City of WILSONVILLE in OREGON

Planning Division
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Wilsonville, OR 97070
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WILSONVILLE CITY HALL
DEVELOPMENT REVIEW BOARD PANEL A

MONDAY, JUNE 10, 2013 - 6:30 P.M.

I. **Call To Order:**

II. **Chairman's Remarks:**

III. **Roll Call:**

Mary Fierros Bower
Lenka Keith
Simon Springall
Ken Ruud
Jerry Greenfield
Council Liaison Susie Stevens

IV. **Citizen's Input:**

V. **City Council Liaison's Report:**

VI. **Consent Agenda:**

A. **Approval Of Minutes Of May 13, 2013 Panel A Meeting**

Documents: May 13 2013 Minutes.pdf

B. **Resolution No. 255**
Terrene Apartments Monument Sign: CRP & Holland Brenchley Estates II LP - applicant. The applicant is requesting approval of a monument sign and waiver for the Terrene apartments. The subject site is located on Tax Lot 200 of Section 14A, T3S, R1W, Clackamas County, Oregon. Staff: Blaise Edmonds

Case Files: DB13-0028 - Monument Sign and Waiver

Documents: DB13-0028 Terrene DRB Packet.pdf

C. **Resolution No. 256**
Carl's Jr. Restaurant Accent Lighting: Ben Altman, SFA Design Group and Craig Anderson, CB Anderson Architects - representatives for Josh Veentjer, Wilsonville Devco LLC - owner. The applicant is requesting approval of architectural accent lighting on a previously approved drive-thru fast food restaurant. The site is located on Tax Lot 302, Section 02DB; T3S-R1W; Washington County; Wilsonville, Oregon. Staff: Daniel Pauly

Case Files: DB13-0027 - Site Design Review

Documents: Carls Jr. Accent Lighting DRB 6.10.2013.pdf

VII. **Public Hearing:**

A. **Resolution No. 257**
Memorial Park Parking Lot: City of Wilsonville - applicant. The applicant is requesting approval of a Site Design Review for expansion and modification to the Memorial Park parking lot and a Type C Tree Removal Plan to remove 26 trees. The site is located at 8200 SW Wilsonville Road on Tax Lot 00691, Section 24, T3S-R1W, Clackamas County, Oregon. Staff: Amanda Hoffman

Case Files: DB13-0030 - Site Design Review
DB13-0031 - Type C Tree Plan

Documents: Memorial Park Packet 6.10.2013.pdf, Exhibit B2 Applicant Submittal.pdf

B. Resolution No. 258

Villebois Phase 4 Central: Stacy Connery, Pacific Community Design, Inc. - representative for Fred Gast, Polygon at Villebois II LLC/Polygon at Villebois III, LLC - applicant. The applicant is requesting approval a Zone Map Amendment from Public Facilities (PF) to Village (V), a Preliminary Development Plan, SAP Refinements, SAP Amendments, Tentative Subdivision Plat, Type C Tree Plan and Final Development Plan for Parks and Open Space for a 57-lot residential subdivision and associated improvements in Villebois PDP-4 Central. Properties involved are Tax Lot 2919 and portions of Tax Lots 2916 and 2922, Section 15, Township 3 South, Range 1 West, Willamette Meridian, City Of Wilsonville, Clackamas County, Oregon. Staff: Daniel Pauly

The DRB action on the Zone Map Amendment is a recommendation to the City Council.

Case Files: DB13-0013 - Villebois SAP-Central PDP-4C, Preliminary Development Plan
DB13-0014 - SAP-Central Refinements
DB13-0015 - SAP-Central Amendments
DB13-0016 - *Zone Map Amendment*
DB13-0017 - Tentative Subdivision Plat
DB13-0018 - Type C Tree Plan
DB13-0019 - Final Development Plan for Parks and Open Space

Documents: VB PDP-4C Packet 6.10.2013.pdf, Exhibit B1 - Part 1.pdf, Exhibit B1 - Part 2.pdf, Exhibit B2.pdf, Exhibit B3.pdf

C. Resolution No. 259

Villebois Phase 2 North: Stacy Connery, Pacific Community Design, Inc. - representative for Fred Gast, Polygon at Villebois II LLC/Polygon at Villebois III, LLC - applicant. The applicant is requesting approval a Zone Map Amendment from Exclusive Farm Use (EFU) and Public Facilities (PF) to Village (V), a Preliminary Development Plan, SAP Refinements, SAP Amendment, Tentative Subdivision Plat, Type C Tree Plan, Final Development Plan for Parks and Open Space and SRIR Review for a 90-lot residential subdivision and associated improvements in Villebois PDP-2 North. Properties involved are Tax Lots 2915, 2992, 2995, and portions of Tax Lots 2916 and 2922, Section 15, Township 3 South, Range 1 West, Willamette Meridian, City Of Wilsonville, Clackamas County, Oregon. Staff: Daniel Pauly

The DRB action on the Zone Map Amendment is a recommendation to the City Council.

Case Files: DB13-0020 - Villebois SAP-North PDP-2N, Preliminary Development Plan
DB13-0021 - SAP-North Refinements
DB13-0022 - SAP-North Amendment
DB13-0023 - *Zone Map Amendment*
DB13-0024 - Tentative Subdivision Plat
DB13-0025 - Type C Tree Plan
DB13-0026 - Final Development Plan for Parks and Open Space
SI13-0001 - SRIR Review

Documents: VB PDP-2N Packet 6.10.2013.pdf, Exhibit B1 Part 1.pdf, Exhibit B1 Part 2.pdf, Exhibit B2.pdf, Exhibit B3 B9 B10.pdf

VIII. Board Member Communications:

A. Results Of The May 30, 2013 DRB Panel B Meeting

Documents: DRB-B May 30 2013 Results.pdf

IX. Staff Communications

X. Adjournment

Assistive Listening Devices (ALD) are available for persons with impaired hearing and can be scheduled for this meeting. The City will also endeavor to provide the following services, without cost, if requested at least 48 hours prior to the meeting.

- Qualified sign language interpreters for persons with speech or hearing impairments.
- Qualified bilingual interpreters.
- To obtain such services, please call the Planning Assistant at 503 682-4960

VI. Consent Agenda:

A. Approval of minutes from May 13, 2013 DRB Panel A meeting

Wilsonville City Hall
29799 SW Town Center Loop East
Wilsonville, Oregon

Development Review Board – Panel A
Minutes–May 13, 2013 6:30 PM

I. Call to Order
Chair Mary Fierros Bower called the meeting to order at 6:30 p.m.

II. Chair's Remarks
The Conduct of Hearing and Statement of Public Notice were read into the record.

III. Roll Call
Present for roll call were: Mary Fierros Bower, Lenka Keith, Ken Ruud, Jerry Greenfield, Simon Springall, and Councilor Liaison Susie Stevens.

Staff present: Blaise Edmonds, Michael Kohlhoff and Amanda Hoffman

VI. Citizens' Input This is an opportunity for visitors to address the Development Review Board on items not on the agenda. There were no comments.

V. City Council Liaison Report
City Councilor Stevens reported that City Council:

- Directed Staff regarding the upgrade and reconstruction of the Memorial Park parking lot after determining which concept design plan they preferred, so the project was now moving through engineering and planning and would be completed in the fall. The parking would be completely reconfigured while saving as many trees as possible, though several diseased trees needed to be removed anyway.
- Would discuss and formally adopt the Council's goals resulting from the City Council retreat at next Monday's Council meeting. She briefly highlighted the goals involving the Development Review Board (DRB), noting the fairly aggressive plan to move forward with the future development of Coffee Creek and the completion and adoption of the Basalt Creek Industrial Area Concept Plan within the next 18 to 27 months. Completing formal concept plans for Advance Road and Frog Pond residential areas were also Council goals.

Jerry Greenfield asked when the parking lot project was expected to come before this DRB.

Blaise Edmonds verified the Memorial Park project would come before the DRB Panel A on June 10th.

Councilor Stevens confirmed the project was the first parking lot coming down into Memorial Park, not the one by the dog park. The lot was having a lot of storm drain problems. The goal was to maximize as many spaces as possible, but make sure they were wide and long enough to accommodate the larger vehicles typically parked there, such as vans, SUVs and buses. The project would also make safer for pedestrian circulation.

Simon Springall inquired about the timeframe for the Advance Road/Frog Pond development.

Michael Kohlhoff, City Attorney, stated the timeframes for those developments were discussed at the Staff retreat and should be available either at this meeting or the first meeting in June. The timing for a concept plan must allow for developing a request for proposal (RFP) to select a consultant, which would

take a few months, and then after bringing on a consultant, the process would probably take about nine months to a year. Developing a major concept plan for the 500 plus- acre residential area, about the size of a Villebois, would be time consuming because all the facilities must be master planned as well.

- The concept plan has been completed for Coffee Creek Industrial Area, so the question was how to structure the financing for it and City Council has created a work plan for that, as well a strategic plan for urban renewal to determine whether that would be a financing option. The City was working with some initial developers, so it would be planned in phases. Coffee Creek was much farther along, obviously, than Frog Pond to the east.
- He clarified that Advance Road was not yet in the urban growth boundary (UGB). The City would next have the chance to add Advance Road in 2015, so Staff wanted to have the concept planning started. Wilsonville was number one in the second tier last time, so that should move the City to the first tier in 2015. Additionally, the school district is advancing its own UGB for 40-acres of Advance Road for some new grade schools and that area is separate from the larger area. The district would move forward a bit faster and the City has done the master planning on that particular 40 acres, so the general layout was somewhat known. But again, the City must install a big sewer pipeline to address the sewer situation because while a little bit of capacity still exists, there was not enough capacity to serve the full area. Part of the sewer treatment plant bond provided for the engineering and design of that pipeline. Another issue involved the pump station for that particular line and its location within the park. The existing pump station must be removed from the flood plain. So, there were lots of moving parts but the Council was working on all of them.

Ken Ruud inquired if Council discussed anything about a goal for a community center or swimming pool.

Councilor Stevens replied one of the first goals that Council agreed on and Staff has been directed to do was to complete a feasibility study for a community recreational/aquatic center in Wilsonville. They acknowledged that the work done by prior volunteers and tasks force had been put on the back burner, but the desire for a facility kept bubbling to the surface. City Manager Bryan Cosgrove stated at the retreat that Council would receive quarterly reports regarding Council's goals.

Mr. Kohlhoff noted the City had hired a new Parks and Recreational Director who would be of the feasibility study, which was also part of Staff's work plan. Some key dates have been discussed, but Staff needs to work through the process of the feasibility study, which would also require a scope of work, and then an RFP and eventually a contract. Staff hopes to put the RFP out in the latter part of the summer.

Councilor Stevens added the goals also included a section identifying what success would look like so they would know whether the goal had been met. For example, having a completed feasibility study presented to Council by July 1, 2014 would indicate that goal had been met. It was not a set date, but a target.

VI. Consent Agenda:

A. Approval of minutes of March 11, 2013 DRB Panel A meeting

Lenka Keith moved to approve the March 11, 2013 DRB Panel A meeting minutes. Simon Springall seconded the motion, which passed unanimously.

B. Resolution No. 252. Athey Creek Temporary Use Permit: Athey Creek Christian Fellowship –Applicant; Robert Lanphere, Jr. And Bit Holdings Fifty-Seven Inc. - Owners. The applicant is requesting approval a Temporary Use Permit to allow Athey Creek Christian Fellowship to continue the use of the main church building until May 17, 2015, and to establish a new youth space across the street from the main church building for 24 months until May 17, 2015. The subject sites are located at 27520 SW 95th Avenue and 27501 SW

95th Avenue, Stes 955 & 960 on Tax Lot 702 Section 11D and Tax Lot 400 Section 11C, T3S-R1W, Clackamas County, Oregon. Staff: Amanda Hoffman

Case Files: DB13-0007 – Temporary Use Permit

Mr. Kohloff noted the initial Staff report should be replaced with new Exhibit A1, a revised Staff report dated May 6, 2013, which had been distributed to the Board. He explained that the new exhibit was simply indicating that the DRB was exercising its authority to grant two temporary use permits. One was a short-term renewal of the existing temporary use permit, DB09-0057, to allow Athey Creek Christian Fellowship to continue using the main church building until May 17, 2015. The Applicant had a five-year temporary permit that expires in January 2015 and this renewal would allow all the timing to line up with the second renewal, which was a 24-month temporary use permit to establish a new youth space expiring on May 17, 2015. The new youth space was located across 95th Ave from the main church building. The uses were all permitted and so the application was just brought before the Board on consent. The only change was to renew the existing temporary use permit, DB09-0057, which was the reason for the change in the Staff report.

Jerry Greenfield stated that after visiting the site at about 10:30 am he was a bit concerned about the high volume of traffic on 95th Ave. A couple people were directing people where to park and assisting pedestrians crossing the road, which might become more problematic with the addition of the property across the street

Blaise Edmonds noted Assistant Planner Amanda Hoffman would have to address that concern and if it could not be resolved, the Board might need to open the item to a public hearing.

Amanda Hoffman, Assistant Planner, stated the problem would be alleviated by the church's attendants that direct traffic and also help pedestrians cross before church services. If there was a youth group function in the evening, then the parents or children, if they were old enough, would actually park on that side of the street, so they would not be crossing.

Mr. Greenfield stated he wanted to register his concern and asked about the possibility of at least adding a marked crosswalk at that point. There were no intersections along that stretch, so there was no implied crosswalk.

Ms. Hoffman noted that as a temporary use, it was not intended to remain for a long period of time.

Mr. Edmonds noted no engineering staff were present, but explained that a marked crosswalk is not typically installed on a public street for temporary use, unless there was an engineering reason. He understood that the youth Christian fellowship is only held in the evening on the west side of 95th Ave, so there would be no reason to cross to the east side of the street.

Ms. Hoffman reiterated that the church has people helping pedestrians cross during the Sunday service.

Mr. Greenfield stated that informally, he would like to have his concern conveyed to the congregation.

Mr. Kohloff replied City Staff would talk to the church and work with them to see if any crossing monitors beyond what they already have are needed. He doubted that a crosswalk could be installed given this was all outside the PM peak hour, but Staff could certainly monitor it and work with them.

Simon Springall commented that it was kind of interesting that the City did not consider walkability in the business area of the city. He asked if everybody was expected to come and leave their work by car and never walk around in the area.

Mr. Edmonds explained that 95th Ave is unique. It was designed primarily as an industrial park in the early 1990s so the intent was mostly freight and industrial traffic, warehouse, and manufacturing. There is a sidewalk on one side of the street for a good distance and then up the road, there are sidewalks on both sides of the street. Appropriate crosswalks exist at the intersections, but not mid-block; it was not designed as a residential area. The thinking back then was not as advanced as it is today.

Jerry Greenfield moved to approve Resolution No. 252 with Exhibit A1 replacing the Staff report provided in the meeting packet. The motion was seconded by Lenka Keith and passed unanimously.

VII. Public Hearing:

A. Resolution No. 253. Fox Center Townhomes: Seema LLC – Applicant. The applicant is requesting approval a Site Design Review for fifteen (15) townhome units known as Fox Center Townhomes. The site is located at 30625 SW Willamette Way East on Tax Lot 100, Section 22AC; T3S R1W; Clackamas County; Wilsonville, Oregon. Staff: Blaise Edmonds

Case Files: DB13-0006 – Site Design Review

Chair Fierros Bower called the public hearing to order at 6:55 p.m. and read the conduct of hearing format into the record. All Board members declared for the record that they had visited the site. No board member, however, declared a conflict of interest, bias, or conclusion from a site visit. No board member participation was challenged by any member of the audience.

Simon Springall stated that he had attended many of the City Council meetings where the earlier planning on the project was discussed last year. He did not believe that influenced his opinion on the design review in any way.

Blaise Edmonds, Manager of Current Planning, announced that the criteria applicable to the application were stated on page 2 of the Staff report, which was entered into the record. Copies of the report were made available to the side of the room.

Mr. Edmonds presented the Staff report via PowerPoint, briefly reviewing the site's location and overall history as well as the recently approved Zone and Comprehensive Plan Map amendments. He noted the Applicant also obtained a Stage II Final Plan and a Type C Tree Plan, but chose to return at a future date for the final review, which would be the Site Design Review, presently before the Board. He displayed the Approved Stage II Final Site Plan and Proposed Revised Site Plan, noting that all the site planning issues had been resolved through the DRB and City Council. His key comments regarding the Site Design Review via PowerPoint were as follows:

- The development was still targeted for age-restricted occupants, age 55 years or over. While the occasional boomerang college student might move back and live with a parent, the primary renter would have to be age 55 and over. Residents would not own but lease or rent the units.
- Initially, the Applicant proposed 16 townhome units but now 15 units were proposed.
- Originally, a host of waivers were proposed for setbacks on the three-sided corner lot. The Applicant chose to redesign the site plan so that no waivers were being requested except for the small trellis-type structure next to the park at the corner of Wilsonville Rd and Willamette Way East. This was the only waiver the DRB approved.

- The revised Site Plan was basically the same as the Stage II approval. The buildings were pushed farther back to comply with all the minimum setbacks of the zone, and one, four-unit building was reduced to three-units to create a neighborhood raised-bed vegetable garden.
- Another challenge was that the original conceptual plan showed building elevations with a saw tooth-type of roof pattern, as shown on Page 4 of 23 of the Staff report. Feedback received during public testimony, from the DRB, and even from Council members through the public hearing process indicated concern about having a very contemporary saw tooth pattern. So, the Applicant returned with more of a traditional, gable roof design that was more compatible with the surrounding neighborhood. He believed the Applicant had done what the City had asked by returning with a design that fit into this neighborhood more appropriately.
- The only entrance into the site was on Willamette Way East and it aligned with the entrance opposite of the Valley Christian Church, so no conflicting turning movements existed.
- The project was very well parked, which had been an issue in the beginning. The Applicant now proposed 29 surface parking and 15 garage parking spaces for a total of 44 spaces, resulting in about 2.93 parking spaces per unit. While nothing precluded people from parking along Willamette Way East, the idea was that with adequate parking on site that should not occur unless some special event was happening. Chantilly is a one-way road with no street parking and Wilsonville Rd has a bike path so no parking is allowed. So, any overflow parking would probably be at the east side of the property.
    - The Applicant worked very closely with Steve Adams, the City's Private Development Civil Engineer. Concerns were expressed about creating a safe route to schools on the east side of the property. The sidewalk was actually a 10-foot wide, shared, multi-modal path, a pedestrian/bike facility, that would take school-aged children or anybody going to the middle and primary schools across Wilsonville Rd where a signal exists. Eventually, this multi-modal path would continue south along the power line easement, over to the water treatment plant and beyond as part of the Tonquin Trail System. The sidewalk would be built this summer.
    - City Council expressed concerns about having a safe crossing to get to the east side of Willamette Way East, which was why the bulb out was designed at the southeast corner of the property.
    - Council also wanted a ramp for people to access the sidewalk at the very south side of the property, as no sidewalks exist along Chantilly on either side. The Applicant worked hard to create internal pedestrian sidewalk systems, which he noted continues to the common open space.
- The Colors Materials Board, Exhibit B17, was circulated to the Board. He understood the buildings would all be painted in the same color scheme, not in an alternating pattern. He offered to circulate the exhibit in the audience.
- He noted the location of the covered trash enclosure, which was proposed with concrete block walls. A condition of approval would require the Applicant to match the siding of the enclosure's 6-ft high walls with the siding colors of the apartment units. Although planting shrubs next to it would have softened the enclosure, matching the siding would make it more compatible, especially near the main entrance.
- The adjacent neighbor on the west side had some concerns about his privacy. The Applicant proposed planting Juniper and Wax Myrtle, a broadleaf evergreen shrub that provides coverage year round, to create a substantial hedge in a very short period of time. Wax Myrtle grows really fast. He believed the Applicant was also coordinating with the neighbor on building a new fence between the two properties. These neighbors testified that they were comfortable with the project next door and satisfied with the site design being presented tonight.
- Displaying the Landscape Plan, he noted that 50 percent of the site is landscaped, far exceeding the City's Development Code requirement of 15 percent. The existing pine trees at the north end of the site were preserved where the trellis arbor place for meditation would be located along with some additional raised bed yards. He reviewed the trees proposed to be planted, noting that the Katsura trees within the project met the minimum requirements for shade trees within a parking lot.

    - He indicated the trellis feature, which would be a nice, attractive feature seen when approaching the project from Wilsonville Road.
- Homeowners of the Fox Chase and Rivergreen Subdivisions were concerned about the two existing signs on the post and plank fence along Wilsonville Rd. A section of the fence would be removed and probably refurbished. The Applicant intended to keep the signs and put them back on the fence, which would be a bit farther away from the entrance to Willamette Way East. No other signage was being proposed at this time for the project, but the Applicant could return for a monument sign, which the Development Code would allow to identify the project.
- He noted that the Board's role tonight regarded the Site Design Review, not the parking requirements, setbacks, or land use. All those issues have been resolved and decided upon with the Development Review Board last year and the City Council. He believed the Applicant had compromised tremendously to try to fit in with the community architecturally, and listen to a lot of the public testimony from both citizens and decision makers. He highly recommended approval of this project.

Ken Ruud inquired about any special modifications for the trash enclosure considering it was for people age 55 and older?

Mr. Edmonds replied that unfortunately, most of the dumpsters furnished by Republic were standard trash enclosures. They did not design them for special needs people. The enclosures do have gates. The Code requires at least a 10-ft opening to the gates and that an inside portion of the trash enclosure be used for recyclables as well as regular trash. This enclosure would have a roof. There's been quite a controversy as of lately with the City Council as to requirements in terms of roofing over trash, but this particular design had a roof. He briefly described how the residential truck picks up trash, but deferred to the Applicant, who might have had better communication regarding what Republic would require as far as trash collection for the 15 units.

Chair Fierros Bower called for the Applicant's presentation.

Dan Vasquez, Architect, Mildren Design Group, PC, 7650 SW Beveland, Tigard, OR, stated that Mr. Edmonds did a good job explaining the process, which has been long and not easy, but many times this type of process makes a project as good as it can be. He appreciated Mr. Edmonds' comment about the alternate roof design. He believed the Applicant had come up with a solution that was comparable and compatible with the surrounding environment, and that the project would reflect well for both the users as well as the neighborhood. He offered to discuss any of the specific details of the project.

Mr. Kohloff asked for the record if the Applicant agreed with all the conditions, including the condition that would change the exterior of the garbage area.

Mr. Vasquez answered that was correct. With regard to the trash enclosure access, he stated there would be an on-grade opening on the backside by the sidewalk as well, so one would not have to open the heavy gates to get in.

Mr. Ruud asked how high residents would have to reach to put garbage in.

Mr. Vasquez replied that he would need to do a little research on that; the typical wheel-out garbage receptacles were four or five feet high. He believed it might vary according to the different trash companies.

Mr. Greenfield stated it was not clear from drawing how that extra receptacle would be accessed without going through the doors. He assumed the doors opened out into the common parking lane.

Mr. Vasquez answered that was correct. He displayed a rendering of the trash enclosure, noting the access gates and clarifying that there would also be an opening at the midpoint in the back wall of the enclosure.

Mr. Greenfield commented it was probably four or more feet high.

Mr. Ruud asked if the firm had much experience with developing housing communities for those age 55 years and older. Did they have much experience with alternatives for the height of trash receptacles?

Mr. Vasquez replied that the Applicant dealt with the ANSI Standards for accessibility. They had done a lot of research and were very familiar with the various elements of the accessibility code, but he did not recall anything related to trash receptacles. He agreed it was an important aspect to research.

Mr. Edmonds noted another apartment under review was using trash compactors as an alternative because they are more accessible with the doorways lowered for residents.

Greg Close, Wise Investment Services Company, stated he was the real estate representative for the Applicant, who sees the trash enclosure issue as a property management issue. His particular firm was the development agent and not be the management company for this building. The firm would retain a residential professional property management company and inside that company's portfolio, there are age 55 and over projects. So the company would be well versed in how to handle this kind of issue. For this project, he understood that wheel-out trash bins would be used for recycling and trash and the trash collector would simply wheel out and load into their truck. He believed the trash bins would be the individual lightweight plastic bins and were no taller than four and a half foot, so a person could have a bag of trash, simply lift the lid and deposit it. These were not at all like a commercial bin, which is more of a metal container that is a little taller with a bigger, heavier lid to pick up. For this size and scope of project, the plastic roll about bins would be easy for the residents to access. He noted the Applicant was not targeting any special needs population, just age 55 and over. A residential base of folks not much older than himself was expected who are physically capable of many things, like planting in the garden. Although there could be some quite elderly and frail people, they would still be independent from the program at Fox Center Townhomes.

Chair Fierros Bower asked if any units would be wheelchair accessible. It looked like the restrooms on the second floor were wheelchair accessible.

Mr. Close replied the second floor would not be wheelchair accessible.

Chair Fierros Bower said the restrooms on the second floor look like they are designed much bigger than those on the first floor.

Mr. Close responded they could be.

Mr. Vasquez noted that by Code, due to the quantity of the units proposed, no units were required to be accessible. Given the program that they have and quantity and type of units proposed with the dual floor, as Mr. Close stated, accessibility requirements were very limited for this type of unit so no accessible restrooms exist in these facilities.

Mr. Greenfield complimented the Applicant on the siting, which was done very well.

Mr. Vasquez added that the units were designed with a restroom on the first floor, and by nature of the grading; every unit is accessible, especially when considering access to the garage and the front grade and steps to the building.

Mr. Close stated the entrance thresholds are all flat to grade, so there would be no barriers between the hard surface areas and the entrance to the ground floor of the unit. Anyone in a wheelchair could gain access to the ground floor of any unit, all of which have restroom facilities on the ground floor. If such a person were spending the night, for instance, they might have to use a hide-a-bed on the ground floor or something but they are restricted on the second floor.

Mr. Kohlhoff asked if the stairways go straight up or have a big turn.

Mr. Close believed the stairs go straight up.

Mr. Vasquez believed there is a turn, but no floor plan was available.

Mr. Kohlhoff noted that a number of adaptive chairs and mechanized units exist for stairways. Quite a process is involved as the State must approve it, but that option was available although a little expensive.

Chair Fierros Bower called for public testimony in favor of, opposed and neutral to the application.

Mike Thompson stated he was the homeowner adjacent to the property in question. He thanked the people doing this project, noting they had been very easy to work with and very responsive to most of their requests and things. He stated he wanted to address the street parking issue, which, as he understood from the last meeting, would be discussed at this meeting. He noted that anytime there was any traffic, Willamette Way East can back up past those driveways, and there is barely enough room for two cars if anybody parks on one side, especially near the streetlight where people are turning and stuff. He has lived in his house since 1985 and as traffic and homes have built up, he has seen a lot more close calls so he has a real concern about the parking, if any, along that stretch. He wanted to bring that to the Board's attention because it is a real issue. Anytime that school is happening, kids are coming and going. He often parks his car there to get the mail out of the box, but never when the kids are there because it's just a zoo.

- He wants there to be no parking until past Chantilly, but he did not know if that was possible. There is just about enough room for three cars on that street. So parking at any rate, should only be on one side at the very least, because with parking on both sides only one car could fit down the middle.
- He concluded that their main concern was mostly for the kids.

Nancy Thompson stated the mail was the big issue and asked if any kind of indented pull out could be installed at the end of Chantilly for people picking up their mail from across the street as this would resolve some of the traffic issues.

Mr. Edmonds recalled this topic had considerable discussion at City Council and the DRB. While he could not fairly represent the City Engineering staff, he did recall that the street is wide enough for parking on one side of the street, but the question was on what side of the street because getting the mail on the east side of Willamette East was an issue for many residents. Additionally, there was concern about parking on the west side of the street, because drivers might not see kids or people getting their mail crossing that street. He believed the bulb out was designed at the southeast corner of the project to try to get pedestrians out least a little bit so they were more visible.

- The traffic engineer discouraged any parking along the first 250 or 300 feet along the very north side of Willamette Way East because of vision clearance issues, so the only parking allowed along Willamette Way was three or four parking spaces between the driveway and that bulb out.

- Installing No Parking signs was a challenge because the City did not have any parking enforcement mechanism. The Applicant proposed a lot of onsite parking which would hopefully discourage parking along that street, but nothing in the Public Work Standards would preclude an occasional driver from parking on one side of the street.
- He confirmed that even temporary parking in those three or four spaces would not be enforceable by the sheriffs.

Mr. Thompson reiterated that his biggest concern was safety because with one or two cars parked there and kids running across the street he was fearful that somebody was going to get hurt. Though his kids were all older and grown, he has seen some real close calls over the last 25 years.

Mr. Greenfield noted that danger was already present; it was not a particular consequence of the proposed apartments.

Mr. Thompson agreed the development would not add to it, other than people parking there.

Ms. Thompson added that cars would be coming in and out.

Mr. Springall asked if the bulb out would be matched on the opposite side of road.

Mr. Edmonds replied that he did not think so; considering the width of the street, another bulb out on the other side would create a choke point. He understood it would slow traffic, but the road was too narrow for two-lane traffic.

Mr. Thompson inquired about installing a speed bump. The safety of the children was a real issue for him.

Mr. Kohlhoff stated the City has had real issues with speed bumps. Some California Highway Patrol studies indicated that speed bumps give families a false sense of security. He recalled that the City Engineer was going to do something on the west side and bring down either some striping or yellow paint or something along there, then the cutout for the bulb would allow maybe one to two parking spaces maximum. While the additional parking would obscure, it also might slow traffic. He believed the City Engineer wanted to keep the east side clear because of the mailboxes and that was the side where traffic backed up, generally, because of Wilsonville Rd. The kids could cross at the light on Wilsonville Rd.

Mr. Thompson explained that traffic does back up from Wilsonville Rd as far as Chantilly, and then the kids cross Willamette Way East wherever they can, not necessarily at the corners, at least until they get to Wilsonville Road.

Mr. Kohlhoff noted the development was age 55 and older, so no children would be coming from the development, so this was the existing condition.

Mr. Thompson understood it did not have anything to do with the project as such, but the City should consider a plan to make it safer for the kids.

Mr. Edmonds believed City Engineer Steve Adams has gone through that entire analysis because he was asked by the City Council at the time to find a solution. He offered to provide Mr. Thompson with Mr. Adams' business card.

Mr. Kohlhoff added that once the project goes in, everyone could see how things operate and Mr. Thompson's observations could be very helpful and might affect some decisions. He encouraged him to talk with Mr. Adams, Mr. Edmonds or himself.

Lenka Keith understood that speed bumps were a concern with fire and rescue because they cannot just fly over them.

Mr. Edmonds agreed, stating their number one priority is getting to the scene as quickly as possible and every 3/10s of a second spent at each another speed bump down the road added time to an emergency response. Speed bumps throughout the city could prevent them from responding in a timely fashion.

- He reiterated that City Engineer mentioned painting about 250 to 300 ft of the curb along Willamette Way East from the Wilsonville Rd intersection yellow to deter parking. This would limit parking to two or three cars at the south end of that block. He agreed that the parked cars might slow traffic.
- He explained the City Engineer concluded that the safest route to school was on the west side of Willamette Way East, on the frontage of the Applicant's property because that was the side of the controlled, signaled pedestrian crossing on Wilsonville Rd going to the school. As that pathway continued south, it eventually crossed to the east side of Willamette Way East, providing access to the Autumn Park Apartments and beyond.

Mr. Ruud asked if the inability to install No Parking signs was certain.

Mr. Kohlhoff stated he would review it with the City Engineer. The City has and could post No Parking signs; at the same time, sometimes a yellow curb is a better situation. The City could get enforcement for parking violations as well; the City just did not do a lot of it, although enforcement is done within neighborhoods.

- The solution City Engineer Steve Adams came up with was to install the bulb out to provide a crossing for pedestrians and also some indentation for the vehicles parked south of the driveway. Parking would also be restricted in some manner north—on the west side, leaving the east side of the street open due to the mailboxes location and people stopping to get their mail.
- He reiterated this is kind of a living thing, so if what has been proposed proves to be insufficient, the City could try other things. Basically it was a balance between pedestrians, vehicle turning distances, the ability to queue a bit because of the busy road and light, and the need to get kids safely to school.

Mr. Greenfield noted this was not part of the design review phase, but an issue to be addressed by the City Engineer.

Mr. Edmonds agreed, noting it was appropriate to address during a public hearing given the public testimony from concerned citizens. The issue was extensively discussed at Council, even more so than at the DRB. He clarified that the Board was considering the site, not what was in the public right-of-way, which was the City Engineer's purview, being a licensed engineer. He agreed this was something Staff would keep working on to determine the best solution.

Mr. Kohlhoff added the neighbors have a lot of common sense, too, which the City would take into consideration.

Ms. Thompson believed the 10-ft sidewalks would be a huge improvement. The only times this was an issue was when Boones Ferry School releases because almost every child within a mile of the school walks, bikes, or rides scooters home; some parents do drive and then the traffic backs up forever.

- One problem was that this nice 10-ft sidewalk would go to Chantilly and then there was no sidewalk, so the kids bounce back and forth across Willamette Way East to be on sidewalk, which was a concern if drivers could not see the children. She asked if putting in a sidewalk would be considered.

Mr. Edmonds answered yes, that sidewalk along Willamette Way East would be extended as part of a project by the engineering staff, but it was not part of the subject project. That connection to the rest of the sidewalk improvements was in the budget, because they realized that gap was a dangerous situation.

Ms. Keith noted that she appraises proposed apartments and the Applicant's proposal provided almost 3 parking spaces per unit, which was more than anything she had seen. Many complexes have 1 or 1.5 spaces for three-bedroom units. The Development Code required only 1.5 spaces per unit. She could not imagine needing that much parking for age 55 plus, or that there would be a need to park along the street.

Mr. Greenfield asked if the development would have a homeowners association (HOA).

Mr. Close answered, no; the units would be for rent. The property would be professional managed with leases and covenants, parking rules, regulations, etc.

Chair Fierros Bower confirmed that the Applicant had no rebuttal and closed the public hearing at 7:50 p.m.

Jerry Greenfield moved to adopt Resolution No. 253. Ken Ruud seconded the motion, which passed unanimously.

Chair Fierros Bower read the rules of appeal into the record.

VIII. Board Member Communications

A. Results of the March 25, 2013 DRB Panel B meeting

B. Results of the April 22, 2013 DRB Panel B meeting

Mr. Edmonds noted the material was included in the meeting packet.

IX. Staff Communications

Mr. Kohlhoff announced that the compaction on Boeckman Rd was going well, so construction is planned for this summer and hopefully would be completed by fall.

X. Adjournment

The meeting adjourned at 7:55 p.m.

Respectfully submitted,

Paula Pinyerd, ABC Transcription Services, Inc. for
Shelley White, Planning Administrative Assistant

VI. Consent Agenda:

B. Resolution No. 255. Terrene Apartments Monument Sign: CRP & Holland Brenchley Estates II LP - applicant. The applicant is requesting approval of a monument sign and waiver for the Terrene apartments. The subject site is located on Tax Lot 200 of Section 14A, T3S, R1W, Clackamas County, Oregon. Staff: Blaise Edmonds

Case File: DB13-0028 – Monument Sign and Waiver

DEVELOPMENT REVIEW BOARD
RESOLUTION NO. 255

A RESOLUTION ADOPTING FINDINGS AND CONDITIONS APPROVING A MONUMENT SIGN AND A WAIVER FOR THE TERRENE APARTMENTS. THE SUBJECT PROPERTY IS LOCATED ON TAX LOT 200 OF SECTION 14A, T3S, R1W, CLACKAMAS COUNTY, OREGON, CRP/HOLLAND BRENCHLEY ESTATES II L.P, APPLICANT.

RECITALS

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared a staff report on the above-captioned subject dated June 3, 2013, and

WHEREAS, said planning exhibits and staff reports were duly considered by the Development Review Board at a regularly scheduled meeting conducted on June 10, 2013, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board Panel A of the City of Wilsonville approves the request for a monument sign and a waiver to the maximum sign height and does hereby adopt the staff report attached hereto as Exhibit A1 with modified findings, recommendations and conditions placed on the record herein and authorizes the Planning Director to issue approvals consistent with said recommendations for Case File:

DB13-0028 Monument Sign and Waiver

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 10th day of June 2013 and filed with the Planning Administrative Assistant on _____. This resolution is final on the l5th calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03).*

_____

Mary Fierros Bower, Chair
Development Review Board, Panel A

Attest:

_____

Shelley White, Planning Administrative Assistant

STAFF REPORT
WILSONVILLE PLANNING DIVISION
STAFF REPORT Exhibit A1
DEVELOPMENT REVIEW BOARD
QUASI-JUDICIAL PUBLIC HEARING

Public Hearing Date: **June 10, 2013**
Date of Report: **June 3, 2013**

Application Numbers: **DB13-0028 Proposed monument sign and a waiver to the maximum sign height at the Terrene at the Grove.**

Property Owner: CRP/Holland Brenchley Estates II, L.P.

Applicant: Mr. John Hendry

REQUEST: Mr. John Hendry, acting as agent for the owner is seeking approval of a monument sign to identify the Terrene Apartments and a waiver to exceed the 6 foot height limit to allow a ten (10) foot tall sign including the "T" circular logo sign.

Comprehensive Plan Designation: Residential 6-7 du/ac.

Current Zone Map Designations: Planned Development Residential – 4 (PDR-4).

Project Location: The subject is adjacent to the south side of the Terrene Apartments Community Center at the northwest corner of Ash Meadows lane and SW Parkway Avenue. The site is more particularly described as Tax Lot 200 in Section 14A; T3S R1W; Clackamas County; Wilsonville, Oregon.

Staff Reviewer: Blaise Edmonds, Manager of Current Planning

APPLICABLE REVIEW CRITERIA - Planning and Land Development Ordinance: Sections 4.008 through 4.015, 4.031, Sections 4.156.01 through 4.156.07 as applicable, Sections 4.400-4.450 as applicable.

STAFF RECOMMENDATION: Approve the application with conditions of approval on page 3.

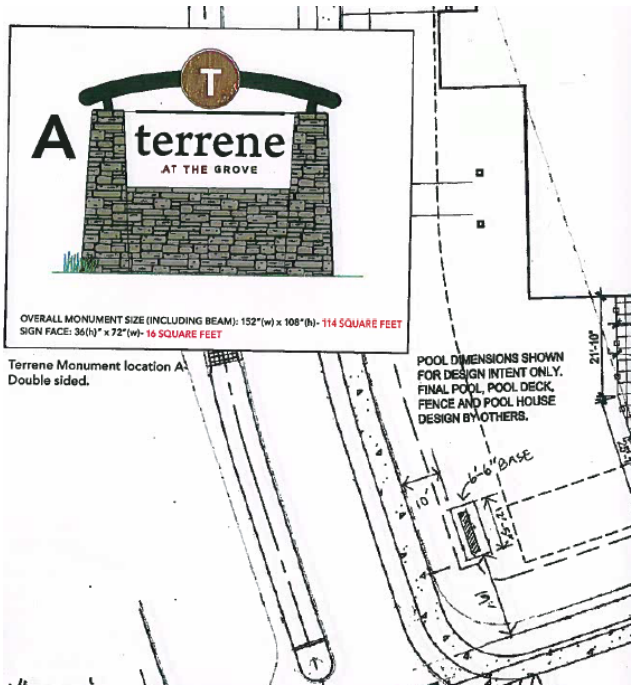
PROJECT SUMMARY:

A detailed project introduction and compliance report in support of the application is provided by the Applicant found in the - Exhibit B1. The Applicant's narrative adequately describes proposed monument sign and compliance findings regarding applicable review criteria. Except where necessary to examine issues identified in this

report, staff has relied upon the applicant's submittal documents and compliance findings, rather than repeat their contents again here.

Recommendation: Approval of the application, with conditions of approval attached herein on page 3 of this report.

Vicinity Map



EXHIBITS:

A1. Staff Report and Findings (this document)
B1. Applicant's Narrative/Findings
B2. Plan Sheet Monument Sign Drawing and site plan.

PROPOSED CONDITIONS OF APPROVAL

The applications and supporting documents are hereby adopted for approval with the following conditions:

DB13-0028: Monument Sign

On the basis of findings 1 through 20. This action <u>approves</u> the proposed monument sign and waiver submitted with this application, approved by the Development Review Board, and stamped "Approved Planning Division" with conditions of approval being proposed.

1. The Applicant/Owner shall obtain approval from the Engineering Division for the location of the monument sign to ensure safe vision clearance prior to its construction. See Finding 5.

2. The proposed monument sign including the main graphics and the "T" logo shall not exceed eighteen (18) square feet. See Finding 7. The Applicant/Owner shall obtain a sign permit from the Planning Division prior to the construction of the sign.

3. The Applicant/Owner shall obtain a building permit for the monument sign prior to its installation.

FINDINGS OF FACT

1. Existing Site Conditions:

The project site for the monument sign has level terrain with no existing trees but has ground cover vegetation.

Surrounding Development: The adjacent land uses are as follows:

Compass Direction	**Existing Use(s)**
North	Terrene Community Center.
East	Ash Meadows condos and vacant industrial land owned by Mentor Graphics.
South	Undeveloped residential
West	Active Adults at the Grove

Previous Planning Applications Relevant to the Subject Property:

2. Ordinance No. 509 that revised Wilsonville's Development Code included a citywide change from PDR zone to a range of PDR -1 through PDR-7.

73RZ04: PDR Zone
81PC26: Stage II Final Plan – Addition of 21 units/spaces.
82DR04: Final Site Plan- 12 additional units
Ordinance No. 270 and Resolution 84PC01: Amendment to the Comprehensive Plan Map from Primary Open Space to Secondary Open Space to allow tree removal. Added - 8 mobile home sites.
DB11-0006 Stage I Preliminary Plan – Brenchley Estates - South
DB11-0007 Three Waivers – Parcel 1
DB11-0010 Stage II Final Plan – Parcel 1
DB11-0011 Site Design Review – Parcel 1
DB11-0009 Type 'C' Tree Plan – Parcel 1
DR11-0005 Tentative Partition Plat
SI11-0001 SROZ Map and SRIR – Parcel 1
DB11-0029 Stage II Final Plan – Phase II, Brenchley Estates South
DB11-0032 Stage II Waivers – Phase II
DB11-0030 Site Design Review – Phase II
DB11-0033 Type 'C' Tree Plan – Phase II
DB11-0031 Tentative Subdivision Plat – Phase II
SI11-0002 – SROZ Map Verification and SRIR - Phase II
01AR02 Partition Plat.
Resolution No. 226:
DB12-0012 Zone Map Amendment
DB12-0013 Revised Stage I Preliminary Plan
DB12-0014 Waivers

DB12-0015 Stage II Final Plan – Lot 1
DB12-0016 Site Design Review - Lot 1
DB12-0017 Type 'C' Tree Plan – Lot 1
DB12-0018 5 - Lot Tentative Sub. Plat and waiver to block size standards.
Ordinance No. 703

3. The Applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

4. The statutory 120-day time limit applies to this application. The application was initially received on April 30, 2013. On May 2, 2013 the application was deemed complete. The City must render a final decision for the request, including any appeals, by August 30, 2013.

CONCLUSIONARY FINDINGS:

Section 4.156.01. Sign Regulations Purpose and Objectives.

(.01) Purpose. The general purpose of the sign regulations are to provide one of the principal means of implementing the Wilsonville Comprehensive Plan by fostering an aesthetically pleasing, functional, and economically vital community, as well as promoting public health, safety, and well-being. The sign regulations strive to accomplish the above general purpose by meeting the needs of sign owners while maintaining consistency with the development and design standards elsewhere in Chapter 4. This code regulates the design, variety, number, size, location, and type of signs, as well as the processes required to permit various types of signs. Sign regulations have one or more of the following specific objectives:

A. Well-designed and aesthetically pleasing signs sufficiently visible and comprehensible from streets and rights-of-way that abut a site as to aid in wayfinding, identification and provide other needed information.

1. See finding 2. This criterion is met.

B. Sign design and placement that is compatible with and complementary to the overall design and architecture of a site, along with adjoining properties, surrounding areas, and the zoning district.

2. The design of the proposed monument sign is has elegant aesthetic utilizing stone and wood materials which reflect the exterior materials of the adjacent Terrene community center and apartment complex. The proposed monument sign is similar to the style of monument signs installed at Jory Trail at the Grove Apartments. The signs identifying the Ash Meadows Condominiums and at the smaller apartment complexes in the vicinity are 30 years old so the applicant did not intend to match the design of the proposed sign with those signs. This criterion is met.

C. A consistent and streamlined sign review process that maintains the quality of sign development and ensures due process.

3. As indicated in Findings 1 through 19 this criterion is met.

D. Consistent and equitable application and enforcement of sign regulations.

4. As indicated in Findings 1 through 19 this criterion is met.

E. All signs are designed, constructed, installed, and maintained so that public safety, particularly traffic safety, are not compromised.

5. The site plan indicates that the proposed monument sign would be setback ten (10) feet from the property lines at intersection of SW Parkway Avenue and Ash Meadows Lane. The proposed monument sign will need to be installed as to not block safe vision

clearance. Proposed condition 1 requires that the Applicant submit plans to the City Engineering Division to review vision clearance prior to its installation. See condition No. 1.

F. Sign regulations are content neutral.

6. The City is not regulating the freedom of speech of the content of the sign meeting code.

Section 4.156.07. Sign Regulations In Residential Zones.

(.01) Ground Mounted Signs for Residential Developments. One ground mounted sign, not exceeding eighteen (18) square feet in area and six (6) feet in height above ground, shall be permitted for each residential subdivision or for any multi-family development.

A. Additional ground mounted signs of eighteen (18) square feet or less shall be permitted for additional entrances to the subdivision or development located on a separate street frontage or on the same street frontage located at least two hundred (200) feet apart.

7. The proposed monument sign is approximately 21 square feet in area which exceeds code by 3 square feet. See Finding 12. The Applicant did not ask for a waiver to exceed the maximum sign area so staff is proposing a condition of approval limiting the sign area to 18 square feet. See proposed condition 2. In a separate application the Applicant is also seeking a Class II Administrative approval for a ground mounted sign at the southwest corner of the Terrene Apartments next to Ash Meadows Road which is more than 200 feet apart meeting this criterion.

B. For one entrance on a street frontage, an additional ground mounted sign may be placed on opposite side of the street or private drive at the intersection.

8. The Applicant is not proposing to install a second sign on the opposite side of Ash Meadows Lane.

(.02) Ground Mounted Signs for Outdoor Recreational Areas on Separate Lots. Public or private parks or other similar outdoor recreational areas on separate lots than dwelling units are allowed one (1) ground mounted sign of eighteen (18) square feet or less in area and six (6) feet or less in height above ground.

9. This criterion is not applicable to this request.

(.02) Sign Height above Ground.

A. The height above ground of a freestanding or ground-mounted sign is measured from the average grade directly below the sign to the highest point of the sign or sign structure except as follows:

1. **A freestanding or ground mounted sign on a man-made base, including a graded earth mound, shall be measured from the grade of the nearest pavement or top of any pavement curb to the highest point of the sign or sign structure. In all cases signs on a berm shall be allowed to be eight (8) feet in height from the top of the berm.**

10. The proposed monument sign would not be placed on a berm.

Subsection 4.156.02 (.06) A and B - Class III Sign Permit Review Criteria: Generally and Site Design Review:

Class III Sign Permit. Sign permit requests shall be processed as a Class III Sign Permit when associated with new development, or redevelopment requiring DRB review, and not requiring a Master Sign Plan; when a sign permit request is associated with a waiver or non-administrative variance; or when the sign permit request involves one or more freestanding or ground mounted signs greater than eight (8) feet in height in a new location.
A. Class III Sign Permit Submission Requirements: Ten (10) paper and electronic copies of the submission requirements for Class II Sign Permits plus information on any requested waivers or variances in addition to all required fees.

B. Class III Sign Permit Review Criteria: The review criteria for Class II Sign Permits plus waiver or variance criteria when applicable.

11. As indicated in Findings 1 through 19 these criteria are met.

Section 4.156.03 Sign Measurement

This section defines methods to use for sign measurement including specifying the following for measurement of individual element signs, "The area for signs constructed of individual elements (letters, figures, etc.) attached to a building wall or similar surface or structure shall be the summed area of up to three squares, rectangles , circles, or triangles drawn around all sign elements."

12. The Applicant has measured the monument sign by drawing a single rectangle around all sign elements, which is consistent with the measurement method identified by this section. The sign graphics On Exhibit B2 indicates "Terrene at the Grove" sign face at 36" high x 72" wide or 16 square feet. However, Image "A" of the monument sign is not drawn to scale so staff is relying on the proposed dimensions. There is a small circular "T" sign logo shown mounted on a beam element of the monument sign that is approximately 30" diameter which is approximately 4.9 square feet for total 20.9 or 21 square feet of signs.

<u>Site Design Review</u>

Subsection 4.400 (.01) Excessive Uniformity, Inappropriateness of Design, Etc.

> **"Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and**

landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefor."

13. It is staff's professional opinion that the proposed monument signs will not result in excessive uniformity, inappropriateness or poor design, and the proper attention has been paid to site development. These criteria are satisfied.

Subsection 4.400 (.02) Purposes of Objectives of Site Design Review

"The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:" Listed A through J. including D. which reads "Conserve the City's natural beauty and visual character and charm by assuring that structures, signs and other improvements are properly related to their sites, and to surrounding sites and structures, with due regard to the aesthetic qualities of the natural terrain and landscaping, and that proper attention is given to exterior appearances of structures, signs and other improvements;"

14. It is staff's professional opinion that the proposed monument sign complies with the purposes and objectives of site design review, especially objective D. which specifically mentions signs. The proposed monument sign is of a scale and design appropriately related to the subject site and the appropriate amount of attention has been given to visual appearance. These criteria are satisfied.

Subsection 4.421 (.01) Site Design Review-Design Standards

"The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural styles is not included in these standards." Of the criteria listed A.-G. only F. is applicable to this application, which reads, "Advertising Features. In addition to the requirements of the City's sign regulations, the following criteria should be included: the size, location, design, color, texture, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties."

15. There is no indication that the size, location, design, color, texture, lighting or material of the proposed monument sign would detract from the design of the Terrene Apartments complex and the surrounding properties. These criteria are satisfied.

Subsection 4.421 (.02) Applicability of Design Standards to Signs

> **"The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures."**

16. Design standards have been applied to the proposed monument signs, as applicable, see Finding 2 above. These criteria are satisfied.

Subsection 4.421 (.03) Objectives of Section 4.400 Serve as Additional Criteria and Standards

> **"The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards."**

17. The purposes and objectives in Section 4.400 are being used as additional criteria and standards. See Findings 1 through 16 above. These criteria are satisfied.

Subsection 4.421 (.05) Site Design Review-Conditions of Approval

> **"The Board may attach certain development or use conditions in granting an approval that are determined necessary to insure the proper and efficient functioning of the development, consistent with the intent of the Comprehensive Plan, allowed densities and the requirements of this Code."**

18. No additional conditions of approval are recommended to ensure the proper and efficient functioning of the monument sign. This criterion is satisfied

Subsection 4.421 (.06) Color or Materials Requirements

> **"The Board or Planning Director may require that certain paints or colors of materials be used in approving applications. Such requirements shall only be applied when site development or other land use applications are being reviewed by the City."**

19. It is the professional opinion of staff that the proposed coloring and the stone masonry of the monument sign is appropriate and no additional requirements are necessary. This criterion is satisfied.

Section 4.440 Site Design Review-Procedures

> **"A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:" Listed A through F.**

20. The Applicant has submitted a sign plan as required by this section. These criteria are satisfied.

(.08) Waivers and Variances. Waivers and variances are similar in that they allow deviation from requirements such as area, and height from ground. They differ in that waivers are granted by the DRB as part of a comprehensive review of the design and function of an entire site to bring about an improved design and variances are granted by either the Planning Director or DRB to relieve a specific hardship caused by the regulations.

A. Waivers. The DRB may grant waivers for sign area, sign height from ground (no waiver shall be granted to allow signs to exceed thirty-five (35) feet in height), number of signs, or use of electronic changeable copy signs in order to better implement the purpose and objectives of the sign regulations as determined by making findings that all of the following criteria are met:

1. The waiver will result in improved sign design, in regards to both aesthetics and functionality.

21. As discussed in Finding 2 the design of the proposed monument sign has elegant aesthetics utilizing stone and wood materials which reflect the exterior materials of the Terrene at the Grove apartment complex. The proposed monument sign is also similar to the style of monument signs installed at Jory Trail at the Grove apartments nearby to the south. The proposed letters and logo graphics are designed to be easily read and functional to clearly identify the Terrene Apartments. It has superior design than the signs in the vicinity at Ash Meadows condominiums and at the smaller apartment complexes. This criterion is met.

2. The waiver will result in a sign or signs more compatible with and complementary to the overall design and architecture of a site, along with adjoining properties, surrounding areas, and the zoning district than signs allowed without the waiver.

22. Findings 2 and 20 are applicable to this criterion.

3. The waiver will result in a sign or signs that improve, or at least do not negatively impact, public safety, especially traffic safety.

23. The proposed waiver to increase the sign height 4 feet above the 6 foot height limit would result in a monument sign that will not negatively impact, public safety, especially traffic safety. Proposed condition 1 will ensure safe vision clearance.

4. Sign content is not being considered when determining whether or not to grant a waiver.

24. Sign content was not considered in this staff report meeting this criterion.

Class III sign permit application and Waiver

Applicant: Sign Wizards, 1111 SE Grand Ave. Portland, OR 97214
Contact: Christine Mosher, or Russ Mahler
Phone: 503-235-6967
Oregon Contractor's number: 67127

Legal Property Owner: Brenchley Estates Partners LP
Site Location:
Tax Map:
Tax Lot:

Project:
Terrene At the Grove

Requested Action:
Sign Wizards is requesting approval for a Class III sign permit and wavier for a residential Monument Sign for the Terrene at the Grove.

Location:
SW Parkway Ave. and corner of Street D, entrance into TerreneTerrene at the Grove

Section 4.156.02 sub section .08, A. Waivers 1-4

The Terrene Monument sign is to be installed at the entrance into the Terrene development, at SW Parkway Ave and Street D
The waiver is requested because the height of the sign is 10 feet from the ground.

1. **The waiver will result in improved sign design, in regards to both aesthetics and functionality.**

The Monument sign size fits within the development standards for the overall project and environment, and will clearly identify the property serving an increasing population who may not read the native language, or for people with disabilities. Lending to the overall safety for someone in unfamiliar surroundings, clearly marking an important location.

2. **The waiver will result in a sign or signs more compatible with and complementary to the overall design and architecture of a site, along with adjoining properties, surrounding areas, and the zoning district that signs allowed without the waiver.**

The Monument sign is designed and crafted using natural materials reflecting those found on the site, weathered wood, stone, and metal. Sign materials to be used are high quality, long lasting and will provide ease of maintenance. The sign will not detract from adjacent building or properties. Care has been taken to avoid visual impact of the site, without sacrificing visual way finding. The sign is designed to be a s inclusive and universally accessible as possible, addressing a wide range of sensory and cognitive abilities and needs for people living and working in the community.

City of Wilsonville
Exhibit B1 DB13-0028

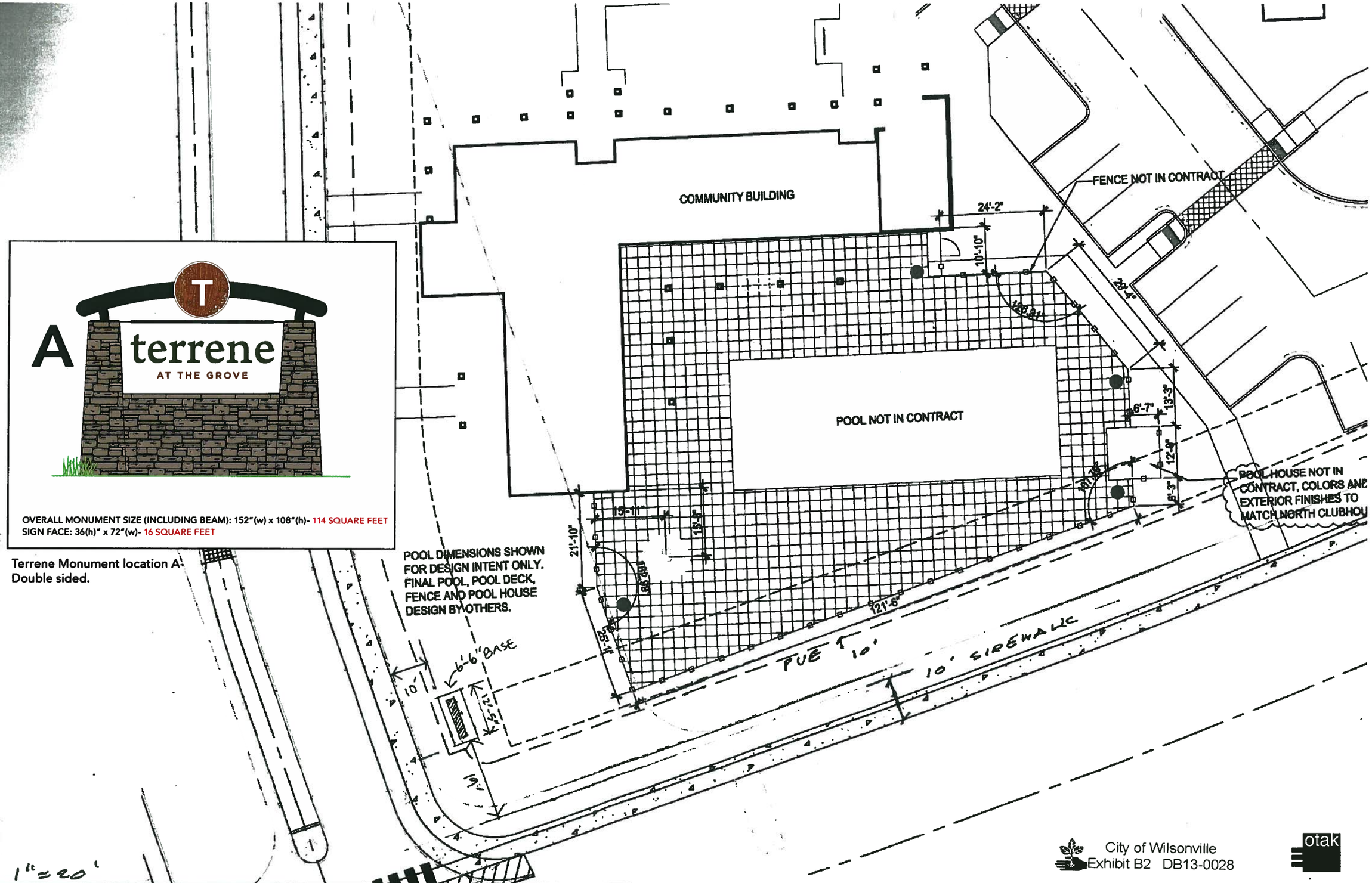
3. **The waiver will result in a sign or signs that improve, or a least do not negatively impact, public safety, especially traffic safety.**

The Monument sign will improve the safety of the people living at the Terene by clearly marking and identifying the location, the sign will become a landmark for members of the community, addressing a wide range of sensory and cog;cognitive ablilites of people working and living in the community, therefore increasing the tax revenues.

4. **Sign Content is not being considered when determining whether of not to grant a waiver.**

The Monument reads: Terrene at the Grove, no consideration is given to the sign content.

SIGN
WIZARDS
1111 SE Grand Avenue
Portland, Oregon 97214



City of Wilsonville
Exhibit B2 DB13-0028

otak

TERRENE: *Entrance Monument to Terrene at SW Parkway and Street 'D"*

DATE: 4/17/13

DRAWING NOT TO SCALE

ENLARGED SITE PLAN

VI. Consent Agenda:

C. Resolution No. 256. Carl's Jr. Restaurant Accent Lighting: Ben Altman, SFA Design Group and Craig Anderson, CB Anderson Architects – representatives for Josh Veentjer, Wilsonville Devco LLC – owner. The applicant is requesting approval of architectural accent lighting on a previously approved drive-thru fast food restaurant. The site is located on Tax Lot 302, Section 02DB; T3S-R1W; Washington County; Wilsonville, Oregon. Staff: Daniel Pauly

Case File: DB13-0027 – Site Design Review

DEVELOPMENT REVIEW BOARD
RESOLUTION NO. 256

A RESOLUTION ADOPTING FINDINGS AND A CONDITION APPROVING A SITE DESIGN REVIEW REQUEST FOR LED ACCENT LIGHTING ON A PREVIOSULY APPROVED DRIVE-THRU FAST FOOD RESTAURANT. THE SITE IS LOCATED ON TAX LOT 302, SECTION 02DB; T3S-R1W; WASHINGTON COUNTY; WILSONVILLE, OREGON. BEN ALTMAN, SFA DESIGN GROUP AND CRAIG ANDERSON, CB ANDERSON ARCHITECTS– REPRESENTATIVES FOR JOSH VEENTJER, WILSONVILLE DEVCO LLC - APPLICANT/OWNER.

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated June 3, 2013, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel A at a scheduled meeting conducted on June 10, 2013, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report dated June 3, 2013, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations for:

DB13-0027 Class 3 Site Design Review of accent lighting for previously approved Carl's Jr. restaurant.

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 10th day of June, 2013 and filed with the Planning Administrative Assistant on _____. This resolution is final on the l5th calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03).*

_____,
Mary Fierros Bower Chair, Panel A
Wilsonville Development Review Board

Attest:

_____
Shelley White, Planning Administrative Assistant

Exhibit A1

STAFF REPORT
WILSONVILLE PLANNING DIVISION

Carl's Jr. Restaurant Accent Lighting

DEVELOPMENT REVIEW BOARD PANEL 'A'
QUASI-JUDICIAL PUBLIC HEARING
STAFF REPORT

HEARING DATE	June 10, 2013
DATE OF REPORT:	June 3, 2013

APPLICATION NOS.: DB13-0027 Site Design Review

REQUEST/SUMMARY: The Development Review Board is being asked to review architectural accent lighting on a drive-thru foot fast food restaurant they approved during their March 11, 2013 meeting.

LOCATION: The southeast corner of the 95th Avenue/ Boones Ferry Road intersection near Elligsen Road/I-5 Interchange. The property is specifically known as Tax Lot 302, Section 2DB, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Washington County, Oregon.

OWNER/APPLICANT: Josh Veentjer
Wilsonville Devco LLC

APPLICANT'S REPS.: Ben Altman
SFA Design Group

Craig Anderson
CB Anderson Architects

COMPREHENSIVE PLAN MAP DESIGNATION: Commercial

ZONE MAP CLASSIFICATION: PDC (Planned Development Commercial)

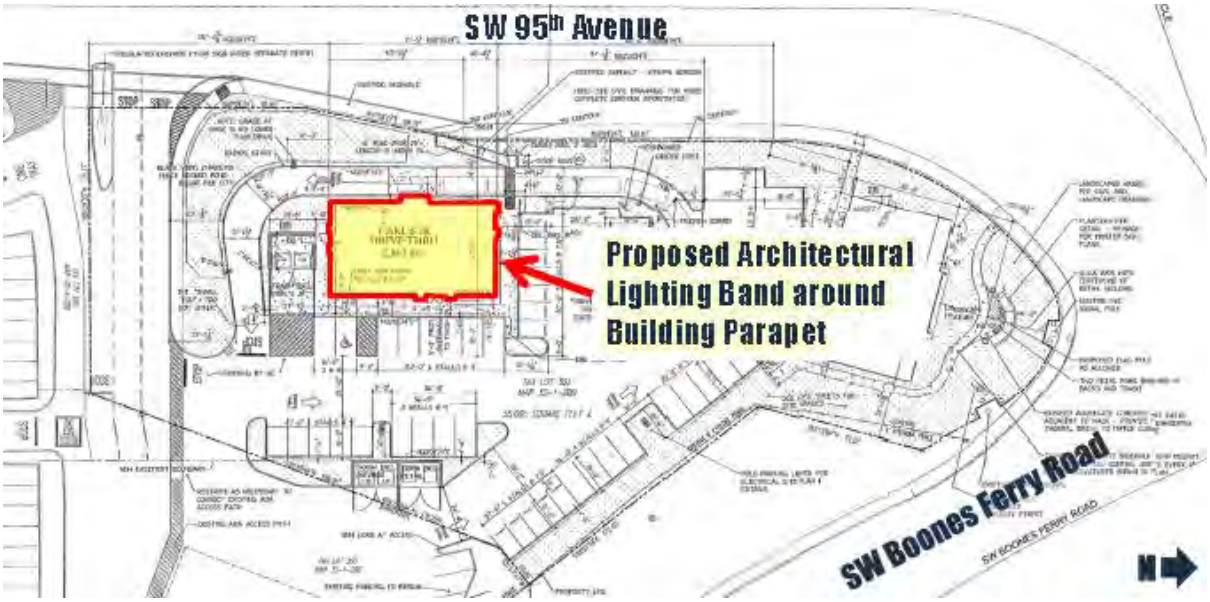
STAFF REVIEWERS: Daniel Pauly AICP, Associate Planner

STAFF RECOMMENDATION: **Approve with conditions** the requested Site Design Review request.

APPLICABLE REVIEW CRITERIA

Section 4.008	**Application Procedures-In General**
Section 4.009	**Who May Initiate Application**
Section 4.010	**How to Apply**
Section 4.011	**How Applications are Processed**
Section 4.014	**Burden of Proof**
Section 4.031	**Authority of the Development Review Board**
Subsection 4.035 (.04)	**Site Development Permit Application**
Subsection 4.035 (.05)	**Complete Submittal Requirement**
Section 4.131	**Planned Development Commercial Zone (PDC)**
Sections 4.199.20 through 4.199.60	**Outdoor Lighting**
Sections 4.400 through 4.450 as applicable	**Site Design Review**

Vicinity Map



BACKGROUND/SUMMARY:

In their March 11, 2013 meeting the Development Review Board approved with conditions a new Carl's Jr. restaurant at the corner of 95th Avenue and Boones Ferry Road in North Wilsonville. The approved architecture is a smaller scale wood-frame structures using traditional exterior materials reinforcing their location in Wilsonville's small town setting. The building feature brick, horizontal lap siding, and board and batten materials. Near the top of the building is a red band of trim. The proposed LED light band will be placed in the reveal of this red band accenting this feature and creating additional visibility of the building in the dark.

Approved Carl's Jr. Building Rendering <u>Without</u> Accent Lighting

Proposed Carl's Jr. Building Rendering <u>With</u> Accent Lighting Band

CONCLUSION AND CONDITION OF APPROVAL:

Staff has reviewed the applicant's analysis of compliance with the applicable criteria. The Staff report adopts the applicant's responses as Findings of Fact except as noted in the Findings. Based on the Findings of Fact and information included in this Staff Report, and information received from a duly advertised public hearing, staff recommends that the Development Review Board approve the proposed application (DB13-0027) with the following condition:

REQUEST A: DB13-0027 SITE DESIGN REVIEW

Planning Division Condition:	
PDA 1.	Installation of the architectural lighting band shall be carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. Minor revisions may be approved by the Planning Director through administrative review pursuant to Section 4.030. See Findings A3.

MASTER EXHIBIT LIST:

The following exhibits are hereby entered into the public record by the Development Review Board as confirmation of its consideration of the application as submitted. This is the exhibit list that includes exhibits for Planning Case File DB13-0027.

A1. Staff report and findings (this document)
A2. Staff's public hearing presentation slides (not available until public hearing)
B1. Development Permit Application
B2. Applicant's Narrative
B3. Plans and Drawings

FINDINGS OF FACT:

1. The statutory 120-day time limit applies to this application. The application was received on April 26, 2013. On May 2, 2013, the Applicant submitted additional materials. On May 3, 2013 the application was deemed complete. The City must render a final decision for the request, including any appeals, by August 31, 2013.

2. Surrounding land uses are as follows:

Compass Direction	Zone:	Existing Use:
North:	PDI	95th/Boones Ferry Intersection/ Riverwood Industrial Campus
East:	PDC	Chevron/Boones Ferry Rd.
South:	PDC	Holiday Inn
West:	PDC	95th Avenue/AGC Center

3. Prior land use actions include:

   Edwards Business Center Industrial Park Plat-Stage I
   97DB28 Stage II, Site Design Review, LaPoint Center
   DB06-0041, DB06-0043, DB06-0057, DB06-0042 Stage II Final Plan, Site Design Review, Waiver to Building Height, Master Sign Plan for Brice Office Building (Expired)
   DB12-0074 through DB12-0076 Boones Ferry Pointe: Carl's Jr. Restaurant and Multi-tenant Commercial Building; Stage II Final Plan, Site Design Review, and Master Sign Plan.

4. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

CONCLUSIONARY FINDINGS:

NOTE: Pursuant to Section 4.014 the burden of proving that the necessary findings of fact can be made for approval of any land use or development application rests with the applicant in the case.

GENERAL INFORMATION

Section 4.008 Application Procedures-In General

Review Criteria: This section lists general application procedures applicable to a number of types of land use applications and also lists unique features of Wilsonville's development review process.
Finding: These criteria are met.
Explanation of Finding: The application is being processed in accordance with the applicable general procedures of this Section.

Section 4.009 and Subsection 4.140 (.03) Who May Initiate Application and Ownership

Review Criterion: "Except for a Specific Area Plan (SAP), applications involving specific sites may be filed only by the owner of the subject property, by a unit of government that is in the process of acquiring the property, or by an agent who has been authorized by the owner, in writing, to apply." "The tract or tracts of land included in a proposed Planned Development must be in one (1) ownership or control or the subject of a joint application by the owners of all the property included."
Finding: This criterion is satisfied.
Explanation of Finding: The application has been submitted on behalf of the property owner, Wilsonville Devco LLC. The application form is signed by Josh Veentjer, Managing Member.

Subsection 4.011 (.02) B. Lien Payment before Application Approval

Review Criterion: "City Council Resolution No. 796 precludes the approval of any development application without the prior payment of all applicable City liens for the subject property. Applicants shall be encouraged to contact the City Finance Department to verify that there are no outstanding liens. If the Planning Director is advised of outstanding liens while an application is under consideration, the Director shall advise the applicant that payments must be made current or the existence of liens will necessitate denial of the application."
Finding: This criterion is satisfied.
Explanation of Finding: No applicable liens exist for the subject property. The application can thus move forward.

Subsection 4.035 (.04) A. General Site Development Permit Submission Requirements

Review Criteria: "An application for a Site Development Permit shall consist of the materials specified as follows, plus any other materials required by this Code." Listed 1. through 6. j.
Finding: These criteria are satisfied.

Explanation of Finding: The applicant has provided all of the applicable general submission requirements contained in this subsection.

REQUEST A: DB13-0027 SITE DESIGN REVIEW

Site Design Review

Subsection 4.400 (.01) and Subsection 4.421 (.03) Excessive Uniformity, Inappropriateness of Design, Etc.

A1. **Review Criteria:** "The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards." "Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefor."

Finding: These criteria are satisfied.

Explanation of Finding: The applicant provides a response to this subsection on pages 5-6 of the compliance narrative in their narrative, Exhibit B2. Staff summarizes the compliance with this subjection as follows:

Excessive Uniformity: Staff is not aware of any manner in which the proposed additional light band leads to excessive uniformity of buildings or development in the area.

Inappropriate or Poor Design of the Exterior Appearance of Structures: Be blending with the red trim, the architectural lighting does not unduly detract from the architecture of the building in a manner that constitutes inappropriate or poor design.

Inappropriate or Poor Design of Signs: No change to the previously approved sign package is proposed in this application.

Lack of Proper Attention to Site Development: The appropriate professional services, including the project architect have been consulted, to determine the placement of the light band.

Lack of Proper Attention to Landscaping: Landscaping is not impacted by the proposed architectural light band.

Subsection 4.400 (.02) and Subsection 4.421 (.03) Purposes of Objectives of Site Design Review

A2. **Review Criteria:** "The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards." "The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:" Listed A through J.

Finding: These criteria are satisfied.

Explanation of Finding: The applicant provides a response to this subsection on pages 5-6 of the compliance narrative in their notebook, Exhibit B2, demonstrating compliance with the listed purposes and objectives. In short, the proposal complements, and at least

does not unduly detract from the previously approved architecture that was found by the Development Review Board to be a high quality design appropriate for the site and its location in Wilsonville.

Section 4.420 Development in Accordance with Plans

A3. **Review Criteria:** The section states that development is required in accord with plans approved by the Development Review Board.
Finding: These criteria will be satisfied by Condition of Approval PDA 1.
Explanation of Finding: A condition of approval has been included to ensure the installation of architectural light band is carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. No building permits is required for the proposed banding.

Subsection 4.421 (.01) and (.02) Site Design Review-Design Standards

A4. **Review Criteria:** This subsection lists the design standards for Site Design Review. Listed A through G. Pursuant to subsection (.02) ""The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures."
Finding: These criteria are satisfied.
Explanation of Finding: The applicant has provided sufficient information demonstrating compliance with the standards of this subsection. Among the information provided is a written response to these standards on pages 5-6 of the compliance narrative in the applicant's narrative, Exhibit B2.

Subsection 4.421 (.05) Site Design Review-Conditions of Approval

A5. **Review Criterion:** "The Board may attach certain development or use conditions in granting an approval that are determined necessary to insure the proper and efficient functioning of the development, consistent with the intent of the Comprehensive Plan, allowed densities and the requirements of this Code."
Finding: This criterion is satisfied.
Explanation of Finding: No additional conditions of approval are recommended to ensure the proper and efficient functioning of the development.

Subsection 4.421 (.06) Color or Materials Requirements

A6. **Review Criterion:** "The Board or Planning Director may require that certain paints or colors of materials be used in approving applications. Such requirements shall only be applied when site development or other land use applications are being reviewed by the City."
Finding: This criterion is satisfied.
Explanation of Finding: The red coloring of the architectural lighting is appropriate for the location as it matches the approved color of the trim to which it is attached.

Section 4.440 Site Design Review-Submittal Requirements

A7. **Review Criteria:** This section lists additional submittal requirements for Site Design Review in addition to those listed in Section 4.035.
Finding: These criteria are satisfied.
Explanation of Finding: The applicant has submitted the required additional materials, as applicable.

Outdoor Lighting

Section 4.199.20 Applicability of Outdoor Lighting Standards

A8. **Review Criterion:** This section states that the outdoor lighting ordinance is applicable to "Installation of new exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas" and "Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas." In addition the exempt luminaires and lighting systems are listed.
Finding: This criterion is satisfied.
Explanation of Finding: The proposal is for a new exterior lighting system in a commercial project and is thus subject to the outdoor lighting standards.

Section 4.199.30 Outdoor Lighting Zones

A9. **Review Criterion:** "The designated Lighting Zone as indicated on the Lighting Overlay Zone Map for a commercial, industrial, multi-family or public facility parcel or project shall determine the limitations for lighting systems and fixtures as specified in this Ordinance."
Finding: This criterion is satisfied.
Explanation of Finding: The development site is within LZ 2 and the proposed outdoor lighting systems are being reviewed under the standards of this lighting zone.

Subsection 4.199.40 (.01) A. Alternative Methods of Outdoor Lighting Compliance

A10. **Review Criterion:** "All outdoor lighting shall comply with either the Prescriptive Option or the Performance Option below."
Finding: This criterion is satisfied.
Explanation of Finding: The applicant has submitted information to comply with the performance option, and they have previously for other lighting for the site.

Subsection 4.199.40 (.01) C. Performance Option for Outdoor Lighting Compliance

"If the lighting is to comply with the Performance Option, the proposed lighting design shall be submitted by the applicant for approval by the City meeting all of the following:" Listed 1. through 3.

Subsection 4.199.40 (.01) C. 1. Weighted Average of Direct Uplight Lumens Standard

A11. **Review Criteria:** "The weighted average percentage of direct uplight lumens shall be less than the allowed amount per Table 9."

Finding: These criteria are satisfied.
Explanation of Finding: The mounting will be tucked under a relief on the previously approved trim around the parapet of the building with no direct uplight.

Subsection 4.199.40 (.01) C. 2. Maximum Light Level at Property Lines

A12. **Review Criteria:** "The maximum light level at any property line shall be less than the values in Table 9, as evidenced by a complete photometric analysis including horizontal illuminance of the site and vertical illuminance on the plane facing the site up to the mounting height of the luminaire mounted highest above grade."
Finding: These criteria are satisfied.
Explanation of Finding: The proposed architectural lighting adds no measurable illuminance at ground level or at the vertical property line.

Subsection 4.199.40 (.01) C. 2. Luminaire Aiming Direction

A13. **Review Criteria:** "Luminaires shall not be mounted so as to permit aiming or use in any way other than the manner maintaining the shielding classification required herein:"
Finding: These criteria are satisfied.
Explanation of Finding: The mounting will be tucked under a relief on the previously approved trip around the parapet of the building and is not able to be aimed otherwise.

Subsection 4.199.40 (.01) D. Outdoor Lighting Curfew

A14. **Review Criterion:** "All prescriptive or performance based exterior lighting systems shall be controlled by automatic device(s) or system(s) that:" Listed 1. through 3.
Finding: This criterion is satisfied.
Explanation of Finding: Carl's Jr. is exempt from lighting curfew as a 24/7 operation.

Subsection 4.199.50 Submittal Requirements

A15. **Review Criteria:** "Applicants shall submit the following information as part of DRB review or administrative review of new commercial, industrial, multi-family or public facility projects:" Listed A. through F. "In addition to the above submittal requirements, Applicants using the Prescriptive Method shall submit the following information as part of the permit set plan review:
A. A site lighting plan (items 1 A - F, above) which indicates for each luminaire the 3 mounting height line to demonstrate compliance with the setback requirements. For luminaires mounted within 3 mounting heights of the property line the compliance exception or special shielding requirements shall be clearly indicated."
Finding: These criteria are satisfied.
Explanation of Finding: The applicant has submitted sufficient information to review the application.

This electronic fill-in form cannot be submitted electronically. Please sign a printed copy and submit to the Wilsonville Planning Division. Please call 503-682-4960 if you have any questions.

CITY OF WILSONVILLE

29799 SW Town Center Loop East
Wilsonville, OR 97070
Phone: 503.682.4960
Fax: 503.682.7025
Web: www.ci.wilsonville.or.us

Pre-Application meeting date: _____

Planning Division

Development Permit Application

Final action on development application or zone change is required within 120 days in accordance with provisions of ORS 227.175

A pre application conference is normally required prior to submittal of an application. Please visit the City's website for submittal requirements

Incomplete applications will not be scheduled for public hearing until all of the required materials are submitted.

TO BE COMPLETED BY APPLICANT:
Please PRINT legibly

Legal Property Owner's Name: Wilsonville Devco, LLC	Authorized Representative: Ben Altman, SFA Design Group
Address: 50550 Mandarina La Quinta, Ca 92253	Address: 9020 SW Washington Sq. Rd., Suite 505 Portland, OR 97070
Phone: (503) 201-1389	Phone: 503-641-8311
Fax:	Fax:
E-mail: josh@iipcorp.com	E-mail: baltman@sfadg.com

Property Owner or Authorized Signature: _____ Printed Name Josh Veentjer

Title: Managing member Date 4/11/13

Site Location and Description:

Project Address if Available: _____ Suite/Unit _____

Project Location: SW 95th Avenue, adjacent Chevron Station

Tax Map #(s): T3S R1W 2DB Tax Lot #(s): 302 County: Washington

Request: Design Review for Adding LED banding on the Carl's Jr. Building, file DB12-0074 to DB12-0076.

Project Type: Class I Class II Class III

- [ ] Residential
- [x] Commercial
- [ ] Industrial
- [ ] Other (describe below)

Application Type:

[ ] Annexation	[ ] Appeal	[ ] Comp Plan Map Amendment	[ ] Conditional Use
[ ] Final Plat	[ ] Major Partition	[ ] Minor Partition	[ ] Parks Plan Review
[ ] Plan Amendment	[ ] Planned Development	[ ] Preliminary Plat	[ ] Request to Modify Condition
[ ] Request for Special Meeting	[ ] Request for Time Extension	[ ] Signs	[✓] Site Design Review
[ ] SROZ/SRIR Review	[ ] Staff Interpretation	[ ] Stage I Master Plan	[ ] Stage II Final Plan
[ ] Type C Tree Removal Plan	[ ] Tree Removal Permit (B or C)	[ ] Temporary Use	[ ] Variance
[ ] Villebois SAP	[ ] Villebois PDP	[ ] Villebois FDP	[ ] Waiver
[ ] Zone Map Amendment	[ ] Other		

FOR STAFF USE ONLY:

Application Rec'd: _____ Fee: _____ Check #: _____ Application Complete: _____ By: _____

File No (s) _____

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City of Wilsonville
EXHIBIT B1 DB13-0027

Land Use Application
City of Wilsonville

Boones Ferry Pointe

Carl's Jr.
Design Review Modifications
LED Building Banding

Site Design Review

April 26, 2013

APPLICANT/OWNER:
Wilsonville Devco, LLC
50550 Mandarina
La Quinta, CA 92253
Contact: Josh Veentjer
josh@iipcorp.com

APPLICANT'S REPRESENTATIVES:

CB Anderson, Project Architects
7209 Greenwood Ave. N.
Seattle, WA 98103
Contact: Craig Anderson
206-782-2911
craig@cba-arch.com

SFA Design Group, Project Planning
9020 SW Washington Square Dr., Ste 505
Portland, OR 97223
Contact: Ben Altman
503-641-8311
baltman@sfadg.com

City of Wilsonville
EXHIBIT B2 DB13-0027

FACT SHEET:

Project Name:	**Boones Ferry Pointe**
Type of Application:	Site Design Review for Carl's Jr. - The Sign Plan Modification and LED Banding on Building
Site Location:	SW 95th Avenue
Tax Lots:	T3S R1W, Map 2DB, Lot 302
Land Area:	55,605 square feet; or 1.30 Acres
Comp. Plan/Zoning:	Commercial/PDC, Planned Development Commercial
Applicants/Owners:	Wilsonville Devco, LLC

Design Team:

Project Planning
Ben Altman, SFA Design Group

Project Architect
CB Anderson
Craig Anderson - Primary Contact
Cameron Fultz

Sign Resource Identity Group
Michael Ehrenberger

Engineering MEP
Priest Engineering
Arwin Priest
Brett Wixson

I. Introduction

This application is submitted on behalf of Josh Veentjer, Wilsonville Devco, LLC representing the owner and applicant for Tax Lot 302, Map T3S R1W 2DB.

On March 11, 2013 The DRB approved development Plans for Boones Ferry Pointe, including a Carls Jr & Retail Center, Case Files DB12-0074-DB12-0076. Subsequent to the approval, Carls Jr corporate informed Mr. Veentjer that they wanted a revision including:

1. Type I - Green Burrito Logo added to the Free Standing Sign; and
2. Type III - Red LED Banding on Building

The proposed sign revision will be a Type I review linked with the Building Permit, as it represents only a change of face, with no increase in sign area. Therefore it only requires purchase of the sign permit.

However, the Led banding will require a Type III Design Review Board Review. Therefore this application is for DRB approval of the proposed accent banding.

Development Agreement

Prior to submittal of this application, the applicant has worked with the City and the owner of the adjacent Chevron Station, and the Holiday Inn to refine access, egress, and site circulation. The conclusions reached by the parties have been recorded in a Development Agreement, a copy of which is included in the application documents, see Index Tab.

The Development Agreement provides for the driveway configuration, which will provide two inbound lanes, after the sign island and two outbound lanes, with a 50 foot north bound curb radius to accommodate trucks. It also provides for reconfiguration of the access and egress points for the Holiday Inn. In addition the Agreement provides for relocation of the existing freestanding Chevron Sign and provision for adding a panel for Carl's Jr.

Surrounding Development

This property is located in the area originally master planned as the Commerce Circle Industrial Park. However, it is now separated from the Commerce Circle area by 95th Avenue. The AGC Building is located west across 95th from the site.

The site abuts in intersection of 95th Avenue and Boones Ferry Road, and is located immediately north of the Holiday Inn and west of the Chevron Station. To the east of the site is Boones Ferry Road.

Compliance Report Format

In the following sections, compliance with applicable Plan policies and Code provisions are addressed. Specific Comprehensive Plan policies and Code provisions determined to be applicable to this application are presented in ***10 pt Bold Italic***, with our compliance response presented in 12 pt regular type.

II. Development Code Compliance

TYPE III DRB REVIEW

CARL'S JR. BUILDING – RED LED BANDING

Consistent with the industrial designation in the Comprehensive Plan, the subject property is zoned PDC, Planned Development Commercial. For the most part the PDC and other applicable zoning and development standards were addressed for compliance under the original approvals, Case Files DB12-0074-DB12-0076. Therefore compliance responses for this application are limited to the specific sections affected by the two proposed changes, primarily signs and design review.

(.04) Professional Design.

A. The applicant for all proposed Planned Developments shall certify that the professional services of the appropriate professionals have been utilized in the planning process for development.

B. Appropriate professionals shall include, but not be limited to the following to provide the elements of the planning process set out in Section 4.139:

1. An architect licensed by the State of Oregon;

2. A landscape architect registered by the State of Oregon;

3. An urban planner holding full membership in the American Institute of Certified Planners, or a professional planner with prior experience representing clients before the Development Review Board, Planning Commission, or City Council; or

4. A registered engineer or a land surveyor licensed by the State of Oregon.

C. One of the professional consultants chosen by the applicant from either 1, 2, or 3, above, shall be designated to be responsible for conferring with the planning staff with respect to the concept and details of the plan.

D. The selection of the professional coordinator of the design team will not limit the owner or the developer in consulting with the planning staff.

RESPONSE

The Planned Development Regulations require a Design Team. The Professional Design Team for this project is listed on Pages 2.

Subsequent to the approval of the Boones Ferry Pointe development Carls Jr. corporate informed Mr. Veentjer that they wanted him to add Red LED Banding on Building as reflected in the attached Building Elevation Exhibits.

The proposed banding consists of LED strip lighting, which is placed on the red trim boards at the top of the building. The strips are 1inch wide and vary in length.

SITE DESIGN REVIEW

1.400. Purposed.

(.01) Excessive uniformity, inappropriate or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services thereof.

(.02) The City Council declares that the purposes and objectives of site and development requirements and the site design review procedures are to:

A. Assure that Site Development Plans are designed in a manner that insures proper functioning of the site and maintains a high quality visual environment;

B. Encourages originality, flexibility and innovation in site planning and development, including the architecture, landscaping and graphic design of said development;

C. Discourages monotonous, drab, unsightly, dreary and inharmonious developments;

D. Conserve the City's natural beauty and visual character and charm by assuring that structures, signs and other improvements are properly related to their sites, and to surrounding sites and structures, with due regard to the aesthetic qualities of the natural terrain and landscaping, and that proper attention is given to exterior appearances of structures, signs and other improvements;

E. Protect and enhance the City's appeal and thus support and stimulate business and industry and promote the desirability of investment and occupancy in business, commercial and industrial purposes;

F. Stabilize and improve property values and prevent blighted areas and, thus increase tax revenues;

G. Insure that adequate public facilities are available to serve development as it occurs and that proper attention is given to site planning and development so as to not adversely impact the orderly, efficient and economic provisions of public facilities and services;

H. Achieve the beneficial influence of pleasant environments for living and working on behavioral patterns and, thus decrease the cost of government services and reduce opportunities for crime through careful consideration of physical design and site layout under defensible space guidelines that clearly define all areas as either public, semi-public, or private, provide clear identity of structures and opportunities for easy surveillance of the site that maximize resident control of behavior – particularly crime;

I. Foster civic pride and community spirit so as to improve the quality and quantity of citizen participation in local government and in community growth, change and improvements;

J. Sustain the comfort, health, tranquility and contentment of residents and attract new residents by reason of the City's favorable environment and, thus, to promote and protect the peace, health and welfare of the City.

RESPONSE

The approved building design and architectural detail is attractive, with the accent colors. However at night these details are visually diminished. Therefore the desire is to provide night-time accent by adding LED strips running parallel to the approved accent banding.

As part of the updated sign code, this type of accent lighting was specifically defined as an architectural feature rather than signage.

This request is consistent with the design review objectives, which encourages originality, flexibility and innovation in site planning and development, including the architecture, landscaping and graphic design of development. The objectives further focus on protecting and enhancing the City's appeal aimed at supporting and stimulating business and industry and promoting the desirability of investment and occupancy in business, commercial and industrial purposes. And, they seek to stabilize and improve property values and prevent blighted areas, thus increasing tax revenues.

This request is further consistent with the purposes of the Planned Development Regulations, which seek to take advantage of advances in technology, architectural design. And to allow flexibility and innovation in adapting to changes in the economic and technological climate.

This facility is located at a prominent intersection, at the north end of town, and it will operate 24 hours per day. This site is in an industrial area, not surrounded by any residential uses. In addition this area will not be highly occupied during the evening hours as the majority of the businesses will be closed. Therefore adequate visual identity is essential to attracting customers.

The LED strips allow for the building accents that are typically visible during daylight hours only to also be visible at night. LEDs are one of the most recent technological advancements in the lighting industry. They provide significant flexibility in applications. Moore importantly they are highly energy efficient and the light intensity is easily controllable, see also the following responses to the Outdoor Lighting regulations.

The proposed light strips are designed to provide a soft, subtle glow, rather than a harsh or bright glare. The banding is proposed along the top trim, including the entry towers. The accent banding already approved by the DRB will be red. The LED strips will also be red, so the banding is visible at night.

If the planning staff or Board members are interested in viewing actual lighting similar to that being proposed, these LED strips have been installed at the Tigard Carl's Jr., just off I-5 on 99W.

4.199 OUTDOOR LIGHTING
4.199.20. Applicability:

(.01) This Ordinance is applicable to:
A. Installation of new exterior lighting systems in public facility, commercial industrial and multi-family housing projects with common areas.
B. Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial industrial and multi-family housing projects with common areas.

(.02) Exemption. The following luminaires and lighting systems are EXEMPT from these requirements:

A. Interior lighting
B. Internally illuminated signs
F. Building Code required exit path lighting
G. Lighting specifically for stairs and ramps
K. Code required Signs
M. Landscape lighting

4.199.30 Lighting Overlay Zones.

(.01) The designated Lighting Zone as indicated on the Lighting Overlay Zone Map for a commercial, industrial, multi-family, or public facility parcel or project shall determine the limitations for lighting systems and fixtures as specified in this Ordinance.

(.02) The Lighting Zones shall be:

A. LZ 0. Critical dark environments.
B. LZ 1. Developed areas in City and State parks, recreation areas, SROZ wetland and wildlife habitat areas; developed areas in natural settings; sensitive night environments; and rural areas.
C. LZ 2. Low-density suburban neighborhoods and suburban commercial districts, industrial parks and districts. This zone is intended to be the default condition for the majority of the City.
D. LZ 3. Medium to high-density suburban neighborhoods and districts, major shopping and commercial districts as depicted on the Lighting Overlay Zone Map.
E. LZ 4. Reserved for limited applications with special lighting requirements.

4.199.40. Lighting Systems Standards for Approval.
(.01) Non-Residential Uses and Common Residential Areas.

A. All outdoor lighting shall comply with either the Prescriptive Option or the Performance Option below.

(.03) In addition to the above submittal requirements, Applicants using the Performance Method shall submit the following information as part of the permit set plan review:

A. Site plan showing horizontal isocandle lines, or the output of a point-by-point computer calculation of the horizontal illumination of the site, showing property lines and light levels immediately off of the subject property.
B. For each side of the property, the output of a point-by-point vertical footcandle calculation showing illumination in the vertical plane at the property line from grade to at least 10 feet higher than the height of the tallest pole.
C. Lighting plans shall be prepared by a qualified licensed engineer.

4.199.60. Major Additions or Modifications to Pre-Existing Sites.
(01.) Major Additions. If a major addition occurs on a property, all of the luminaires on the site shall comply with the requirements of this Section. For purposes of this subsection, the following are considered to be major additions:

A. Additions of 50 percent or more in terms of additional dwelling units, gross floor area, seating capacity, or parking spaces, either with a single addition or with cumulative additions after July 2, 2008.
B. Modification or replacement of 50 percent or more of the outdoor lighting luminaries' within a 5-year timeframe existing as of July 2, 2008.

Table 9: Performance Method

		Maximum Light Level at Property Line	
Lighting Zone	*Maximum percentage of direct uplight lumens*	*Horizontal plane at grade (foot candles - fc)*	*Vertical plane facing the site in question, from grade to mounting height of highest mounted luminaire (foot candles – fc)*
LZ 2	*5%*	*0.2 fc*	*0.4 fc*

From Table 10: Curfew: Lighting Zone Curfew Time

LZ 2 10:00 PM (2200 hours)

RESPONSE

The City has adopted new outdoor lighting standards, Section 4.199. These relatively new regulations set standards for the intensity of outdoor lighting, and there are also curfew provisions, aimed at lower artificial light levels at night (dark sky).

Section 4.199.30(.02) establishes lighting zones. The subject site is within LZ 2, as identified on the Lighting Zone Map. This zone applies to low-density suburban neighborhoods and suburban commercial districts, industrial parks and districts, and is the default condition for the majority of the City. This zone has a 10:00 PM curfew, which calls for lower lighting levels after 10:00 PM.

The development site is within a developed commercial and industrial district and within the PDC, Planned Development Commercial Zone. This development is subject to the provisions of these new regulations, as defined above. The following findings and supporting drawings demonstrate that the proposed external lighting associated with this new development has been designed to comply with this section utilizing the "Performance Option", as previously approved.

However, this section also provides an exception for businesses that operate continuously (Exception 3). The Carl's Jr. will be a 24 hour, 7 day/week operation so this exception is applicable.

Even with this exception, the approved Development Plans provided for lighting that is energy efficient and consistent with the standard in this section of the code. The proposed LED band lighting maintains this level of energy efficiency and controls the lighting intensity consistent with the standards.

Illumination Systems, Inc. has provided a letter specifying that the photometrics for the LED Banding will result in no change at the ground level from the originally approved lighting plan. The light strips emit only 8 lumens per linear foot. This application includes the fixture cut sheets.

The lights are controlled by timers and photocells so they are only activated at times of low natural light. See Lighting Plans for details.

Table 8: Maximum Lighting Mounting Height In Feet			
Lighting Zone	***Lighting for private drives, driveways, parking, bus stops and other transit facilities***	***Lighting for walkways, bikeways, plazas and other pedestrian areas***	***All other lighting***
LZ 0	*20*	*8*	*4*
LZ 1	*25*	*12*	*4*
LZ 2	***40***	***18***	***8***
LZ 3	*40*	*18*	*16*
LZ 4	*Height limit to be determined by Special Use Permit Only*		

Lighting mounted onto buildings or other structures shall not exceed a mounting height greater than 4 feet higher than the tallest part of the building or structure at the place where the lighting is installed, nor higher than 33.33 percent of the horizontal distance of the light from the nearest property line, whichever is less.

The subject site is in LZ 2. Below are the mounting heights for the light fixtures, which demonstrating compliance with Table 8:.

- Main Building roofline – 17'
- Entry Towers – 23'

The led strips are powered by 24 volts dc, and are only 1.5 watts. The supplemental lighting plan and photometrics demonstrate compliance using the Performance Option. Based on the above findings and plans submitted this project complies with the outdoor lighting standards.

General Building Design

In the design for the original approval care was taken to maintain brand identity for the anchor tenant, Carl's Jr., while also integrating the development into the business park environment. The prototype Carl's Jr. building is quite contemporary, so a full exterior redesign was necessary for this Wilsonville location.

The prototypical towers denoting building entries with signage located at the top were retained, but are constructed of brick giving them a more traditional appearance. Accent and siding colors are from the prototype Carl's Jr. design, but the awnings along with the more traditional horizontal & vertical siding are unique design elements to this location. Steel canopies using 12" C-Channels are used at these entry points and over the Drive-Thru Window where the awnings are of a contemporary style giving contrast to the traditional siding and creating welcoming highlights appropriate for a quick-serve restaurant.

The colors have also been carefully chosen to achieve the same effect in reference to the brick's dark red color. The various beige colors of the siding stand in contrast to the brick in hue color and light-dark value and yet complement each other in their muted chromatic brightness. The red horizontal trim band and awning elements are designed to complement the brick in an inverted fashion from the siding. The contrast element in this case is the chromatic brightness of the color while the hue color is similar to the red brick and the light-dark value is complementary to the siding's light-dark value. A second type of canopy-awning is also used at access areas that are dark and much muted in color to further balance the composition.

The proposed light strips are designed to provide a soft, subtle glow, rather than a harsh or bright glare. The banding is proposed along the top trim, including the entry towers. The accent banding already approved by the DRB will be red. The LED strips will also be red, so the banding is visible at night.

The proposed building and site improvements are designed to compliment and enhance the existing business park environment, and therefore will maintain consistency with the Design Review Criteria and Objectives listed above. The approved improvements are designed to ensure the site functions safely, properly and efficiently. The proposed Led banding is a simple subtle detail that will help identify the building and provide accent during hours of darkness.

4.421. Criteria and Application of Design Standards.

(.01) The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural style is not included in these standards. (Even in the Boones Ferry Overlay Zone, a range of architectural styles will be encouraged.)

A. Preservation of Landscape. The landscape shall be preserved in it natural state, insofar as practicable, by minimizing tree and soil removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.

B. Relation of Proposed Buildings to Environment. Proposed structures shall be located and designed to assure harmony with the natural environment, including protection of steep slopes, vegetation and other naturally sensitive areas for wildlife habitat and shall provide buffering from less intensive uses in accordance with Sections 4.139 and 4.139.5. The achievement of such relationship may include enclosure of space in conjunction with other existing buildings or other proposed buildings and the creation of focal points with respect to avenues of approach, street access or relationships to natural features such as vegetation or topography.

C. Drives, Parking, and Circulation. With respect to vehicular an pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the design of proposed buildings and structures and the neighboring properties.

D. ***Surface Water Drainage. Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties of (et sic) the public storm drainage system.***

E. ***Utility Service. Any utility installations above ground shall be located so as to have an harmonious relation to neighboring properties and site. The proposed method of sanitary and storm sewage disposal from all buildings shall be indicated.***

F. ***Advertising Features. In addition to the requirements of the City's sign regulations, the following criteria should be included: the size, location, design, color, texture, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties.***

G. ***Special Features. Exposed storage area, exposed mechanical installations, surface areas, truck loading areas, utility buildings and structures and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall be required to prevent their being incongruous with the existing or contemplated environment and its surrounding properties. Standards for screening and buffering are contained in Section 4.176.***

(.02) The standards of review outlined in Sections (a) through (g) shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures.

(.03) The Board shall also be guided by the purposes of Section 4.400 and such objectives shall serve as additional criteria and standards.

RESPONSE

The location and red color of the proposed LED lighting feature will not detract from the design of proposed buildings and structures and the surrounding properties.

The original approvals confirm compliance with these design criteria. The proposed LED accent banding will be similar to that approved for the Chevron fuel island canopy. Except that in this, as part of the updated sign code, this type of accent lighting was specifically defined as an architectural feature rather than signage, as it was considered for the Chevron site.

The property is located at a prominent arterial intersection adjacent to the Elligsen Road Freeway Interchange and therefore the site is highly visible from the adjacent roadways. But as noted, the Carl's Jr. will be a 24 hour operation, and this typically active business area is relatively inactive during the evening and night-time hours.

This site is surrounded by a combination of commercial and industrial uses and shares access with the adjacent Chevron Station and Holiday Inn. There are no nearby residential uses. And, both the Chevron and Holiday Inn have been approved with various forms of accent lighting. Therefore this proposal is compatible with the surrounding development.

CONCLUSION – LED BUILDING BANDING

Based on the Plans submitted design and the findings provided herein the proposed Red LED banding on the building has been demonstrated to comply with all applicable code standards. Therefore the applicant respectfully requests approval as requested.

Carl's Jr.®

CHARBROILED BURGERS

GREEN BURRITO®

SW 95TH AVENUE & SW BOONES FERRY ROAD,
WILSONVILLE, OR 97070

SignResource
IDENTITY GROUP

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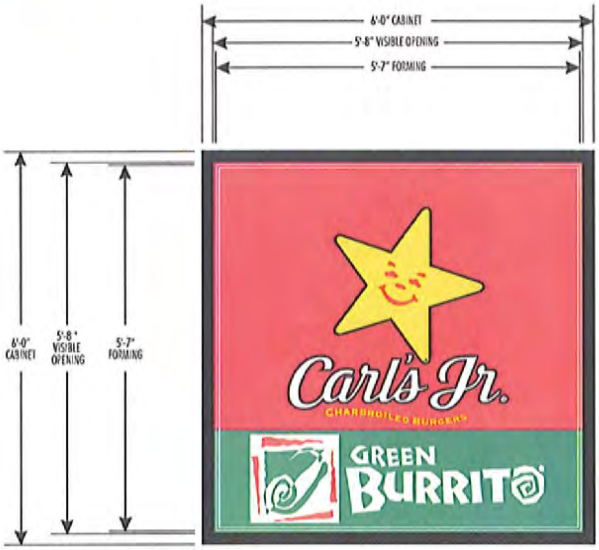
Website: www.signresource.com

City of Wilsonville
EXHIBIT B3 DB13-0027

K

ILLUMINATED PYLON SIGN

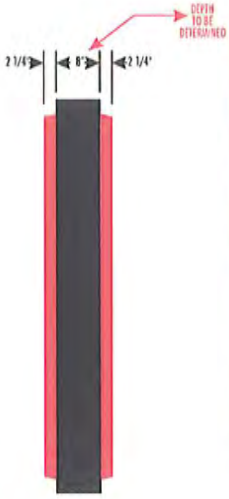
ORDER PART # CKEZ0042



FRONT VIEW

O.D. 6'-0"H X 6'-0"W

RETAINER SIZE: TBD (DRAWN AT 2")



SIDE VIEW

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CARL'S JR - WILSONVILLE, OR.

Date Created	10/30/12
Address	SW 95TH AVENUE & COMMERCE CIRCLE, WILSONVILLE OR 97070
Revision	C

ILLUMINATION SYSTEMS INC

Date: April 25, 2013

Re: Carl's Jr. @ Boones Ferry Pointe RED LED Rope Light on Parapet

To: Whom It May Concern,

With an approx. 8 lumens output per foot for the Red LED rope light, there is no scientific statement to state that it will impact the foot-candle values on the ground. After review and photometric evaluation has been done with the available American Lighting RED LED Rope Light, it has been shown that there is no foot-candle change on the ground.

Thank you,

Pachia Moua
Illumination Systems, Inc

O

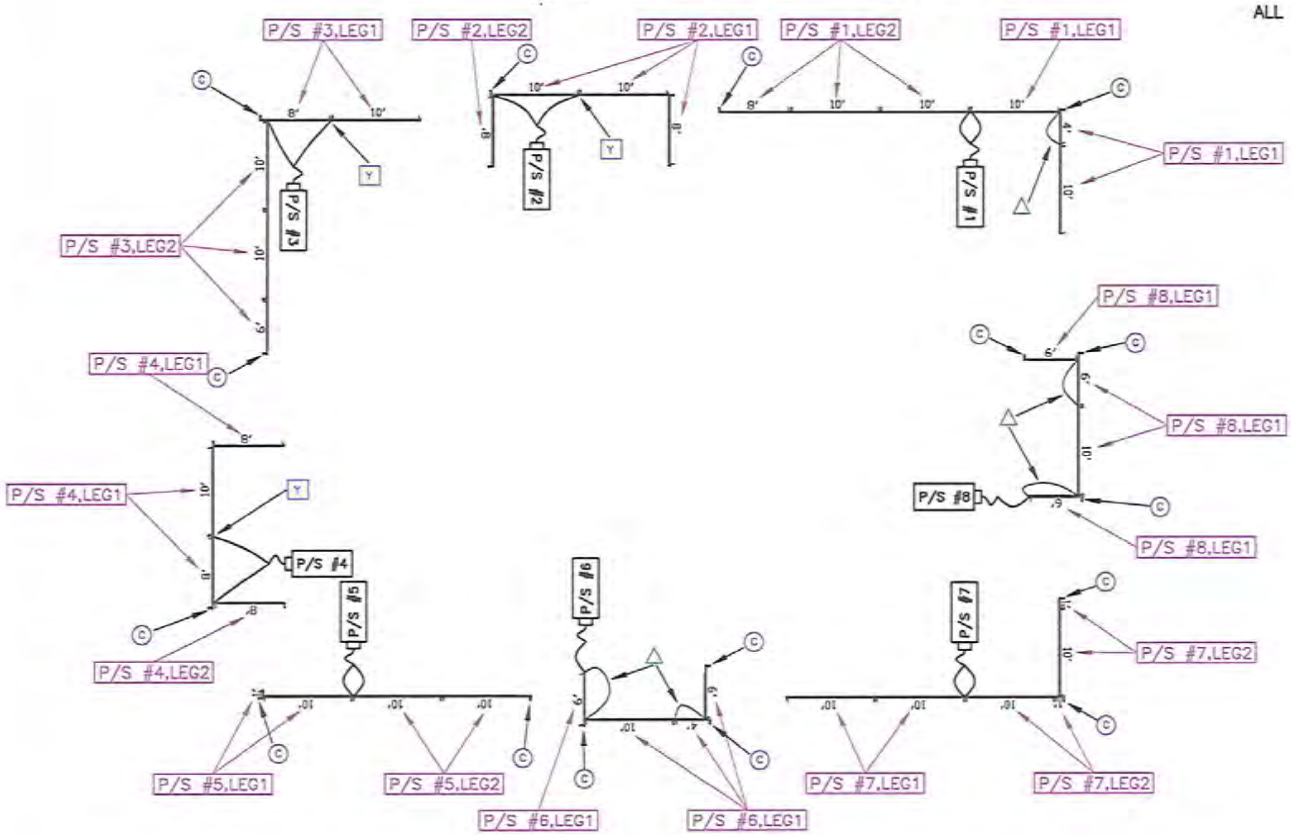
SLOAN LED LIGHT BARS

PRODUCT TOTALS:

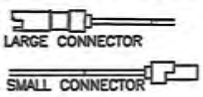
(19) Each 701189-10H – 10' Red LEDStripe Lengths (Actual length 121 3/8")
(7) Each 701189-8H – 8' Red LEDStripe Lengths (Actual length 97 3/8")
(6) Each 701189-6H – 6' Red LEDStripe Lengths (Actual length 73 3/8")
(2) Each 701189-4H – 4' Red LEDStripe Lengths (Actual length 48 7/8")
(3) Each 701189-1H – 1' Red LEDStripe lengths (Actual length 12 7/8")
(8) Each 701895-24C – 100 Watt Power Supply
(14) Each 701158-120 – 10' Hook-up Cable
(5) Each 701385 – Jumper Kits
(3) Each 701160-3 – "Y" Connectors
(12) Each 701362-R – Outside Corner Covers
(20) Each 400828-FC –Frosted Acrylic Endcap (Included)

Key:
△ = Jumper Kit
Ⓒ = Cut Here
Y = Y Connector

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE STATED.



WARNING:
CUT THE END WITH THE SMALL CONNECTOR ONLY.



1) LEDStripe AND POWER SUPPLY QUANTITIES ARE ESTIMATES ONLY AND ARE BASED ON THE SUPPLIED INFORMATION AND DRAWINGS. ACTUAL PART REQUIREMENTS MAY VARY AT THE TIME OF INSTALLATION AND INSTALLATION METHOD.

2) PLEASE NOTE – MAXIMUM FOOTAGE PER POWER SUPPLY SHOULD NOT EXCEED 60' (SPLIT INTO TWO PARALLEL RUNS OF 30' EACH)

3) JACKETED CABLE ESTIMATED ASSUMES MAXIMUM RUN LENGTH OF 10'.

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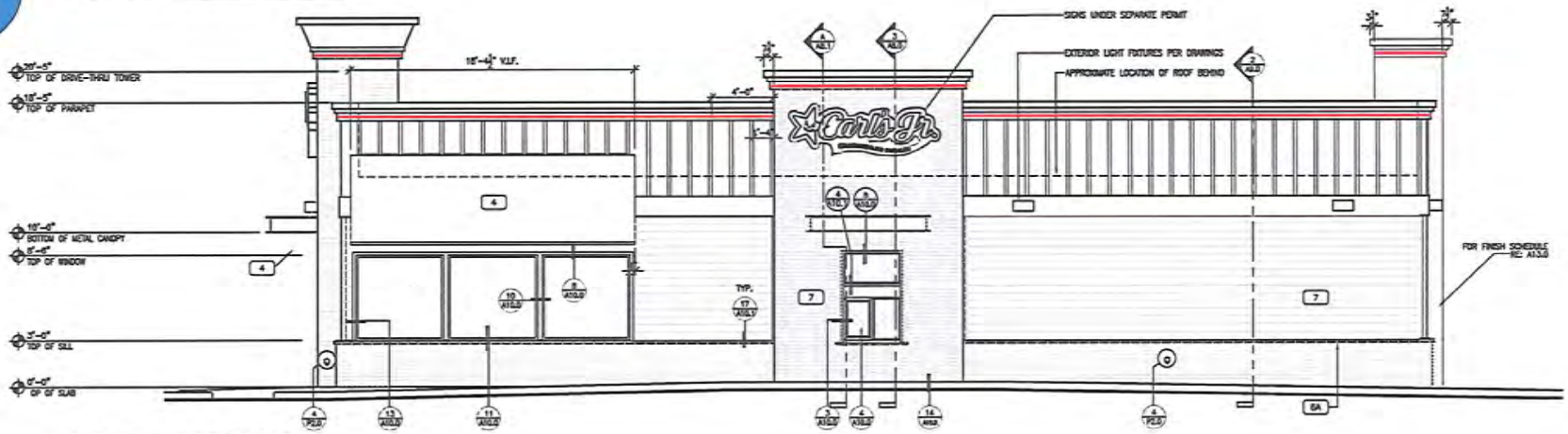
CARL'S JR - WILSONVILLE, OR.

Date Created	10/30/12
Address	SW 95TH AVENUE & COMMERCE CIRCLE, WILSONVILLE OR 97070
Revision	G

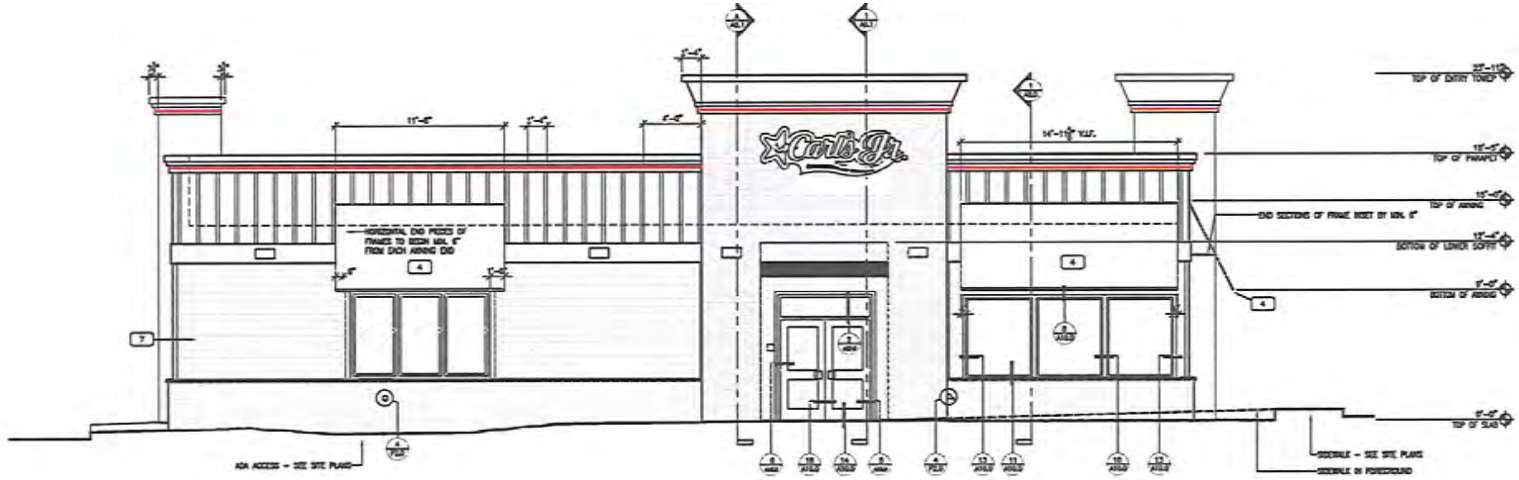
Carl's Jr. CHARBROILED BURGERS

O

SLOAN LED LIGHT BARS



WEST ELEVATION



EAST ELEVATION

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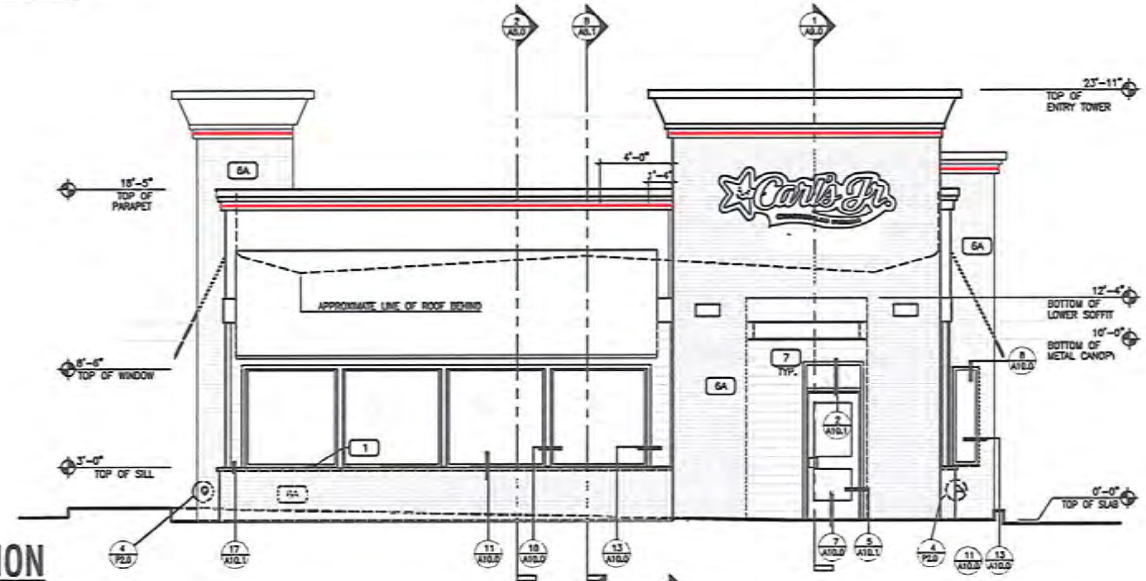
CARL'S JR - WILSONVILLE, OR.

Date Created	10/30/12
Address	SW 95TH AVENUE & COMMERCE CIRCLE, WILSONVILLE OR 97070
Revision	G

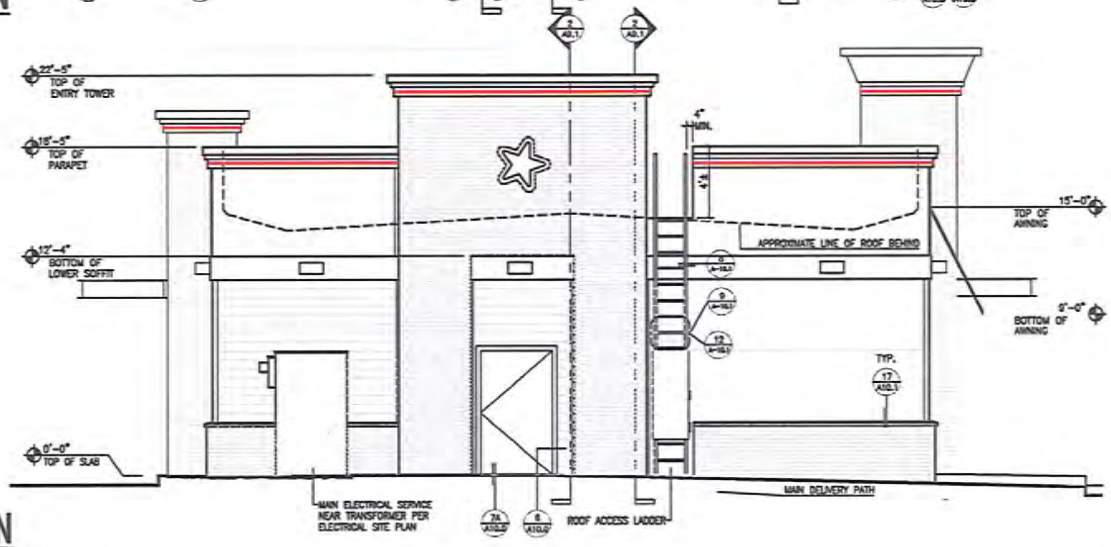
Carl's Jr. CHARBROILED BURGERS

O

SLOAN LED LIGHT BARS



NORTH ELEVATION



SOUTH ELEVATION

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Website: www.signresource.com

CARL'S JR - WILSONVILLE, OR.

Date Created	10/30/12
Address	SW 95TH AVENUE & COMMERCE CIRCLE, WILSONVILLE OR 97070
Revision	G

Carl's Jr. CHARBROILED BURGERS

24 VDC Power Supply
HighLINER Fixture and LEDStripe

- IP68 Rated (Ingress Protection 68)
- Auto-resetting
- Simple secondary hookups, no minimum load, no load balancing and no dip switches
- Modular compact design
- CE and UL Recognized for dry, damp, and wet locations
- Backward compatible with legacy SloanLED LEDStripe

Part number	Nominal input voltage	Max input current	Power output	Overall dimensions L x W x H
701895-24C	100-240 V	2.0 A	24 V	7.625 in x 1.73 in x 1.19 in

Power Supply Capacity

Item description	Power output	Maximum
HighLINER	100 W DC	6 units
LEDStripe 24 VDC (all colors)	100 W (2 legs) DC*	60 feet
Power Used per Foot in Watts		1.5

*Footages expressed are total (maximum 30 ft per leg).
Power Output is based on Power Supply loading of two parallel 30 ft legs.
Actual power draw may depend on loading configuration.

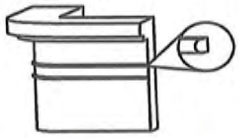
Illustrated above are two parallel 30 ft legs of LEDStripe.

Bends
LEDStripe and ColorLINE

- Radial or flat bend
- Factory bend:

LEDStripe	12 in minimum radius
ColorLINE	9.75 in minimum radius

Radial Bend



In field radial bend:

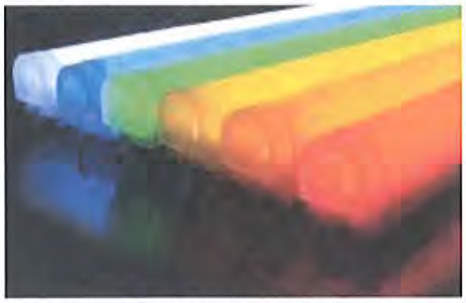
LEDStripe	14 ft minimum
ColorLINE	19 ft minimum

Flat Bend

In field flat bend:

LEDStripe	19 ft minimum
ColorLINE	6 ft minimum

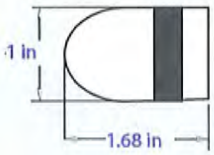
LEDStripe
Large-profile LED tubing

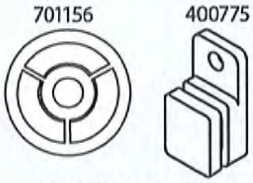


- Daytime color when non-illuminated
- High impact acrylic: UV stable, hydrocarbon insensitive, non-fading
- Can be factory bent to minimum 12 inch radius
- Can be cut in the field
- Conforms to UL 48 standard, CE certified and ETL Listed

Specifications

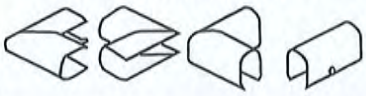
Power per foot	1.5 W (except 1 ft at 3 W) on average	
Operating temperature	-40° C to +70° C	
Colors	Warm:	Red, orange, amber
	Cool:	Green, blue, white
	Misc.:	Lemon yellow has amber daytime color
Power Supply	SloanLED 24 VDC Power Supply	





Mounting Buttons

Corner and Joint Covers

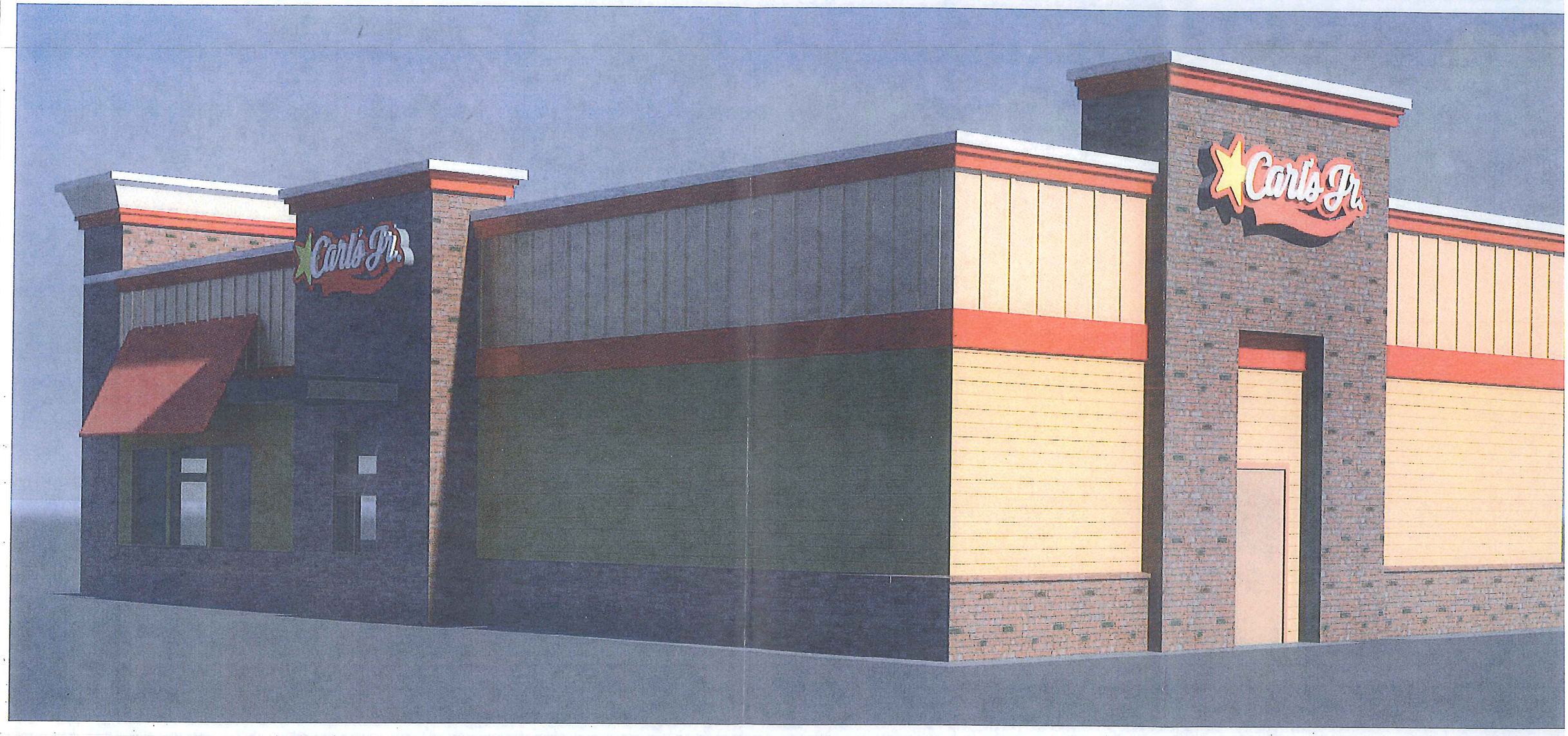


Outside Corner	701362-X
Inside Corner	701363-X
Step Corner	701364-X
Joint Cover	701361-X

Item description	Part number	Approx. cut increments	Actual length
1 ft Tube	701189-color-1	1 in	12.88 in
2 ft Tube	701189-color-2	3 in	24.88 in
4 ft Tube	701189-color-4	3 in	48.88 in
6 ft Tube	701189-color-6	3 in	73.38 in
8 ft Tube	701189-color-8	3 in	97.38 in
10 ft Tube	701189-color-10	3 in	121.38 in

ColorLINE and LEDStripe system are covered by US Patent: 6776504, 6969179, 7192157, and patent pending

Carl's Jr.
Carl's Jr.


Carl's Jr.
Carl's Jr.

VII. Public Hearing:

A. Resolution No. 257. Memorial Park Parking Lot: City of Wilsonville – applicant. The applicant is requesting approval of a Site Design Review for expansion and modification to the Memorial Park parking lot and a Type C Tree Removal Plan to remove 26 trees. The site is located at 8200 SW Wilsonville Road on Tax Lot 00691, Section 24, T3S-R1W, Clackamas County, Oregon. Staff: Amanda Hoffman

Case Files: DB13-0030 – Site Design Review
DB13-0031 – Type C Tree Plan

DEVELOPMENT REVIEW BOARD
RESOLUTION NO. 257

A RESOLUTION ADOPTING FINDINGS APPROVING AN EXPANSION AND MODIFICATION TO THE MEMORIAL PARK PARKING LOT. THE SITE IS LOCATED AT 8200 SW WILSONVILLE ROAD ON TAX LOT 00691, SECTION 24, T3S-R1W, CLACKAMAS COUNTY, OREGON. CITY OF WILSONVILLE, APPLICANT.

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared a report on the above-captioned subject dated June 3, 2013, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board at a regularly scheduled meeting conducted on June 10, 2013 at which time exhibits, together with findings were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby approve case file number(s):

DB13-0030: Site Design Review
DB13-0031: Type C Tree Removal Plan

and adopts the staff report attached hereto as Exhibit A1, with modified findings, recommendations and conditions placed on the record herein, consistent with said recommendations.

ADOPTED by the Development Review Board Panel A of the City of Wilsonville at a regular meeting thereof this 10th day of June 2013 and filed with the Planning Administrative Assistant on _____. This resolution is final on the 15th calendar day after the postmarked date of the written notice of decision unless appealed or called up for review by the council in accordance with WC Sec 4.022(.09)

_____
Mary Fierros Bower, Chair - Panel A
Wilsonville Development Review Board

Attest:

_____
Shelley White, Planning Administrative Assistant

Exhibit A1

STAFF REPORT
WILSONVILLE PLANNING DIVISION

Memorial Park Parking Lot

DEVELOPMENT REVIEW BOARD PANEL 'A'
QUASI-JUDICIAL PUBLIC HEARING

HEARING DATE: **June 10, 2013**
DATE OF REPORT: **June 3, 2013**

CASE FILES: **DB13-0030: Site Design Review & DB13-0031: Type C Tree Removal Plan**

APPLICANT/ OWNER: City of Wilsonville

REQUEST: The Applicant, City of Wilsonville is requesting approval of the necessary Site Development Permit and Type C Tree Removal applications to further develop Tax Lot 00691 of Section 24, Clackamas County. The site consists of 91 acres. Site Design Review is requested for a parking lot modification & Type C Tree Removal for 26 trees.

LOCATION: The 91-acre parcel is located at 8200 SW Wilsonville Road.

LEGAL DESCRIPTION: Tax Lot 00691 of Section 24, Clackamas County, Oregon (See Vicinity Map on Page 2).

LAND USE DESIGNATIONS: Wilsonville Comprehensive Plan Map
Designation: *Public*

ZONING DESIGNATIONS: Wilsonville Zone Map Classification:
PF-Public Facilities Zone
Willamette River Greenway

STAFF REVIEWERS: Blaise Edmonds, Don Walters and Mike Ward

REQUESTED ACTION:
The Development Review Board is being asked to review the site development plans for a portion of Tax Lots 00691 of Section 24, Clackamas County. Site Design Review is requested for a parking lot modification and a Type C Tree Removal Plan for 26 trees. The application is referred to as case files #**DB13-0030: Site Design Review and #DB13-0031: Type C Tree Removal**.

APPLICABLE CRITERIA:

Planning and Land Development Ordinance: Sections 4.008-4.015; 4.120; 4.154; 4.155; 4.167; 4.175-4.179; 4.199; 4.300; 4.400- 4.450; 4.506.01 (E); 4.508.01 (B); 4.610.10; 4.610.40; 4.620.00. **Other Planning Documents**: Wilsonville Comprehensive Plan; Bicycle and Pedestrian Master Plan; Transportation Systems Plan; Storm Water Master Plan and Parks and Recreation Master Plan.

STAFF RECOMMENDATION: **Approve** the Site Design Plan for the redesign and expansion of the parking lot and Type C Tree Removal Plan for 26 trees.

VICINITY MAP:

BACKGROUND (AS SUPPLIED BY THE APPLICANT):

"Memorial Park is the City's oldest and largest park. The park property was acquired by the City in 1968 and is located on the Willamette River with one-half mile of frontage. The park is comprised of 120 acres of recreational opportunities and natural habitat. Memorial Park includes many amenities including: sports fields, tennis and basketball courts, a skatepark, playgrounds, a boat dock, picnic areas and shelters, restroom facilities, community garden, an off leash dog run, paths, and hiking trails.

Due to asphalt failure and inadequate stormwater infrastructure, repairs are needed to the parking lot. The parking lot is heavily used, and is situated at the main entrance to the active recreational area (i.e., baseball, soccer, tennis, basketball, etc.) in the park. The existing orientation and

configuration of the parking lot creates some inefficient use of the available space, and creates confusion on the part of motorists using the parking lot.

The parking lot provides access to recreational areas in the park (including shelters and other parking areas), and connections to the park's trail system. Situated at the base of a steep slope, the parking lot is partially within the 100-year floodplain of a tributary to Boeckman Creek. It's also located partially within the Significant Resource Overlay Zone for the creek. Groundwater and stormwater have significantly impacted the parking lot, and appear to be the primary cause for much of the asphalt failure.

The 2012 Stormwater Master Plan identified a Low Impact Development project for the parking lot. In conjunction with reconfiguring the parking lot, vegetated swales were proposed to be included for stormwater treatment.

An informational kiosk and a corresponding trail connection adjacent to the parking lot were included in the 2004 Memorial Park Trails Plan. The kiosk and trail will provide access to a bus turnout. SMART buses occasionally access the parking lot, and the turnout will provide a safe place for buses to park.

A request for proposals was released and due by December 14, 2012. Staff formed a multi-departmental internal design team and selected Wallis Engineering and GreenWorks to complete the final design and construction documents. Staff met with City Council on April 15, 2013 and May 6, 2013 to move forward with a final design. Staff will be soliciting bids for the construction of the park. Completion for the parking lot is anticipated at the end of summer 2013."

DISCUSSION TOPICS:

1. Tree Removal:

The Applicant has provided an arborist report done by Morgan Holen & Associates. The arborist recommended removal of 24 trees and retention of 69 trees in the immediate area. The proposed removal of the 26 trees are due to construction, disease or health and safety. Based upon the submitted plans (Sheet C-1 – Site Plan & Tree Removal) the existing 26 trees that are proposed to be removed are not part of an approved landscape plan; however because of the number of trees that are proposed to be removed a Type C Tree Removal Plan has been submitted. Condition of approval will guarantee compliance with this requirement.

2. Sewer Pump Station:

The Applicant originally proposed a future Sewer Pump Station site within the expanded parking lot area. After receiving many concerns from neighbors and meetings internally with City Staff, the City of Wilsonville has decided to take the Sewer Pump Station off of the proposed redesign of the parking area. The Sewer Pump Station will be part of a different application in a new location.

CONCLUSIONS AND RECOMMENDATIONS:

Staff has reviewed the Applicant's analysis of compliance with the applicable criteria. Although not comprehensive in nature, in most cases, Staff finds that the analysis satisfactorily demonstrates compliance with the City's Comprehensive Plan and the Planning & Land Development Ordinance. The Staff report adopts the Applicant's responses as Findings of Fact except as noted in the Findings and modified by proposed Conditions of Approval. Based on the Findings of Fact and information included in this Staff Report, and information received from a duly advertised public hearing, Staff recommends that the Development Review Board approve the proposed application (DB13-0030 & DB13-0031) with the following conditions:

CONDITIONS OF APPROVAL:

The applications **(DB13-0030: Site Design Review, DB13-0031: Type C Tree Removal Plan)** and supporting documents are hereby adopted for approval with the following conditions:

PD	**=**	**Planning Division Conditions**
BD	**=**	**Building Division Conditions**
PF	**=**	**Engineering Conditions**
NR	**=**	**Natural Resources Conditions**
TR	**=**	**SMART/Transit Conditions**
FD	**=**	**Tualatin Valley Fire and Rescue Conditions**

Planning Division Conditions:	
PD1.	Construction, site development, and landscaping shall be carried out in substantial accord with the plans, drawings, sketches, and other documents approved by the Board, unless altered with Board approval. Minor amendments to the project that are to be conducted by Planning Staff may be processed by the Planning Director through a Class I Administrative Review process.
PD2.	The Applicant shall provide the general contractor for the proposed project with a copy of the approved plans and conditions of approval adopted by the City.
PD3.	Proposed plantings must meet the requirements of Section 4.176(.06)
PD4.	Landscaping shall be professionally maintained by weeding, pruning and replacing dead plant material as necessary.
PD5.	The Applicant must submit an application for a Class I Administrative Review, Type C Tree Permit for the removal of 26 trees.
PD6.	The Applicant shall install house-side shield plates on the three closest parking lot lights to the western property boundary.
PD7.	The Applicant shall submit an erosion and sediment control plan.

Building Division Conditions:	
BD1.	ACCESSIBLE ROUTES shall consist of one or more of the following components: Walking surfaces with a slope not steeper than 1:20, doors and doorways, ramps, curb ramps excluding the flared sides, elevators and platform lifts. All components shall comply with the applicable portions of Chapter 4 of ANSI A117.1-2003. SLOPE. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of a walking surface shall not be steeper than 1:48. (ANSI A117.1-2203)
BD2.	ACCESSIBLE ROUTE CLEAR WIDTH. Clear width of an accessible route shall comply with Table 403.5.

TABLE 403.5	
Segment Length	Minimum Segment Width
≤24 inches	32 inches[1]
>24 inches	36 inches
[1]Consecutive segments of 32 inches in width must be separated by a route segment 48 inches minimum in length and 36 inches minimum in width.	

BD3.	PARKING SPACES – OBSTRUCTIONS. Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width [36”] of adjacent accessible routes. (ANSI A117.1-2003 502.8)
BD4.	ACCESS AISLE. The access aisle adjacent to the disabled parking space shall be on the passenger side of the vehicle unless the aisle serves two vehicles. (1106.7.1)
BD5.	WHEELCHAIR USER ONLY. The van-accessible parking space shall also be labeled a “Wheelchair User Only” space as per Table 1106.1. Place an approved “Wheelchair User Only” sign directly below and adjacent to the “Van-Accessible” sign.

Engineering Division Conditions:
NO COMMENTS.

Natural Resources Division Conditions:
NO COMMENTS.

SMART/Transit Division Conditions:
NO COMMENTS.

Tualatin Valley Fire and Rescue Conditions:
NO COMMENTS.

EXHIBIT LIST

The following exhibits are hereby entered into the public record by the Development Review Board as confirmation of its consideration of the application as submitted. This is the master exhibits list that includes exhibits for Planning Case Files DB13-0030 and DB13-0031.

A. Staff's Written and Graphic Materials:

A1. STAFF REPORT:

B. Applicant's Written and Graphic Materials:

B1. APPLICATION (ON FILE)

B2. APPLICATION NARRATIVE

B3. PLAN SET:

Plan Sheets

a. Sheet C 1 -Site Plan/Tree Removal Plan

b. Sheet L 1.0 – Planting Plan

c. Sheet L 2.0 – Planting Details

d. Sheet L 3.0 – Planting Details

e. Sheet 1.0 – Lighting Plan

f. Sheet 1.1 – Lighting Details

g. Sheet 1.2 – Lighting Details

B4. TREE SURVEY

C. Development Review Team Correspondence:

C1. Building Department Conditions

D. General Correspondence:

D1. Letters (neither For nor Against): None submitted

D2. Letters (In Favor): None submitted

D3. Letters (Opposed): None submitted

FINDINGS OF FACT

1. **Statutory Timeline:**
The statutory 120-day time limit applies to this application. The application was received on May 14, 2013. On May 15, 2013, the application was deemed complete. The City must render a final decision for the request, including any appeals, by **September 12, 2013.**

2. **Adjacent land uses**:

Compass Direction	**Zone:**	**Existing Use:**
North:	PF	Park
South:	n/a	Willamette River
East:	RA-H	Residential
West:	R	Residential

3. **Natural Characteristics:** The area subject to development is generally flat. It is bound on the south by the Willamette River, Wilsonville Road & Memorial Drive to the north, single-family residential to the west, and single-family residential to the west.

4. **Streets:** The subject property is fronted on the north by Wilsonville Road and Memorial Drive. Both streets are constructed to current standards. There is currently one access point from Memorial Drive to the property. Access to the site will continue to be via the existing driveway. No other access is proposed or required.

5. **Review Procedures:** The Applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

GENERAL INFORMATION

SECTION 4.008. APPLICATION PROCEDURES - IN GENERAL.

The Applicant is requesting the necessary site development permit applications to further develop Tax Lot 00691 of Section 24, Clackamas County. The site consists of 90 acres. Site Design Review is requested for a redesign and expansion of the existing parking lot associated with Memorial Park and a Type C Tree Removal Plan for removal of 26 trees.

SECTION 4.009. WHO MAY INITIATE APPLICATIONS.

The application has been submitted by Kerry Rappold, Natural Resources Program Manager, City of Wilsonville. The subject site is owned by the City of Wilsonville. The Applicant has signed the development application demonstrating permission of the property owner for submission of the application. This provision is met.

SECTION 4.034. APPLICATION REQUIREMENTS.

Following is documentation, by request, of the standards and procedures appropriate to each application.

CONCLUSIONARY FINDINGS: DB13-0030 – SITE DESIGN REVIEW

The Applicant has provided a detailed description of the proposed development (Exhibit B2), which is incorporated into this report by reference. The contents of the Applicant's narrative will not be repeated here, except where necessary to demonstrate where applicable criteria are not satisfied.

The Applicant proposes to redesign and expand the existing Memorial Park parking facility to improve traffic circulation, pedestrian safety and overall aesthetics of the park.

SECTION 4.136. PUBLIC FACILITIES ZONE.

(.01) Purpose: The PF zone is intended to be applied to existing public lands and facilities; including quasi-public lands and facilities which serve and benefit the community and its citizens. Typical uses permitted in the PF Zone are schools, churches, public buildings, hospitals, parks and public utilities. Not all of the uses permitted in this zone are expected to be publicly owned.

(.02) Uses Permitted Outright:

F. Parking Facilities
J. Parks

A1. The Applicant is proposing a redesign and expansion of the existing parking facility

associated with Memorial Park, staff finds that these are listed in the Planning and Land Development Ordinance as uses permitted outright. This provision is therefore satisfied.

(.04) Dimensional Standards:

A. Minimum Lot Size: One (1) Acre…
B. Minimum front and rear yard setbacks: Thirty (30) feet. Minimum sideyard setback: ten (10) feet.
C. Minimum street frontage: Seventy-five (75) feet.
D. Maximum height: thirty five (35) feet.

A2. The site consists of 90 acres. There are no structures proposed that are required to meet setbacks, therefore these provisions are satisfied.

(.05) Off-Street Parking Requirements: As provided in Section 4.155.

A3. A detailed discussion regarding off-street parking requirements can be found under Section 4.155 on page 9.

(.06) Signs:

A4. No new signs are proposed with this project. Therefore, staff finds this provision is not applicable.

(.07) Corner Vision:

A5. The subject site is not by definition a "corner lot". Therefore, staff finds this provision is not applicable.

(.08) Special Regulations:

A. All principal and conditional uses shall be subject to Section 4.400 through 4.450 (Site Design Review) of the Wilsonville Code.

A6. Site Design Review is requested for a redesign and expansion of the existing parking lot associated with Memorial Park. A detailed Site Design Review of these elements can be found in this report beginning on page 17.

SECTION 4.155. GENERAL REGULATIONS - PARKING, LOADING AND BICYCLE PARKING.

(.03) Minimum and Maximum Off-Street Parking Requirements:

A. Parking and loading or delivery areas shall be designed with access and maneuvering area adequate to serve the functional needs of the site and shall:

A7. Site Design Review is requested for a redesign and expansion of the existing parking lot associated with Memorial Park. The park will be accessed via walk, bike, car or bus. The applicant has given great thought into designing a parking area that separates vehicle and pedestrian traffic since most of the traffic is either by vehicle or by foot. Staff finds that the proposed site plan meets the above requirements.

B. Parking and loading or delivery areas landscaping requirements

A8. Site Design Review is requested for a redesign and expansion of the existing parking lot associated with Memorial Park. The Applicant is proposing a 5' wide and 6' tall evergreen screen along the western boundary of the proposed parking area, adjacent to the existing residential properties. The applicant is proposing one tree per six parking spaces while the code requires one per eight. Staff finds that the proposed site plan meets the above requirements.

Subsection 4.155(.03)B.4 Parking for ADA

A9. The proposal includes five (5) ADA parking stalls for the new parking area. Staff finds that the proposed site plan meets the above requirements.

Subsection 4.155.(03)B.5.: Connection of Parking Areas

A10. There are no adjacent sites with parking areas, therefore this provision is not applicable.

Subsection 4.155.(03)B.6-8 and Table 5: Parking Standards.

A11. Site Design Review is requested for a redesign and expansion of the existing parking lot associated with Memorial Park. The parking standards of the WC (Section 4.155) do not include a specific requirement for parks. The original Memorial Park Master Plan calls for 77 parking stalls. There are 131 existing angled stalls that are less than a typical compact size (8'x 16'). The Applicant has provided 118 total parking spaces including 5 ADA parking stalls, 2 compact stalls and 4 motorcycle parking stalls. This option is supported by City Council. Therefore staff finds this provision satisfied.

SECTION 4.167. GENERAL REGULATIONS - ACCESS, INGRESS AND EGRESS.

A12. Access to the site has already been established and is not proposed to be changed; Additional access is not proposed; therefore, this provision is not applicable.

SUBSECTION 4.171. GENERAL REGULATIONS – PROTECTION OF NATURAL FEATURES AND OTHER RESOURCES

(.02) General Terrain Preparation:

A13. The purpose of this section is to protect the natural environment and scenic features of

the City of Wilsonville and to encourage site planning and development practices which protect and enhance natural features. The plan proposes to celebrate and enhance natural features. The proposed plan minimizes grade changes, and proposes to remove 26 trees. The natural state on the site is being enhanced with trees and shrubs as well as ornamental trees and shrubs that will be beneficial for wildlife and pollinators. The proposed improvements are in keeping with the existing site and the appearance of surrounding areas. The Applicant states that "all grading will be completed in accordance with the Uniform Building Code".

(.03) Hillsides:

A14. The subject property does not contain slopes greater than 25%; therefore, this provision is not applicable.

(.04) Trees and Wooded Areas.

A15. The tree survey included 93 trees in the immediate area by the arborist hired for the project. The Applicant has provided summary findings that 26 trees will be removed as a part of this application because of construction, safety or disease/hazard. However, according to the Applicant the natural state on the site is being enhanced with native trees and shrubs as well as ornamental trees and shrubs that will be beneficial for wildlife and pollinators, shade and screening. This provision is therefore satisfied.

(.05) High Voltage Powerline Easements and Rights of Way and Petroleum Pipeline Easements:

A16. The subject site is not encumbered by high voltage powerline easements and right-of-way or petroleum pipeline easement; therefore, this provision is not applicable.

(.06) Hazards to Safety:

A17. The subject site is not located within a soil or geological hazard area, nor is it located in an area prone to forest and brush fires. Review of the building plans and public works permit will ensure that best engineering practices are maintained.

SECTION 4.175: PUBLIC SAFETY AND CRIME PREVENTION

A18. The Applicant is proposing new lighting for the parking area to discourage crime. The

Applicant is also proposing new pedestrian walkways to insure public safety. No new buildings or structures are proposed with this application. These features aid in public safety and crime prevention for the site.

SECTION 4.176: LANDSCAPING. SCREENING, AND BUFFERING

(.01) Purpose

A19. Landscaping for the site was either existing or previously planted by the City of Wilsonville. The proposal seeks to redesign and expand the existing parking lot area to provide better service to the park users. The proposed landscaping includes a variety of trees, shrubs, hedges to provide for shade, screening and interest.

A20. The Applicant has provided summary findings that they have hired Green Works, a highly qualified landscape architecture firm out of Portland to design the landscaping for the Memorial Park parking lot on behalf of the City of Wilsonville. The design is unique and is a statement in support of the landscape of the area.

A21. The site landscaping consists of playing fields, areas for lawn, native plants, fruiting shrubs and trees. Irrigation is provided through drip, rotor and/or manual components. The plan has been designed to be aesthetically pleasing, to preserve native vegetation and to conserve water through the selection of native plants throughout the parking lot and surrounding impacted area. Pursuant to Section 4.176 (.02) B., the landscaping standards are the minimum requirements; higher standards can be substituted as long as other limitations are met. It is the professional opinion of Staff that based upon the fact that the proposed landscaping plan is simply the augmentation of an existing landscaping that it exceeds the minimum requirements.

(.03) Landscape Area

A22. This section requires that not less than 15% of the total lot area be landscaped with plants. The overall area of the park exceeds the 15% landscaping requirement. With the redesign and expansion of the parking area, the proposal seeks to enhance the parking area by providing additional landscaping and trees. Based upon the fact that the Applicant seeks to enhance existing landscape, Staff finds that this requirement is exceeded.

(.04) Buffering and Screening

A23. The Buffering and Screening section requires that all intensive developments be screened and buffered from less intensive developments and that roof and ground mounted HVAC equipment and outdoor storage areas be adequately screened from off-site view. The subject site is surrounded by residential and public right-of-way. The proposal calls for an expansion of the existing parking lot which is a more intensive use behind the homes to the west of the project site. The proposal does not include any roof or ground mounted HVAC equipment. Screening is proposed by the applicant in the form of a 5’-6’ hedge along the western edge of the parking area to minimize the impacts of the parking area to the surrounding residences. Therefore, Staff finds this requirement has been met.

(.06) Plant Materials.

A24. Shrubs - These code sections specify the size of plant material required for new development as well as standards related to species selection, and growth rate. Shrubs are required to be equal or better than two-gallon containers, and shall have a 10"-12" spread. Sheet L1.0 provides a summary of proposed plants, staff finds this requirement has been met.

A25. Ground cover - Ground covers in one gallon containers are to be planted on 4' centers minimum, 4" pots are to be spaced at 2' centers, 2 ¼" pots are to be spaced at 18" centers. All ground covers are to be planted at a density so as to cover 80% of the planting area within 3-years of planting. Sheet L2.0 provides a summary of proposed plants, staff finds this requirement has been met.

A26. Trees are required to be well-branched and typical of their type as described in current American Association of Nurserymen (AAN) Standards and shall be balled and burlapped. The trees shall be grouped as follows:

1. Primary trees which define, outline or enclose major spaces, shall be a minimum of 2" caliper.
2. Secondary trees which define, outline or enclose interior areas shall be a minimum of 1-3/4" to 2" caliper.
3. Accent trees which, are used to add color, variation and accent to architectural features, shall be 1-3/4" minimum caliper.
4. Large conifer trees shall be installed at a minimum height of eight feet.
5. Medium-sized conifers shall be installed at a minimum height of five to six feet.

Exhibit B3-Sheet L1.0 provides a summary of proposed plants. The Applicant is proposing twenty-two (22) 2" caliper Sun Valley Maple, Patmore Ash, Black Tupelo and Harvest Gold Linden, for parking lot shade trees. As secondary trees located in the adjacent picnic area, the Applicant is proposing seven (7) 8' Incense-Cedar, Ponderosa Pine, Douglas Fir and Western Red Cedar. to provide a shady area for picnicking. The applicant is proposing three (3) 2" caliper Flowering Accent trees. Staff finds that proposed plantings meet the code requirement. Condition of approval PD3 will guarantee compliance with these provisions.

(.07) Installation and Maintenance.

A27. Plant materials, once approved by the DRB, shall be installed to current industry standards and shall be properly staked to assure survival. Support devices (guy wires, etc.) shall not be allowed to interfere with normal pedestrian or vehicular movement. Maintenance of landscaped areas is the on-going responsibility of the property owner. Any landscaping installed to meet the requirements of this Code, or any condition of approval established by City decision-making body acting on an application, shall be continuously maintained in a healthy, vital and acceptable manner. Plants that die are to be replaced in kind, within one growing season, unless the City approves appropriate

substitute species. Failure to maintain landscaping as required in this subsection shall constitute a violation of the City Code for which appropriate legal remedies, including the revocation of any applicable land development permits, may result.

(.08) Landscaping on Corner Lots

A28. The subject is not by definition a "corner lot"; therefore this criteria is not applicable.

(.10) Completion of Landscaping.

A29. The Applicant's submittal documents do not specify whether a deferment of the installation of the proposed planting plan is requested. Since the current landscape treatment far exceeds the 15% minimum code requirement for coverage and the proposal will enhance the site, the Applicant will not be required to post a bond or other security. Staff is confident that the City of Wilsonville will develop the project without a bond because there is strong city and community involvement.

SECTION 4.177. STREET IMPROVEMENT STANDARDS.

Subsection 4.177.03(.01)A-B.

A30. The subject site does not abut any stub streets; therefore, continuation of streets through the development is not applicable.

A31. The subject site fronts on SW Wilsonville Road which is identified in the Transportation System Plan as a Minor Arterial**.** Additional right-of-way or street improvements are not warranted at this time.

A32. Subsection (.01) C. 3., requires that a minimum setback of 55 feet from the centerline or 25 feet from the right-of-way designated on the Master Plan, whichever is greater to allow for future widening, is required. The proposal does not include a request for additional structures; therefore, this provision is not applicable.

Subsection 4.177.03(.01)E: *Access drives and lanes.*

A33. General access to the site will be by the existing driveway off of Memorial Drive or by pedestrian travel along the existing walkways leading to the parks.

Subsection 4.177.03(.01)F: *Rights-of-way.*

A34. The subject site fronts on SW Wilsonville Road which is identified in the Transportation System Plan as a Minor Arterial**.** Additional right-of-way or street improvements are not warranted at this time.

SECTION 4.178 SIDEWALK AND PATHWAY STANDARDS

(.01) Sidewalks

A35. All sidewalks are required to be a minimum of five (5) feet in width, except where the walk is adjacent to a commercial storefront. Staff notes that all proposed sidewalks are a minimum of five (5) feet; therefore, this provision is satisfied.

TRANSIT SERVICE

A36. The subject site is not a SMART transit stop. However the applicant has provided a bus turnout for future bus service or large groups.

SECTION 4.199 OUTDOOR LIGHTING

A37. The proposal includes a request for replacement of existing parking lot lighting as well as new parking lot lights under the prescriptive option.

Subsection 4.199.20 (.01) Outdoor Lighting Ordinance Applicability

A38. This subsection defines when the Outdoor Lighting Ordinance is applicable. The subsection states that the ordinance is applicable to " installation of new exterior lighting systems in public facility, commercial, industrial, and multi-family housing projects with common areas" The proposed lighting is a new exterior lighting system in a redesign and parking lot expansion project for Memorial Park. The Outdoor Lighting Ordinance thus applies to this application.

Section 4.199.30 Lighting Overlay Zone

A39. This section establishes lighting overlay zones for applicable areas of the City. The subject property is not contained within a lighting zone.

Subsection 4.199.40 (.01) A. Prescriptive or Performance Option

A40. This subsection allows outdoor lighting to comply either with the prescriptive or performance option in Section 4.199.40. The Applicant has selected to conform with the prescriptive option.

Subsection 4.199.40 (.01) B. 1. Maximum Luminaire Wattage & Shielding

A41. This subsection requires, under the prescriptive option, the maximum luminaire lamp wattage and shielding shall comply with Table 7. The Applicant states that as shown in their submitted drawings (Exhibit B3) that "the proposed lighting is in conformance with lighting Zones 1 & 2 as the lighting is proposed at only 48 watts." This provision is satisfied.

Subsection 4.199.40 (.01) B. 2. Conformance with Oregon Energy Efficiency Specialty Code, Exterior Lighting

A42. This subsection requires the proposed lighting to comply with the Oregon Energy Efficiency Specialty Code, Exterior Lighting. The Applicant is proposing LED lights. Therefore this provision is satisfied.

Subsection 4.199.40 (.01) B. 3. Maximum Mounting Height

A43. This section establishes the maximum mounting height of luminaires. Table 8 of the Lighting Ordinance states that the mounting height shall be no greater than twenty-five (25) feet. The proposed light poles are all 25 feet and therefore satisfy the requirements as described in Table 8.

Subsection 4.199.40 (.01) B. 4. Luminaire Set Backs

A44. The subject property abuts a property with the same base and lighting zone, so no setback is required. However, the lighting that is proposed is for parking lot lighting. The cut sheets provided by the applicant show that the lights have "optional house side shield plates with back light strips". Staff finds that it would be appropriate to have these house side shield plates installed on the three closest lights to the western property boundary in order to provide the most protection to the adjoining residential properties. Condition of approval PD6 will guarantee compliance with these provisions.

Subsection 4.199.40 (.01) D. Lighting Curfew

A45. This subsection identifies curfew requirements for outdoor lighting systems. It includes a number of exceptions, including for businesses that operate continuously or periodically after curfew. The Applicant states that the Memorial Park operates continuously after curfew. Staff concurs that the park qualifies for a curfew exception under this subsection. The provisions of this subsection are thus satisfied.

Subsections 4.199.50 (.01) General Submittal Requirements

A46. This subsection lists the submittal requirements for all lighting reviews. The Applicant has submitted the required items, satisfying the requirements of this subsection.

Subsection 4.199.50 (.02) Additional Submittal Requirements for Prescriptive Option

A47. This subsection lists items to be submitted, in addition to those required by Subsection 4.199.50 (.01), for review of the prescriptive option. The Applicant has submitted the required additional items, satisfying the requirements of this subsection.

SECTION 4.300. UNDERGROUND UTILITIES

Section 4.300. General.

(.01) The City Council deems it reasonable and necessary in order to accomplish the orderly and desirable development of land within the corporate limits of the City, to require the underground installation of utilities in all new developments.

(.02) After the effective date of this Code, the approval of any development of land within the City will be upon the express condition that all new utility lines, including but not limited to those required for power, communication, street lighting, gas, cable television services and related facilities, shall be placed underground.

(.03) The construction of underground utilities shall be subject to the City's Public Works Standards and shall meet applicable requirements for erosion control and other environmental protection.

Section 4.320. Requirements.

(.01) The developer or subdivider shall be responsible for and make all necessary arrangements with the serving utility to provide the underground services (including cost of rearranging any existing overhead facilities). All such underground facilities as described shall be constructed in compliance with the rules and regulations of the Public Utility Commission of the State of Oregon relating to the installation and safety of underground lines, plant, system, equipment and apparatus.

A48. The Applicant has provided summary findings that "No above ground utilities are proposed." Storm drainage will be provided through low impact development practices. With the exception of storm drainage, no additional above ground utilities are proposed or warranted.

SUBSECTION 4.420. JURISDICTION AND POWERS OF THE BOARD

(.02) Development in Accord with Plans.

A49. This section specifies that construction, site development, and landscaping shall be carried out in substantial accord with the plans, drawings, sketches, and other documents approved by the Board, unless altered with Board approval. This has been added as a condition of approval (see condition of approval PD1). Minor amendments to the project that are to be conducted by Planning Staff may be processed by the Planning Director through a Class I Administrative Review process. Proposed condition of approval PD2 would require that a copy of all DRB approved conditions of approval be given to general contractor for the proposed project to ensure compliance with all conditions of approval. The Planning Division will not approve the final inspection for the proposed project until all conditions of approval are satisfied.

SECTION 4.421. CRITERIA AND APPLICATION OF DESIGN STANDARDS.

(.01) The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural styles is not included in these standards. (Even in the Boones Ferry Overlay Zone, a range of architectural styles will be encouraged.)

A. Preservation of Landscape.

A50. The Applicant has provided findings that "The proposed plan minimizes grade changes, and proposes to remove 26 trees. The natural state on the site is being enhanced with native trees and shrubs as well as ornamental trees and shrubs that will be beneficial for screening and pollinators. A small amount of excavation will occur." Based upon the submitted plans (See Exhibit B3) it appears as though the Applicant proposes to remove the 26 trees due to construction, disease, structure or health and safety. The Applicant has submitted a Type C Tree Removal Plan. Condition of approval will guarantee compliance with this requirement.

B. Relation of Proposed Buildings to Environment.

A51. Staff finds that the subject property does not contain steep slopes, however it is within a Significant Resource Overlay Zone (SROZ). The area of the site that is within the SROZ is not part of this proposal**.** No buildings are proposed as part of the site plan. This provision is satisfied.

C. Drives, Parking and Circulation.

A52. The drives, parking and circulation is existing on the site. The proposal includes enhancing the circulation and parking by providing one way drive aisles, and the intersection of the internal streets and additional parking spaces to serve the public better. Access to the site will be via car, pedestrian, bike and bus. There is an existing bus turnout that will be incorporated into the new redesign of the park to serve users arriving by bus, however the site is not currently served by SMART.

D. Surface Water Drainage.

A53. The Applicant has provided summary findings that "stormwater quality will be addressed through the use of biofiltration swales. The swales will be installed along the south side of the parking lot and in the islands throughout the parking lot. Stormwater quality will also be addressed through the use of an extended dry pond on the north end of the site. The site is flow control exempt and so no detention will be addressed. However, the

extended pond and biofiltration swales will contribute attenuation of the storm water flows. The stormwater will be conveyed via culvert to an unnamed tributary of Boeckman Creek." Staff finds that this site incorporates low impact development practices for storm water. The Applicant shall submit an erosion and sediment control plan. Condition of approval PD7 will guarantee compliance with these provisions.

D. Utility Service.

A54. The Applicant has provided summary findings that "No above ground utilities are proposed" and, therefore staff finds this provision to be satisfied.

E. Advertising Features.

A55. The Applicant has provided summary findings that "No signage is proposed at this time." Staff finds that no additional signage is proposed; therefore, this provision is not applicable.

F. Special Features.

A56. The proposal does not include plans for additional special features including exposed machinery or loading bays. This provision is therefore not applicable.

SECTION 4.430. LOCATION, DESIGN AND ACCESS STANDARDS FOR MIXED SOLID WASTE AND RECYCLING AREAS

(.01) The following locations, design and access standards for mixed solid waste and recycling storage areas shall be applicable to the requirements of Section 4.179 of the Wilsonville City Code.

A57. Storage requirements are based upon the square footage of buildings and or number of units. The Applicant is not proposing additional structures and no additional refuse containers. The proposal is unique in that any refuse generated by the use of the facility can be self-contained and hauled off-site.

SECTION 4.506 (.01) E & 4.508 (.01) E. WILLAMETTE RIVER GREENWAY.

A58. The subject property is within Memorial Park which is within the Willamette River Greenway. The proposed parking lot improvements are maintenance and repair usual and necessary for the continuance of the existing parking lot use and is permitted outright within the Willamette River Greenway Boundary thus, meeting code. Furthermore, the removal of trees is not classified as intensification of use within the Willamette River Greenway Boundary thus, meeting code, however a Type C Tree Permit is required and discussed starting on Page 20.

CONCLUSIONARY FINDINGS: DB13-0031 – TYPE 'C' TREE REMOVAL PLAN

The Applicant has provided a detailed description of the proposed development (Exhibit B2), which is incorporated into this report by reference. The contents of the Applicant's narrative will not be repeated here, except where necessary to demonstrate where applicable criteria are not satisfied.

The Applicant proposes to remove 26 trees from the existing site, in order to enable the construction and safety of the proposed park. The existing trees are part of a mature landscape planting which was installed by the former property/homeowners.

Subsection 4.610.10(.01): *Standards for Tree Removal, Relocation or Replacement*

B1. The removal of 26 coniferous and deciduous trees throughout the site is necessary in order to re-grade a small portion of the site, construct the proposed facility, maintain safety and satisfy the standards for removal.

B2. The Applicant has submitted a tree survey which has identified 93 trees in the immediate area of the site (Exhibit B4). The Applicant identifies the need to remove 26 trees in order to construct and maintain safety for the proposed park (Exhibit B3). The applicant proposes to mitigate for the tree removal (Exhibit B2), by installing 30 replacement trees to do so.

Subsection 4.610.10(.01)(H)(1-3): (1) *Necessity for Construction, (2) Disease, Damage, or Nuisance, or Hazard, (3) Interference*

B3. Ten (10) on-site trees not identified for removal are proposed to be retained as part of the on-site landscaping. Twenty-six (26) trees are proposed to be removed due to construction, disease, damage, nuisance or hazard and interference. The specifics are outlined in the tree survey specific to each tree and the reason for its removal. Based on the proposed tree removal plan accompanied by the tree survey, staff finds it meets this code requirement. The Applicant will need to obtain a Type "C" Tree Removal Permit prior conducting to any earthwork (i.e., grading) on the site, or removal of trees. See Condition PD8.

Subsection 4.620.00(.02) – (.05): *Tree Relocation, Mitigation, or Replacement*

B4. The Applicant's tree survey indicates that 26 trees will be removed. As listed on the tree removal plan (Exhibit B3), 10 trees will be retained within the immediate parking area, 69 trees will be retained within the tree survey. See Findings A2 and A3, above.

B5. The proposed planting plan indicates that 30 trees will be planted (Exhibit B3). Therefore these 30 trees are sufficient to meet the minimum mitigation requirement. Based on the above findings the proposed mitigation meets these code requirements.

Subsection 4.610.40: *Type "C" Permit*

B6. The Applicant must subsequently apply for a Type "C" Tree Removal Permit per Subsection 4.610.40(.02). Planning Division staff will not issue this permit until the

application complies with the approved Type "C" Tree Removal Plan. The applicant/owner cannot start construction/grading prior to the issuance of the Type "C" Tree Permit. With Condition PD8, this criterion can be met.

Development Review Template

DATE: **5/29/13**
TO: **AMANDA HOFFMAN, ASSOCIATE PLANNER**
FROM: **DON WALTERS**
SUBJECT: **DEVELOPMENT REVIEW # DB13-0030**

WORK DESCRIPTION: MEMORIAL PARK PARKING LOT IMPROVEMENTS

****

Building Division Conditions:

BD 1. ACCESSIBLE ROUTES shall consist of one or more of the following components: Walking surfaces with a slope not steeper than 1:20, doors and doorways, ramps, curb ramps excluding the flared sides, elevators and platform lifts. All components shall comply with the applicable portions of Chapter 4 of ANSI A117.1-2003. SLOPE. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of a walking surface shall not be steeper than 1:48. (ANSI A117.1-2203)

BD 2. ACCESSIBLE ROUTE CLEAR WIDTH. Clear width of an accessible route shall comply with Table 403.5.

TABLE 403.5	
Segment Length	Minimum Segment Width
≤24 inches	32 inches[1]
>24 inches	36 inches
[1]Consecutive segments of 32 inches in width must be separated by a route segment 48 inches minimum in length and 36 inches minimum in width.	

BD 3. PARKING SPACES – OBSTRUCTIONS. Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width [36”] of adjacent accessible routes. (ANSI A117.1-2003 502.8)

BD 4. ACCESS AISLE. The access aisle adjacent to the disabled parking space shall be on the passenger side of the vehicle unless the aisle serves two vehicles. (1106.7.1)

BD 5. WHEELCHAIR USER ONLY. The van-accessible parking space shall also be labeled a “Wheelchair User Only” space as per Table 1106.1. Place an approved “Wheelchair User Only” sign directly below and adjacent to the “Van-Accessible” sign.

City of Wilsonville
EXHIBIT C1 DB13-0030/0031

Development Application for Memorial Park Parking Lot

APPLICANT:

City of Wilsonville
Kerry Rappold-Natural Resources Manager
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Wilsonville, OR 97070
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ARBORIST:

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Lake Oswego, OR 97035
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Email: morgan.holen@ comcast.net

ENGINEER:

Wallis Engineering
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Vancouver, WA 98660
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LANDSCAPE ARCIDTECT:

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Fax: (503) 222-2283
Email: info@greenworkspc.com

Development Application Summary Information for Memorial Park Parking Lot

Legal Description: Tax Lot 691 of Section 24, Clackamas County, Oregon

Current Zoning: PF-Public Facilities Zone, Willamette River Greenway

Comp. Plan Designation: Public

Applications Submitted for: Site Design Review, Type C Tree Removal Permit

Vicinity Map

SECTION 1: GENERAL INFORMATION

Memorial Park is the City's oldest and largest park. The park property was acquired by the City in 1968 and is located on the Willamette River with one-half mile of frontage. The park is comprised of 120 acres of recreational opportunities and natural habitat. Memorial Park includes many amenities including: sports fields, tennis and basketball courts, a skatepark, playgrounds, a boat dock, picnic areas and shelters, restroom facilities, community garden, an off leash dog run, paths, and hiking trails.

Due to asphalt failure and inadequate stormwater infrastructure, repairs are needed to the parking lot. The parking lot is heavily used, and is situated at the main entrance to the active recreational area (i.e., baseball, soccer, tennis, basketball, etc.) in the park. The existing orientation and configuration of the parking lot creates some inefficient use of the available space, and creates confusion on the part of motorists using the parking lot.

The parking lot provides access to recreational areas in the park (including shelters and other parking areas), and connections to the park's trail system. Situated at the base of a steep slope, the parking lot is partially within the 100-year floodplain of a tributary to Boeckman Creek. It's also located partially within the Significant Resource Overlay Zone for the creek. Groundwater and stormwater have significantly impacted the parking lot, and appear to be the primary cause for much of the asphalt failure.

The 2012 Stormwater Master Plan identified a Low Impact Development project for the parking lot. In conjunction with reconfiguring the parking lot, vegetated swales were proposed to be included for stormwater treatment.

An informational kiosk and a corresponding trail connection adjacent to the parking lot were included in the 2004 Memorial Park Trails Plan. The kiosk and trail will provide access to a bus turnout. SMART buses occasionally access the parking lot, and the turnout will provide a safe place for buses to park.

A request for proposals was released and due by December 14, 2012. Staff formed a multi-departmental internal design team and selected Wallis Engineering and GreenWorks to complete the final design and construction documents. Staff met with City Council on April 15, 2013 and May 6, 2013 to move forward with a final design. Staff will be soliciting bids for the construction of the park. Completion for the parking lot is anticipated at the end of summer 2013.

SECTION 2: EXECUTIVE SUMMARY

Tree Removal: An arborist report was completed by Morgan Holen & Associates that included the surveying of trees within and around the parking lot area and a recommendation to remove 26 trees and plant 30 trees. The tree removal is necessary for construction purposes and due to the declining condition of some of the existing trees. The proposal includes an application for a Type C Tree Removal Permit; after the plan is approved an application will be made prior to any grading or construction work onsite.

Planting Plan: The park will be enhanced with native and ornamental trees and shrubs that will help beautify the site and provide habitat for urban wildlife. 30 trees will be planted as a proposed mitigation for the removal of 26 trees.

Zoning: The subject property is zoned PF and a park use is outright permitted in the zone with a Willamette River Greenway Overlay. The land uses that are adjacent to the park are Day Dream Ranch to the West, Willamette River to the South, and Public Facilities to the East.
The subject property is fronted on the north by Memorial Drive. There is currently one access point off of Memorial Drive on the north end of the property. No new access is proposed.

Parking: The park is intended to serve the surrounding area via foot, bike, car or bus. This park will be able to do that better with a redesigned parking area and expansion to serve more users and provide more pedestrian connections with raised walkways, as well as an existing Bus turn-out and proposed bike racks.

Grading & Utilities: The grading proposed is very minimal. The proposed plan minimizes grade changes, and proposes to remove 26 trees. The natural state of the site is being enhanced with native and ornamental trees and shrubs that will be beneficial for screening. A small amount of excavation will occur. Any grading that will occur will be in compliance with the Uniform Building Code. Utilities are proposed to be installed underground with new lighting.

Landscape: Green Works, a highly qualified landscape architecture firm based out of Portland, has been hired to design Memorial Park on behalf of the City of Wilsonville. A few examples of parks that they have worked on with in the region include: Engelman Park here in Wilsonville, George Rogers Park in Lake Oswego, Hood River Waterfront Park and Tanner Springs Park in Portland. The design of Memorial Park is unique and is a statement in support of the landscape and history of the area.
The design is sensitive to the surrounding areas, and will certainly provide a place that is connected to the environment. Site landscaping consists of a lawn area, native plantings, and fruiting/flowering shrubs, hedge and trees. Irrigation is provided through drip, rotor and/or manual.

The plan has been designed to be aesthetically pleasing, to preserve native vegetation and to conserve water through the selection of native plants. The proposed landscaping is intended to provide a natural buffer between the residential properties closest to the site on the west side. As shown in the attached landscape plan the proposed mitigation trees all meet or exceed the requirements for mitigation. Plant materials will be installed to current industry standards and shall be properly staked to assure survival.

Storm Water: Stormwater quality will be addressed through the use of biofiltration swales. The swales will be installed along the south side of the parking lot and in the islands throughout the parking lot. Stormwater quality will also be addressed through the use of an extended dry pond on the north end of the site. The site is flow control exempt and so no detention will be addressed. However, the extended pond and biofiltration swales will contribute attenuation of the storm water flows. The stormwater will be conveyed via culvert to an unnamed tributary of Boeckman Creek.

Refuse: The proposal does not include modifying any existing trash enclosures or adding any new ones.

SECTION 3: CONFORMANCE WITH APPLICABLE REVIEW CRITERIA

Section 4.008. Application Procedures - In General.

Response: The Applicant is requesting the necessary site development permit applications to redevelop the parking lot area for Memorial Park on Tax Lot 00691 of Section 24, Clackamas County. The site consists of the 91 acres of park area. Site Design Review is requested for the modification of the parking area.

Section 4.034. Application Requirements.

Response: Following is documentation, by request, of the standards and procedures appropriate to each application.

Zoning

SECTION 4.136. PF- PUBLIC FACILITY ZONE.

(.01) Purpose: The PF zone is intended to be applied to existing public lands and facilities; including quasi-public lands and facilities which serve and benefit the community and its citizens. Typical uses permitted in the PF Zone are schools, churches, public buildings, hospitals, parks and public utilities. Not all of the uses permitted in this zone are expected to be publicly owned.

(.02) Uses Permitted Outright:

J. Parks

Response: The City of Wilsonville is proposing an redesign and expansion to the existing parking lot, the parking lot is associated with the park use and is therefore permitted outright. This provision is satisfied.

(.04) Dimensional Standards:

A. Minimum Lot Size: 30,000 square feet.

B. Minimum front and rear yard setbacks: Thirty (30) feet. Minimum sideyard setback: ten (10) feet.

C. Minimum street frontage: Seventy-five (75) feet.

D. Maximum height: thirty five (35) feet.

Response: There are no structures proposed that are required to meet setbacks, therefore these provisions are satisfied.

(.05) Off-Street Parking Requirements: ***As provided in Section 4.155.***

Response: A detailed discussion regarding off-street parking requirements can be found under Section 4.155. The park site has an existing parking area, however the parking area is being modified to provide better traffic flow, safety and more usable parking spaces.

(.06) Signs:

Response: No new signs are part of this proposal

(.07) Corner Vision:

Response: The subject site is not by definition a "corner lot". Therefore, this provision is not applicable.

(.08) Special Regulations:

A. All principal and conditional uses shall be subject to Section 4.400 through 4.450 (Site Design Review) of the Wilsonville Code.

Response: Site Design Review is requested for a modification to the existing parking area. A detailed Site Design Review of these elements are addressed below.

SECTION 4.155. GENERAL REGULATIONS - PARKING, LOADING AND BICYCLE PARKING.

(.03) Minimum and Maximum Off-Street Parking Requirements:

A. Parking and loading or delivery areas shall be designed with access and maneuvering area adequate to serve the functional needs of the site and shall:

Response: Site Design Review is requested for a redesign and expansion of the existing parking area.

B. Parking and loading or delivery areas landscaping requirements

Response: Site Design Review is requested for a modification of the existing parking area. Many agencies as well as internal departments have been involved in the design of the park in order to separate vehicles and pedestrians and provide better traffic flow throughout the park.

Subsection 4.155(.03)B.4 Parking for ADA

Response: Five ADA parking spaces and a raised crossing from the ADA stalls in the center of the lot across to the entrance to the park are proposed as part of the redesign.

Subsection 4.155.(03)B.5.: Connection of Parking Areas

Response: The proposed parking area is not adjacent to any other parking areas. However, the proposal includes connection to trails and the entrance to the park.

Subsection 4.155.(03)B.6-8 and Table 5: Parking Standards.

Response: Site Design Review is requested for a modification to the existing parking area. The parking standards of the Wilsonville Code (Section 4.155) do not include a specific requirement for park development. However, the City of Wilsonville recognizes the need for more adequate parking at the site as well as the sizes of the parking stalls to be increased.

SECTION 4.167. GENERAL REGULATIONS - ACCESS, INGRESS AND EGRESS.

Response: Access to the site will be via car, pedestrian, bike and bus; Additional access is not proposed; however the existing access is proposed to be enhanced and raised concrete crossing for pedestrians will be added.

SUBSECTION 4.171. GENERAL REGULATIONS – PROTECTION OF NATURAL FEATURES AND OTHER RESOURCES

(.02) General Terrain Preparation:

Response: The plan proposes to celebrate and enhance natural features. The proposed plan minimizes grade changes, and proposes to remove 26 trees. The natural state on the site is being enhanced with trees and shrubs as well as ornamental trees and shrubs that will be beneficial for wildlife and pollinators. The proposed improvements are in keeping with the existing site and the appearance of surrounding areas. All grading will be completed in accordance with the Uniform Building Code.

(.03) Hillsides:

Response: The area where the work is being completed, does not contain slopes greater than 25%; therefore, this provision is not applicable.

(.04) Trees and Wooded Areas.

Response: The site currently has numerous trees. Ninety-three (93) trees were included as part of the tree survey of the immediate area. Twenty-six (26) trees will be removed as a part of this application because of construction, safety or disease/hazard. However, the natural state on the site is being enhanced with native trees and shrubs as well as ornamental trees and shrubs that will be beneficial for wildlife and pollinators and screening.

(.05) High Voltage Powerline Easements and Rights of Way and Petroleum Pipeline Easements:

Response: The subject site is not encumbered by high voltage powerline easements and right-of-way or petroleum pipeline easement; therefore, this provision is not applicable.

(.06) Hazards to Safety:

Response: The subject site is not located within a soil or geological hazard area, nor is it located in an area prone to forest and brush fires.

SECTION 4.175: PUBLIC SAFETY AND CRIME PREVENTION

Response: The City of Wilsonville is proposing to install raised pedestrian crossings to connect to paths, as well as getting pedestrians safely across the parking area. The proposal does not include any new buildings or structures. New lighting is also part of this proposal which aids in public safety and crime prevention.

SECTION 4.176: LANDSCAPING. SCREENING, AND BUFFERING

(.01) Purpose

Response: Landscaping for the site was either existing or previously planted by the City of Wilsonville. The proposal seeks to improve the parking area by creating more parking, establishing better circulation, better pedestrian flow, better aesthetics and preservation of many of the existing trees.

The City of Wilsonville hired Green Works, a highly qualified landscape architecture firm out of Portland to design Memorial Park's landscape area around the altered parking lot. The design is unique and is a statement in support of the landscape of the area. The City of Wilsonville has worked to develop a site plan that is functional, interesting and compatible with its surroundings. The design is sensitive to the surrounding areas, and will certainly provide a place that is connected to the environment.

The site landscaping consists of areas for lawn, native plants, fruiting shrubs and trees. Irrigation is provided through drip and rotor components. The plan has been designed to be aesthetically pleasing, to preserve native vegetation and to conserve water through the selection of native plants. Pursuant to Section 4.176 (.02) B., the landscaping standards exceed the minimum requirements.

(.03) Landscape Area

Response: This section requires that not less than 15% of the total lot area be landscaped with plants. The proposal seeks to enhance the site by providing additional parking and landscaping in the already established parking area. Based upon the fact that the existing landscaping already exceeds the required 15% landscaping this requirement has been met.

(.04) Buffering and Screening

Response: The Buffering and Screening section requires that all intensive developments be screened and buffered from less intensive developments. The subject site is surrounded by residential. Six feet of screening is proposed in the form of additional plantings along the perimeter of the parking and circulation area to minimize the impacts of the parking area to the surrounding residences. Therefore, this requirement has been met.

(.06) Plant Materials.

Response: Shrubs - These code sections specify the size of plant material required for new development as well as standards related to species selection, and growth rate. Shrubs are

required to be equal or better than two-gallon containers, and shall have a 10"-12" spread. Plans provided by Green Works provide a summary of proposed plants and this requirement has been met.

Ground cover - Ground covers in one gallon containers are to be planted on 4' centers minimum, 4" pots are to be spaced at 2' centers, 2 ¼" pots are to be spaced at 18" centers. All ground covers are to be planted at a density so as to cover 80% of the planting area within 3-years of planting. The submitted plan by Green Works provides a summary of proposed plants, and this requirement has been met.

Trees are required to be well-branched and typical of their type as described in current American Association of Nurserymen (AAN) Standards and shall be balled and burlapped. The trees shall be grouped as follows:

1. Primary trees which define, outline or enclose major spaces, shall be a minimum of 2" caliper.
2. Secondary trees which define, outline or enclose interior areas shall be a minimum of 1-3/4" to 2" caliper.
3. Accent trees which, are used to add color, variation and accent to architectural features, shall be 1-3/4" minimum caliper.
4. Large conifer trees shall be installed at a minimum height of eight feet.
5. Medium-sized conifers shall be installed at a minimum height of five to six feet.

Green Works provides a summary of proposed plants. The proposal includes twenty-two (22) 2" caliper Sun Valley Maple, Patmore Ash, Black Tupelo and Harvest Gold Linden, for parking lot shade trees. As secondary trees located in the adjacent picnic area, the Applicant is proposing seven (7) 8' Incense-Cedar, Ponderosa Pine, Douglas Fir and Western Red Cedar to provide a shady area for picnicking. The applicant is proposing three (3) 2" caliper Flowering Accent trees. The proposed plantings meet or exceed the code requirement.

(.07) Installation and Maintenance.

Response: Plant materials, once approved by the DRB, shall be installed to current industry standards and shall be properly staked to assure survival. Support devices (guy wires, etc.) shall not be allowed to interfere with normal pedestrian or vehicular movement. Maintenance of landscaped areas is the on-going responsibility of the property owner. Any landscaping installed to meet the requirements of this Code, or any condition of approval established by City decision-making body acting on an application, shall be continuously maintained in a healthy, vital and acceptable manner. Plants that die are to be replaced in kind, within one growing season, unless the City approves appropriate substitute species.

(.08) Landscaping on Corner Lots

Response: The subject is not by definition a "corner lot"; therefore this criteria is not applicable.

(.10) Completion of Landscaping.

Response: This proposal does not include a deferment of the installation of the proposed planting plan. The current landscape treatment far exceeds the 15% minimum code requirement for coverage and the proposal will enhance the site, the City of Wilsonville will develop the project without a bond because there is strong city and community involvement.

SECTION 4.177. STREET IMPROVEMENT STANDARDS.

Subsection 4.177.03(.01)A-B.

Response: The subject site does not abut any stub streets; therefore, continuation of streets through the development is not applicable.

The subject site is accessed by a private drive that is off of Memorial Drive. Additional right-of-way or street improvements are not warranted at this time.

Subsection 4.177.03(.01)E: *Access drives and lanes.*

Response: General access to the site will be by car, bike, bus and pedestrian travel along the trails and sidewalks that are already existing and will be enhanced by proposed connectivity.

Subsection 4.177.03(.01)F: *Rights-of-way.*

Response: No right-of-way is impacted by this proposal.

Subsection 4.177.03(.01)I: *Corner or clear vision area.*

Response: The City of Wilsonville will be in compliance with clear vision areas and vertical clearance.

SECTION 4.178 SIDEWALK AND PATHWAY STANDARDS

(.01) Sidewalks

Response: All sidewalks are required to be a minimum of five (5) feet in width. All proposed sidewalks are a minimum of five (5) feet with some extending to 10 feet wide; therefore, this provision is satisfied.

TRANSIT SERVICE

Response: The subject site is serviced by various buses throughout the year, however the site is not on a serviced route by SMART.

SECTION 4.199 OUTDOOR LIGHTING

Response: The proposal includes a request for additional lighting; however; the park area is not within a Lighting Zone. The proposal complies with the Prescriptive Option. Cut sheets,

photometrics and a map showing location of new lights are included within the applicant materials.

SECTION 4.300. UNDERGROUND UTILITIES

Section 4.300. ***General.***

(.01) The City Council deems it reasonable and necessary in order to accomplish the orderly and desirable development of land within the corporate limits of the City, to require the underground installation of utilities in all new developments.

(.02) After the effective date of this Code, the approval of any development of land within the City will be upon the express condition that all new utility lines, including but not limited to those required for power, communication, street lighting, gas, cable television services and related facilities, shall be placed underground.

(.03) The construction of underground utilities shall be subject to the City's Public Works Standards and shall meet applicable requirements for erosion control and other environmental protection.

Section 4.320. ***Requirements.***

(.01) The developer or subdivider shall be responsible for and make all necessary arrangements with the serving utility to provide the underground services (including cost of rearranging any existing overhead facilities). All such underground facilities as described shall be constructed in compliance with the rules and regulations of the Public Utility Commission of the State of Oregon relating to the installation and safety of underground lines, plant, system, equipment and apparatus.

Response: No above ground utilities are proposed. Storm drainage will be provided through low impact development practices. With the exception of storm drainage, no additional above ground utilities are proposed or warranted.

SUBSECTION 4.420. JURISDICTION AND POWERS OF THE BOARD

(.02) Development in Accord with Plans.

Response: A copy of all DRB approved conditions of approval will be given to the general contractor for the proposed project to ensure compliance with all conditions of approval and allow building permits to be issued in a timely fashion.

SECTION 4.421. CRITERIA AND APPLICATION OF DESIGN STANDARDS.

(.01) The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural styles is not included in these standards. (Even in the Boones Ferry Overlay Zone, a range of architectural styles will be encouraged.)

A. Preservation of Landscape.

Response: The proposed plan minimizes grade changes, and proposes to remove 26 trees. The natural state on the site is being enhanced with native trees and shrubs as well as ornamental trees and shrubs that will be beneficial for screening and pollinators. A small amount of excavation will occur. The City of Wilsonville proposes to remove the 26 trees due to construction, disease, structure or health and safety. The proposal includes a Type C Tree Removal Plan.

B. Relation of Proposed Buildings to Environment.

Response: The subject property does contain steep slopes and is it within a Significant Resource Overlay Zone (SROZ). No buildings are proposed as part of the site plan.

C. Drives, Parking and Circulation.

Response: The drives, parking and circulation is existing on the site. The proposal includes enhancing the circulation and parking by providing one way drive aisles, and the intersection of the internal streets and additional parking spaces to serve the public better.

D. Surface Water Drainage.

Response: Stormwater quality will be addressed through the use of biofiltration swales. The swales will be installed along the south side of the parking lot and in the islands throughout the parking lot. Stormwater quality will also be addressed through the use of an extended dry pond on the north end of the site. The site is flow control exempt and so no detention will be addressed. However, the extended pond and biofiltration swales will contribute attenuation of the storm water flows. The stormwater will be conveyed via culvert to an unnamed tributary of

Boeckman Creek." Staff finds that this site incorporates low impact development practices for storm water. The Applicant shall submit an erosion and sediment control plan.

E. Utility Service.

Response: No above ground utilities are proposed and, therefore this provision is satisfied.

F. Advertising Features.

Response: No new signs are proposed with this project.

G. Special Features.

Response: The proposal does not include plans for additional special features including exposed machinery or loading bays. This provision is therefore not applicable.

(.02) The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures.

Response: The City of Wilsonville is not proposing accessory buildings, structures or other site features. This provision is therefore satisfied.

SECTION 4.430. LOCATION, DESIGN AND ACCESS STANDARDS FOR MIXED SOLID WASTE AND RECYCLING AREAS

(.01) The following locations, design and access standards for mixed solid waste and recycling storage areas shall be applicable to the requirements of Section 4.179 of the Wilsonville City Code.

Response: Storage requirements are based upon the square footage of buildings and or number of units. The City of Wilsonville is not proposing additional structures. There are existing refuse containers on site. Any refuse generated by the use of the facility can be self-contained and hauled off-site.

SECTION 4.506 (.01) E & 4.508 (.01) E. WILLAMETTE RIVER GREENWAY.

Response: The subject property is within Memorial Park which is within the Willamette River Greenway. The proposed parking lot improvements are maintenance and repair usual and necessary for the continuance of the existing parking lot use and is permitted outright within the Willamette River Greenway Boundary thus, meeting code. Furthermore, the removal of trees is not classified as intensification of use within the Willamette River Greenway Boundary thus,

meeting code, however a Type C Tree Permit is required and discussed below.

Tree Removal and Mitigation

Subsection 4.610.10(.01): *Standards for Tree Removal, Relocation or Replacement*

Response: The removal of the 26 coniferous and deciduous trees throughout the site is necessary in order to re-construct the parking area, maintain safety and satisfy the standards for removal.

The proposal includes a tree survey for the ninety-three (93) trees in the immediate area. Twenty-six (26) trees are required to be removed in order to construct and maintain safety for the proposed parking area. The proposal includes a mitigation plan for the tree removal, by installing 30 replacement trees.

Subsection 4.610.10(.01)(H)(1-3): (1) *Necessity for Construction, (2) Disease, Damage, or Nuisance, or Hazard, (3) Interference*

Response: Ten on-site trees not identified for removal are proposed to be retained as part of the on-site landscaping. Twenty-six (26) trees are proposed to be removed due to construction, disease, damage, nuisance or hazard and interference. The specifics are outlined in the tree survey specific to each tree and the reason for its removal. Based on the proposed tree removal plan accompanied by the tree survey, the proposal meets this code requirement.

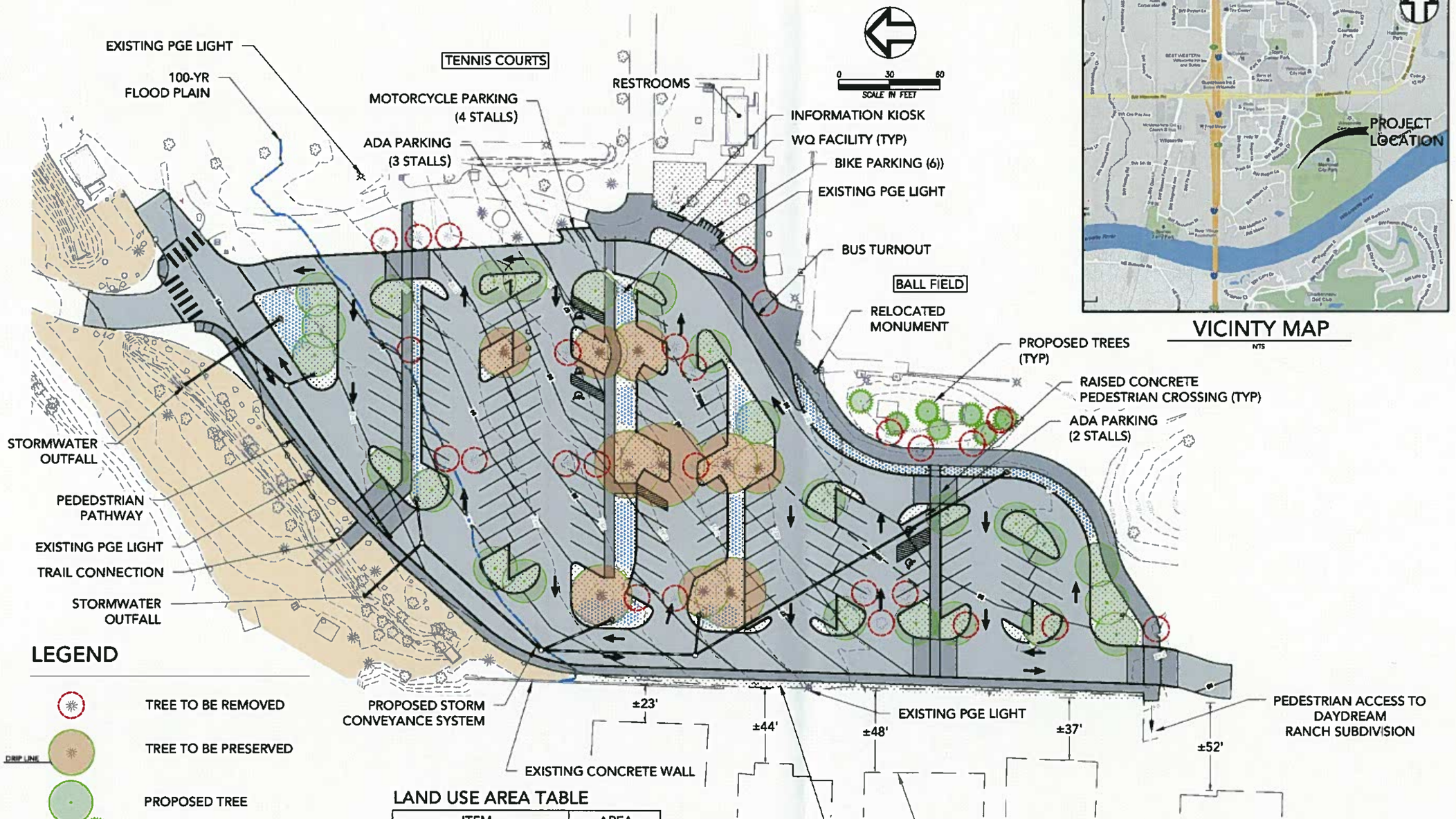
Subsection 4.620.00(.02) – (.05): *Tree Relocation, Mitigation, or Replacement*

Response: The tree survey indicates that 26 trees will be removed.

The proposed planting plan indicates that 30 trees will be planted. Based on this the number of trees are sufficient to meet the minimum mitigation requirement.

Subsection 4.610.40: *Type "C" Permit*

Response: The City of Wilsonville will subsequently apply for a Type "C" Tree Removal Permit per Subsection 4.610.40(.02).



VICINTY MAP

NTS

LEGEND

- TREE TO BE REMOVED
- TREE TO BE PRESERVED (DRIP LINE)
- PROPOSED TREE
- PROPOSED ASPHALT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED WATER QUALITY FACILITY
- PROPOSED LANDSCAPING
- SROZ LIMIT, ASSUMED AT EDGE OF EXISTING PAVEMENT

LAND USE AREA TABLE

ITEM	AREA
PAVING AND PARKING	71,700 SF
LANDSCAPING	27,350 SF

PARKING STALL COUNT

STANDARD	111
COMPACT	2
ADA	5
TOTAL	118

TYPICAL STANDARD SIZE ANGLED PARKING DIMENSIONS

AISLE WIDTH	18'
PARKING STALL DEPTH	18'
DEPTH W/ NO OVERHANG	19.8'
PARKING STALL WIDTH	9'

TYPICAL COMPACT SIZE ANGLED PARKING DIMENSIONS

AISLE WIDTH	18'
PARKING STALL DEPTH	16'
DEPTH W/ NO OVERHANG	17.8'
PARKING STALL WIDTH	8'

PRELIMINARY

NO.	REVISION	BY	DATE

ONE INCH 0 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

DESIGNED BY: JW
DRAWN BY: CK
CHECKED BY: DB

GREENWORKS

MEMORIAL PARK DEVELOPMENT SITE PLAN

wallis engineering

PROJECT NO: 1337A

DATE: 5/2013

CITY OF WILSONVILLE

MEMORIAL PARK IMPROVEMENTS

DRAWING NO: C1

City of Wilsonville
Exhibit B3 DB13-0030/0031

PLANTING LEGEND

EXISTING TREE TO REMAIN

PARKING SHADE TREES - SIZE: 2" CAL. QUANTITY: 22

ACER RUBRUM 'SUN VALLEY'	SUN VALLEY MAPLE
FRAXINUS PENNSYLVANICA 'PATMORE'	PATMORE ASH
NYSSA SYLVATICA	BLACK TUPELO
TILLIA CORDATA X MONGOLICA 'HARVEST GOLD'	HARVEST GOLD LINDEN

CONIFER TREES - SIZE: 8' HEIGHT QUANTITY: 7

CALOCEDRUS DECURRENS	INSENSE-CEDAR
PINUS PONDEROSA 'WILLAMETTE VALLEY STRAIN'	PONDEROSA PINE
PSEUDOTSUGA MENZEISEII	DOUGLAS-FIR
THUJA PLICATA	WESTERN RED-CEDAR

FLOWERING ACCENT - SIZE: 2" CAL. QUANTITY: 3

AMELANCHIER LAEVIS 'SPRING FLURRY'	SPRING FLURRY SERVICEBERRY
AMELANCHIER LAEVIS 'SPRING FLURRY'	SNOWCLOUD SERVICEBERRY
CERCIS CANADENSIS	EASTERN REDBUD
CORNUS 'EDDIE'S WHITE WONDER'	EDDIE'S WHITE WONDER DOGWOOD

SHRUBS & ORNAMENTAL GRASSES

		SIZE
SHRUBS		
ARCTOSTAPHYLOS COLUMBIANA 'OREGON HYBRID'	MANZANITA 'OREGON HYBRID'	5 GAL. CONT.
CORNUS STOLONIFERA 'KELSEYI'	KELSEY DOGWOOD	2 GAL. CONT.
CORNUS STOLONIFERA 'FARROW'	ARCTIC FIRE DOGWOOD	2 GAL. CONT.
MAHONIA AQUIFOLIUM 'COMPACTA'	TALL OREGON GRAPE	2 GAL. CONT.
MAHONIA NERVOSA	CASCADE OREGON GRAPE	2 GAL. CONT.
POLYSTICHUM MUNITUM	SWORD FERN	2 GAL. CONT.
RIBES SANGUINEUM	FLOWERING CURRANT	5 GAL. CONT.
VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	3 GAL. CONT.
ORNAMENTAL GRASSES		
HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	2 GAL. CONT.
MISCANTHUS SINENSIS 'LITTLE KITTEN'	LITTLE KITTEN MAIDEN GRASS	2 GAL. CONT.
PENNISETUM ALOPECROIDES	FOUNTAIN GRASS	2 GAL. CONT.

GROUNDCOVERS

		SIZE
ARCTOSTAPHYLOS UVA-URSI	KINNIKINNICK	1 GAL. CONT.
GAULTHERIA SHALLON	SALAL	1 GAL. CONT.
MAHONIA REPENS	CREEPING MAHONIA	1 GAL. CONT.
ARCTOSTAPHYLOS UVA-URSI	KINNIKINNICK	1 GAL. CONT.

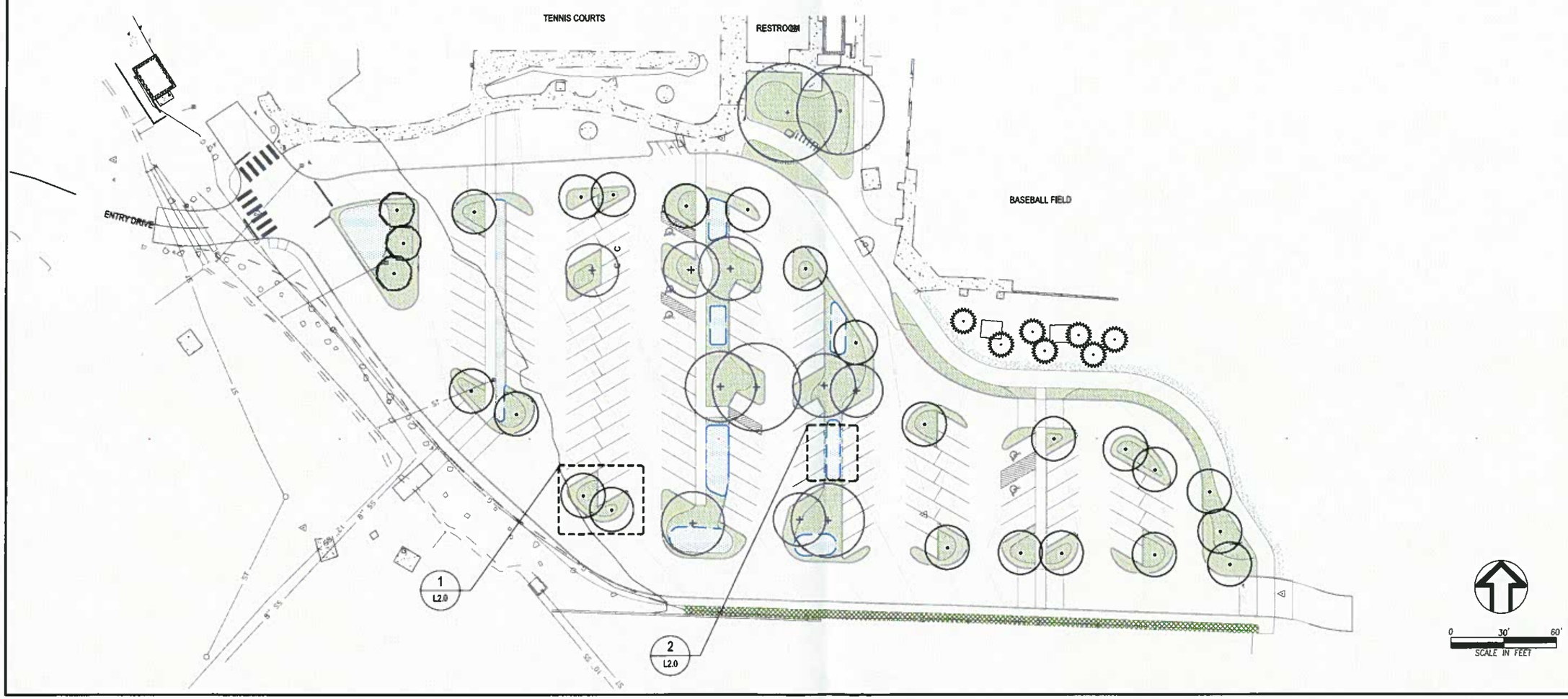
EVERGREEN SCREEN - 5' WIDE X 6' TALL

		SIZE
ARBUTUS UNEDO 'COMPACTA'	COMPACT STRAWBERRY TREE	5 GAL. CONT.
THUJA OCCIDENTALIS	ARBORVITAE	5 GAL. CONT.
VIBURNUM TINUS 'COMPACTUM'	SPRING BOUQET LAURUSTINUS	3 GAL. CONT.

WATER QUALITY FACILITIES

		SIZE
CAREX DENSA	DENSE SEDGE	1 GAL. CONT.
DESCHAMPSIA CAESPITOSA	TUFTED HAIR GRASS	1 GAL. CONT.
JUNCUS PATENS	SPREADING RUSH	1 GAL. CONT.
SCIRPUS MICROCARPUS	SMALL FRUITED BULLRUSH	1 GAL. CONT.
SPIRAEA DOUGLASII	DOUGLAS SPIREA	1 GAL. CONT.
IRIS SIBIRICA	SIBERIAN IRIS	1 GAL. CONT.
CAMASSIA QUAMASH	COMMON CAMAS	1 GAL. CONT.

LAWN REPAIR AREA



PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: SK
DRAWN BY: DS
REV:

0 ONE INCH 1"
ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

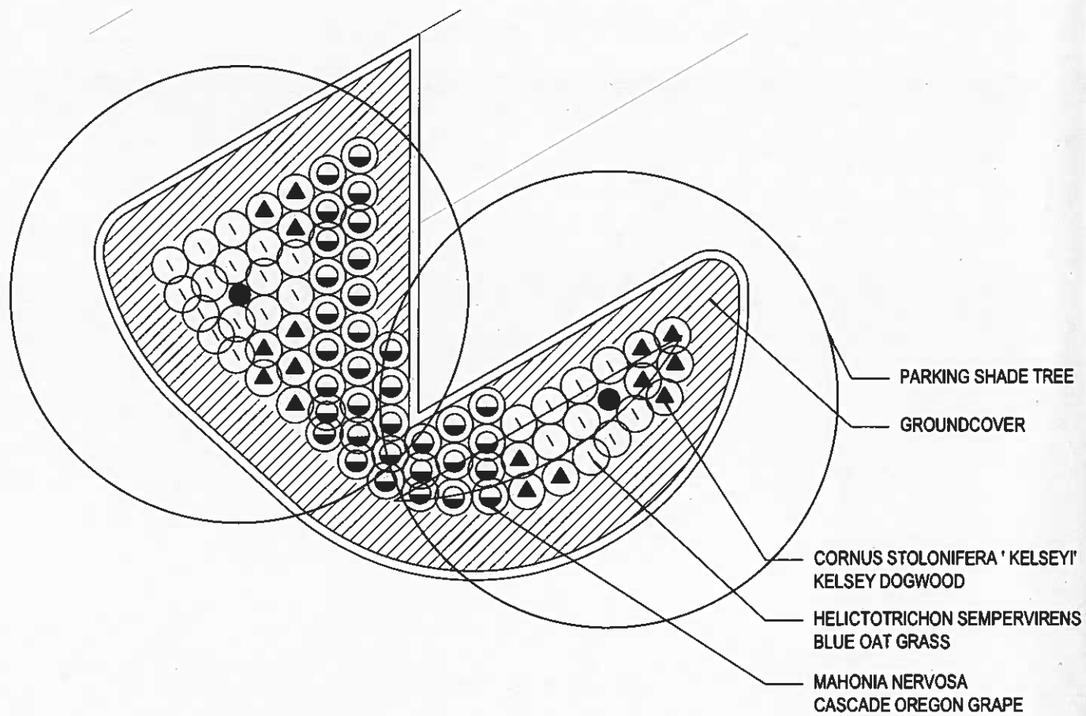
PLANTING PLAN

GREENWORKS

PROJECT NO: 1337A
DATE: 5/21/13

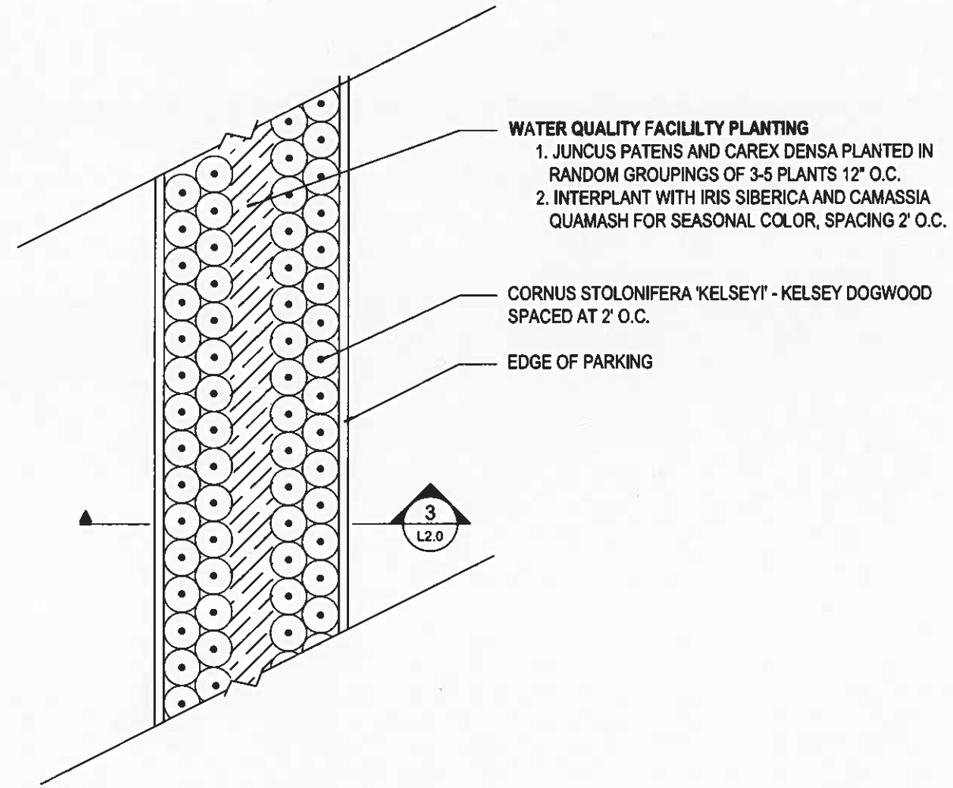
CITY OF WILSONVILLE
MEMORIAL PARK IMPROVEMENTS

DRAWING NO:
L1.0



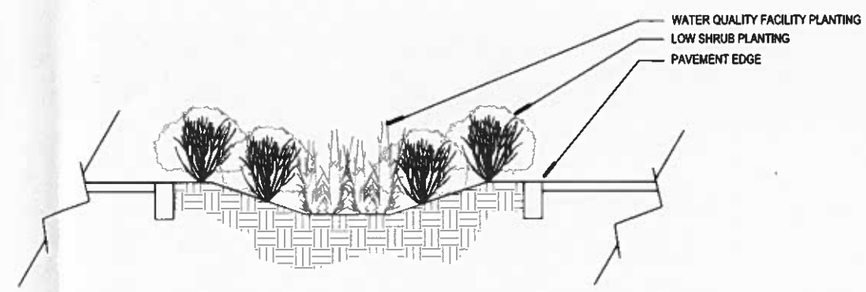
1 TYPICAL LANDSCAPE PLANTING
PLAN

0' 1' 2' 4'



2 TYPICAL STORMWATER FACILITY PLANTING
PLAN

0' 1' 2' 4'



3 TYPICAL STORMWATER FACILITY PLANTING
SECTION

0 6" 1' 2'

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: SK
DRAWN BY: DS
CHK:

ONE INCH
ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

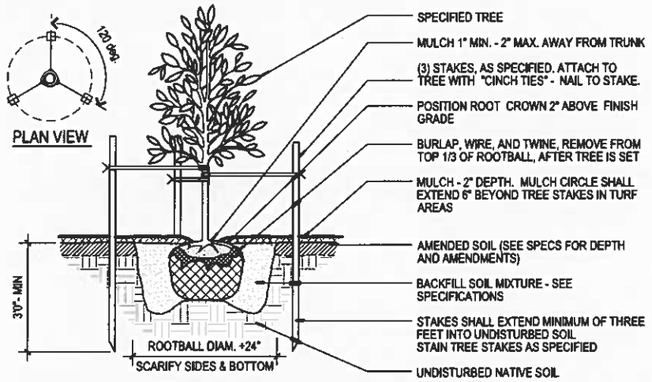
PLANTING PLAN ENLARGEMENTS

GREENWORKS

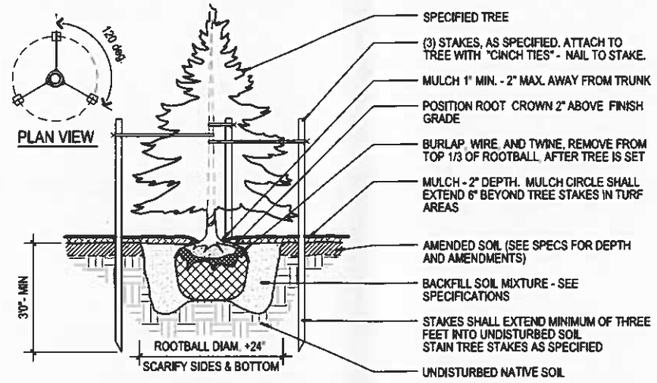
PROJECT NO: 1337A
DATE: 5/21/13

CITY OF WILSONVILLE
MEMORIAL PARK IMPROVEMENTS

DRAWING NO:
L2.0



1 DECIDUOUS TREE PLANTING - STAKING
SECTION
0 6" 12" 24"



1 CONIFER TREE PLANTING - STAKING
SECTION
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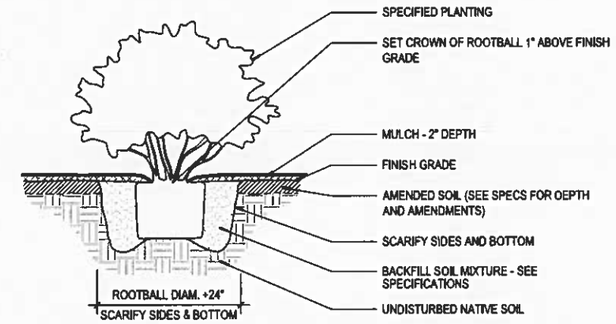
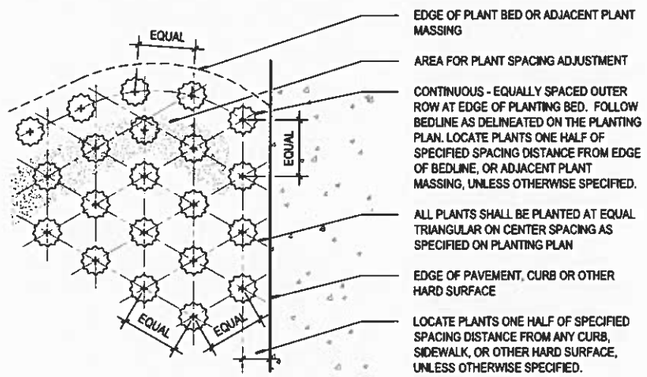


1 SHRUB PLANTING - CONTAINER
SECTION
0 6" 12" 24"



4 GROUNDCOVER PLANTING
Plan
NOT TO SCALE

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: SK
DRAWN BY: DS
REV:

ONE INCH
0 1"
ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

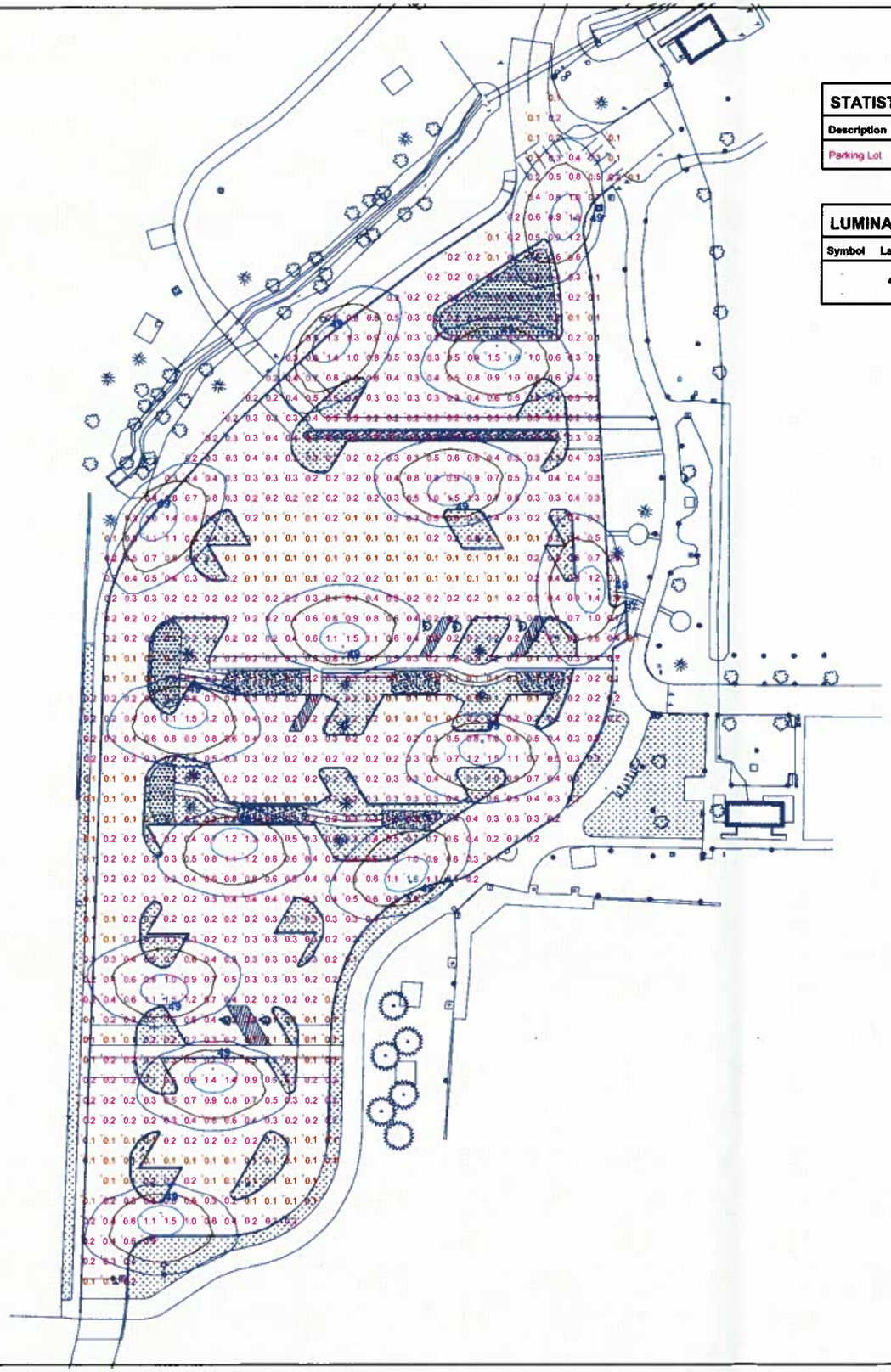
PLANTING DETAILS

GREENWORKS

PROJECT NO: 1337A
DATE: 5/21/13

CITY OF WILSONVILLE
MEMORIAL PARK IMPROVEMENTS

DRAWING NO:
L3.0



STATISTICS

Description	Avg	Min	Avg/Min
Parking Lot	0.4 fc	0.1 fc	4.0:1

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Description	Lumens	LLF	Watts
	49	14	49W LEOTEK LED WITH 25' MH & 6' Mast Arm	Absolute	0.85	48.8

VISUAL

Memorial Parking Lot

Wilsonville, OR

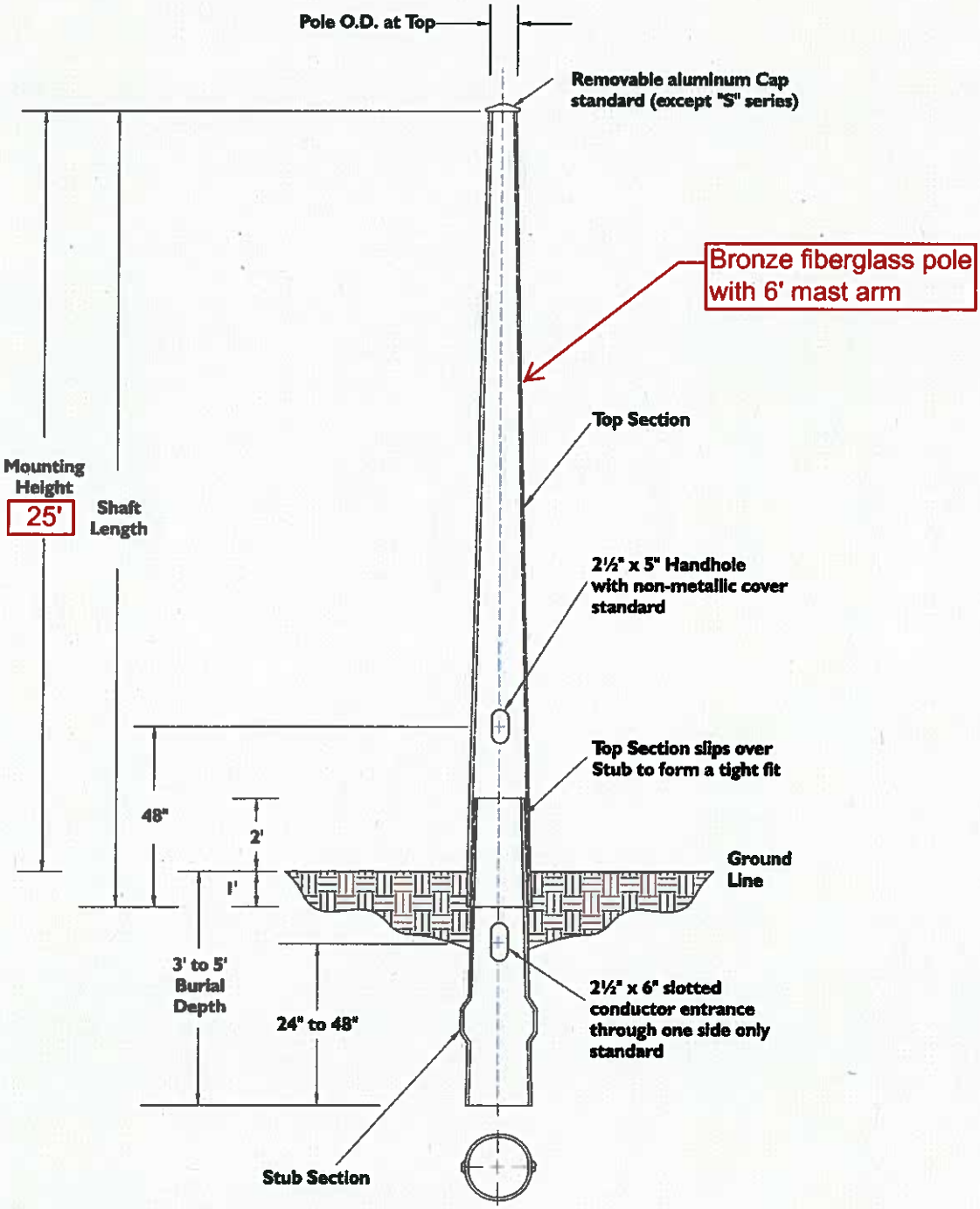
Designer
Aroun Xaybanha

Date
May 28 2013

Scale
1inch = 40 feet

PGE Job No.

Shakespeare Tuff-Stub Base Direct Burial Poles



Shakespeare Composite Structures

19845 Highway 76 · PO Box 733 · Newberry, SC 29108
803.276.5504 ext. 187 · F/803.276.8940
Toll-free in U.S.A.: 1.800.800.9008 ext. 187
www.skp-cs.com

©2003 Shakespeare Composite Structures · Form LSB-1 ©2003 3: SM 0600 WP

Lighting Detail

Sheet 1.1

A Division of Genlyte Thomas Group, LLC

The Leader in Electro-Optics Technology

a subsidiary company of LITEON

Job Name: Memorial Park

Type:

Complete Catalog Number:

LED GREEN Cobra™ Street Light

Ordering Example

GC1	30E	MV	NW	2	GY	
GC1 – LED Street Light GCD1 – LED Street Light Dimmable GCA1[1] – LED Street Light GCAD1[1] – LED Street Light Dimmable	Number/ Type of LEDs 20E 30E 40E 60E 80E	Voltage MV - 120-277V HV - 347-480V	Nominal Color Temperature[2] NW – 4300K	Light Distribution 2 - Type 2 3 - Type 3	Finish[3] GY - Gray Bronze	Accessories/Options BSK - Bird Spider Kit SPB - Square Pole Bracket RPB - Round Pole Bracket PTB - Pole-Top Bracket HSS[4] – House Side Shield 350 - Factory set 350mA Drive Current 530 - Factory set 530mA Drive Current FDC[5]- Fixed Drive Current

Notes:
1. Meets Buy American Provision of ARRA
2. NW standard. Consult factory for other color temperatures.
3. Gray standard. Consult factory for other finishes.
4. Flush mounted shield easily field installed. Cuts light off ½ mounting height behind luminaire.
5. Non-field adjustable drive current. Specify setting - 350mA, 530mA, or 700mA.

Luminaire Specifications

Housing: Die cast aluminum housing with universal four-bolt slip fitter mounts to 11/4 " to 2" (15/8" to 23/8" O.D.) diameter mast arm. Cooling fins maintain LED junction temperature assuring long LED life and efficiency. Electrical components are accessed without tools and are mounted on removable power door. Power door features quick electrical disconnects to terminal block and LED board. Photocontrol receptacle is standard and can be aimed without tools. Photocontrol is provided by others.

Light Emitting Diodes: Hi-flux/Hi-power white LEDs produce a minimum of 70% of initial intensity at 70,000 hours of life. LEDs are tested in accordance with IESNA LM-80 testing procedures. They have a mean correlated color temperature of 4300K (standard). LEDs are 100% mercury and lead free.

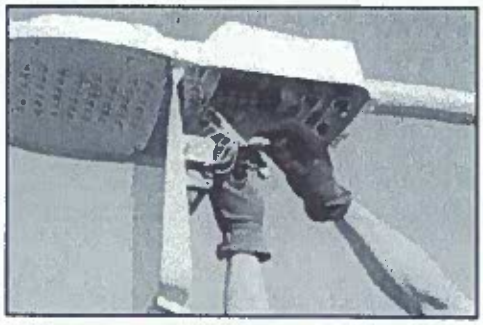
Optical Systems: Micro-lens systems produce IESNA Type 2 or Type 3 distributions. Luminaire is classified as Full-Cutoff with 0% total lumens above 90°.

Electrical: Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Transient voltage complies with ANSI C62.41 Cat. A. Power supply is field adjustable to 350mA, 530mA, or 700mA drive current. Standard factory setting is 700mA. Integral surge protector is tested per ANSI/IEEE C62.45 procedures based on ANSI/IEEE C62.41.2 definitions for standard and optional waveforms for Location Category C-High.

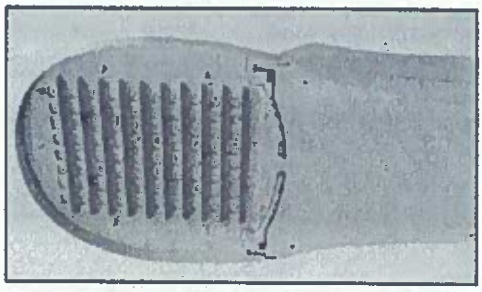
Finish: Housing receives a fade and abrasion resistant, epoxy polyester powder coat, light gray finish standard.

Listings/Ratings/Warranties/Patents: Luminaires are UL listed for use in wet locations in the United States and Canada. Optical systems maintain an IP66 rating. Five-year limited warranty is standard on all components. Patents pending.

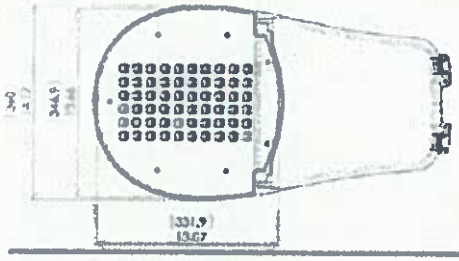
Photometry: All luminaires are photometrically tested by certified independent testing laboratories in accordance with IESNA LM-79 testing procedures.



Removable "power door" opens without tools and hangs securely during wiring.



Optional House Side Shield plate with back light strips is factory or field installable.



Weight	EPA*
21 lbs. (9kg)	0.9ft²

*Effective Projected Area (consult factory for multiple units)

LED GREEN Technology

GCA units are manufactured in USA and meet Buy American requirements within the ARRA.

Lighting Detail

Sheet 1.2

Leotek Electronics USA Corp.
726 South Hillview Drive | Milpitas, CA 95035 | 408.380.1788 | www.leotek.com

Morgan Holen & Associates

MHA1262 Memorial Park - Tree Inventory 2-25-13

No.	Common Name	Species Name	DBH[1]	C-Rad[2]	Ht[3]	DEI[4]	Cond[5]	Comments	Treatment
2353	Norway maple	*Acer platanoides*	20	18	40	8	3	basal decay	**if retained, further investigation Rx**
2354	Norway maple	*Acer platanoides*	22	18	45	20	4	invasive species; no major defects	
2355	Norway maple	*Acer platanoides*	14	15	35	12	4	invasive species; no major defects	
2356	Norway maple	*Acer platanoides*	18	21	45	25	4	invasive species; no major defects	
2357	maple	*Acer* spp.	22	21	50		4	located on side slope of grassy mound	
2358	maple	*Acer* spp.	24	20	50	50	4	good structure, no major defect	
2359	red maple	*Acer rubrum*	9	12	35	20	4	small	
2360	Norway maple	*Acer platanoides*	22	18	40	16	3	invasive species; codom, included bark	**if retained, further investigation Rx**
2361	red maple	*Acer rubrum*	10	15	30	18	4	girdling roots	
2362	dec	unknown	10	12	20	35	4	no major defects	
2363	dec	unknown	10	12	20	20	4	no major defects	
2364	dec	unknown	8	12	20	18	4	no major defects	
2788	flowering pear	*Pyrus calleryana*	8	8	40	1	4	no major defects	
2789	flowering pear	*Pyrus calleryana*	8	10	40	1	4	no major defects	
2790	flowering pear	*Pyrus calleryana*	8	10	40	1	4	no major defects	
2791	flowering pear	*Pyrus calleryana*	10	10	40	1	4	no major defects	
2792	flowering pear	*Pyrus calleryana*	10	10	40	1	4	no major defects	
2793	beech	*Fagus* spp.	14	18	40	1	4	well maintained	
2794	Norway maple	*Acer platanoides*	26	25	45	35	4	surface root damage; no major defects	
2795	Norway maple	*Acer platanoides*	26	28	45	16	4	no major defects	
2796	Norway maple	*Acer platanoides*	22	20	40	11	1	poor structure, included bark, decay, lean	remove
2797	Norway maple	*Acer platanoides*	28	30	45	9	4	no major defects	
2798	Douglas-fir	*Pseudotsuga menziesii*	26	25	65	4	3	twig dieback, thin crown	retain 4
2799	Douglas-fir	*Pseudotsuga menziesii*	32	25	65	6	4	no major defects, prune overtopped spur	retain 2, **pr def part**
2800	Douglas-fir	*Pseudotsuga menziesii*	26	18	65	10	4	no major defects	retain 1
2801	Douglas-fir	*Pseudotsuga menziesii*	24	16	65	10	4	no major defects	retain 3
2802	incense-cedar	*Calocedrus decurrens*	14	9	40	10	3	dead lower branches, some flagging	remove 5
2803	incense-cedar	*Calocedrus decurrens*	28	15	65	9	4	relatively thin crown	remove 5
2805	incense-cedar	*Calocedrus decurrens*	8	9	30		2	poor structure	remove
2807	incense-cedar	*Calocedrus decurrens*	34	15	70	6	4	no major defects	retain 1
2808	incense-cedar	*Calocedrus decurrens*	48	15	70	6	3	codom, included bark, appears stable	retain 2
2809	Douglas-fir	*Pseudotsuga menziesii*	18	20	70	7	3	some dead wood, basal swelling	retain 2
2810	Douglas-fir	*Pseudotsuga menziesii*	30	25	70	7	3	forked top, multiple attachments	retain 2

City of Wilsonville
EXHIBIT B4 DB13-0030/0031

Morgan Holen & Associates, Inc.

MHA1262 Memorial Park - Tree Inventory 2-25-13

No.	Common Name	Species Name	DBH[1]	C-Rad[2]	Ht[3]	DEI[4]	Cond[5]	Comments	Treatment
2811	Douglas-fir	*Pseudotsuga menziesii*	28	22	70	6	3	forked top, some dead wood, broken top	remove
2812	Douglas-fir	*Pseudotsuga menziesii*	24	18	70	8	4	minor mechanical damage at base	retain 1
2813	incense-cedar	*Calocedrus decurrens*	26	15	70	6	4	no major defects	retain 1
2814	incense-cedar	*Calocedrus decurrens*	50	15	70	9	3	codom, appears stable	
2902	Douglas-fir	*Pseudotsuga menziesii*	14,18	18	50		3	codom stems, some included bark	retain 2, monitor or rm
2903	Douglas-fir	*Pseudotsuga menziesii*	16	18	50	5	2	thin crown, losing apical dominance, poor stem structure, progressive decline	remove
2904	Douglas-fir	*Pseudotsuga menziesii*	18	18	50	6	2	thin crown, losing apical dominance, heavy cone production, progressive decline	remove
2905	fir spp.	*Abies* spp.	12	10	30	6	3	small, poor species selection	remove
3204	red maple	*Acer rubrum*	12	15	40	6	4	some included bark	
3205	red maple	*Acer rubrum*	12	15	40	15	4	no major defects	
3206	red maple	*Acer rubrum*	10	12	40	35	4	no major defects	
3207	red maple	*Acer rubrum*	6	8	30	35	3	sunscald	
3208	red maple	*Acer rubrum*	15	18	40	15	3	self-correcting lean	
3432	Atlas cedar	*Atlas cedar*	24	15	50	14	3	minor asymetry, sapsuckers, girdling roots	
3433	Oregon ash	*Fraxinus latifolia*	30	30			3	codom, stem decay with hollows	if retained, monitor
3434	Oregon ash	*Fraxinus latifolia*	2*12	16			3	codom, some included bark	if retained, monitor
3435	willow	*Salix* spp.	3*6	15			1	poor structure, basal and stem decay	remove
3436	red alder	*Alnus rubra*	8	10			4	no major defects	
3437	willow	*Salix* spp.	8	10			3	some basal decay	
3438	red alder	*Alnus rubra*	6	10			4	no major defects	
3440	willow	*Salix* spp.	3*10	25			2	poor structure, decay	if retained, safety prune
3650	Douglas-fir	*Pseudotsuga menziesii*	24	21	60	9	4	no major defects	if retained, prune
3651	Douglas-fir	*Pseudotsuga menziesii*	22	15	65	8	4	no major defects	if retained, prune
3652	incense-cedar	*Calocedrus decurrens*	28	15	55	3	2	dead branches, lean, poor taper	remove
3653	incense-cedar	*Calocedrus decurrens*	32	10	60	5	3	self-correcting lean	remove
3654	Douglas-fir	*Pseudotsuga menziesii*	21	18	60	7	3	forked top, twig dieback	remove, or retain
3791	willow	*Salix* spp.	5*6	15			2	poor structure, included bark	
3792	willow	*Salix* spp.	3*6	18			2	could retain in group	
3793	red alder	*Alnus rubra*	8	20	50		4		
3794	red alder	*Alnus rubra*	8	17	50		4		
3795	red alder	*Alnus rubra*	6	20	50		4		
3796	willow	*Salix* spp.	12	18	50		3	forked top, some included bark	
3797	red alder	*Alnus rubra*	10	18	50		4		

Morgan Holen & Associates

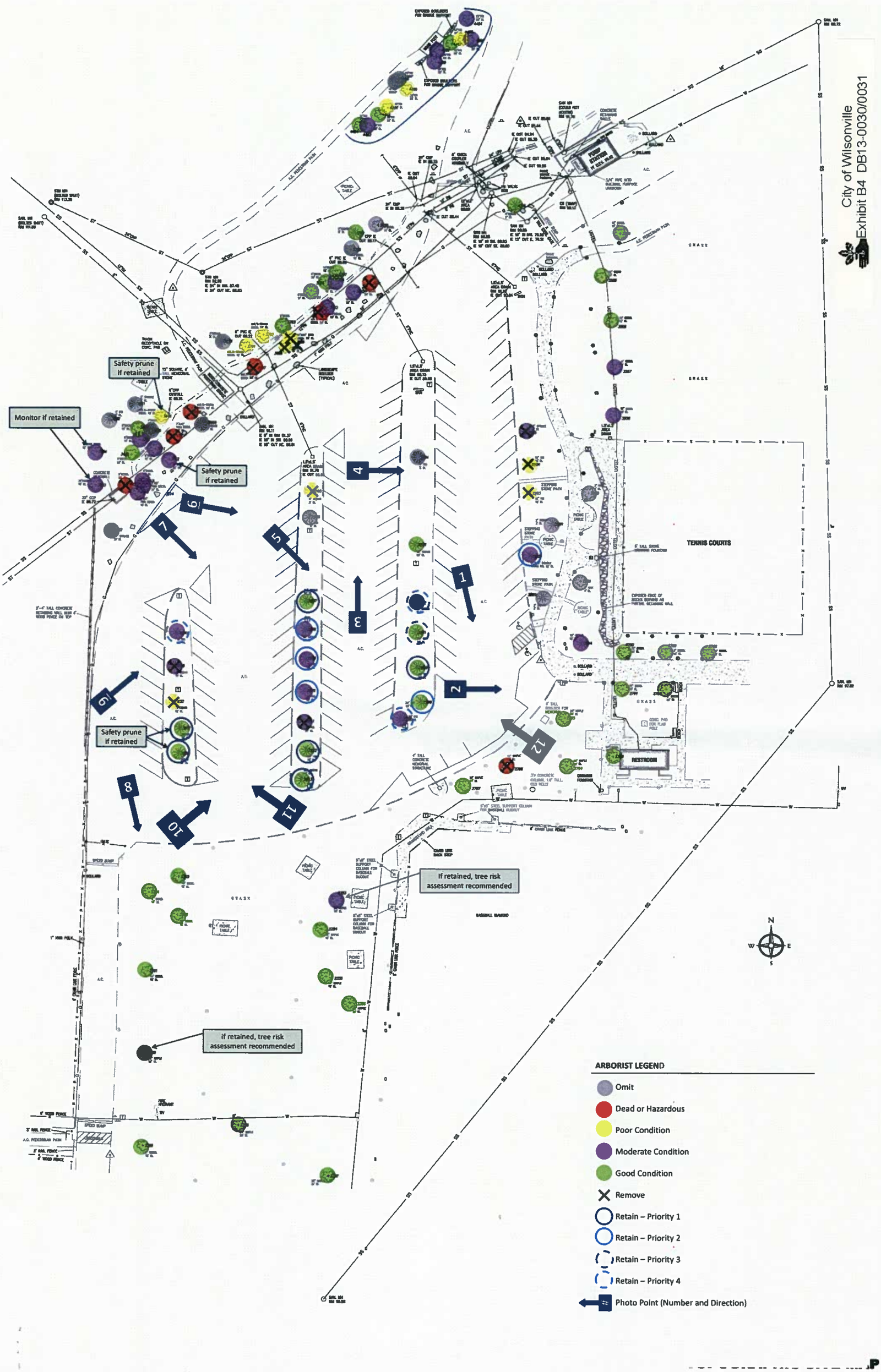
MHA1262 Memorial Park - Tree Inventory 2-25-13

No.	Common Name	Species Name	DBH[1]	C-Rad[2]	Ht[3]	DEI[4]	Cond[5]	Comments	Treatment
3799	western redcedar	*Thuja plicata*	6	8	20		4		
3801	willow	*Salix* spp.	20	30	50		1	codom, included bark, lean, soil heave	remove
3802	red alder	*Alnus rubra*	10	18	50		3		
3803	red alder	*Alnus rubra*	10	18	50		3		
3804	willow	*Salix* spp.	4*6	20	50		1	poor structure, basal decay	remove
3805	willow	*Salix* spp.	10,15	18	50		2	basal and branch decay	remove
3806	red alder	*Alnus rubra*	6	15	50		2	poor structure, but lean is self-correcting	remove
3807	willow	*Salix* spp.	3*6	18	50		1	poor structure, basal decay, soil heave	remove
3808	willow	*Salix* spp.	5*6	18	50		1	poor structure, basal decay, lean	remove
3810	willow	*Salix* spp.	7,6	18	15		1	decay, history of branch failure	remove
3811	red alder	*Alnus rubra*	6	15	50		3		
3812	Oregon ash	*Fraxinus latifolia*	18	22	50	10	3		**if retained, safety prune**
3813	red alder	*Alnus rubra*	6	12			3		
3814	red alder	*Alnus rubra*	5,8	12			3		
3815	Dec-2	unknown-2	4,8	18			3		
4089	incense-cedar	*Calocedrus decurrens*	6	6	20	2	4	no major defects	
4484	Douglas-fir	*Pseudotsuga menziesii*	22	25			3	thin, small live crown; one-sided	retain
4485	Douglas-fir	*Pseudotsuga menziesii*	17	25			2	overtopped	retain
4486	Douglas-fir	*Pseudotsuga menziesii*	23	25			3	overtopped, one-sided	retain
4487	Douglas-fir	*Pseudotsuga menziesii*	32	25	130		4		retain
4488	Douglas-fir	*Pseudotsuga menziesii*	24	25			3		retain
4489	Douglas-fir	*Pseudotsuga menziesii*	27	25			3		retain
4490	Douglas-fir	*Pseudotsuga menziesii*	25	25	40		2		retain
4491	Douglas-fir	*Pseudotsuga menziesii*	15	25			2	overtopped	retain
4492	Douglas-fir	*Pseudotsuga menziesii*	30	25			4		retain
4493	Douglas-fir	*Pseudotsuga menziesii*	22	25			3		retain
4494	Douglas-fir	*Pseudotsuga menziesii*	31	25	130		4		retain

[1]**DBH** is tree diameter measured at 4.5-feet above the ground level, in inches; [2]**C-Rad** is the average crown radius measured in feet;

[3]**HT is approximate height measured in feet**; [4]**DEI** is distance to existing infrastructure measured in feet;

[5]**Cond** is an arborist assigned rating to generally describe the condition of individual trees as follows- 0: Omit; 1: Dead/Hazardous; 2: Poor Condition; 3: Fair Condition; 4: Good Condition, and 5: Excelllent Condition


City of Wilsonville
Exhibit B4 DB13-0030/0031
Safety prune if retained
Monitor if retained
Safety prune if retained
Safety prune if retained
If retained, tree risk assessment recommended
If retained, tree risk assessment recommended
TENNIS COURTS
RESTROOM
PUMP STATION
ARBORIST LEGEND
Omit
Dead or Hazardous
Poor Condition
Moderate Condition
Good Condition
Remove
Retain – Priority 1
Retain – Priority 2
Retain – Priority 3
Retain – Priority 4
Photo Point (Number and Direction)

VII. Public Hearing:

B. Resolution No. 258. Villebois Phase 4 Central: Stacy Connery, Pacific Community Design, Inc. – representative for Fred Gast, Polygon at Villebois II LLC/Polygon at Villebois III, LLC - applicant. The applicant is requesting approval a Zone Map Amendment from Public Facilities (PF) to Village (V), a Preliminary Development Plan, SAP Refinements, SAP Amendments, Tentative Subdivision Plat, Type C Tree Plan and Final Development Plan for Parks and Open Space for a 57-lot residential subdivision and associated improvements in Villebois PDP-4 Central. Properties involved are Tax Lot 2919 and portions of Tax Lots 2916 and 2922, Section 15, Township 3 South, Range 1 West, Willamette Meridian, City Of Wilsonville, Clackamas County, Oregon. Staff: Daniel Pauly

The DRB action on the Zone Map Amendment is a recommendation to the City Council.

Case Files: DB13-0013 – Villebois SAP-Central PDP-4C, Preliminary Development Plan
DB13-0014 – SAP-Central Refinements
DB13-0015 – SAP-Central Amendments
DB13-0016 – *Zone Map Amendment*
DB13-0017 – Tentative Subdivision Plat
DB13-0018 – Type C Tree Plan
DB13-0019 – Final Development Plan for Parks and Open Space

DEVELOPMENT REVIEW BOARD
RESOLUTION NO. 258

A RESOLUTION ADOPTING FINDINGS RECOMMENDING APPROVAL OF A ZONE MAP AMENDMENT FROM PUBLIC FACILITIES (PF) TO VILLAGE (V) AND ADOPTING FINDINGS AND CONDITIONS APPROVING A PRELIMINARY DEVELOPMENT PLAN, SAP REFINEMENTS, SAP AMENDMENTS, TENTATIVE SUBDIVISION PLAT, TYPE C TREE PLAN AND FINAL DEVELOPMENT PLAN FOR PARKS AND OPEN SPACE FOR A 57-LOT RESIDENTIAL SUBDIVISION AND ASSOCIATED IMPROVEMENTS IN VILLEBOIS PDP-4 CENTRAL. PROPERTIES INVOLVED ARE TAX LOT 2919 AND PORTIONS OF TAX LOTS 2916 AND 2922, SECTION 15, TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON. STACY CONNERY, AICP, PACIFIC COMMUNITY DESIGN, INC. – REPRESENTATIVE FOR FRED GAST, POLYGON NW COMPANY- APPLICANT.

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated June 3, 2013, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel A at a scheduled meeting conducted on June 10, 2013, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report dated June 3, 2013, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations, subject to City Council approval of the Zone Map Amendment Request (DB13-0016), for:

DB13-0013 through DB13-0015, and DB13-0017 through DB13-0019 Preliminary Development Plan, SAP Refinements, SAP Amendments, Tentative Subdivision Plat, Type C Tree Plan, and Final Development Plan for a 57-lot residential subdivision, and associated parks and open space and other improvements.

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 10th day of June, 2013 and filed with the Planning Administrative Assistant on _____. This resolution is final on the l5th calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03).*

_____,
Mary Fierros Bower Chair, Panel A
Wilsonville Development Review Board

Attest:

_____
Shelley White, Planning Administrative Assistant

Exhibit A1

STAFF REPORT
WILSONVILLE PLANNING DIVISION

Polygon Homes- Villebois Phase 4 Central
"Polygon Northwest at Villebois No. 2" and
Tonquin Woods at Villebois No. 5"
and SAP Central Amendments

DEVELOPMENT REVIEW BOARD PANEL 'A'
QUASI-JUDICIAL PUBLIC HEARING
STAFF REPORT

HEARING DATE	June 10, 2013
DATE OF REPORT:	June 3, 2013

APPLICATION NOS.: DB13-0013 SAP-Central PDP-4C, Preliminary Development Plan
DB13-0014 SAP-Central Refinements
DB13-0015 SAP-Central Amendments
DB13-0016 Zone Map Amendment
DB13-0017 Tentative Subdivision Plat
DB13-0018 Type C Tree Plan
DB13-0019 Final Development Plan for Parks and Open Space

REQUEST/SUMMARY: The Development Review Board is being asked to review a Preliminary Development Plan, SAP Refinements, SAP Amendments, Zone Map Amendment, Tentative Subdivision Plat, Type C Tree Plan, and Final Development Plan for a 57-lot residential subdivision, and associated parks and open space and other improvements.

LOCATION: West of 110th Avenue, north of Mont Blanc Street, north of former Dammasch State Hospital. Tax Lots 2919, portions of Tax Lot 2916 and 2922, Section 15, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon.

PROPERTY OWNER: Polygon at Villebois II LLC, Polygon at Villebois III LLC

APPLICANT: Fred Gast, Polygon NW Company

APPLICANT'S REP.: Stacy Connery, AICP, Pacific Community Design, Inc.

COMPREHENSIVE PLAN MAP DESIGNATION: Residential-Residential-Village

ZONE MAP CLASSIFICATIONS: PF (Public Facility)

STAFF REVIEWERS: Daniel Pauly AICP, Associate Planner
Steve Adams PE, Development Engineering Manager
Don Walters, Building Plans Examiner
Kerry Rappold, Natural Resources Program Manager

STAFF RECOMMENDATIONS: **Approve with conditions** the requested Preliminary Development Plan, SAP Refinements, SAP Amendments, Tentative Subdivision Plat, Tree Removal Plan, and Final Development Plan for Parks and Open Space. **Recommend approval** of the requested Zone Map Amendment to City Council.

APPLICABLE REVIEW CRITERIA

DEVELOPMENT CODE	
Section 4.008	**Application Procedures-In General**
Section 4.009	**Who May Initiate Application**
Section 4.010	**How to Apply**
Section 4.011	**How Applications are Processed**
Section 4.014	**Burden of Proof**
Section 4.031	**Authority of the Development Review Board**
Section 4.033	**Authority of City Council**
Subsection 4.035 (.04)	**Site Development Permit Application**
Subsection 4.035 (.05)	**Complete Submittal Requirement**
Section 4.110	**Zones**
Section 4.125	**V-Village Zone**
Section 4.154	**Bicycle, Pedestrian, and Transit Facilities**
Section 4.155	**Parking, Loading, and Bicycle Parking**
Section 4.167	**Access, Ingress, and Egress**
Section 4.169	**General Regulations-Double Frontage Lots**
Section 4.171	**Protection of Natural Features and Other Resources**
Section 4.175	**Public Safety and Crime Prevention**
Section 4.176	**Landscaping, Screening, and Buffering**
Section 4.177	**Street Improvement Standards**
Section 4.178	**Sidewalk and Pathway Standards**
Section 4.197	**Zone Changes and Amendments to Development Code-Procedures**
Sections 4.199.20 through 4.199.60	**Outdoor Lighting**
Sections 4.200 through 4.220	**Land Divisions**
Sections 4.236 through 4.270	**Land Division Standards**
Sections 4.300 through 4.320	**Underground Utilities**
Sections 4.400 through 4.440 as applicable	**Site Design Review**
Sections 4.600 through 4.640.20 as applicable	**Tree Preservation and Protection**
COMPREHENSIVE PLAN	
Implementation Measure 4.1.6.a.	
Implementation Measure 4.1.6.b.	
Implementation Measure 4.1.6.c.	
Implementation Measure 4.1.6.d.	
OTHER PLANNING DOCUMENTS	
Villebois Village Master Plan	
SAP Central Approval Documents	

Vicinity Map

BACKGROUND/SUMMARY:

PDP 4C Preliminary Development Plan (DB13-0013)

The proposed Preliminary Development Plan 4 of Specific Area Plan Central (also known as PDP 4C) comprises approximately 6.83 acres The applicant proposes a variety of housing, including 17 small and small cottage detached single-family houses and 40 attached row houses, totaling 57 units. Also proposed are associated infrastructure improvements and 0.84 acres of parks/open spaces. All of the houses will back up to alleys. The front of the houses will face tree lined streets, parks and green spaces.

Proposed Housing Type	Number of Units
Small Detached Single Family	8
Small Cottage Detached Single Family	9
Attached Row House	40
Total	57

Refinements to SAP Central (DB13-0014)

When submitting a Preliminary Development Plan the Development Code allows applicants to request "refinements" to the previously approved Specific Area Plan (SAP) and Villebois Village Master Plan. "Refinements" are specifically defined changes not significant in a quantifiable or qualitative sense as defined in the code. Refinements are required to equally or better implement relevant goals, policies, and implementation measures of the Villebois Village Master Plan as

well as not have a detrimental effect on natural and scenic resources, or preclude adjoining areas from developing according to the Villebois Village Master Plan.

In concurrence with their PDP request, the applicant is requesting three refinements, parks and trails, location and mix of land uses, and density. Notable drivers of the refinements include adding linear greens and changing the product types to reflect developer preferences, as the SAP was requested by a different developer.

As demonstrated by the findings under Request B the requested refinements are not significant changes as defined by code and equally or better meet the applicable components of the Villebois Village Master Plan.

Amendments to SAP Central (DB13-0015)

Amendment to Phasing Plan

The phasing for SAP Central was set during the review of previous phases. The requested phasing amendment reflects Polygon's desire to develop the portions they own in concert with neighboring areas in SAP North and East.

Amendments to SAP Central-Pattern Book

The SAP Central Architectural Pattern Book applies only to the subject phase. The remainder of SAP Central is subject to the Village Center Architectural Standards (VCAS).

Polygon has a product type "Small Cottage Detached" which has been approved by the DRB to be added to the SAP North, SAP South, and SAP East Architectural Pattern Books. The request is to similarly add the "Small Cottage Detached" to the SAP Central Pattern Book.

The applicant has provided a "redlined" mock-up of the proposed pattern book in Section VIIB of their submitted notebook, Exhibit B1. Condition of Approval PDC 2 requires the applicant submit copies of the final pattern book to the City for use in reviewing development covered by the book.

Zone Map Amendment (DB13-0016)

The zoning proposal is to change the current PF zone, a remnant of the former Dammasch State Hospital use, to the Village (V) zone. The proposed residential and park uses are permitted under Wilsonville Code Section 4.125. The proposed Zone Map Amendment would enable the development permitting process for this area of Villebois.

Tentative Subdivision Plat (DB13-0017)

The applicant is proposing the subdivision of the properties into 57 residential lots, along with alleys, parks areas, and associated site improvements. Tentative plats are requested for two subdivisions. The subdivision on what is now Tax Lot 2919 will be "Polygon Northwest at Villebois No. 2" and what is now a portion of Tax Lot 2916 will be "Tonquin Woods at Villebois No. 5."

Type C Tree Plan (DB12-0047)

Five (5) will be removed as part of the PDP 4 Central development and mitigated with street trees and trees in parks and open spaces.

Final Development Plan for Parks and Open Space (DB12-0048)

The most significant park shown in this area in the Villebois Village Master Plan is Pocket Park 12. However, this park was approved as part of neighboring PDP 3 East. What remains to be reviewed as part of the subject Final Development Plan are proposed new linear green areas around some of the houses.

No fixtures, such as benches or play structures, are proposed or required for the park areas. The proposed landscape palette is consistent with the Community Elements Book. To ensure consistency with the high design standards of the Community Elements Book and Architectural Pattern Book, specific requirements are being placed on the materials for any retaining walls within the public view shed and any hand rails.

Signs will be placed at the Villebois Drive/Costa Circle round-a-bout matching the Master Sign and Wayfinding Plan.

DISCUSSION TOPICS:

Timing of Development with Adjacent Portions of SAP East and SAP North

While the subject areas are part of SAP Central they are more closely related to and will be developed concurrently with portions of SAP East and SAP North. The proposed block bounded by Mont Blanc Street, Costa Circle East, Villebois Drive South, and Orleans Loop (Phase 2 of the PDP) will be developed concurrently with a phase of PDP 3 East. A large portion of the improvements on current Tax Lot 2919 were actually approved with PDP 3 East and the associated development agreement addendum. This includes the portion of Pocket Park 12 on the property as well as the Costa Circle and Villebois Drive improvements on the property. Because development of lots in this block are so closely related to these improvements associated with PDP 3 East a Condition of Approval requires the block to be developed after or concurrently with the development of the improvements in the area related to PDP 3 East.

The portions of the PDP along and including Costa Circle, Dundee Lane, and Geneva Loop are planned to be developed at the same time as the development across these streets in PDP 2 North which is being reviewed concurrently with this application. These streets form the SAP boundaries, but in reality both sides of the street will be developed at the same time.

Exhibit B4 and B5 illustrate the phasing plans across SAP boundaries.

Adjacent Street Dedications

As shown in Exhibit B6 a number of street dedications and have been recorded from the parcel owned by Villebois LLC adjacent to the proposed PDP 4 Central owned by Polygon. The

appropriate public utility easements have also been recorded on the Villebois LLC property. These street dedication areas are currently zoned Public Facility, which is appropriate for the proposed street use they are thus not being rezoned at this time. These dedications allow the following streets adjacent to and associated with PDP 4C to be fully built with this development:

- Costa Circle from Barber Street to Orleans Loop
- Orleans Loop from Costa Circle to edge of PDP at future Hilltop Park and from Villebois Drive South to Mont Blanc Street
- Villebois Drive North and South from Geneva Loop to Orleans Loop, including round-a-bout at Costa Circle.

These off site improvements are illustrated in Exhibit B4.

Proposed Right-of-way Improvements and Development Impacts

The developer is currently proposing right-of-way improvement beyond what may be proportionally required based on the proposed development. These additional improvements are voluntary by the developer based on working with SDC credits and other mechanisms in order to bring amenities and function earlier than they would come otherwise in order to assist in marketing and provide immediate amenities to home buyers in the area.

Courtyard Fencing

In order to increase consistency with the Architectural Pattern Book and other development elsewhere in Villebois a condition of approval requires courtyard fencing consistent with the pattern book and the architectural style of the home for all but the standard lots. Where necessary, this includes installation of up to forty-eight inch (48") dry stack rock or brick wall along the front of the lot or side of a lot to create a fairly level and usable front yard outdoor living area (5% maximum slope) enclosed by the courtyard fencing. The applicant/owner can install a greater than forty-eight inch (48") wall, but if maintaining the required five (5) percent slope requires greater than a forty-eight inch (48") wall the applicant/owner can request an exception from the courtyard wall and courtyard slope requirements as part of building plan review.

Retaining Walls and Potential Hand Rails

The applicant aims at grading and designing stairs in the pocket parks and linear greens to avoid the need of retaining walls and hand rails. While staff understands this intent, a possibility remains construction will necessitate either or both retaining walls and hand rails. For this reason a Condition of Approval requires any of these elements built to be appropriately enhanced to be consistent with the Architectural Pattern Book.

CONCLUSION AND CONDITIONS OF APPROVAL:

Staff has reviewed the applicant's analysis of compliance with the applicable criteria. This Staff report adopts the applicant's responses as Findings of Fact except as noted in the Findings. Based on the Findings of Fact and information included in this Staff Report, and information received

from a duly advertised public hearing, staff recommends that the Development Review Board approve the proposed applications (DB113-0013 through DB13-0015and DB13-0017 through DB13-0019) and recommend approval of the zone map amendment to City Council (DB13-0016) with the following conditions:

The Developer is proposing improvements consistent with past agreements between the City's and preceding owners and past City approvals.

REQUEST A: DB13-0013 SAP-Central PDP-4C, Preliminary Development Plan

Planning Division Conditions:	
PDA 1.	Approval of DB13-0013 SAP-Central PDP-4C, Preliminary Development Plan is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) to Village (V) (Case File DB13-0016).
PDA 2.	The lots that will be on current Tax Lot 2919 shall not be developed unless adjacent improvements for Costa Circle and Villebois Drive and utility improvements occur prior to or in conjunction with the development. See Findings A21 and E15.
PDA 3.	All landscaping, and park improvements approved by the Development Review Board and Engineering Division Public Works Permit punch list items for the specific phase of the PDP shall be completed before 50% of the homes are occupied for the PDP unless weather or other special circumstances prohibit completion, which case bonding for the improvements is permitted. See Finding A59.
PDA 4.	Street lighting types and spacing shall be as shown in the Community Elements Book. See Finding A30.
PDA 5.	The developer shall enter into an Operations and Maintenance Agreement for 'Polygon Northwest at Villebois No. 2' and 'Tonquin Woods at Villebois No. 5' subdivisions that clearly identify ownership and maintenance for all pocket parks and linear greens and paths. Such agreements shall ensure maintenance in perpetuity and shall be recorded with the subdivisions. Such agreement shall be reviewed and approved by the City Attorney prior to recordation. See also Findings E6. and G4.
PDA 6.	The applicant/owner shall install courtyard fencing in the front yard of all houses consistent with the Architectural Pattern Book and the architectural style of the house. The courtyard area enclosed by the fence shall not exceed a five (5) percent slope from front building line of the house to the point of the courtyard closest to the front lot line or between the points of the courtyard closest to opposite side lot lines. Where necessary, the applicant shall install dry stack rock or brick wall along the front or side of the lot to ensure a five (5) percent or less slope is maintained. Where the topography of a lot would require a greater than forty-eight inch (48") wall to maintain a five (5) percent slope for the courtyard the applicant/owner can request an exception from the courtyard fencing and courtyard slope requirements as part of the building permit review. See Finding A27.

REQUEST B: DB13-0014 SAP-Central Refinements

Planning Division Conditions:	
PDB 1.	Approval of DB13-0014 SAP-Central Refinements is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) to Village (V) (Case File DB13-0016).

REQUEST C DB13-0015 SAP-Central Amendments

Planning Division Conditions:	
PDC 1.	Approval of DB13-0015 SAP-Central Amendments is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) to Village (V) (Case File DB13-0016).
PDC 2.	Prior to approval of the Final Plat of 'Polygon Northwest at Villebois No. 2' or 'Tonquin Woods at Villebois No. 5' by the City, the applicant shall cause three (3) bound copies of the new pattern book be printed and given to the City. Such copies shall be in substantial conformance with the Development Review Board approval including all lot dimensions and sizes. See Finding C6.

REQUEST D: DB13-0016 Zone Map Amendment

Planning Division Conditions: ***No Conditions of Approval Proposed for This Request***
This action recommends adoption of the Zone Map Amendment to the City Council for the subject properties. Case files DB13-0013, DB13-0014, DB13-0015, DB13-0017, DB13-0018, and DB13-0019 are contingent upon City Council's action on the Zone Map Amendment request.

REQUEST E: DB13-0017 Tentative Subdivision Plat

Planning Division Conditions:	
PDE 1.	Approval of DB13-0017 Tentative Subdivision Plat is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) to Village (V) (Case File DB13-0016).
PDE 2.	Any necessary easements or dedications shall be identified on the Final Subdivision Plat.
PDE 3.	Alleyways, parking lots and drives shall remain in private ownership and be maintained by the Homeowner's Association established by the subdivision's CC&Rs. The CC&R's shall be reviewed and approved by the City Attorney prior to recordation.
PDE 4.	The Final Subdivision Plat shall indicate dimensions of all lots, lot area, minimum lot size, easements, proposed lot and block numbers, parks/open space by name and/or type, and any other information that may be required as a result of the hearing process for PDP-4C or the related Tentative Plats.
PDE 5.	A non-access reservation strip shall be applied on the final plat to those lots with access to a public street and an alley. All lots with access to a public street and an alley must take vehicular access from the alley to a garage or parking area. A plat note effectuating that same result can be used in the alternative. The applicant shall work with the County Surveyor and City Staff regarding appropriate language. See Finding E3.
PDE 6.	All reserve strips and street plugs shall be detailed on the Final Subdivision Plat. See Finding E29.
PDE 7.	All tracts shall, except those indicated for future home development, shall include a public access easement across their entirety.

REQUEST F: DB13-0018 Type C Tree Plan

Planning Division Conditions:	
PDF 1.	Approval of DB13-0018 Type C Tree Plan is contingent upon City Council approval

	of the Zone Map Amendment from Public Facility (PF) to Village (V) (Case File DB13-0016).
PDF 2.	The property owner/applicant or their successors in interest shall grant access to the property for authorized City representatives as needed to verify the tree related information provided, to observe tree related site conditions, and to verify, once a removal permit is granted, that the terms and conditions of the permit are followed. See Finding F1.
PDF 3.	Prior to granting a Tree Removal Permit in accordance with the proposed Tree Removal Plan the permit grantee shall file with the City a cash or corporate surety bond or irrevocable bank letter of credit in an amount determined by the City to ensure compliance with the Tree Removal Permit conditions and the requirements of the Tree Preservation and Protection Ordinance. See Finding F5.
PDF 4.	Trees planted as replacement of removed trees shall be, state Department of Agriculture Nursery Grade No. 1. or better, shall meet the requirements of the American Association of Nursery Men (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade, shall be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced. See Findings F11 and F12.
PDF 5.	Solvents, building material, construction equipment, soil, or irrigated landscaping, shall not be placed within the drip line of any preserved tree, unless a plan for such construction activity has been approved by the Planning Director or Development Review Board based upon the recommendations of an arborist. See Finding F14.
PDF 6.	Before and during development, land clearing, filling or any land alteration the applicant shall erect and maintain suitable tree protective barriers which shall include the following: • 6' high fence set at tree drip lines. • Fence materials shall consist of 2 inch mesh chain links secured to a minimum of 1 ½ inch diameter steel or aluminum line posts. • Posts shall be set to a depth of no less than 2 feet in native soil. Protective barriers shall remain in place until the City authorizes their removal or issues a final certificate of occupancy, whichever occurs first. See Finding F14.

REQUEST G: DB13-0019 Final Development Plan for Parks and Open Space

Planning Division Conditions:	
PDG 1.	Approval of DB13-0019 Final Development Plan for Parks and Open Space is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) to Village (V) (Case File DB13-0016).
PDG 2.	All plant materials shall be installed consistent with current industry standards.
PDG 3.	All construction, site development, and landscaping of the parks shall be carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. Minor alterations may be approved by the Planning Division through the Class I Administrative Review process. See Finding G32.
PDG 4.	All retaining walls within the public view shed shall be a decorative stone or brick construction or veneer. Final color and material for the retaining walls shall be approved by the Planning Division through the Class I Administrative Review

	Process. See Finding G37.
PDG 5.	All hand rails within the parks and open space shall be of a design similar to the approved courtyard fencing shown in the Architectural Pattern Book. Final design of any hand rails in parks and open space shall be approved by the Planning Division through the Class I Administrative Review Process. See Finding G37.
PDG 6.	All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Development Review Board. See Finding G 42.
PDG 7.	The applicant shall submit final parks, landscaping and irrigation plans to the City prior to construction of parks. The irrigation plan must be consistent with the requirements of Section 4.176(.07)C.
PDG 8.	Prior to occupancy of each house the Applicant/Owner shall install landscaping along the public view-sheds of each house, unless otherwise approved by the Community Development Director. Homeowners association shall contract with a professional landscape service to maintain the landscaping.
PDG 9.	Street trees, as shown on the approved landscape plans, shall be planted as each house or park is built.

The following Conditions of Approval are provided by the Engineering, Natural Resources, or Building Divisions of the City's Community Development Department or Tualatin Valley Fire and Rescue, all of which have authority over development approval. A number of these Conditions of Approval are not related to land use regulations under the authority of the Development Review Board or Planning Director. Only those Conditions of Approval related to criteria in Chapter 4 of Wilsonville Code and the Comprehensive Plan, including but not limited to those related to traffic level of service, site vision clearance, recording of plats, and concurrency, are subject to the Land Use review and appeal process defined in Wilsonville Code and Oregon Revised Statutes and Administrative Rules. Other Conditions of Approval are based on City Code chapters other than Chapter 4, state law, federal law, or other agency rules and regulations. Questions or requests about the applicability, appeal, exemption or non-compliance related to these other Conditions of Approval should be directed to the City Department, Division, or non-City agency with authority over the relevant portion of the development approval.

REQUEST A: DB13-0013 SAP-Central PDP-4C, Preliminary Development Plan
REQUEST E: DB13-0017 Tentative Subdivision Plat

Engineering Division Conditions:	
Standard Comments:	
PFA 1.	All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards.
PFA 2.	Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:
	Coverage (Aggregate, accept where noted) — *Limit*
	Commercial General Liability
	General Aggregate (per project) — $ 2,000,000
	Fire Damage (any one fire) — $ 50,000
	Medical Expense (any one person) — $ 10,000

	Business Automobile Liability Insurance Each Occurrence $ 1,000,000 Aggregate $ 2,000,000 Workers Compensation Insurance $ 500,000
PFA 3.	No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved by Staff, all fees have been paid, all necessary permits, right-of-way and easements have been obtained and Staff is notified a minimum of 24 hours in advance.
PFA 4.	All public utility/improvement plans submitted for review shall be based upon a 22"x 34" format and shall be prepared in accordance with the City of Wilsonville Public Work's Standards.
PFA 5.	Plans submitted for review shall meet the following general criteria: a. Utility improvements that shall be maintained by the public and are not contained within a public right-of-way shall be provided a maintenance access acceptable to the City. The public utility improvements shall be centered in a minimum 15-ft. wide public easement for single utilities and a minimum 20-ft wide public easement for two parallel utilities and shall be conveyed to the City on its dedication forms. b. Design of any public utility improvements shall be approved at the time of the issuance of a Public Works Permit. Private utility improvements are subject to review and approval by the City Building Department. c. In the plan set for the Public Works Permit, existing utilities and features, and proposed new private utilities shall be shown in a lighter, grey print. Proposed public improvements shall be shown in bolder, black print. d. All elevations on design plans and record drawings shall be based on NAVD 88 Datum. e. All proposed on and off-site public/private utility improvements shall comply with the State of Oregon and the City of Wilsonville requirements and any other applicable codes. f. Design plans shall identify locations for street lighting, gas service, power lines, telephone poles, cable television, mailboxes and any other public or private utility within the general construction area. g. As per City of Wilsonville Ordinance No. 615, all new gas, telephone, cable, fiber-optic and electric improvements etc. shall be installed underground. Existing overhead utilities shall be undergrounded wherever reasonably possible. h. Any final site landscaping and signing shall not impede any proposed or existing driveway or interior maneuvering sight distance. i. Erosion Control Plan that conforms to City of Wilsonville Ordinance No. 482. j. Existing/proposed right-of-way, easements and adjacent driveways shall be identified. k. All engineering plans shall be stamped by a Professional Engineer registered in the State of Oregon.
PFA 6.	Submit plans in the following general format and order for all public works construction to be maintained by the City:

	a. Cover sheet b. City of Wilsonville construction note sheet c. General construction note sheet d. Existing conditions plan. e. Erosion control and tree protection plan. f. Site plan. Include property line boundaries, water quality pond boundaries, sidewalk improvements, right-of-way (existing/proposed), easements (existing/proposed), and sidewalk and road connections to adjoining properties. g. Grading plan, with 1-foot contours. h. Composite utility plan; identify storm, sanitary, and water lines; identify storm and sanitary manholes. i. Detailed plans; show plan view and either profile view or provide i.e.'s at all utility crossings; include laterals in profile view or provide table with i.e.'s at crossings; vertical scale 1"= 5', horizontal scale 1"= 20' or 1"= 30'. j. Street plans. k. Storm sewer/drainage plans; number all lines, manholes, catch basins, and cleanouts for easier reference l. Water and sanitary sewer plans; plan; number all lines, manholes, and cleanouts for easier reference. m. Detailed plan for storm water detention facility (both plan and profile views), including water quality orifice diameter and manhole rim elevations. Provide detail of inlet structure and energy dissipation device. Provide details of drain inlets, structures, and piping for outfall structure. Note that although storm water detention facilities are typically privately maintained they will be inspected by engineering, and the plans must be part of the Public Works Permit set. n. Detailed plan for water quality facility (both plan and profile views). Note that although storm water quality facilities are typically privately maintained they will be inspected by Natural Resources, and the plans must be part of the Public Works Permit set. o. Composite franchise utility plan. p. City of Wilsonville detail drawings. q. Illumination plan. r. Striping and signage plan. s. Landscape plan.
PFA 7.	Prior to manhole and sewer line testing, design engineer shall coordinate with the City and update the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to the updated numbering system. Design engineer shall also show the updated numbering system on As-Built drawings submitted to the City.
PFA 8.	The applicant shall install, operate and maintain adequate erosion control measures in conformance with the standards adopted by the City of Wilsonville Ordinance No. 482 during the construction of any public/private utility and building improvements until such time as approved permanent vegetative materials have been installed.
PFA 9.	Applicant shall work with City's Natural Resources office before disturbing any soil on the respective site. If 5 or more acres of the site will be disturbed applicant shall obtain a 1200-C permit from the Oregon Department of Environmental Quality. If 1

	to less than 5 acres of the site will be disturbed a 1200-CN permit from the City of Wilsonville is required.
PFA 10.	To lessen the impact of the proposed project on the downstream storm drain system, and adjacent properties, project run-off from the site shall be detained and limited to the difference between a developed 25-year storm and an undeveloped 25-year storm. The detention and outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
PFA 11.	A storm water analysis prepared by a Professional Engineer registered in the State of Oregon shall be submitted for review and approval by the City to address appropriate pipe and detention facility sizing.
PFA 12.	The applicant shall be in conformance with all water quality requirements for the proposed development per the Public Works Standards. If a mechanical water quality system is used, prior to City acceptance of the project the applicant shall provide a letter from the system manufacturer stating that the system was installed per specifications and is functioning as designed.
PFA 13.	Storm water quality facilities shall have approved landscape planted and/or some other erosion control method installed and approved by the City of Wilsonville prior to streets and/or alleys being paved.
PFA 14.	The applicant shall provide the City with a Stormwater Maintenance and Access Easement (on City approved forms) for City inspection of those portions of the storm system to be privately maintained. Applicant shall maintain all LID storm water components and private conventional storm water facilities located within medians and from the back of curb onto and including the project site.
PFA 15.	Fire hydrants shall be located in compliance with TVF&R fire prevention ordinance and approval of TVF&R.
PFA 16.	The applicant shall contact the Oregon Water Resources Department and inform them of any existing wells located on the subject site. Any existing well shall be limited to irrigation purposes only. Proper separation, in conformance with applicable State standards, shall be maintained between irrigation systems, public water systems, and public sanitary systems. Should the project abandon any existing wells, they shall be properly abandoned in conformance with State standards.
PFA 17.	All survey monuments on the subject site, or that may be subject to disturbance within the construction area, or the construction of any off-site improvements shall be adequately referenced and protected prior to commencement of any construction activity. If the survey monuments are disturbed, moved, relocated or destroyed as a result of any construction, the project shall, at its cost, retain the services of a registered professional land surveyor in the State of Oregon to restore the monument to its original condition and file the necessary surveys as required by Oregon State law. A copy of any recorded survey shall be submitted to Staff.
PFA 18.	Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
PFA 19.	No surcharging of sanitary or storm water manholes is allowed.
PFA 20.	The project shall connect to an existing manhole or install a manhole at each connection point to the public storm system and sanitary sewer system.
PFA 21.	A City approved energy dissipation device shall be installed at all proposed storm

	system outfalls. Storm outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
PFA 22.	The applicant shall provide a 'stamped' engineering plan and supporting information that shows the proposed street light locations meet the appropriate AASHTO lighting standards for all proposed streets and pedestrian alleyways.
PFA 23.	All required pavement markings, in conformance with the Transportation Systems Plan and the Bike and Pedestrian Master Plan, shall be completed in conjunction with any conditioned street improvements.
PFA 24.	Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
PFA 25.	The applicant shall provide adequate sight distance at all project driveways by driveway placement or vegetation control. Specific designs to be submitted and approved by the City Engineer. Coordinate and align proposed driveways with driveways on the opposite side of the proposed project site.
PFA 26.	Access requirements, including sight distance, shall conform to the City's Transportation Systems Plan (TSP) or as approved by the City Engineer. Landscaping plantings shall be low enough to provide adequate sight distance at all street intersections and alley/street intersections.
PFA 27.	Applicant shall design interior streets and alleys to meet specifications of Tualatin Valley Fire & Rescue and Allied Waste Management (United Disposal) for access and use of their vehicles.
PFA 28.	Applicant shall prepare an Ownership and Maintenance agreement between the City and the Owner. Stormwater or rainwater facilities may be located within the public right-of-way upon approval of the City Engineer. The Ownership and Maintenance agreement shall specify that the rainwater and stormwater facilities shall be privately maintained by the Applicant; maintenance shall transfer to the respective homeowners association when it is formed.
PFA 29.	The applicant shall "loop" proposed waterlines by connecting to the existing City waterlines where applicable.
PFA 30.	All water lines that are to be temporary dead-end lines due to the phasing of construction shall have a valved tee with fire-hydrant assembly installed at the end of the line.
PFA 31.	Applicant shall provide a minimum 6-foot Public Utility Easement on lot frontages to all public right-of-ways. An 8-foot PUE shall be provided along Minor and Major Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
PFA 32.	For any new public easements created with the project the Applicant shall be required to produce the specific survey exhibits establishing the easement and shall provide the City with the appropriate Easement document (on City approved forms).
PFA 33.	Mylar Record Drawings: At the completion of the installation of any required public improvements, and before a 'punch list' inspection is scheduled, the Engineer shall perform a record survey. Said survey shall be the basis for the preparation of 'record drawings' which will serve as the physical record of those changes made to the plans and/or specifications, originally approved by Staff, that occurred during construction. Using the record survey as a guide, the appropriate changes will be made to the construction plans

	and/or specifications and a complete revised 'set' shall be submitted. The 'set' shall consist of drawings on 3 mil. Mylar and an electronic copy in AutoCAD, current version, and a digitally signed PDF.
PFA 34.	Subdivision or Partition Plats: Paper copies of all proposed subdivision/partition plats shall be provided to the City for review. Once the subdivision/partition plat is approved, applicant shall have the documents recorded at the appropriate County office. Once recording is completed by the County, the applicant shall be required to provide the City with a 3 mil Mylar copy of the recorded subdivision/partition plat.
PFA 35.	Subdivision or Partition Plats: All newly created easements shown on a subdivision or partition plat shall also be accompanied by the City's appropriate Easement document (on City approved forms) with accompanying survey exhibits that shall be recorded immediately after the subdivision or partition plat.
PFA 36.	The applicant shall work with the other developers of Villebois and the City to develop an equitable storm water and parks maintenance fee or a maintenance memorandum of understanding prior to any final plat approval.
Specific Comments:	
PFA 37.	At the request of Staff, DKS Associates completed a Transportation Review dated May 17, 2013. The project is hereby limited to no more than the following impacts. Estimated New PM Peak Hour Trips 38 Estimated Weekday PM Peak Hour Trips 12 Through Wilsonville Road Interchange Area
PFA 38.	The initial approval of SAP Central consisted of 9 single family units, 500 townhome/condo units, and 501 apartment units for a total of 1,010 residential units, along with 20,000 sq. ft. of commercial space. Based on assumed trip generation rates, these land uses were estimated to generate 616 p.m. peak hour trips. The currently proposed land use includes 49 single family units, 459 townhome/condo units, and 501 apartment units for a total of 1,009 residential units, along with 33,000 of commercial space. Based on these counts, it is estimated that SAP Central will generate 659 p.m. peak hour trips. This is 43 p.m. peak hour trips above what was initially approved for SAP Central. Many of the changes from townhome/condo units to single family units occur with this proposed development. The applicant may be required to pay Street SDC fees for these additional 43 PM Peak Hour Trips, unless applicant can show evidence of other arrangements with the City having been made.
PFA 39.	All construction traffic shall access the site via Grahams Ferry Road to Barber Street or via 110th Avenue. No construction traffic will be allowed on Brown Road or Barber Street east of Costa Circle West.
PFA 40.	Applicant shall construct full street improvements for the extension of Costa Circle West from the edge of the proposed development, Orleans Loop, southward to connect with Barber Street as shown on plans dated 04/15/2013, and shall provide service lines to those undeveloped properties lying to the east and south of Costa Circle West.
PFA 41.	Applicant shall be required to complete full design and construction through the far

	right-of-way and all intersections through the far corner radii of all planned streets bordering the development. Streets shall be designed in conformance to the applicable street type as shown in the Villebois Village Master Plan.
PFA 42.	The applicant shall provide 'stamped' engineering details with dimensions for intersection sight distance verification and AutoTURN layouts for all proposed intersections, including alley/street connections. Adequate clearance shall be provided at all intersections and alleyways. The sight distance point for exiting vehicles shall be located 14.4 feet from the edge of the traveled way. At a minimum, the applicant shall provide 'stamped' engineering AutoTURN layouts for fire trucks and buses (WB-60) that show the overhang and/or mirrors of the vehicle as opposed to the wheel paths. Turning vehicles may use the width of the minor street to start the appropriate turn. The vehicle must however, stay within the appropriate receiving (inside) lane of the major street. Additionally, the turning vehicle must not intrude onto the wheel chair ramp on the inside of the turning movement.
PFA 43.	The larger portion of the proposed subdivision, lying on tax lot 31W15 02916, lacks direct sidewalk access to Villebois SAP South PDP 6 or SAP East PDP 1 and to the Lowrie Primary School. Applicant shall construct a temporary sidewalk, and provide the necessary easements, linking the proposed development to existing sidewalks and/or crosswalks to provide a safe route to Lowrie Primary School.
PFA 44.	Pedestrian Links- sidewalk connections shall be provided between alleys and roadways where alleys do not intersect with the local road network. City of Wilsonville guidelines recommend that the distance between pedestrian access points along a roadway not exceed 300 feet.
PFA 45.	Alleys that are identified by Tualatin Valley Fire and Rescue (TVF&R) as possible routes for medical and/or fire emergencies shall meet TVF&R's design requirements.
PFA 46.	At the time of plan submittal for a Public Works Permit, the applicant shall provide to the City a copy of correspondence showing that the plans have also been distributed to the franchise utilities. Prior to issuance of a Public Works Permit, the applicant shall have coordinated the proposed locations and associated infrastructure design for the franchise utilities. Should permanent/construction easements or right-of-way be required to construct the public improvements or to relocate a franchised utility, the applicant shall provide a copy of the recorded documents. Should the construction of public improvements impact existing utilities within the general area, the applicant shall obtain written approval from the appropriate utility prior to commencing any construction.
PFA 47.	The proposed subdivision straddles the division line for street lighting type. All street lighting on Costa Circle and streets lying within the boundary of Costa Circle shall be lighted with approved Acorn style lights. All street lying north and outside of Costa Circle shall be lighted with approved Westbrooke style lights.
PFA 48.	Bus stop locations have been previously identified along Costa Circle East @ Mont Blanc Lane. Applicant shall coordinate with SMART in locating and constructing necessary transit facilities.
PFA 49.	Applicant shall provide sufficient mail box units for the proposed phasing plan; applicant shall construct mail pick-up facilities at locations coordinated with City

	staff and the Wilsonville U.S. Postmaster.
PFA 50.	If the adjacent segment of Costa Circle East has not yet been constructed, then that portion of the proposed subdivision on tax lot 31W15 02919 shall be required to construct full street improvements to the adjacent segment of Costa Circle East concurrently with the project.
PFA 51.	Plans show several water, storm and sanitary lines lying outside of the project boundaries. Applicant shall construct SAP Central PDP 4 concurrently with SAP North PDP 2. Applicant shall provide a complete utility system capable of servicing all proposed lots in compliance with Public Works Standards. For proposed lines lying outside of planned right-of-ways, applicant shall provide the City with construction easement(s) and permanent pipeline easement(s) prior to the City issuing a Public Works Permit for their construction. Pipeline easements lying within planned street right-of-ways shall expire at time of future street dedication.
PFA 52.	The project site appears to straddle both the Arrowhead Creek basin and the Coffee Lake Creek basins. Applicant shall direct stormwater runoff to the correct basin; no interbasin transfer of stormwater is allowed.
PFA 53.	Detention of stormwater flows within the Arrowhead Creek basin have already been accounted for in existing stormwater detention features. No additional detention is required.
PFA 54.	Much of the proposed development lies within the Coffee Lake Creek basin. Per City Ord. 608, detention is not required for areas of Villebois that drain directly to the Coffee Lake Wetlands; however, until the stormwater system is completed east of 110th Avenue (Costa Circle), applicant shall be in conformance with PFA 10 and PFA 11 for this portion of the development.
PFA 55.	With the Villebois SAP South PDP 6 development, a temporary stormwater detention and water quality facility was constructed at the northwest corner of Costa Circle East & Mont Blanc Street. When this area is developed, this detention and water quality facility will need to be relocated, unless a direct stormwater connection has been made to the Coffee Lake Wetlands and an appropriately sized water quality facility has been constructed.
PFA 56.	Storm water is shown on sheet 5 (dated 4/15/20313) as being temporarily detained by Villebois Phase 2 North. If storm water is detained or treated by Phase 2 North, agreements between PDP 2 North and PDP 4 Central must be signed and recorded with Clackamas County for the detention and/or treatment of storm water as applicable.
PFA 57.	Applicant shall connect to existing sanitary line at Barber & Costa Circle West and extend the line to service the undeveloped properties east of Costa Circle West and South of Ravenna Loop.
PFA 58.	Applicant shall be required to build the off-site sanitary sewer line prior to or concurrently with this project. This off-site line runs from near the intersection of 110th Ave. and Stockholm Ave. to the existing main line in the future Coffee Lake Drive.
PFA 59.	In accordance with the Public Works Standards, sewer lines entering manholes must be greater than 90 degrees from the line out to minimize turbidity within the manhole.
PFA 60.	Applicant shall install a 12” water main in Villebois Drive per the approved Villebois

	Master plan.
PFA 61.	Both Northwest Natural Gas line and Kinder Morgan have existing gas/fuel lines located on the west side of the existing 110th Avenue right-of-way. No obstruction can be placed within, adjacent or across the pipelines that will impede access to the pipelines or easement. Applicant's contractor shall contact representatives from both Northwest Natural Gas line and Kinder Morgan prior to commencing any work within 10 feet of the lines.
PFA 62.	Applicant shall be required to reimburse the City for their share of a sanitary sewer reimbursement fee established per Res. 2350 for tax lot 31W15 02919 and for their corresponding share of tax lot 31W15 02916 at time of issuance of a Public Works Permit.
PFA 63.	SAP Central PDP 4 consists of 57 lots. All construction work in association with the Public Works Permit and Project Corrections List shall be completed prior to the City Building Division issuing a certificate of occupancy, or a building permit for the housing unit(s) in excess of 50% of total (29th lot).

REQUEST A: DB13-0013 SAP-Central PDP-4C, Preliminary Development Plan

Building Division Conditions:	
BD 1.	FIRE HYDRANTS shall be provided along required fire apparatus access roads and adjacent public streets with locations approved by the fire marshal. (2010 OFC C102.1)
BD 2.	SW ORLEANS LOOP appears to temporarily end near proposed Lot 16. Dead-end fire apparatus access roads in excess of 150' [or a little longer because of the home fire sprinkler systems] shall be provided with width and turn-around provisions in accordance with Table D103.4 of the fire code. (OFC D103.4) An approved fire department turn-around or temporary roadway meeting fire access roadway requirements allowing fire vehicles to access adjacent streets, or other means meeting the approval of the fire marshal may be required here. Please contact the fire marshal, Drew Dubois, at 503.259.1404 for additional discussion.

REQUEST A: DB13-0013 SAP-Central PDP-4C, Preliminary Development Plan
REQUEST G: DB13-0019 Final Development Plan for Parks and Open Space

Natural Resources Division Conditions:	
This memorandum includes staff conditions of approval. The conditions are based on the preliminary and final development plans for PDP 4. The conditions of approval apply to the applicant's submittal of construction plans (i.e. engineering drawings).	
Rainwater Management Plan:	
NR 1.	Pursuant to the City of Wilsonville Public Works Standards, access should be provided for the entire perimeter of the rainwater management components. At a minimum, at least one access shall be provided for maintenance and inspection.
NR 2.	All Rainwater Management Components and associated infrastructure located in public areas shall be designed to the Public Works Standards. Rainwater Management Components in private areas shall comply with the plumbing code.
NR 3.	Plantings in Rainwater Management Components located in public areas shall comply with the Public Works Standards. Plantings in Rainwater Management Components located in private areas shall comply with the Plant List in the Rainwater Management Program or Community Elements Plan.

NR 4.	The rainwater management components shall comply with the requirements of the Oregon DEQ UIC (Underground Injection Control) Program.
Stormwater Management:	
NR 5.	Provide profiles, plan views and specifications for the proposed water quality treatment facilities consistent with the requirements of the City of Wilsonville's Public Works Standards.
NR 6.	Pursuant to the Public Works Standards, the applicant shall submit a maintenance plan (including the City's stormwater maintenance covenant) for the proposed stormwater facilities, inclusive of the rainwater management components, prior to approval for occupancy of the associated development.

MASTER EXHIBIT LIST:

The following exhibits are hereby entered into the public record by the Development Review Board as confirmation of its consideration of the application as submitted. This is the exhibit list that includes exhibits for Planning Case File DB13-0013 through DB13-0019.

A1. Staff report and findings (this document)
A2. Slides and notes for Staff's Public Hearing Presentation *(available at Public Hearing)*
B1. Applicant's Notebook: *Under separate cover*.
Section I: General Information
IA) Introductory Narrative
IB) Form/Ownership Documentation
IC) Fee Calculation
ID) Mailing List *Staff Note: This information has been revised*
IE) Updated SAP Central Phasing + Unit Counts
Section II: Preliminary Development Plan (Includes Phasing Amendment and Refinements)
IIA) Supporting Compliance Report
IIB) Reduced Drawings
IIC) Utility & Drainage Reports
IID) Traffic Analysis
IIE) Tree Report
IIF) Conceptual Elevations
Section III: Tentative Plat
IIIA) Supporting Compliance Report
IIIB) Tentative Plat
IIIC) Draft CC&R's
IIID) Copy of Certification of Assessments and Liens
IIIE) Subdivision Name Approval
Section IV: Zone Change
IVA) Supporting Compliance Report
IVB) Zone Change Map
IVC) Legal Description and Sketch
Section V: Tree Removal Plan

VA) Supporting Compliance Report
VB) Tree Report
VC) Tree Preservation Plan
Section VI: Final Development Plan
VIA) Supporting Compliance Report
VIB) Reduced Drawings
Section VII: SAP Amendment for Pattern Book
VIIA) Supporting Compliance Report
VIIB) Proposed Pattern Book Amendments

B2. Applicant's Large Format Plans (Smaller 11x17 plans included in Sections IIB and IIIB of the applicant's notebook Exhibit B1.) *Under separate cover*
Sheet 1 Cover Sheet
Sheet 2 Existing Conditions
Sheet 3 Aerial Photograph
Sheet 4.1 Tentative Plat
Sheet 4.2 Tentative Plat
Sheet 5 Grading and Erosion Control
Sheet 6 Composite Utility Plan
Sheet 7.1 Circulation Plan
Sheet 7.2 Street Sections
Sheet 8.1 Site/Land Use Plan
Sheet 8.2 Typical Lot Pattern
Sheet 9 Tree Preservation Plan
Sheet 10 Street Tree/Lighting Plan
Sheet 11 PDP Phasing Plan

B3. Final Develop Plan Large Format Plans (Smaller 11x17 plans included in Section VIB of the applicant's notebook, Exhibit B1.) *Under separate cover*
Sheet 1 Cover Sheet (Landscape Plans)
Sheet L 1.0 Landscape Plan
Sheet L 2.0 Landscape Plan
Sheet L 3.0 Landscape Details

B4. EX1 Reference Diagram, Including Phasing, for PDP 4 Central and PDP 2 North

B5. EX2 Phasing Diagram for PDP 4 Central and PDP 2 North

B6. Documentation of dedication of adjacent right-of-way for street improvements associated with proposed development.

C1. Comments and Conditions from Engineering Division

C2. Comments and Conditions from Building Division

C3. Comments and Conditions from Natural Resources

FINDINGS OF FACT:

1. The statutory 120-day time limit applies to this application. The application was received on April 15, 2013. On May 15, 2013, staff conducted a completeness review within the statutorily allowed 30-day review period, and, on April 30, May 3, and May 17, 2013, the Applicant submitted new materials. On May 17, 2013 the application was deemed complete.

The City must render a final decision for the request, including any appeals, by February 2, 2013

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2. Surrounding land uses are as follows:

Compass Direction	Zone:	Existing Use:
North:	--	Unincorporated Rural Residential
East:	V	Phase 3 East Villebois (approved/unbuilt)
South:	PF/V	Phase 1 North Villebois (under construction) Future Phase 3 Central (proposed) Undeveloped portions of SAP Central
West:	--	Unincorporated Rural Residential

3. Prior land use actions include:

   Legislative:
   02PC06 - Villebois Village Concept Plan
   02PC07A - Villebois Comprehensive Plan Text
   02PC07C - Villebois Comprehensive Plan Map
   02PC07B - Villebois Village Master Plan
   02PC08 - Village Zone Text
   04PC02 – Adopted Villebois Village Master Plan
   LP-2005-02-00006 – Revised Villebois Village Master Plan
   LP-2005-12-00012 – Revised Villebois Village Master Plan (Parks and Recreation)
   LP10-0001 – Amendment to Villebois Village Master Plan (School Relocation from SAP North to SAP East)

   Quasi Judicial:
   DB06-0005 – SAP-Central

4. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

CONCLUSIONARY FINDINGS:

NOTE: Pursuant to Section 4.014 the burden of proving that the necessary findings of fact can be made for approval of any land use or development application rests with the applicant in the case.

GENERAL INFORMATION

Section 4.008 Application Procedures-In General

Review Criteria: This section lists general application procedures applicable to a number of types of land use applications and also lists unique features of Wilsonville's development review process.
Finding: These criteria are met.
Details of Finding: The application is being processed in accordance with the applicable general procedures of this Section.

Section 4.009 Who May Initiate Application

Review Criterion: "Except for a Specific Area Plan (SAP), applications involving specific sites may be filed only by the owner of the subject property, by a unit of government that is in the process of acquiring the property, or by an agent who has been authorized by the owner, in writing, to apply."
Finding: This criterion is satisfied.
Details of Finding: The application has been submitted on behalf of the property owner, Polygon at Villebois II, LLC and Polygon at Villebois III, LLC.

Subsection 4.010 (.02) Pre-Application Conference

Review Criteria: This section lists the pre-application process
Finding: These criteria are satisfied.
Details of Finding: A pre-application conference was held on March 28, 2013 in accordance with this subsection.

Subsection 4.011 (.02) B. Lien Payment before Application Approval

Review Criterion: "City Council Resolution No. 796 precludes the approval of any development application without the prior payment of all applicable City liens for the subject property. Applicants shall be encouraged to contact the City Finance Department to verify that there are no outstanding liens. If the Planning Director is advised of outstanding liens while an application is under consideration, the Director shall advise the applicant that payments must be made current or the existence of liens will necessitate denial of the application."
Finding: This criterion is satisfied.
Details of Finding: No applicable liens exist for the subject property. The application can thus move forward. Section IIID of the applicant's notebook, Exhibit B1, includes a copy of certification of assessments and liens.

Subsection 4.035 (.04) A. General Site Development Permit Submission Requirements

Review Criteria: "An application for a Site Development Permit shall consist of the materials specified as follows, plus any other materials required by this Code." Listed 1. through 6. j.

Finding: These criteria are satisfied.
Details of Finding: The applicant has provided all of the applicable general submission requirements contained in this subsection.

Section 4.110 Zoning-Generally

Review Criteria: "The use of any building or premises or the construction of any development shall be in conformity with the regulations set forth in this Code for each Zoning District in which it is located, except as provided in Sections 4.189 through 4.192." "The General Regulations listed in Sections 4.150 through 4.199 shall apply to all zones unless the text indicates otherwise."
Finding: These criteria are satisfied.
Details of Finding: This proposed development is in conformity with the applicable zoning district and general development regulations listed in Sections 4.150 through 4.199 have been applied in accordance with this Section.

REQUEST A: DB13-0013 SAP-CENTRAL PDP-4C, PRELIMINARY DEVELOPMENT PLAN

The applicant's findings in Section IIA of their notebook, Exhibit B1, respond to the majority of the applicable criteria.

Village Zone

Subsection 4.125 (.02) Permitted Uses in Village Zone

A1. **Review Criteria:** This subsection lists the uses typically permitted in the Village Zone, including single-family detached dwellings, row houses, and non-commercial parks, playgrounds, and recreational facilities.
Finding: These criteria are satisfied.
Details of Finding: The uses proposed include row homes, single-family homes, and parks.

Subsection 4.125 (.05) Development Standards Applying to All Development in the Village Zone

"All development in this zone shall be subject to the V Zone and the applicable provisions of the Wilsonville Planning and Land Development Ordinance. If there is a conflict, then the standards of this section shall apply. The following standards shall apply to all development in the V zone:"

Subsection 4.125 (.05) A. 1. Block, Alley, Pedestrian and Bicycle Standards: Maximum Block Perimeter

A2. **Review Criteria:** "Maximums Block Perimeter: 1,800 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent a block perimeter from meeting this standard.
Finding: These criteria are satisfied.
Details of Finding: The maximum block perimeter will be met when the adjacent area of the Village Center is developed according to the Master Plan and SAP approvals.

Subsection 4.125 (.05) A. 2. Block, Alley, Pedestrian and Bicycle Standards: Maximum Spacing Between Streets for Local Access

A3. **Review Criteria:** "If the maximum spacing for streets for local access exceeds 530 feet, intervening pedestrian and bicycle access shall be provided, with a maximum spacing of 330 feet from those local streets, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions from meeting this standard."
Finding: These criteria are satisfied.
Details of Finding: The maximum street spacing will be met when the adjacent area of the Village Center is developed according to the Master Plan and SAP approvals.

Subsection 4.125 (.05) A. 2. Block, Alley, Pedestrian and Bicycle Standards: Intervening Pedestrian and Bicycle Access

A4. **Review Criteria:** "If the maximum spacing for streets for local access exceeds 530 feet, intervening pedestrian and bicycle access shall be provided, with a maximum spacing of 330 feet from those local streets, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions from meeting this standard."

Finding: These criteria are satisfied.

Details of Finding: The maximum street spacing will be met when the adjacent area of the Village Center is developed according to the Master Plan and SAP approvals. No intervening pedestrian and bicycle access is required.

Subsection 4.125 (.05) B. Access

A5. **Review Criterion:** "All lots with access to a public street, and an alley, shall take vehicular access from the alley to a garage or parking area, except as determined by the City Engineer."

Finding: This criterion is satisfied.

Details of Finding: All of the lots within the proposed PDP that have frontage on a public street and an alley will take vehicular access from an alley to a garage or parking area. See also Finding E3 and Condition of Approval PDE 5.

Table V-1, Development Standards

A6. **Review Criteria:**

Table V-1: Development Standards

Building Type	Min. Lot Size (sq.ft.)	Min. Lot Width (ft.)	Min. Lot Depth (ft.)	Max. Lot Coverage (note)	Min. Frontage Width [10, 12] (%age)	Max. Bldg. Height [9] (ft.)	Setbacks [10, 13, 20] Front Min. (ft.)	Front Max. (ft.)	Rear Min. (ft.)	Side Min. (ft.)	Alley-Loaded Garage (note)	Street-Loaded Garage (note)
Commercial Buildings - Village Center [14]	NR	NR	NR	1	90	60	NR [3]	5	NR	NR	NR	NA
Hotels - Village Center [14]	NR	NR	NR	1	80	60	NR [3]	15	NR	NR	NR	NA
Mixed Use Buildings - Village Center [14]	NR	NR	NR	1	90	60	NR [3]	8	NR	NR	NR	NA
Multi-Family Dwellings - Village Center [14]	NR	NR	NR	1	80	45	5 [4]	15	NR	NR	NR	NA
Row Houses [11] - Village Center [14]	NR	NR	NR	1	80	45	5 [4]	10	NR	NR	NR	NA
Commercial Buildings	NR	NR	NR	1	60	45	NR	15	NR	NR	NR	NA
Mixed Use Buildings	NR	NR	NR	1	60	45	NR	15	NR	NR	NR	NA
Multi-Family Dwellings	NR	NR	NR	1	60	45	8 [4]	15	NR	NR	NR	NA
Row Houses [11]	NR	15	50	1	80	45	8 [5]	15	NR	NR	NR	NA
Duplexes	4,000	45	70	2	60 [16]	35	12 [5, 6]	20 [6]	5	5 [15]	7	8,17,18
Single-Family Dwellings	2,250	35	50	2	60 [16]	35	12 [5, 6]	20 [6]	5	5 [15]	7	8,17

Notes: NR No Requirement
NA Not Allowed
1 Lot < 8000sf: NR; Lot >8000sf: 80% (Max. Lot Coverage)
2 Small lots: 75%, Medium Lots: 65%, Standard and Large Lots: 55%, Estate Lots: 45% Maximum Lot Coverage
On lots where detached accessory buildings are built, maximum lot coverage may be increased by 10%.
3 Bay windows, balconies, and other structural building projections above 8 ft. may encroach up to 5 ft. into the Public Way; canopies, awnings, and other non-structural projections may encroach up to 8 ft. into the Public Way.
4 Porches, stairs, stoops, decks, canopies, balconies, bay windows, chimneys, awnings, and other building projections may encroach up to the Public Way.
5 Porches, stoops, decks, canopies, balconies, bay windows, chimneys, awnings, and other building projections may encroach to within 8 ft. of the Public Way. Stairs may encroach to the Public Way.
6 For Standard, or Large Lots on Collector Avenues, front setbacks are 20 ft. min., (13' setback to porch), side street setbacks are 15' (8' setback to porch). Pie-shaped lots or lots with significant trees or grade banks at frontage have no maximum front setback.
7 The garage setback from alley shall be between 3 and 5 foot or, when as optional parking space is located between the garage and the alley, shall be 16 ft. minimum. Lots with important trees, as identified in the Master Plan, or grade differences at the alley, affecting garage location shall be exempt from this requirement.
8 Street-loaded garages shall be a minimum 20 ft. front setback to face of garage, and located a minimum of 5 ft. behind main façade of the associated dwelling unit.
9 Vertical encroachments are allowed up to ten additional feet, for up to 10% of the building footprint; vertical encroachments shall not be habitable space.
10 For Village Center buildings with lots fronting two or more streets, at least two facades shall be subject to the minimum frontage width and front setback requirements.
11 Row Houses are typically attached, but may be detached within the Village Center Boundary. When attached, no more than ten units shall be contiguous along a street edge. When row houses are detached, the Minimum Frontage Width is 65%. The Minimum Frontage Width for detached row houses may be less than 65% on corner lots or to accommodate the curve radius of street frontage, public utility easements, important trees, grade differences, public open space requirements, or as otherwise approved by the DRB.
12 See Definitions, 4.125.01, for measurement of Minimum Frontage Width.
13 Front Setback is measured as the offset of the front lot line or a vehicular or pedestrian access easement line. On lots with alleys, Rear Setback shall be measured from the rear lot line abutting the alley.
14 See Figure 2A - Village Center Boundary & Land Use Plan in the Villebois Village Master Plan for areas included within the Village Center.
15 On Estate Lots and Large Lots with frontage 70 ft. or wider, the minimum combined side yard setbacks shall total 15 ft. with a minimum of 5 ft. On Small and Medium Lots, minimum side setback shall be 0 ft. or as required by Building Code.
16 For cluster housing with lots arranged on a courtyard, frontage shall be measured at the front door face of the building adjacent to a public right of way or a public pedestrian access easement linking the courtyard with the Public Way.
17 Dwellings on lots without alley access shall be at least 36 feet wide.
18 Duplexes with front-loaded garages are limited to one shared standard-sized driveway/apron.
19 Maximum setbacks may be increased as necessary to accommodate deeper porches, building code, public utility easements or public open space requirements.
20 Lots are categorized as small, medium, standard, large or estate as shown in the Pattern Book. [Table V-1 amended by Ord. 667 on 8/17/09; Ord. 682, 9/9/10]

Finding: These criteria are satisfied.

Details of Finding: In previous PDP's it has consistently been interpreted to allow the lot width and lot sizes to be governed by the Pattern Book. With the proposed SAP

Amendments to the Pattern Book all lot dimensions will be consistent with the Pattern Book.

Subsection 4.125 (.07) Table V-2 Off-Street Parking, Loading & Bicycle Parking

A7. **Review Criteria:**

Table V-2: Off Street Parking Requirements

Permitted or Conditional Use	Min. Vehicle Spaces	Max. Vehicle Spaces	Bicycle Short-term (Spaces)	Bicycle Long-term (Spaces)
Permitted Uses				
Single-Family Detached Dwellings	1.0/DU	NR	NR	NR
Single-Family Accessory Dwelling Units*	1.0/DU	NR	NR	NR
Duplex	1.0/DU	NR	NR	NR
Row Houses	1.0/DU	NR	NR	NR
Multi-Family Dwellings	1.0/1 Bdr 1.5/2 Bdr 1.75/3 Bdr	NR	1 per 20 units Min. of 2	1 per 4 units Min. of 2
Community Housing	1 per 4 residents	1 per unit	None	1 per 8 residents Min. of 2
Commercial Uses				
Convenience Store	2/1000 sf	5/1000 sf	1 per 5000 sf Min. of 2	1 per 12,000 sf Min. of 2
Restaurant/Pub	2/1000 sf	10/1000 sf	1 per 5000 sf Min. of 2	1 per 12,000 sf Min. of 2
Child Day Care	0.2 per student/staff	0.3 per student/staff	None	1 per 10,000 sf Min. of 2
Medical/Dental	3/1000 sf	4/1000 sf	1 per 40,000 sf Min. of 2	1 per 70,000 sf Min. of 2
All other commercial uses	2/1000 sf	4/1000 sf	1 per 10,000 sf Min. of 2	1 per 40,000 sf Min. of 2
Conditional Uses				
Schools	0.2 per student/staff	0.3 per student/staff	0.3 per student/staff	0.2 per classroom
Recreational Facilities	3/1000 sf [1]	5/1000 sf [1]	1 per 3,000 sf Min. of 4	1 per 3000 sf Min. of 4
Conference Center	0.3 per seat	0.5 per seat	1 per 15 seats Min. of 2	1 per 40 seats Min. of 10
Library/Museum	2/1000 sf	4/1000 sf	1 per 1000 sf Min. of 6	1 per 1000 sf Min. of 6
Religious Institution	.25 per seat	.5 per seat	1 per 2,000 sf Min. of 2	1 per 4,000 sf Min. of 2
Theater	.25 per seat	.5 per seat	1 per 20 seats Min. of 2	1 per 50 seats Min. of 4
Overnight Lodging Facility	1 per room	1.5 per room	1 per 20 rooms Min. of 2	1 per 20 rooms Min. of 2
Light Manufacturing/Research and Development	2/1000 sf	4/1000 sf	1 per 10,000 sf Min. of 2	1 per 40,000 sf Min. of 2
All other Conditional Uses	2/1000 sf	4/1000 sf	1 per 10,000 sf Min. of 2	1 per 40,000 sf Min. of 2

Notes:
[1] 1/1000 sf min. for court facilities
NR No requirement
* See WC Section 4.113(.11) Assessory Dwelling Units

[Table 4-2 amended by Ord. 677, 3/1/10]

Finding: These criteria are satisfied.

Details of Finding: At least one (1) parking space is provided for each dwelling unit.

Subsection 4.125 (.08) Parks & Open Space

A8. **Review Criteria:** This subsection prescribes the open space requirement for development in the Village Zone.
Finding: These criteria are satisfied.
Details of Finding: The applicant states the following regarding these requirements, "The Parks Master Plan for Villebois states that there are 57.87 acres of parks and 101.46 acres of open space for a total of 159.33 acres within Villebois, approximately 33%. SAP Central includes parks and open space areas consistent with the Master Plan." PDP 4C does not include any parks shown in the Villebois Village Master Plan. Additional linear greens are added increasing park and open space area.

Subsection 4.125 (.09) Street Alignment and Access Improvements

Subsection 4.125 (.09) A. 1. a. Street Alignment and Access Improvements Conformity with Master Plan, etc.

A9. **Review Criterion:** "All street alignment and access improvements shall conform to the Villebois Village Master Plan, or as refined in the Specific Area Plan, Preliminary Development Plan, or Final Development Plan . . ."
Finding: This criterion is satisfied.
Details of Finding: The street alignments and access improvements within this PDP are generally consistent with those approved in the Villebois Village Master Plan and SAP Central.

Subsection 4.125 (.09) A. 1. a. i. Street Improvement: Conformity with Public Works Standards and Continuation of Streets

A10. **Review Criteria:** "All street improvements shall conform to the Public Works Standards and shall provide for the continuation of streets through proposed developments to adjoining properties or subdivisions, according to the Master Plan."
Finding: These criteria are satisfied.
Details of Finding: All street improvements within this PDP will comply with the applicable Public Works Standards, which will be verified during the Engineering Division review of the Public Works Permits. The street system within this PDP is designed to provide for the continuation of streets within Villebois and to adjoining properties or subdivisions according to the Master Plan.

Subsection 4.125 (.09) A. 1. a. ii. Streets Developed According to Master Plan

A11. **Review Criterion:** "All streets shall be developed according to the Master Plan."
Finding: This criterion is satisfied.
Details of Finding: All streets within this PDP will be developed with curbs, landscape strips, sidewalks, and bikeways or pedestrian pathways as depicted on the Circulation Plan, applicant's sheet 7.1 in Exhibit B2, and in accordance with the Master Plan.

Subsection 4.125 (.09) A. 2. a. & b. Intersections of Streets: Angles and Intersections

A12. **Review Criteria:**

- "Angles: Streets shall intersect one another at angles not less than 90 degrees, unless existing development or topography makes it impractical.
- Intersections: If the intersection cannot be designed to form a right angle, then the right-of-way and paving within the acute angle shall have a minimum of thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than ninety (90) degrees shall require approval by the City Engineer after consultation with the Fire District."

Finding: These criteria are satisfied.

Details of Finding: The Circulation Plan, applicant's sheet 7.1 in Exhibit B2, demonstrates that all proposed streets will intersect at angles consistent with the above standards.

Subsection 4.125 (.09) A. 2. c. Intersection of Streets: Offsets

A13. **Review Criterion:** "Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections shall be separated by at least:

- 1000 ft. for major arterials
- 600 ft. for minor arterials
- 100 ft. for major collector
- 50 ft. for minor collector"

Finding: These criteria are satisfied.

Details of Finding: The plan sheets demonstrate that opposing intersections on public streets are offset, as appropriate, so that no danger to the traveling public is created.

Subsection 4.125 (.09) A. 2. d. Curb Extensions

A14. **Review Criteria:** "Curb extensions at intersections shall be shown on the Specific Area Plans required in subsection 4.125(.18)(C) through (F) below, and shall:

- Not obstruct bicycle lanes on collector streets.
- Provide a minimum 20 foot wide clear distance between curb extensions at all local residential street intersections shall have, shall meet minimum turning radius requirements of the Public Works Standards, and shall facilitate fire truck turning movements as required by the Fire District."

Finding: These criteria are satisfied.

Details of Finding: Curb extensions are shown on the Circulation Plan, sheet 7.1 in Exhibit B2. No curb extensions on collectors are proposed as part of this PDP. The plan sheets illustrate that all local street intersections will have a minimum 20 foot wide clear distance between curb extensions.

Subsection 4.125 (.09) A. 3. Street Grades

A15. **Review Criteria:** "Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate, grades in excess of 8%, but not more than 12%, may be permitted for short distances, as approved by the City Engineer, where topographic conditions or existing improvements warrant modification of these standards."

Finding: These criteria are satisfied.

Details of Finding: The Grading & Erosion Control Plan, sheet 5 Exhibit B2, demonstrates that proposed streets comply with this standard. SW Dundee Lane has an approximately 11.87% grade, which has been approved by the City Engineer.

Subsection 4.125 (.09) A. 4. Centerline Radius Street Curves

A16. **Review Criterion:** "The minimum centerline radius street curves shall be as follows:

- Arterial streets: 600 feet, but may be reduced to 400 feet in commercial areas, as approved by City Engineer.
- Collector streets: 600 feet, but may be reduced to conform with the Public Works Standards, as approved by the City Engineer.
- Local streets: 75 feet"

Finding: These criteria are satisfied.
Details of Finding: Compliance is shown on the plan sheets.

Subsection 4.125 (.09) A. 5. Rights-of-way

A17. **Review Criteria:** Pursuant to subsection (.09) A. above, the provisions of 4.177 apply for rights-of-way as no other provisions are noted.
Finding: These criteria are satisfied.
Details of Finding: Proposed rights-of-way are shown on the applicant's plan sheets, including sheets 4.1 and 4.2, Tentative Subdivision Plat, in Exhibit B2. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with recordation of a final plat in accordance with Section 4.177.

Subsection 4.125 (.09) A. 6. Access Drives

A18. **Review Criteria:** Access drives are required to be 16 feet for two-way traffic. Otherwise, pursuant to subsection (.09) A. above, the provisions of 4.177 apply for access drives as no other provisions are noted.
Finding: These criteria are satisfied.
Details of Finding: The applicant states, "Access drives (alleys) will be paved at least 16-feet in width within a 20-foot tract, as shown on the Circulation Plan. In accordance with Section 4.177, all access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions."

Subsection 4.125 (.09) A. 7. Clear Vision Areas

A19. **Review Criteria:** Pursuant to subsection (.09) A. above, the provisions of 4.177 apply for clear vision areas as no other provisions are noted.
Finding: These criteria are satisfied.
Details of Finding: The applicant states that clear vision areas will be provided and maintained in compliance with the Section 4.177.

Subsection 4.125 (.09) A. 8. Vertical Clearance

A20. **Review Criteria:** Pursuant to subsection (.09) A. above, the provisions of 4.177 apply for vertical clearance as no other provisions are noted.
Finding: These criteria are satisfied.
Details of Finding: The applicant states that vertical clearance will be provided and maintained in compliance with the Section 4.177.

Subsection 4.125 (.09) A. 9. Interim Improvement Standards

A21. **Review Criteria:** Pursuant to subsection (.09) A. above, the provisions of 4.177 apply for interim improvement standards as no other provisions are noted.
Finding: These criteria will be satisfied by Condition of Approval PDA 2.
Details of Finding: The condition of approval requires certain improvements approved with PDP 3 East be built prior to development on Tax Lot 2919 in order to avoid need for interim improvements.

Subsection 4.125 (.10) Sidewalk and Pathway Improvement Standards

A22. **Review Criteria:** "The provisions of Section 4.178 shall apply within the Village zone."
Finding: These criteria are satisfied.
Details of Finding: The applicant states, "All sidewalks and pathways within SAP Central will be constructed in accordance with the standards of Section 4.178 and the Villebois Village Master Plan. Sidewalks and pathways are shown in the street cross-sections on the *Circulation Plan*." See applicant's sheet 7.2, Exhibit B2.

Subsection 4.125 (.11) Landscaping, Screening and Buffering

A23. **Review Criteria:** "Except as noted below, the provisions of Section 4.176 shall apply in the Village zone:
- Streets in the Village Zone shall be developed with street trees as described in the Community Elements Book."

Finding: These criteria are satisfied.
Details of Finding: The appropriate landscaping is provided. The proposed street trees are among the choices provided in the Community Elements Book.

Subsection 4.125 (.12) Signage and Wayfinding

A24. **Review Criteria:** "Except as this subsection may otherwise be amended, or until such time as a Signage and Wayfinding Plan is approved as required by Section 4.125(.18)(D)(2)(f), signs within the Village zone shall be subject to provisions of Section 4.156."
Finding: These criteria are satisfied.
Details of Finding: The SAP Central Signage & Wayfinding Plan indicates the provision of 'Internal Site Identifiers" on each corner of the Villebois Drive and Costa Circle intersection. The applicant has indicates these will be provided and they are shown on the proposed landscape plan.

Subsection 4.125 (.13) Design Principles Applying to the Village Zone

A25. **Review Criteria:** "The following design principles reflect the fundamental concepts, and support the objectives of the Villebois Village Master Plan, and guide the fundamental qualities of the built environment within the Village zone.

- The design of landscape, streets, public places and buildings shall create a place of distinct character.
- The landscape, streets, public places and buildings within individual development projects shall be considered related and connected components of the Villebois Village Master Plan.
- The design of streets and public spaces shall provide for and promote pedestrian safety, connectivity and activity.
- The design of exterior lighting shall minimize off-site impacts, yet enable functionality."

Finding: These criteria are satisfied.

Details of Finding: The Architectural Pattern Book and Community Elements Book ensure the design meets the fundamental design concepts and support the objectives of the Villebois Village Master Plan. By complying with an approved Architectural Pattern Book and Community Elements Book the design of the PDP will satisfy these criteria. See also Final Development Plan, Request G.

Subsection 4.125 (.14) A. 1. a. Design Standards: Flag Lots

A26. **Review Criterion:** "Flag lots are not permitted."

Finding: This criterion is satisfied.

Details of Finding: No flag lots are proposed.

Subsection 4.125 (.14) A. 2. a. - e. and h. – k. Building and Site Design Requirements

A27. **Review Criteria:** "Building and site design shall include:

- Proportions and massing of architectural elements consistent with those established in an approved Architectural Pattern Book or Village Center Architectural Standards.
- Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Architectural Pattern Book, Community Elements Book or approved Village Center Architectural Standards.
- Protective overhangs or recesses at windows and doors.
- Raised stoops, terraces or porches at single-family dwellings.
- Exposed gutters, scuppers, and downspouts, or approved equivalent.
- Building elevations of block complexes shall not repeat an elevation found on an adjacent block.
- Building elevations of detached buildings shall not repeat an elevation found on buildings on adjacent lots.
- A porch shall have no more than three walls.
- A garage shall provide enclosure for the storage of no more than three motor vehicles, as described in the definition of Parking Space."

Finding: These criteria are satisfied or will be satisfied by Conditions of Approval.

Details of Finding: The application requests PDP approval for single family detached homes, including small, small cottage, and row house product types. Conformance with the Pattern Book and Community Elements Book will assure consistency with the Design

Standards of subsection (.14). Architectural plans will be approved by the City's architectural consultant prior to the City issuing building permits, which will ensure conformance of these different housing types with the Architectural Pattern Book. In order to increase consistency with the Architectural Pattern Book and other development elsewhere in Villebois, Condition of Approval PDA 6 requires courtyard fencing consistent with the pattern book and the architectural style of the home. This includes installation of up to forty-eight inch (48") dry stack rock or brick wall along the front of the lot or side of a lot to create a fairly level and usable front yard outdoor living area enclosed by the courtyard fencing. The applicant/owner can install a greater than forty-eight inch (48") wall, but if maintaining the required five (5) percent slope requires greater than a forty-eight inch (48") wall the applicant/owner can request an exception from the courtyard wall and courtyard slope requirements as part of building plan review. Condition of Approval PDA 7 requires building foundations exposed to the public view shed due to elevation differences on the lot to receive brick or stone facades consistent with the architectural pattern book.

Subsection 4.125 (.14) A. 2. g. Landscape Plans

A28. **Review Criterion:** "Building and site design shall include:

- A landscape plan in compliance with Sections 4.125(.07) and (.11), above."

Finding: This criterion is satisfied.

Details of Finding: The appropriate landscape plans have been provided. See Landscape Plans, Exhibit B3.

Subsection 4.125 (.14) A. 2. f. Protection of Significant Trees

A29. **Review Criterion:** "Building and site design shall include:

- The protection of existing significant trees as identified in an approved Community Elements Book."

Finding: This criterion is satisfied.

Details of Finding: No existing significant trees exist on the subject property.

Subsection 4.125 (.14) A. 3. Lighting and Site Furnishings

A30. **Review Criteria:** "Lighting and site furnishings shall be in compliance with the approved Architectural Pattern Book, Community Elements Book, or approved Village Center Architectural Standards."

Finding: These criteria are satisfied or will be required to do so by Condition of Approval PDA 4.

Details of Finding: No site furnishings are shown that would be subject to the Community Elements Book. A condition of approval ensures street lights type and spacing is according to the Community Elements Book.

Subsection 4.125 (.14) A. 4. Building Systems

A31. **Review Criteria:** "Building systems, as noted in Tables V-3 and V-4 (Permitted Materials and Configurations), below, shall comply with the materials, applications and configurations required

therein. Design creativity is encouraged. The LEED Building Certification Program of the U.S. Green Building Council may be used as a guide in this regard."

Finding: These criteria are satisfied.

Details of Finding: Subsequent Building Permit applications will review proposed buildings for consistency with the criteria of Table V-3 and the Architectural Pattern Book.

Subsection 4.125 (.18) G. Preliminary Development Plan Approval Process

Subsection 4.125 (.18) G. 1. a. Preliminary Development Plan: Submission Timing

A32. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall be filed with the City Planning Division for the entire SAP, or when submission of the SAP in phases has been authorized by the Development Review Board, for a phase in the approved sequence."

Finding: This criterion is satisfied.

Details of Finding: As stated by the applicant, "this PDP addresses Phase 4 on the amended SAP Central Phasing Plan. This PDP includes a request to amend the SAP Central Phasing." See Request C.

Subsection 4.125 (.18) G. 1. b. Preliminary Development Plan: Owners' Consent

A33. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall be made by the owner of all affected property or the owner's authorized agent;"

Finding: This criterion is satisfied.

Details of Finding: This application is made by Polygon at Villebois II LLC and Polygon at Villebois III LLC, the owners of the property. The vesting deeds can be found in Section IB of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) G. 1. c. Preliminary Development Plan Permit Process: Proper Form & Fees

A34. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall be filed on a form prescribed by the City Planning Division and filed with said division and accompanied by such fee as the City Council may prescribe by resolution;"

Finding: These criteria are satisfied.

Details of Finding: The applicant has used the prescribed form and paid the required application fees.

Subsection 4.125 (.18) G. 1. d. Preliminary Development Plan Permit Process: Professional Coordinator

A35. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall set forth the professional coordinator and professional design team for the project;"

Finding: This criterion is satisfied.

Details of Finding: A professional design team is working on the project with Stacy Connery AICP from Pacific Community Design as the professional coordinator.

Subsection 4.125 (.18) G. 1. e. Preliminary Development Plan Permit Process: Mixed Uses

A36. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall state whether the development will include mixed land uses, and if so, what uses and in what proportions and locations."
Finding: This criterion is satisfied.
Details of Finding: The proposed PDP includes only residential uses with supporting park amenities.

Subsection 4.125 (.18) G. 1. f. Preliminary Development Plan Permit Process: Land Division

A37. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall include a preliminary land division (concurrently) per Section 4.400, as applicable."
Finding: This criterion is satisfied.
Details of Finding: A preliminary subdivision plat has been submitted concurrently with this request. See Request E.

Subsection 4.125 (.18) G. 1. g. Preliminary Development Plan Permit Process: Zone Map Amendment

A38. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall include a concurrent application for a Zone Map Amendment (i.e., Zone Change) for the subject phase."
Finding: This criterion is satisfied.
Details of Finding: A zone change request has been submitted concurrently with this request. See Request D.

Subsection 4.125 (.18) G. 2. a. – c. Preliminary Development Plan Permit Process: Information Required

A39. **Review Criteria:** "The application for Preliminary Development Plan approval shall include conceptual and quantitatively accurate representations of the entire development sufficient to demonstrate conformance with the approved SAP and to judge the scope, size and impact of the development on the community and shall be accompanied by the following information:

- A boundary survey or a certified boundary description by a surveyor licensed in the State of Oregon.
- Topographic information sufficient to determine direction and percentage of slopes, drainage patterns, and in environmentally sensitive areas, (e.g., flood plain, wetlands, forested areas, steep slopes or adjacent to stream banks). Contour lines shall relate to North American Vertical Datum of 1988 and be at minimum intervals as follows:
    - One (1) foot contours for slopes of up to five percent (5%);
    - Two (2) foot contours for slopes from six percent (6%) to twelve (12%);
    - Five (5) foot contours for slopes from twelve percent (12%) to twenty percent (20%). These slopes shall be clearly identified, and
    - Ten (10) foot contours for slopes exceeding twenty percent (20%).

- The location of areas designated Significant Resource Overlay Zone (SROZ), and associated 25-foot Impact Areas, within the PDP and within 50 feet of the PDP boundary, as required by Section 4.139.

Finding: These criteria are satisfied.

Details of Finding: A certified boundary description by a surveyor licensed in the State of Oregon is provided as the legal description and sketch for the zone map amendment (see Section IVC of the applicant's notebook, Exhibit B1). Topographic information in accordance with Section 4.125(.18)G.2.b. is shown on the Existing Conditions, located in Section IIB of the applicant's notebook, Exhibit B1. The site does not include any designated SROZ areas.

Subsection 4.125 (.18) G. 2. d. Preliminary Development Plan Permit Process: Land Area Tabulation

A40. **Review Criteria:** "A tabulation of the land area to be devoted to various uses, and a calculation of the average residential density per net acre."

Finding: These criteria are satisfied.

Details of Finding: Following is a tabulation of land area devoted to the various uses and a calculation of net residential density:

Approx. Gross Acreage (all properties) 6.83 Acres
Parks 0.84 Acres
Public Streets 3.14 Acres
Lots and Alleys 2.85 Acres

Net Residential Density: 57 lots / 2.85 Acres = 20 units per net acre

Subsection 4.125 (.18) G. 2. e. Preliminary Development Plan Permit Process: Streets, Alleys, and Trees

A41. **Review Criteria:** "The location, dimensions and names, as appropriate, of existing and platted streets and alleys on and within 50 feet of the perimeter of the PDP, together with the location of existing and planned easements, sidewalks, bike routes and bikeways, trails, and the location of other important features such as section lines, section corners, and City boundary lines. The plan shall also identify all trees 6 inches and greater d.b.h. on the project site only."

Finding: These criteria are satisfied.

Details of Finding: Information on planned alleys and streets are provided or the information is readily available. Easements, sidewalks, bike routes and bikeways, trails, and other relevant features are shown. The required trees are shown.

Subsection 4.125 (.18) G. 2. f. Preliminary Development Plan Permit Process: Building Drawings

A42. **Review Criteria:** "Conceptual drawings, illustrations and building elevations for each of the listed housing products and typical non-residential and mixed-use buildings to be constructed within the Preliminary Development Plan boundary, as identified in the approved SAP, and where required, the approved Village Center Design."

Finding: This criterion is satisfied.

Details of Finding: The proposed PDP includes Small Detached, Small Cottage, and Row House housing products, along with a number of variations within these product types. Conceptual elevations have been provided. Final building elevations will be reviewed by the City's architectural consultant prior to issuing building permits.

Subsection 4.125 (.18) G. 2. g. Preliminary Development Plan Permit Process: Utility Plan

A43. **Review Criterion:** "A composite utility plan illustrating existing and proposed water, sanitary sewer, and storm drainage facilities necessary to serve the SAP."
Finding: This criterion is satisfied.
Details of Finding: A composite utility plan has been provided. See applicant's sheet 6 in Exhibit B1.

Subsection 4.125 (.18) G. 2. h. Preliminary Development Plan Permit Process: Phasing Sequence

A44. **Review Criterion:** "If it is proposed that the Preliminary Development Plan will be executed in Phases, the sequence thereof shall be provided."
Finding: This criterion is satisfied.
Details of Finding: The PDP is proposed to be executed in two phases. The proposed phases of the subject PDP are shown on the PDP Phasing Plan. The phasing is based on coordinating construction with adjacent portions of PDP 3 East and PDP 2 North. See applicant's sheet 11 in Exhibit B1 as well as Exhibit B4 and B5.

Subsection 4.125 (.18) G. 2. i. Preliminary Development Plan Permit Process: Security for Capital Improvements

A45. **Review Criterion:** "A commitment by the applicant to provide a performance bond or other acceptable security for the capital improvements required by the project."
Finding: This criterion is satisfied.
Details of Finding: The applicant states "the applicant will provide a performance bond or other acceptable security for the capital improvements required by the project."

Subsection 4.125 (.18) G. 2. j. Preliminary Development Plan Permit Process: Traffic Report

A46. **Review Criterion:** "At the applicant's expense, the City shall have a Traffic Impact Analysis prepared, as required by Section 4.030(.02)(B), to review the anticipated traffic impacts of the proposed development. This traffic report shall include an analysis of the impact of the SAP on the local street and road network, and shall specify the maximum projected average daily trips and maximum parking demand associated with buildout of the entire SAP, and it shall meet Subsection 4.140(.09)(J)(2)."
Finding: This criterion is satisfied.
Details of Finding: The required traffic report has been provided, and can be found in Section IID of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) H. PDP Application Submittal Requirements

Subsection 4.125 (.18) H. 1. PDP Application Submittal Requirements: General

A47. **Review Criteria:** "The Preliminary Development Plan shall conform with the approved Specific Area Plan, and shall include all information required by (.18)(D)(1) and (2), plus the following:

- The location of water, sewerage and drainage facilities;
- Conceptual building and landscape plans and elevations, sufficient to indicate the general character of the development;
- The general type and location of signs;
- Topographic information as set forth in Section 4.035;
- A map indicating the types and locations of all proposed uses; and
- A grading and erosion control plan illustrating existing and proposed contours as prescribed previously in this section."

Finding: These criteria are satisfied.

Details of Finding: The proposed PDP generally conforms to the approved SAP Central, with the proposed refinements. See Request B. The PDP application includes all information required by 4.125(.18)(D)(1) and (2), as applicable to a PDP. The required plans are can be found in Exhibit B2. The *Existing Conditions*, sheet 2, shows the existing site features, including topographic features. Proposed lots to be created for development are shown on the *Tentative Plat*, sheets 4.1 and 4.2. The *Grading and Erosion Control Plan*, sheet 5, shows the location of drainage facilities, topographic information, and a grading and erosion control facilities. The *Composite Utility Plan*, sheet 6, indicates the proposed location of water and sanitary sewer lines and drainage facilities. The *Site/Land Use Plan*, sheet 8.1, indicates the types and locations of all proposed uses in the Preliminary Development Plan.

Subsection 4.125 (.18) H. 2. PDP Application Submittal Requirements: Traffic Report

A48. **Review Criteria:** "In addition to this information, and unless waived by the City's Community Development Director as enabled by Section 4.008(.02)(B), at the applicant's expense, the City shall have a Traffic Impact Analysis prepared, as required by Section 4.030(.02)(B), to review the anticipated traffic impacts of the proposed development. This traffic report shall include an analysis of the impact of the PDP on the local street and road network, and shall specify the maximum projected average daily trips and maximum parking demand associated with buildout of the entire PDP, and it shall meet Subsection 4.140(.09)(J)(2) for the full development of all five SAPs."

Finding: These criteria are satisfied.

Details of Finding: The required traffic report is included in Section IID of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) H. 3. PDP Application Submittal Requirements: Level of Detail

A49. **Review Criterion:** "The Preliminary Development Plan shall be sufficiently detailed to indicate fully the ultimate operation and appearance of the phase of development. However, approval of a Final Development Plan is a separate and more detailed review of proposed design features, subject to the standards of Section 4.125(.18)(L) through (P), and Section 4.400 through Section 4.450."

Finding: This criterion is satisfied.

Details of Finding: As stated by the applicant, "the plan sheets for the proposed Preliminary Development Plan provide sufficient detail to show the ultimate operation and appearance of the subject phase of development. The FDP application for design of the included park areas within the PDP area is submitted concurrent with this application." See Request G.

Subsection 4.125 (.18) H. 4. PDP Application Submittal Requirements: Copies of Legal Documents

A50. **Review Criterion:** "Copies of legal documents required by the Development Review Board for dedication or reservation of public facilities, or for the creation of a non-profit homeowner's association, shall also be submitted."
Finding: This criterion is satisfied.
Details of Finding: The required legal documents for review have been provided. See Section IIIC in the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) I. PDP Approval Procedures

A51. **Review Criteria:** "An application for PDP approval shall be reviewed using the following procedures:

- Notice of a public hearing before the Development Review Board regarding a proposed PDP shall be made in accordance with the procedures contained in Section 4.012.
- A public hearing shall be held on each such application as provided in Section 4.013.
- After such hearing, the Development Review Board shall determine whether the proposal conforms to the permit criteria set forth in this Code, and shall approve, conditionally approve, or disapprove the application."

Finding: These criteria are satisfied.
Details of Finding: The request is being reviewed according to this subsection.

Subsection 4.125 (.18) J. PDP Refinements to Approved SAP

Subsection 4.125 (.18) J. 1. a. ii. Refinements to the SAP: Parks, Trails, and Open Space

A52. **Review Criterion:** "Changes to the nature or location of park types, trails or open space that do not significantly reduce function, usability, connectivity, or overall distribution or availability of these uses in the Specific Area Plan."
Finding: This criterion is satisfied.
Details of Finding: Concurrently with this PDP request refinements to the parks, by adding linear green spaces, are being requested that meet the applicable criteria. See Request B.

Subsections 4.125 (.18) J. 1. a. iv. and v. Refinements to the SAP: Mix of Land Uses and Density

A53. **Review Criteria:**

- "Changes to the location or mix of land uses that do not significantly alter the overall distribution or availability of uses in the Preliminary Development Plan.

- A change in density that does not exceed ten percent, provided such density change has not already been approved as a refinement to the underlying SAP or PDP, and does not result in fewer than 2,300 dwelling units in the Village."

Finding: These criteria are satisfied.

Details of Finding: Concurrently with this PDP request refinements to the location and mix of land uses and density are being requested that meet the applicable criteria. See Request B.

Subsection 4.125 (.18) K. PDP Approval Criteria

Subsection 4.125 (.18) K. 1. a. PDP Approval Criteria: Consistent with Standards of Section 4.125

A54. **Review Criteria:** "Is consistent with the standards identified in this section."

Finding: These criteria are satisfied.

Details of Finding: As shown elsewhere in this request, the proposed Preliminary Development Plan is consistent with the standards of Section 4.125.

Subsection 4.125 (.18) K. 1. b. PDP Approval Criteria: Complies with the Planning and Land Development Ordinance

A55. **Review Criterion:** "Complies with the applicable standards of the Planning and Land Development Ordinance, including Section 4.140(.09)(J)(1)-(3)."

Finding: This criterion is satisfied.

Details of Finding: Findings are provided showing compliance with applicable standards of the Planning and Land Development Ordinance. Specifically Findings A61 through A63 address Subsections 4.140 (.09) J. 1. through 3.

Subsection 4.125 (.18) K. 1. c. PDP Approval Criteria: Consistent with Approved SAP

A56. **Review Criterion:** "Is consistent with the approved Specific Area Plan in which it is located."

Finding: This criterion is satisfied.

Details of Finding: Together with the proposed refinements and amendments, the PDP is consistent with the approved SAP.

Subsection 4.125 (.18) K. 1. d. PDP Approval Criteria: Consistent with Approved Pattern Book

A57. **Review Criterion:** "Is consistent with the approved Pattern Book and, where required, the approved Village Center Architectural Standards."

Finding: This criterion is satisfied.

Details of Finding: As stated by the applicant, "No buildings are proposed with this Preliminary Development Plan. Subsequent Building Permit applications for residential buildings in this Preliminary Development Plan will document compliance with the Architectural Pattern Book. However, proposed lots are sized to accommodate proposed uses in a manner consistent with Table V-1 and the Architectural Pattern Book."

Subsection 4.125 (.18) K. 2. PDP Approval Criteria: Reasonable Phasing Schedule

A58. **Review Criterion:** "If the PDP is to be phased, that the phasing schedule is reasonable and does not exceed two years between commencement of development of the first, and completion of the last phase, unless otherwise authorized by the Development Review Board."
Finding: This criterion is satisfied.
Details of Finding: The PDP is proposed to be phased. Phase 1, which includes the row houses along Costa Circle West, Dundee Lane, on a portion of current Tax Lot 2916, is planned to be built in Summer/Fall 2013. Phase 2, which includes current Tax Lot 2919 along Costa Circle East, Villebois Drive, and Orleans Avenue, is planned to be built in summer 2014.

Subsection 4.125 (.18) K. 3. PDP Approval Criteria: Parks Concurrency

A59. **Review Criterion:** "Parks within each PDP or PDP Phase shall be constructed prior to occupancy of 50% of the dwelling units in the PDP or PDP phase, unless weather or other special circumstances prohibit completion, in which case bonding for such improvements shall be permitted."
Finding: This criterion will be satisfied by Condition of Approval PDA 3.
Details of Finding: The applicant asserts and a condition of approval ensures the parks within PDP 3E will be completed prior to occupancy of 50% of the housing units or bonding will be provided if special circumstances prevent completion.

Subsection 4.125 (.18) K. 5. PDP Approval Criteria: DRB Conditions

A60. **Review Criterion:** "The Development Review Board may require modifications to the PDP, or otherwise impose such conditions as it may deem necessary to ensure conformance with the approved SAP, the Villebois Village Master Plan, and compliance with applicable requirements and standards of the Planning and Land Development Ordinance, and the standards of this section."
Finding: This criterion is satisfied.
Details of Finding: No additional conditions of approval are recommended.

Subsection 4.140 (.09) J. Planned Development Permit Review Criteria

"A planned development permit may be granted by the Development Review Board only if it is found that the development conforms to all the following criteria, as well as to the Planned Development Regulations in Section 4.140:"

Subsection 4.140 (.09) J. 1. Consistency with Comprehensive Plan and Other Plans, Ordinances

A61. **Review Criteria:** "The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council."
Finding: These criteria are satisfied.
Details of Finding: The applicant's findings demonstrate that the location, design, size, and uses proposed with the PDP are both separately and as a whole consistent with SAP Central, and thus the Villebois Village Master Plan, the City's Comprehensive Plan

designation of Residential – Village for the area, and any other applicable ordinance of which staff is aware.

Subsection 4.140 (.09) J. 2. Meeting Traffic Level of Service D

A62. **Review Criteria:** That the location, design, size and uses are such that traffic generated by the development at the most probable used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D, as defined in the Highway Capacity manual published by the National Highway Research Board, on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets. Immediately planned arterial and collector streets are those listed in the City's adopted Capital Improvement Program, for which funding has been approved or committed, and that are scheduled for completion within two years of occupancy of the development or four year if they are an associated crossing, interchange, or approach street improvement to Interstate 5.
Finding: These criteria are satisfied.
Details of Finding: The location, design, size and uses are such that traffic generated within the PDP at the most heavily used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D. The proposed uses and the circulation system are consistent with the SAP Central approval, which included an Internal Circulation Evaluation including an assessment of intersection performance by DKS Associates. A copy of the Traffic Impact Analysis is attached in Section IID of the applicant's notebook, Exhibit B1.

Subsection 4.140 (.09) J. 3. Concurrency for Other Facilities and Services

A63. **Review Criteria:** "That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services."
Finding: These criteria are satisfied.
Details of Finding: As shown in the Utility and Drainage Report, Section IIC of the applicant's notebook, Exhibit B1, and plan sheets, see Exhibit B2, adequate or immediately planned facilities and services are sufficient to serve the planned development.

Section 4.171 Protection of Natural Features & Other Resources

Subsection 4.171 (.02) General Terrain Preparation

A64. **Review Criteria:**
- "All developments shall be planned designed, constructed and maintained with maximum regard to natural terrain features and topography, especially hillside areas, floodplains, and other significant land forms.
- All grading, filling and excavating done in connection with any development shall be in accordance with the Uniform Building Code, all development shall be planned, designed, constructed and maintained so as to:
    - Limit the extent of disturbance of soils and site by grading, excavation and other land alterations.

- Avoid substantial probabilities of: (1) accelerated erosion; (2) pollution, contamination or siltation of lakes, rivers, streams and wetlands; (3) damage to vegetation; (4) injury to wildlife and fish habitats.
- Minimize the removal of trees and other native vegetation that stabilize hillsides, retain moisture, reduce erosion, siltation and nutrient runoff, and preserve the natural scenic character.

Finding: These criteria are satisfied.

Details of Finding: As stated by the applicant, "The plan sheets located in Section IIB demonstrate that the subject Preliminary Development Plan is designed with maximum regard to natural terrain features and topography. The subject PDP does not contain hillside areas or flood plains. The Grading and Erosion Control Plan shows proposed grading within the subject area and the Tree Preservation Plan shows proposed tree preservation.

All subsequent grading, filling and excavating will be done in accordance with the Uniform Building Code. Disturbance of soils and removal of trees and other native vegetation will be limited to the extent necessary to construct the proposed development. Construction will occur in a manner that avoids substantial probabilities of accelerated erosion; pollution, contamination or siltation of lakes, rivers, streams and wetlands; damage to vegetation; and injury to wildlife and fish habitats."

Subsection 4.171 (.03) Hillsides

A65. **Review Criterion:** "Hillsides: All developments proposed on slopes greater than 25% shall be limited to the extent that:"

Finding: This criterion does not apply.

Details of Finding: The subject Preliminary Development Plan does not include any areas of slopes in excess of 25%. Therefore, this standard does not apply to this application.

Subsection 4.171 (.04) Trees and Wooded Area

A66. **Review Criteria:**

- "All developments shall be planned, designed, constructed and maintained so that:
  - Existing vegetation is not disturbed, injured, or removed prior to site development and prior to an approved plan for circulation, parking and structure location.
  - Existing wooded areas, significant clumps/groves of trees and vegetation, and all trees with a diameter at breast height of six inches or greater shall be incorporated into the development plan and protected wherever feasible.
  - Existing trees are preserved within any right-of-way when such trees are suitably located, healthy, and when approved grading allows.
- Trees and woodland areas to be retained shall be protected during site preparation and construction according to City Public Works design specifications, by:
  - Avoiding disturbance of the roots by grading and/or compacting activity.
  - Providing for drainage and water and air filtration to the roots of trees which will be covered with impermeable surfaces.
  - Requiring, if necessary, the advisory expertise of a registered arborist/horticulturist both during and after site preparation.
  - Requiring, if necessary, a special maintenance, management program to insure survival of specific woodland areas of specimen trees or individual heritage status trees.

Finding: These criteria are satisfied.

Details of Finding: The Tree Preservation Plan, located in Section IIB of the applicant's notebook, Exhibit B1, depicts existing trees within the subject area and identifies trees to be retained and to be removed. This application includes a request for approval of a Type "C" Tree Removal Plan, which can be found in Section V of the applicant's notebook. See also Request F.

Only one tree exists on the subject that is part of this PDP request, which is proposed to be removed to enable alley construction. Other trees exist on Tax Lot 2919, but they are in Pocket Park 12, which was reviewed as part of PDP 3E.

Subsection 4.171 (.05) High Voltage Power Lines

A67. **Review Criteria:** "High Voltage Power line Easements and Rights of Way and Petroleum Pipeline Easements:

- Due to the restrictions placed on these lands, no residential structures shall be allowed within high voltage power line easements and rights of way and petroleum pipeline easements, and any development, particularly residential, adjacent to high voltage power line easements and rights of way and petroleum pipeline easement shall be carefully reviewed.
- Any proposed non-residential development within high voltage power line easements and rights of way and petroleum pipeline easements shall be coordinated with and approved by the Bonneville Power Administration, Portland General Electric Company or other appropriate utility, depending on the easement or right of way ownership.

Finding: These criteria do not apply.

Details of Finding: The development area and surrounding area are not around high voltage power lines.

Subsection 4.171 (.06) Safety Hazards

A68. **Review Criteria:** "

- To protect lives and property from natural or human-induced geologic or hydrologic hazards and disasters.
- To protect lives and property from damage due to soil hazards.
- To protect lives and property from forest and brush fires.
- To avoid financial loss resulting from development in hazard areas.

Finding: These criteria are satisfied.

Details of Finding: The applicant states that development of the subject area will occur in a manner that minimizes potential hazards to safety.

Subsection 4.171 (.07) Earth Movement Hazard Areas

A69. **Review Criterion:** "No development or grading shall be allowed in areas of land movement, slump or earth flow, and mud or debris flow, except under one of the following conditions."

Finding: This criterion is satisfied.

Details of Finding: No areas of land movement, slump, earth flow, or mud or debris flow have been identified in the project area.

Subsection 4.171 (.08) Standards for Soil Hazard Areas

A70. **Review Criteria:**

- "Appropriate siting and design safeguards shall insure structural stability and proper drainage of foundation and crawl space areas for development on land with any of the following soil conditions: wet or high water table; high shrink-swell capability; compressible or organic; and shallow depth-to-bedrock.
- The principal source of information for determining soil hazards is the State DOGAMI Bulletin 99 and any subsequent bulleting and accompanying maps. Approved site-specific soil studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the soil hazards database accordingly.

Finding: These criteria are satisfied.

Details of Finding: No soil hazard areas have been identified within the subject area.

Subsection 4.171 (.09) Historic Protection

A71. **Review Criteria:** This subsection establishes requirements for protection of historic resources.

Finding: This criterion is satisfied.

Details of Finding: A Historic/ Cultural Resource Inventory was previously conducted for SAP Central. No historic or cultural resource sites, objects, or areas where identified in the subject PDP.

Section 4.176 Landscaping, Screening, and Buffering

A72. **Review Criteria:** This section establishes landscape, screening, and buffering requirements for development within the City.

Finding: These criteria are satisfied.

Details of Finding: Landscaping will be provided in accordance with the standards in Section 4.176. The Street Tree/Lighting Plan depicts street trees along rights-of-way within the subject Preliminary Development Plan area. The plan has been developed in conformance with the *Community Elements Book* and the applicable standards of Section 4.176. Landscaping in the parks and linear green areas will be reviewed with Request G, Final Development Plan.

Section 4.177 Street Improvement Standards

A73. **Review Criteria:** This section establishes street improvements standards for development within the City.

Finding: These criteria are satisfied.

Details of Finding: The rights-of-way proposed within the subject PDP are shown on the plan sheets in Exhibit B2. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with the final plat. The plan sheets demonstrate that all proposed access drives (alleys) within the PDP area will have a minimum improvement width of 16 feet and will provide two-way travel. All access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by TVF&R. All access drives will be designed to provide a clear travel lane free from any obstructions. Clear vision areas will be maintained in accordance with the standards of Subsection 4.177(.01)(I). Vertical

clearance will be maintained over all streets and access drives in accordance with Subsection 4.177(.01)(J).

Section 4.178 Sidewalk and Pathway Standards

A74. **Review Criteria:**

- "Sidewalks. All sidewalks shall be concrete and a minimum of five (5) feet in width, except where the walk is adjacent to commercial storefronts. In such cases, they shall be increased to a minimum of ten (10) feet in width.
- Pathways
  - Bicycle facilities shall be provided using a bicycle lane as the preferred facility design. The other facility designs listed will only be used if the bike lane standard cannot be constructed due to physical or financial constraints. The alternative standards are listed in order of preference.
  - Bike lane. This design includes 12-foot minimum travel lanes for autos and paved shoulders, 5-6 feet wide for bikes that are striped and marked as bicycle lanes. This shall be the basic standard applied to bike lanes on all arterial and collector streets in the City, with the exception of minor residential collectors with less than 1,500 (existing or anticipated) vehicle trips per day."

Finding: These criteria are satisfied.

Details of Finding: The applicant's sheet 7.2, see Exhibit B2, depicts cross-sections of the proposed sidewalks and pathways in compliance with the above standards and Specific Area Plan Central.

REQUEST B: DB13-0014 SAP-CENTRAL REFINEMENTS

The applicant's findings in Section IIA of their notebook, Exhibit B1, specifically pages 18-23, respond to the majority of the applicable criteria.

Refinements Generally

Subsection 4.125 (.18) J. 1. Refinement Process

B1. **Review Criteria:** "In the process of reviewing a PDP for consistency with the approved Specific Area Plan, the DRB may approve refinements, but not amendments, to the SAP. Refinements to the SAP may be approved by the Development Review Board, upon the applicant's detailed graphic demonstration of compliance with the criteria set forth in Section (.18)(J)(2), below."
Finding: These criteria are satisfied.
Details of Finding: The applicant is requesting a number of refinements as listed below. The applicant has provided plan sheets showing sufficient information to demonstrate compliance with the applicable criteria. As can be seen in the Findings below the criteria set forth in Subsection 4.125 (.18) J. 2. are satisfied for each requested refinement.

Refinement Request "a":Parks, Trails,and Open Space

Subsection 4.125 (.18) J. 1. a. ii. SAP Refinements: Parks, Trails, and Open Space

B2. **Review Criteria:** "Changes to the nature or location of park type, trails, or open space that do not significantly reduce function, usability, connectivity, or overall distribution or availability of these uses in the Preliminary Development Plan."
Finding: These criteria are satisfied.
Details of Finding: As stated by the applicant. "The Villebois Village Master Plan and SAP Central do not show any parks, linear greens, open space or pathways within the proposed PDP area. Several new linear greens are added to this area with the proposed design for PDP 4C. The additional linear greens add park areas to the PDP and are dispersed throughout the PDP distributing greenspace to every block within PDP 4C. The proposed refinement, addition of new linear greens, increases the usable park space within the PDP and achieves greater distribution of parks among all of the blocks in PDP 4C. The proposed refinement does not significantly reduce function, usability, connectivity, or overall distribution or availability of parks, trails or open space. The proposed refinement actually increases all of these factors."

Subsection 4.125 (.18) J. 1. b. i. Defining "Significant" for SAP Refinements: Quantifiable

B3. **Review Criteria:** "As used herein, "significant" means: More than ten percent of any quantifiable matter, requirement, or performance measure, as specified in (.18)(J)(1)(a), above,"
Finding: These criteria are satisfied.
Details of Finding: The performance measures, etc. being measured for the purpose of this refinement are the reduction of function, usability, connectivity, or overall distribution or availability of park uses in the Preliminary Development Plan. Park amenities are being added, creating no reduction in any measurable aspect of the parks.

Subsection 4.125 (.18) J. 1. b. ii. Defining "Significant" for SAP Refinements: Qualitative

B4. **Review Criteria:** "As used herein, "significant" means: That which negatively affects an important, qualitative feature of the subject, as specified in (.18)(J)(1)(a), above."
Finding: These criteria are satisfied.
Details of Finding: This subsection does not provide clear definition of what an important qualitative feature might be. Absent details in this subsection, staff interprets the primary qualitative factors to consider to be the three guiding design principles of the Villebois Village Master Plan: Connectivity, Diversity, and Sustainability. The three guiding design principles are further defined by the goals, policies, and implementation measures of the Master Plan. By virtue of better or equally implementing the goals, policies, and implementation measures of the Villebois Village Master Plan, as described in Finding B5 below, the proposed refinements do not negatively affect qualitative park features.

Subsection 4.125 (.18) J. 2. a. SAP Refinement Review Criteria: Better or Equally Implementing Villebois Village Master Plan

B5. **Review Criterion:** "The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan."
Finding: These criteria are satisfied.
Details of Finding: No park amenities are shown for the PDP area in the Master Plan. Note the portion of Pocket Park 12 on Tax Lot 2919 was approved as part of PDP 3E. The addition these linear greens does not negatively impact the policies, goals, and implementation measures related to parks in the Villebois Village Master Plan.

Subsection 4.125 (.18) J. 2. b. SAP Refinement Review Criteria: Impact on Natural and Scenic Resources

B6. **Review Criterion:** "The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area"
Finding: These criteria are satisfied.
Details of Finding: The proposed refinements add green space and does not impact any identified environmental or scenic resources.

Subsection 4.125 (.18) J. 2. c. SAP Refinement Review Criteria: Effect on Subsequent PDP's and SAP's

B7. **Review Criterion:** "The refinement will not preclude an adjoining or subsequent PDP or SAP areas from development consistent with the approved SAP or the Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The proposed park refinements do not preclude an adjoining or subsequent PDP or SAP area from developing consistent with the approved SAP or Master Plan.

Refinement Request "b": Location and Mix of Land Uses

Subsection 4.125 (.18) J. 1. a. iv. SAP Refinements: Location and Mix of Land Uses

B8. **Review Criteria:** "Changes to the location or mix of land uses that do not significantly alter the overall distribution or availability of uses in the Preliminary Development Plan. For purposes of this subsection, "land uses" or "uses" are defined in the aggregate, with specialty condos, mixed use condos, urban apartments, condos, village apartments, neighborhood apartments, row houses and small detached uses comprising a land use group and medium detached, standard detached, large and estate uses comprising another."
Finding: These criteria are satisfied.
Details of Finding: The changes to the location and mix of land uses are illustrated in the following table.

Description of Block (bounded by:)	SAP Plan	Proposed PDP Plan
SW Mont Blanc St. SW Costa Circle East SW Villebois Dr. N. SW Orleans Loop	10-18 Attached Row Houses 8-10 Small Detached 18-28 Total	4 Attached Row Houses 9 Small Cottage Detached 8 Small Detached 21 Total
SW Orleans Loop Hilltop Park SW Costa Circle West	20-21 Attached Row Houses	25 Attached Row Houses
SW Costa Circle West Future multi-family development tract SW Geneva Loop SW Dundee Lane	6-10 Attached Row Houses	11 Attached Row Houses

Subsection 4.125 (.18) J. 1. b. i. Defining "Significant" for SAP Refinements: Quantifiable

B9. **Review Criteria:** "As used herein, "significant" means: More than ten percent of any quantifiable matter, requirement, or performance measure, as specified in (.18)(J)(1)(a), above,"
Finding: These criteria are satisfied.
Details of Finding: For the purpose of this refinement the quantifiable requirement is the number of lots/units under an aggregated land use category on the SAP level. The first land use category includes small detached, and all attached housing types including row houses. Staff notes the small cottage also is interpreted to fall into this aggregated category. The second land use category includes medium and larger single-family unit types. No units of the second land use category are planned in SAP Central. The table below shows the proposed changes affect the SAP Central Land Use Mix. Proposed is a 0.4 percent increase in the number of units in aggregate category 1, which is well below the ten percent threshold.

	Current SAP C Approved Unit Count	Proposed SAP C Unit Count	% Change
First Land Use Category (Small, Small Cottage, and Attached)	1007	1011	0.4%

Subsection 4.125 (.18) J. 1. b. ii. Defining "Significant" for SAP Refinements: Qualitative

B10. **Review Criteria:** "As used herein, "significant" means: That which negatively affects an important, qualitative feature of the subject, as specified in (.18)(J)(1)(a), above."
Finding: These criteria are satisfied.
Details of Finding: This subsection does not provide clear definition of what an important qualitative feature might be. Absent details in this subsection, staff interprets the primary qualitative factors to consider being the three guiding design principles of the Villebois Village Master Plan: Connectivity, Diversity, and Sustainability. The three guiding design principles are further defined by the goals, policies, and implementation measures of the Master Plan. By virtue of better or equally implementing the goals, policies, and implementation measures of the Villebois Village Master Plan, as described in Finding B11 below, the proposed refinements do not negatively affect qualitative features of the street network.

Subsection 4.125 (.18) J. 2. a. SAP Refinement Review Criteria: Better or Equally Implementing Villebois Village Master Plan

B11. **Review Criterion:** "The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The following are the relevant goals and policies from the Villebois Village Master Plan followed by discussion of how the refinements better or equally meet them:

Land Use Policy 1: The Villebois Village shall be a complete community with a wide range of living choices, transportation choices, and working and shopping choices. Housing shall be provided in a mix of types and densities resulting in a minimum of 2,300 dwelling units within the Villebois Village Master Plan area.

Land Use Policy 2: Future development applications within the Villebois Village area shall provide land uses and other major components of the Plan such as roadways and parks and open space in general compliance with their configuration as illustrated on Figure 1 – Land Use Plan or as refined by Specific Area Plans.

Residential Neighborhood Housing Goal: The Villebois Village shall provide neighborhoods consisting of a mix of homes for sale, apartments for rent, row homes, and single-family homes on a variety of lot sizes, as well as providing housing for individuals with special needs. The Villebois Village shall provide housing choices for people of a wide range of economic levels and stages of life through diversity in product type.

Residential Neighborhood Housing Policy 1: Each of the Villebois Village's neighborhoods shall include a wide variety of housing options and shall provide home ownership options ranging from affordable housing to estate lots.

Residential Neighborhood Housing Policy 5: The Villebois Village shall provide a mix of housing types within each neighborhood and on each street to the greatest extent practicable.
Residential Neighborhood Housing Policy 10: Natural features shall be incorporated into the design of each neighborhood to maximize their aesthetic character while minimizing impacts to said natural features.

As stated by the applicant "In summary, the proposed refinements will better integrate green spaces throughout the PDP and expand the range of housing options in the subject area. As the proposed refinements will not compromise the project's ability to comply with all other Goals, Policies and Implementation Measures of the Villebois Village Master Plan, they will equally meet all other Goals, Policies and Implementation Measures of the Villebois Village Master Plan." See the applicant's more detailed response on pages 21-22 of their compliance report in Section IIA of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) J. 2. b. SAP Refinement Review Criteria: Impact on Natural and Scenic Resources

B12. **Review Criterion:** "The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area"
Finding: These criteria are satisfied.
Details of Finding: No natural or scenic resources have been inventoried that would be impacted by the requested refinement.

Subsection 4.125 (.18) J. 2. c. SAP Refinement Review Criteria: Effect on Subsequent PDP's and SAP's

B13. **Review Criterion:** "The refinement will not preclude an adjoining or subsequent PDP or SAP areas from development consistent with the approved SAP or the Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The proposed refinements will not preclude any other SAP's or PDP's from developing consistent with the approved SAP or the Master Plan.

Refinement Request "c": Density

Subsection 4.125 (.18) J. 1. a. v. SAP Refinements: Density

B14. **Review Criteria:** "A change in density that does not exceed ten percent, provided such density change has not already been approved as a refinement to the underlying SAP or PDP, and does not result in fewer than 2,300 dwelling units in the Village."
Finding: These criteria are satisfied.
Details of Finding: The proposed PDP, as proposed, would result in a density increase (change in the number of overall units) in the SAP of 0.4 percent, which is well below the ten percent (10%) allowance. The small increase will not lead to fewer than 2300 dwelling units in the Villebois Village.

Subsection 4.125 (.18) J. 2. a. SAP Refinement Review Criteria: Better or Equally Implementing Villebois Village Master Plan

B15. **Review Criteria:** "The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The following is policy from the Villebois Village Master Plan followed by discussion of how the refinements better or equally meet it:

Residential Neighborhood Housing Policy 3: The mix of housing shall be such that the Village development provides an overall average density of at least 10 dwelling units per net residential acre.

The change of density is small increase and continues to meet the density requirement for the Village Zone.

Subsection 4.125 (.18) J. 2. b. SAP Refinement Review Criteria: Impact on Natural and Scenic Resources

B16. **Review Criterion:** "The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area"
Finding: This criterion is satisfied.
Details of Finding: No natural or scenic resources have been inventoried that would be impacted by the requested refinement.

Subsection 4.125 (.18) J. 2. c. SAP Refinement Review Criteria: Effect on Subsequent PDP's and SAP's

B17. **Review Criterion:** "The refinement will not preclude an adjoining or subsequent PDP or SAP areas from development consistent with the approved SAP or the Master Plan."
Finding: This criterion is satisfied.
Details of Finding: The proposed minor change in density does not affect any adjoining PDP's or SAP's.

REQUEST C: DB13-0015 SAP-CENTRAL AMENDMENTS

The applicant's findings in Section IIA (page 23) and Section VIIA of their notebook, Exhibit B7, respond to the majority of the applicable criteria.

Amendment Request "a": SAP Phasing

Subsection 4.125 (.18) J. 4. SAP Phasing Amendment to be Processed as Class II Review

C1. **Review Criteria:** "Amendments to the SAP for phasing will be processed as a Class II administrative review proposal."
Finding: These criteria are satisfied.
Details of Finding: While the SAP Phasing Amendment is eligible to be processed as a Class II Review, the Planning Director is allowing it to be reviewed by the DRB as a component of the broader application for PDP 4 Central, as authorized by Section 4.030.

Subsection 4.125 (.18) E. 1. b. ii. SAP Phasing Reasonable

C2. **Review Criterion:** "If the SAP is to be phased, as enabled by Sections 4.125(.18)(D)(2)(g) and (h), that the phasing sequence is reasonable."
Finding: This criterion is satisfied.
Details of Finding: The SAP Central phasing is being realigned based on current property ownership. As a practical matter, development requests are coming in as developers purchase different properties. The areas of SAP Central outside of the Village Center are adjacent to and connected to other Polygon Developments including PDP 3E, PDP 6S, and PDP 2N. The development on these portions of SAP Central in connection with these neighboring Polygon developments is reasonable.

Amendment Request "b": Pattern Book Amendment

Subsection 4.125 (.18) J. 3. SAP Amendment Process

C3. **Review Criteria:** "Amendments to the SAP, not including SAP amendments for phasing, must follow the same procedures applicable to adoption of the SAP itself. Amendments are defined as changes to elements of the SAP not constituting a refinement."
Finding: These criteria are satisfied.
Details of Finding: The proposed changes to the pattern book are not among the changes listed as eligible for refinements. The amendments to the pattern book are thus being processed following the same procedures applicable to the adoption of the SAP itself.

Subsection 4.125 (.18) C. 1. SAP and Villebois Village Master Plan

C4. **Review Criteria:** "Purpose – A SAP is intended to advance the design of the Villebois Village Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The applicant proposes making pattern book changes related to the Small Cottage Detached product, that have previously been found to advance the design of

the Villebois Village Master Plan by being approved for inclusion in the pattern books for SAP North, East, and South.

Subsection 4.125 (.18) C. 2. SAP Application Procedures

C5. **Review Criteria:** "If not initiated by the City Council, Planning Commission or Development Review Board, an application for SAP approval shall be submitted by the Master Planner, or by landowners pursuant to subsection C.3 below. The application shall be accompanied by payment of a fee established in accordance with the City's fee schedule."
Finding: These criteria are satisfied.
Details of Finding: Due to lack of clarity of who currently is the Master Planner, it is not practical for the Master Planner to submit the application. All effected property is under the ownership of Polygon at Villebois III LLC, the property owner who has authorized the application.

Subsection 4.125 (.18) D. 3. Architectural Pattern Book Submission Requirements

C6. **Review Criteria:** This subsection lists the submission requirements for Architectural Pattern Book.
Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDC 2.
Details of Finding: Condition of Approval PDC 2 requires the applicant submit bound copies of the updated pattern books after final approval by the City.

Subsection 4.125 (.18) D. 8. SAP Narrative Statement

C7. **Review Criteria:** A narrative statement shall be submitted, addressing the following: "Includes a description of the goals and objectives of the Villebois Village Master Plan and the Design Principles of the V-Zone, and how they will be met for the specified land use area."
Finding: These criteria are satisfied.
Details of Finding: Similar amendments to other Villebois Pattern Books have previously been found to be supportive of the goals and objectives of the Villebois Village Master Plan. The applicant has provided additional analysis of the amendment's support of the goals and objectives on pages 2-5 of Section VIIA of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) E. 1. b. i. SAP Approval Criteria: Consistent with Standards of Section 4.125

C8. **Review Criteria:** "Is consistent with the standards identified in this section."
Finding: These criteria are satisfied.
Details of Finding: Similar amendments to other Villebois Pattern Books have previously been found to be consistent with the standards of Section 4.125. The applicant has provided additional analysis of the amendments' consistency with the standards of pages 5-9 of the Section VIIA of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) E. 1. b. i. SAP Approval Criteria: Complies with Development Code Standards

C9. **Review Criteria:** "Complies with the applicable standards of the Planning and Land Development Ordinance."

Finding: These criteria are satisfied.
Details of Finding: Similar amendments to other Villebois Pattern Books, including SAP South, East, and North, have previously been found to comply with the standards of the development code.

Subsection 4.125 (.18) E. 1. b. i. SAP Approval Criteria: Consistent with Master Plan

C10. **Review Criteria:** "Is consistent with the Villebois Village Master Plan. Those elements of the Village Master Plan with which the SAP must be consistent are the Plan's Goals, Policies, and Implementation Measures, and, except as the text otherwise provides, Figures 1, 5, 6A, 7, 8, 9A, and 9B."
Finding: These criteria are satisfied.
Details of Finding: Similar amendments to other Villebois Pattern Books have previously been found to be supportive of the goals and objectives of the Villebois Village Master Plan. The applicant has provided additional analysis of the amendments support of the goals and objectives on pages 2-5 of Section VIIA of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) E. 1. b. iii. SAP Approval Criteria: DRB Modifications and Conditions

C11. **Review Criteria:** "The Development Review Board may require modifications to the SAP, or otherwise impose such conditions, as it may deem necessary to ensure conformance with the Villebois Village Master Plan, and compliance with applicable requirements and standards of the Planning and Land Development Ordinance, and the standards of this section."
Finding: These criteria are satisfied.
Details of Finding: No additional modifications or conditions are recommended.

REQUEST D: DB13-0016 ZONE MAP AMENDMENT

The applicant's findings in Section IVA of their notebook, Exhibit B1, respond to the majority of the applicable criteria.

Comprehensive Plan

Compact Urban Development-Implementation Measures

Implementation Measure 4.1.6.a

D1. **Review Criteria:** "Development in the "Residential-Village" Map area shall be directed by the Villebois Village Concept Plan (depicting the general character of proposed land uses, transportation, natural resources, public facilities, and infrastructure strategies), and subject to relevant Policies and Implementation Measures in the Comprehensive Plan; and implemented in accordance with the Villebois Village Master Plan, the "Village" Zone District, and any other provisions of the Wilsonville Planning and Land Development Ordinance that may be applicable."
Finding: These criteria are satisfied.
Details of Finding: The subject area is within SAP-Central, which was previously approved as part of case file DB06-0005 et. seq. and found to be in accordance with the Villebois Village Master Plan and the Wilsonville Planning and Land Development Ordinance.

Implementation Measure 4.1.6.b.

D2. **Review Criteria:** This implementation measure identifies the elements the Villebois Village Master Plan must contain.
Finding: These criteria are not applicable
Details of Finding: The current proposal is for a preliminary development plan implementing the procedures as outlined by the Villebois Village Master Plan, as previously approved.

Implementation Measure 4.1.6.c.

D3. **Review Criterion:** "The "Village" Zone District shall be applied in all areas that carry the Residential-Village Plan Map Designation."
Finding: This criterion is satisfied.
Details of Finding: The Village Zone zoning district is being applied to an area designated as Residential-Village in the Comprehensive Plan.

Implementation Measure 4.1.6.d.

D4. **Review Criterion:** "The "Village" Zone District shall allow a wide range of uses that befit and support an "urban village," including conversion of existing structures in the core area to provide flexibility for changing needs of service, institutional, governmental and employment uses."
Finding: This criterion is satisfied.
Details of Finding: The area covered by the proposed zone change is proposed for residential uses, parks, and open space as shown in the Villebois Village Master Plan.

Planning and Land Development Ordinance

Section 4.029 Zoning to be Consistent with Comprehensive Plan

D5. **Review Criterion:** "If a development, other than a short-term temporary use, is proposed on a parcel or lot which is not zoned in accordance with the Comprehensive Plan, the applicant must receive approval of a zone change prior to, or concurrently with the approval of an application for a Planned Development."
Finding: This criterion is satisfied.
Details of Finding: The applicant is applying for a zone change concurrently with other land use applications for the development as required by this section.

Subsection 4.110 (.01) Base Zones

D6. **Review Criterion:** This subsection identifies the base zones established for the City, including the Village Zone.
Finding: This criterion is satisfied.
Details of Finding: The requested zoning designation of Village "V" is among the base zones identified in this subsection.

Subsection 4.125 (.01) Village Zone Purpose

D7. **Review Criteria:** "The Village (V) zone is applied to lands within the Residential Village Comprehensive Plan Map designation. The Village zone is the principal implementing tool for the Residential Village Comprehensive Plan designation. It is applied in accordance with the Villebois Village Master Plan and the Residential Village Comprehensive Plan Map designation as described in the Comprehensive Plan."
Finding: These criteria are satisfied.
Details of Finding: The subject lands are designated Residential-Village on the Comprehensive Plan map and are within the Villebois Village Master Plan area and the zoning designation thus being applied is the Village "V".

Subsection 4.125 (.02) Village Zone Permitted Uses

D8. **Review Criteria:** This subsection lists the uses permitted in the Village Zone.
Finding: These criteria are satisfied.
Details of Finding: The proposed residential and park uses are consistent with the Village Zone designation and Villebois Village Master Plan.

Subsection 4.125 (.18) B. 2. Zone Change Concurrent with PDP Approval

D9. **Review Criterion:** "… Application for a zone change shall be made concurrently with an application for PDP approval…"
Finding: This criterion is satisfied.
Details of Finding: A zone map amendment is being requested concurrently with a request for PDP approval. See Request. A.

Subsection 4.197 (.02) Zone Change Review

Subsection 4.197 (.02) A. Zone Change Procedures

D10. **Review Criteria:** "That the application before the Commission or Board was submitted in accordance with the procedures set forth in Section 4.008, Section 4.125(.18)(B)(2), or, in the case of a Planned Development, Section 4.140;"
Finding: These criteria are satisfied.
Details of Finding: The request for a zone map amendment has been submitted as set forth in the applicable code sections.

Subsection 4.197 (.02) B. Zone Change: Conformance with Comprehensive Plan Map, etc.

D11. **Review Criteria:** "That the proposed amendment is consistent with the Comprehensive Plan map designation and substantially complies with the applicable goals, policies and objectives, set forth in the Comprehensive Plan text;"
Finding: These criteria are satisfied.
Details of Finding: The proposed zone map amendment is consistent with the Comprehensive Map designation of Residential-Village and as shown in Findings D1 through D4 substantially comply with applicable Comprehensive Plan text.

Subsection 4.197 (.02) C. Zone Change: Specific Findings Regarding Residential Designated Lands

D12. **Review Criteria:** "In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with Implementation Measure 4.1.4.b, d, e, q, and x of Wilsonville's Comprehensive Plan text;"
Finding: These criteria are satisfied.
Details of Finding: Implementation Measure 4.1.6.c. states the "Village" Zone District shall be applied in all areas that carry the Residential-Village Plan Map Designation. Since the Village Zone must be applied to areas designated "Residential Village" on the Comprehensive Plan Map and is the only zone that may be applied to these areas, its application is consistent with the Comprehensive Plan.

Subsection 4.197 (.02) D. Zone Change: Public Facility Concurrency

D13. **Review Criteria:** "That the existing primary public facilities, i.e., roads and sidewalks, water, sewer and storm sewer are available and are of adequate size to serve the proposed development; or, that adequate facilities can be provided in conjunction with project development. The Planning Commission and Development Review Board shall utilize any and all means to insure that all primary facilities are available and are adequately sized."
Finding: These criteria are satisfied.
Details of Finding: The Preliminary Development Plan compliance report and the plan sheets demonstrate that the existing primary public facilities are available or can be provided in conjunction with the project. Section IIC of the applicant's notebook, Exhibit B1, includes supporting utility and drainage reports. In addition, the applicant has provided a Traffic Impact Analysis, which is in Section IID of the applicant's notebook, Exhibit B1.

Subsection 4.197 (.02) E. Zone Change: Impact on SROZ Areas

D14. **Review Criteria:** "That the proposed development does not have a significant adverse effect upon Significant Resource Overlay Zone areas, an identified natural hazard, or an identified geologic hazard. When Significant Resource Overlay Zone areas or natural hazard, and/ or geologic hazard are located on or about the proposed development, the Planning Commission or Development Review Board shall use appropriate measures to mitigate and significantly reduce conflicts between the development and identified hazard or Significant Resource Overlay Zone;"
Finding: These criteria are satisfied.
Details of Finding: The subject property does not involve land in the SROZ or contain any inventoried hazards identified by this subsection.

Subsection 4.197 (.02) F. Zone Change: Development within 2 Years

D15. **Review Criterion:** "That the applicant is committed to a development schedule demonstrating that the development of the property is reasonably expected to commence within two (2) years of the initial approval of the zone change."
Finding: This criterion is satisfied.
Details of Finding: The applicant has provided information stating they reasonably expect to commence development within two (2) years of the approval of the zone change. However, in the scenario where the applicant or their successors due not commence development within two (2) years allow related land use approvals to expire, the zone change shall remain in effect.

Subsection 4.197 (.02) G. Zone Change: Development Standards and Conditions of Approval

D16. **Review Criteria:** "That the proposed development and use(s) can be developed in compliance with the applicable development standards or appropriate conditions are attached to insure that the project development substantially conforms to the applicable development standards."
Finding: These criteria are satisfied.
Details of Finding: As can be found in the findings for the accompanying requests, the applicable development standards will be met either as proposed or as a condition of approval.

REQUEST E: DB13-0017 TENTATIVE SUBDIVISION PLAT

The applicant's findings in Section IIIA of their notebook, Exhibit B7, respond to the majority of the applicable criteria.

Subsection 4.125 (.02) Permitted Uses in the Village Zone

E1. **Review Criteria:** This subsection lists the permitted uses in the Village Zone.
Finding: These criteria are satisfied.
Details of Finding: The proposed subdivision is for uses including single family homes and row houses and parks permitted in the Village Zone.

Subsection 4.125 (.05) Development Standards Applying to All Development in Village Zone

Subsection 4.125 (.05) A. Block, Alley, Pedestrian, and Bicycle Standards

E2. **Review Criteria:** This subsection lists the block, alley, pedestrian, and bicycle standards applicable in the Village Zone.
Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows blocks, alleys, pedestrian, and bicycle paths consistent with this subsection and the proposed PDP.

Subsection 4.125 (.05) B. Access Standards

E3. **Review Criterion:** "All lots with access to a public street, and an alley, shall take vehicular access from the alley to a garage or parking area, except as determined by the City Engineer."
Finding: This criterion will be satisfied by Condition of Approval PDE 5.
Details of Finding: Condition of Approval PDE 5 requires a non-access reservation strip on the street side of lots with street access helping to ensure this criterion is met.

Table V-1: Development Standards in the Village Zone

E4. **Review Criteria:** This table shows the development standards, including setback for different uses in the Village Zone. See full table under Finding A4.
Finding: These criteria are satisfied.
Details of Finding: As been consistently interpreted for PDP approvals in Villebois, lot dimensions in the Architectural Pattern Book can govern such things as lot width and size even when it is not consistent with the table. The proposed lots facilitate the construction of houses that meet relevant standards of the table.

Subsection 4.125 (.07) Off-Street Parking, Loading and Bicycle Parking

E5. **Review Criteria:** "Except as required by Subsections (A) through (D), below, the requirements of Section 4.155 shall apply within the Village zone."
Finding: These criteria are satisfied.
Details of Finding: Nothing concerning the tentative subdivision would prevent the required parking from being built.

Subsection 4.125 (.08) Open Space Requirements

E6. **Review Criteria:** This subsection establishes the open space requirements for the Village Zone.
Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDE 3.
Details of Finding: The tentative subdivision plat shows open space consistent with the requirements of the Village Zone and the proposed PDP. Consistent with the requirements of (.08) C. A condition of approval requires the City Attorney to review and approve pertinent bylaws, covenants, or agreements prior to recordation and that a public access easement is granted across their entirety.

Subsection 4.125 (.09) A. 1. Street and Improvement Standards: General Provisions

E7. **Review Criteria:** "Except as noted below, the provisions of Section 4.177 shall apply within the Village zone:

- General Provisions:
  - All street alignment and access improvements shall conform to Figures 7, 8, 9A, and 9B of the Villebois Village Master Plan, or as refined in an approved Specific Area Plan, Preliminary Development Plan, or Final Development Plan, and the following standards:
  - All street improvements shall conform to the Public Works Standards and the Transportation Systems Plan, and shall provide for the continuation of streets through proposed developments to adjoining properties or subdivisions, according to the Master Plan.
  - All streets shall be developed according to the Master Plan."

Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows street alignments, improvements, and access improvements consistent with the approved PDP found to be consistent with the Master Plan and Transportation Systems Plan.

Subsection 4.125 (.09) A. 2. Street and Improvement Standards: Intersection of Streets

E8. **Review Criteria:** "Intersections of streets:

- Angles: Streets shall intersect one another at angles not less than 90 degrees, unless existing development or topography makes it impractical.
- Intersections: If the intersection cannot be designed to form a right angle, then the right-of-way and paving within the acute angle shall have a minimum of a thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than ninety 90 degrees shall require approval by the City Engineer after consultation with the Fire District.
- Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections shall be separated by at least:
  - 1000 ft. for major arterials
  - 600 ft. for minor arterials
  - 100 ft. for major collector
  - 50 ft. for minor collector
- Curb Extensions:
  - Curb extensions at intersections shall be shown on the Specific Area Plans required in Subsection 4.125(.18)(C) through (F), below, and shall:
    - Not obstruct bicycle lanes on collector streets.

- Provide a minimum 20 foot wide clear distance between curb extensions at all local residential street intersections, meet minimum turning radius requirements of the Public Works Standards, and shall facilitate fire truck turning movements as required by the Fire District."

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows street intersections as proposed in the proposed PDP consistent with these standards.

Subsection 4.125 (.09) A. 3. Street and Improvement Standards: Street Grades

E9. **Review Criteria:** "Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate, grades in excess of 8%, but not more than 12%, may be permitted for short distances, as approved by the City Engineer, where topographic conditions or existing improvements warrant modification of these standards."

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows streets found to meet these standards under Request A.

Subsection 4.125 (.09) A. 4. Street and Improvement Standards: Centerline Radius Street Curves

E10. **Review Criteria:** "The minimum centerline radius street curves shall be as follows:

- Arterial streets: 600 feet, but may be reduced to 400 feet in commercial areas, as approved by the City Engineer.
- Collector streets: 600 feet, but may be reduced to conform with the Public Works Standards, as approved by the City Engineer.
- Local streets: 75 feet"

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows streets found to meet these standards under Request A.

Subsections 4.125 (.09) A. 5. and 4.177 (.01) C. Street and Improvement Standards: Rights-of-way

E11. **Review Criteria:**

- "Prior to issuance of a Certificate of Occupancy Building permits or as a part of the recordation of a final plat, the City shall require dedication of rights-of-way in accordance with the Street System Master Transportation Systems Plan. All dedications shall be recorded with the County Assessor's Office.
- The City shall also require a waiver of remonstrance against formation of a local improvement district, and all non-remonstrances shall be recorded in the County Recorder's Office as well as the City's Lien Docket, prior to issuance of a Certificate of Occupancy Building Permit or as a part of the recordation of a final plat.
- In order to allow for potential future widening, a special setback requirement shall be maintained adjacent to all arterial streets. The minimum setback shall be 55 feet from the centerline or 25 feet from the right-of-way designated on the Master Plan, whichever is greater."

Finding: These criteria are satisfied.

Details of Finding: As stated by the applicant, "rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with recordation of a final plat in accordance with Section 4.177."

Subsections 4.125 (.09) A. 6.and 4.177 (.01) E. Street and Improvement Standards: Access Drives

E12. **Review Criteria:**

- Access drives are required to be 16 feet for two-way traffic.
- An access drive to any proposed development shall be designed to provide a clear travel lane free from any obstructions.
- Access drive travel lanes shall be constructed with a hard surface capable of carrying a 23-ton load.
- Secondary or emergency access lanes may be improved to a minimum 12 feet with an all-weather surface as approved by the Fire District. All fire lanes shall be dedicated easements.
- Minimum access requirements shall be adjusted commensurate with the intended function of the site based on vehicle types and traffic generation.
- Where access drives connect to the public right-of-way, construction within the right-of-way shall be in conformance to the Public Works Standards.

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows alleys of sufficient width to meet the width standards. The applicant states easements for fire access will be dedicated as required.

Subsections 4.125 (.09) A. 7. and 4.177 (.01) F. Street and Improvement Standards: Clear Vision Areas

E13. **Review Criteria:** "A clear vision area which meets the Public Works Standards shall be maintained on each corner of property at the intersection of any two streets, a street and a railroad or a street and a driveway. However, the following items shall be exempt from meeting this requirement:" Listed 1. a.-f.

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows streets found to meet these standards under Request A.

Subsections 4.125 (.09) A. 8.and 4.177 (.01) G. Street and Improvement Standards: Vertical Clearance

E14. **Review Criterion:** "a minimum clearance of 12 feet above the pavement surface shall be maintained over all streets and access drives."

Finding: This criterion is satisfied.

Details of Finding: Nothing shown on the tentative subdivision plat would preclude the required clearance from being provided.

Subsections 4.125 (.09) A. 9.and 4.177 (.01) H. Street and Improvement Standards: Interim Improvement Standards

E15. **Review Criteria:** "It is anticipated that all existing streets, except those in new subdivisions, will require complete reconstruction to support urban level traffic volumes. However, in most cases, existing and short-term projected traffic volumes do not warrant improvements to full Master Plan standards. Therefore, unless otherwise specified by the Planning Commission, the following interim standards shall apply.

- Arterials - 24 foot paved, with standard sub-base. Asphalt overlays are generally considered unacceptable, but may be considered as an interim improvement based on the recommendations of the City Engineer, regarding adequate structural quality to support an overlay.
- Half-streets are generally considered unacceptable. However, where the Development Review Board finds it essential to allow for reasonable development, a half-street may be approved. Whenever a half-street improvement is approved, it shall conform to the requirements in the Public Works Standards:
- When considered appropriate in conjunction with other anticipated or scheduled street improvements, the City Engineer may approve street improvements with a single asphalt lift. However, adequate provision must be made for interim storm drainage, pavement transitions at seams and the scheduling of the second lift through the Capital Improvements Plan.

Finding: These criteria are satisfied.

Details of Finding: The area covered by the tentative subdivision plat does not include any interim improvements. Condition of Approval PDA 2 requires timing of the development of current Tax Lot 2919 with certain improvements approved with PDP 3 East in order to avoid the need for interim improvements.

Subsection 4.202 (.01) through (.03) Plats Reviewed by Planning Director or DRB

E16. **Review Criteria:** "Pursuant to ORS Chapter 92, plans and plats must be approved by the Planning Director or Development Review Board (Board), as specified in Sections 4.030 and 4.031, before a plat for any land division may be filed in the county recording office for any land within the boundaries of the City, except that the Planning Director shall have authority to approve a final plat that is found to be substantially consistent with the tentative plat approved by the Board.

The Development Review Board and Planning Director shall be given all the powers and duties with respect to procedures and action on tentative and final plans, plats and maps of land divisions specified in Oregon Revised Statutes and by this Code.

Approval by the Development Review Board or Planning Director of divisions of land within the boundaries of the City, other than statutory subdivisions, is hereby required by virtue of the authority granted to the City in ORS 92."

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat is being reviewed by the Development Review Board according to this subsection. The final plat will be reviewed by the Planning Division under the authority of the Planning Director to ensure compliance with the DRB review of the tentative subdivision plat.

Subsection 4.202 (.04) A. Lots must be Legally Created for Issuing Development Permit

E17. **Review Criterion:** "No person shall sell any lot or parcel in any condominium, subdivision, or land partition until a final condominium, subdivision or partition plat has been approved by the Planning Director as set forth in this Code and properly recorded with the appropriate county."
Finding: This criterion is satisfied.
Details of Finding: It is understood that no lots or parcels will be sold until the final plat has been approved by the Planning Director and recorded.

Subsection 4.202 (.04) B. Prohibition of Creating Undersized Lots

E18. **Review Criterion:** "It shall be a violation of this Code to divide a tract of land into a parcel smaller than the lot size required in the Zoning Sections of this Code unless specifically approved by the Development Review Board or City Council. No conveyance of any portion of a lot, for other than a public use, shall leave a structure on the remainder of the lot with less than the minimum lot size, width, depth, frontage, yard or setback requirements, unless specifically authorized through the Variance procedures of Section 4.196 or the waiver provisions of the Planned Development procedures of Section 4.118."
Finding: This criterion is satisfied.
Details of Finding: No lots will be divided into a size smaller than allowed by the proposed Village "V" zoning designation.

Subsection 4.210 (.01) Pre-Application Conference

E19. **Review Criterion:** "Prior to submission of a tentative condominium, partition, or subdivision plat, a person proposing to divide land in the City shall contact the Planning Department to arrange a pre-application conference as set forth in Section 4.010."
Finding: This criterion is satisfied.
Details of Finding: A pre-application meeting was held March 28, 2013. See case file PA13-0006.

Subsection 4.210 (.01) A. Preparation of Tentative Plat

E20. **Review Criterion:** "The applicant shall cause to be prepared a tentative plat, together with improvement plans and other supplementary material as specified in this Section. The Tentative Plat shall be prepared by an Oregon licensed professional land surveyor or engineer. An affidavit of the services of such surveyor or engineer shall be furnished as part of the submittal."
Finding: This criterion is satisfied.
Details of Finding: The applicant's sheets 4.1 and 4.2 of their plan set, Exhibit B2, is a tentative subdivision plat prepared in accordance with this subsection.

Subsection 4.210 (.01) B. Tentative Plat Submission

E21. **Review Criteria:** "The design and layout of this plan plat shall meet the guidelines and requirements set forth in this Code. The Tentative Plat shall be submitted to the Planning Department with the following information:" Listed 1. through 26.
Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat has been submitted with the required information.

Subsection 4.210 (.01) D. Land Division Phases to Be Shown

E22. **Review Criteria:** "Where the applicant intends to develop the land in phases, the schedule of such phasing shall be presented for review at the time of the tentative plat. In acting on an application for tentative plat approval, the Planning Director or Development Review Board may set time limits for the completion of the phasing schedule which, if not met, shall result in an expiration of the tentative plat approval."
Finding: These criteria are satisfied.
Details of Finding: Phasing is shown in section IE of the applicant's notebook, Exhibit B1 and the applicant's Reference Diagrams, Exhibits B4 and B5.

Subsection 4.210 (.01) E. Remainder Tracts

E23. **Review Criteria:** "Remainder tracts to be shown as lots or parcels. Tentative plats shall clearly show all affected property as part of the application for land division. All remainder tracts, regardless of size, shall be shown and counted among the parcels or lots of the division."
Finding: These criteria are satisfied.
Details of Finding: All affected property has been incorporated into the tentative subdivision plat.

Subsection 4.236 (.01) Conformity to the Master Plan or Map

E24. **Review Criteria:** "Land divisions shall conform to and be in harmony with the Transportation Master Plan (Transportation Systems Plan), the Bicycle and Pedestrian Master Plan, the Parks and Recreation Master Plan, the Official Plan or Map and especially to the Master Street Plan."
Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat is consistent with applicable plans including the Transportation Systems Plan and Villebois Village Master Plan.

Subsection 4.236 (.02) Relation to Adjoining Street System

E25. **Review Criteria:**

- A land division shall provide for the continuation of the principal streets existing in the adjoining area, or of their proper projection when adjoining property is not developed, and shall be of a width not less than the minimum requirements for streets set forth in these regulations. Where, in the opinion of the Planning Director or Development Review Board, topographic conditions make such continuation or conformity impractical, an exception may be made. In cases where the Board or Planning Commission has adopted a plan or plat of a neighborhood or area of which the proposed land division is a part, the subdivision shall conform to such adopted neighborhood or area plan.
- Where the plat submitted covers only a part of the applicant's tract, a sketch of the prospective future street system of the unsubmitted part shall be furnished and the street system of the part submitted shall be considered in the light of adjustments and connections with the street system of the part not submitted.
- At any time when an applicant proposes a land division and the Comprehensive Plan would allow for the proposed lots to be further divided, the city may require an arrangement of lots and streets such as to permit a later resubdivision in conformity to the street plans and other requirements specified in these regulations.

Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows streets meeting these standards consistent with the proposed PDP. See Requests A.

Subsection 4.236 (.03) Streets: Conformity to Standards Elsewhere in the Code

E26. **Review Criteria:** "All streets shall conform to the standards set forth in Section 4.177 and the block size requirements of the zone."
Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows streets consistent with the proposed PDP under Request A which meets Section 4.177 and the block requirements of the zone.

Subsection 4.236 (.04) Creation of Easements

E27. **Review Criteria:** "The Planning Director or Development Review Board may approve an easement to be established without full compliance with these regulations, provided such an easement is the only reasonable method by which a portion of a lot large enough to allow partitioning into two (2) parcels may be provided with vehicular access and adequate utilities. If the proposed lot is large enough to divide into more than two (2) parcels, a street dedication may be required."
Finding: These criteria are satisfied.
Details of Finding: No specific easements are requested pursuant to this subsection.

Subsection 4.236 (.05) Topography

E28. **Review Criterion:** "The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of these regulations."
Finding: This criterion is satisfied.
Details of Finding: The tentative subdivision plat shows street alignments recognizing topographic conditions consistent with the requested PDP.

Subsection 4.236 (.06) Reserve Strips

E29. **Review Criteria:** "The Planning Director or Development Review Board may require the applicant to create a reserve strip controlling the access to a street. Said strip is to be placed under the jurisdiction of the City Council, when the Director or Board determine that a strip is necessary:" Reasons listed A. through D.
Finding: These criteria are satisfied.
Details of Finding: No reserve strips are being required for the reasons listed in this subsection. However, reserve strips are being required by Condition of Approval PDE 5 to prevent access to the front side of lots served by an alley. See also Findings A5 and E3. Condition of Approval PDE 6 requires the reserve strips be detailed on the final plat.

Subsection 4.236 (.07) Future Expansion of Street

E30. **Review Criteria:** When necessary to give access to, or permit a satisfactory future division of, adjoining land, streets shall be extended to the boundary of the land division and the resulting dead-

end street may be approved without a turn-around. Reserve strips and street plugs shall be required to preserve the objective of street extension.

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows streets for future expansion consistent with this subsection.

Subsection 4.236 (.08) Additional Right-of-Way for Existing Streets

E31. **Review Criteria:** "Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall conform to the designated width in this Code or in the Transportation Systems Plan."

Finding: These criteria are satisfied.

Details of Finding: No additional right-of-way is being required for existing streets.

Subsection 4.236 (.09) Street Names

E32. **Review Criteria:** "No street names will be used which will duplicate or be confused with the names of existing streets, except for extensions of existing streets. Street names and numbers shall conform to the established name system in the City, and shall be subject to the approval of the City Engineer."

Finding: These criteria are satisfied.

Details of Finding: Street names will be reviewed by Engineering staff and be subject to approval by the City Engineer consistent with this subsection.

Subsection 4.237 (.01) Blocks

E33. **Review Criteria:**

- The length, width, and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control, and safety of pedestrian, bicycle, and motor vehicle traffic, and recognition of limitations and opportunities of topography.
- Sizes: Blocks shall not exceed the sizes and lengths specified for the zone in which they are located unless topographical conditions or other physical constraints necessitate larger blocks. Larger blocks shall only be approved where specific findings are made justifying the size, shape, and configuration.

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows blocks consistent with those proposed and reviewed as part of Request A, Preliminary Development Plan.

Subsection 4.237 (.02) Easements

E34. **Review Criteria:**

- Utility lines. Easements for sanitary or storm sewers, drainage, water mains, electrical lines or other public utilities shall be dedicated wherever necessary. Easements shall be provided consistent with the City's Public Works Standards, as specified by the City Engineer or Planning Director. All of the public utility lines within and adjacent to the site shall be installed within the public right-of-way or easement; with underground services extending to the private parcel constructed in conformance to the City's Public Works

Standards. All franchise utilities shall be installed within a public utility easement. All utilities shall have appropriate easements for construction and maintenance purposes.

- Water courses. Where a land division is traversed by a water course, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the water course, and such further width as will be adequate for the purposes of conveying storm water and allowing for maintenance of the facility or channel. Streets or parkways parallel to water courses may be required.

Finding: These criteria are satisfied or will be satisfied by Conditions of Approval.

Details of Finding: As shown on the applicant's sheets 4.1 and 4.2, Tentative Plat, of their plan set, Exhibit B2, the required easements have been provided. Condition of Approval PFA 46 additionally ensure all easements dealing with utilities are on the final plat.

Subsection 4.237 (.03) Mid-block Pedestrian and Bicycle Pathways

E35. **Review Criteria:** "An improved public pathway shall be required to transverse the block near its middle if that block exceeds the length standards of the zone in which it is located.

- Pathways shall be required to connect to cul-de-sacs or to pass through unusually shaped blocks.
- Pathways required by this subsection shall have a minimum width of ten (10) feet unless they are found to be unnecessary for bicycle traffic, in which case they are to have a minimum width of six (6) feet.

Finding: These criteria are satisfied.

Details of Finding: No pathways are required or proposed pursuant to this subsection.

Subsection 4.237 (.04) Tree Planting & Tree Access Easements

E36. **Review Criteria:** "Tree planting plans for a land division must be submitted to the Planning Director and receive the approval of the Director or Development Review Board before the planting is begun. Easements or other documents shall be provided, guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property."

Finding: These criteria are satisfied.

Details of Finding: The proposed street trees are within the proposed public right-of-way.

Subsection 4.237 (.05) Lot Size and Shape

E37. **Review Criteria:** "The lot size, width, shape and orientation shall be appropriate for the location of the land division and for the type of development and use contemplated. Lots shall meet the requirements of the zone where they are located."

Finding: These criteria are satisfied.

Details of Finding: Proposed lot sizes, widths, shapes and orientations are appropriate for the proposed development and are in conformance with the Village Zone requirements as discussed under Request A.

Subsection 4.237 (.06) Access

E38. **Review Criteria:** "The division of land shall be such that each lot shall have a minimum frontage on a street or private drive, as specified in the standards of the relative zoning districts. This minimum frontage requirement shall apply with the following exceptions:" Listed A. and B.

Finding: These criteria are satisfied.
Details of Finding: Each lot has the minimum frontage on a street or greenbelt, as allowed in the approved Architectural Pattern Book.

Subsection 4.237 (.07) Through Lots

E39. **Review Criteria:** "Through lots shall be avoided except where essential to provide separation of residential development from major traffic arteries or adjacent non-residential activity or to overcome specific disadvantages of topography and orientation."
Finding: These criteria are satisfied.
Details of Finding: No through lots are proposed.

Subsection 4.237 (.08) Lot Side Lines

E40. **Review Criteria:** "The side lines of lots, as far as practicable for the purpose of the proposed development, shall run at right angles to the street or tract with a private drive upon which the lots face."
Finding: These criteria are satisfied.
Details of Finding: Generally side lot lines are at right angles with the front lot line. Where they do not, they run at the closest possible angle to 90 degrees as allowed by block shape, adjacent lot shape, and required alley orientation.

Subsection 4.237 (.09) Large Lot Land Divisions

E41. **Review Criteria:** "In dividing tracts which at some future time are likely to be re-divided, the location of lot lines and other details of the layout shall be such that re-division may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of buildings within future street locations shall be made a matter of record if the Development Review Board considers it necessary."
Finding: These criteria are satisfied.
Details of Finding: No future divisions of the lots included in the tentative subdivision plat are anticipated.

Subsection 4.237 (.10) and (.11) Building Line and Built-to Line

E42. **Review Criteria:** The Planning Director or Development Review Board may establish special:
- building setbacks to allow for the future redivision or other development of the property or for other reasons specified in the findings supporting the decision. If special building setback lines are established for the land division, they shall be shown on the final plat.
- build-to lines for the development, as specified in the findings and conditions of approval for the decision. If special build-to lines are established for the land division, they shall be shown on the final plat.

Finding: These criteria are satisfied.
Details of Finding: No building lines or built-to lines are proposed or recommended.

Subsection 4.237 (.12) Land for Public Purposes

E43. **Review Criterion:** "The Planning Director or Development Review Board may require property to be reserved for public acquisition, or irrevocably offered for dedication, for a specified period of time."
Finding: This criterion is satisfied.
Details of Finding: No property reservation is recommended as described in this subsection.

Subsection 4.237 (.13) Corner Lots

E44. **Review Criterion:** "Lots on street intersections shall have a corner radius of not less than ten (10) feet."
Finding: This criterion is satisfied.
Details of Finding: All proposed corner lots meet the minimum corner radius of ten (10) feet.

Section 4.250 Lots of Record

E45. **Review Criteria:** "All lots of record that have been legally created prior to the adoption of this ordinance shall be considered to be legal lots. Tax lots created by the County Assessor are not necessarily legal lots of record."
Finding: These criteria are satisfied.
Details of Finding: The parcels being divided are of record, and the resulting subdivision lots will be lots of record.

Section 4.260 Improvements-Procedures

E46. **Review Criteria:** "In addition to other requirements, improvements installed by the developer, either as a requirement of these regulations or at the developer's own option, shall conform to the requirements of this Code and improvement standards and specifications of the City. The improvements shall be installed in accordance with the City's Public Works Standards."
Finding: These criteria are satisfied.
Details of Finding: The rights-of-way shown on the tentative subdivision plat are sufficient for installation of improvements to City standards. Conformance of the improvements with the City's Public Works Standards and other applicable standards will be ensured through the Engineering Division's permit and inspection process.

Section 4.262 Improvements-Requirements

E47. **Review Criteria:** This section establishes requirements for a number of different improvements including curbs, sidewalks, sanitary sewers, drainage, underground utility and service facilities, streetlight standards, street signs, monuments, and water.
Finding: These criteria are satisfied.
Details of Finding: The applicant has stated their intent to meet the requirements for all the types of improvements indicated in this subsection. Conformance with these requirements will be ensured through the Engineering Division's, and Building Division's where applicable, permit and inspection process.

REQUEST F: DB13-0018 TYPE C TREE PLAN

The applicant's findings in Section VA of their notebook, Exhibit B7, respond to the majority of the applicable criteria.

Subsection 4.600.50 (.03) A. Access to Site for Tree Related Observation

F1. **Review Criterion:** "By submission of an application, the applicant shall be deemed to have authorized City representatives to have access to applicant's property as may be needed to verify the information provided, to observe site conditions, and if a permit is granted, to verify that terms and conditions of the permit are followed."
Finding: This criterion will be satisfied by Condition of Approval PDF 2.
Details of Finding: Condition of Approval PDF 2 ensures the required access is allowed.

Subsection 4.610.00 (.03) B. Type C Tree Removal Review Authority

F2. **Review Criterion:** "Type C. Where the site is proposed for development necessitating site plan review or plat approval by the Development Review Board, the Development Review Board shall be responsible for granting or denying the application for a Tree Removal Permit, and that decision may be subject to affirmance, reversal or modification by the City Council, if subsequently reviewed by the Council."
Finding: This criterion is satisfied.
Details of Finding: The requested removal of five (5) trees is connected to site plan review by the Development Review Board for the proposed development. The tree removal is thus being reviewed by the DRB.

Subsection 4.610.00 (.06) A. Conditions Attached to Type C Tree Permits

F3. **Review Criterion:** "Conditions. Attach to the granting of the permit any reasonable conditions considered necessary by the reviewing authority including, but not limited to, the recording of any plan or agreement approved under this subchapter, to ensure that the intent of this Chapter will be fulfilled and to minimize damage to, encroachment on or interference with natural resources and processes within wooded areas;"
Finding: This criterion is satisfied.
Details of Finding: No additional conditions are recommended pursuant to this subsection.

Subsection 4.610.00 (.06) B. Completion of Operation

F4. **Review Criterion:** "Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:" "Fix a reasonable time to complete tree removal operations;"
Finding: This criterion is satisfied.
Details of Finding: It is understood the tree removal will be completed by the time construction of all homes, parks, and other improvements in the PDP are completed, which is a reasonable time frame for tree removal.

Subsection 4.610.00 (.06) C. Security

F5. **Review Criterion:** "Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:" "Require the Type C permit grantee to file with the City a cash or corporate surety bond or irrevocable bank letter of credit in an amount determined necessary by the City to ensure compliance with Tree Removal Permit conditions and this Chapter. 1. This requirement may be waived by the Planning Director if the tree removal must be completed before a plat is recorded, and the applicant has complied with WC 4.264(1) of this Code."

Finding: This criterion will be satisfied by Condition of Approval PDF 3.

Details of Finding: The condition of approval ensures the security requirement of this subsection is met.

Subsection 4.610.10 (.01) Standards for Tree Removal, Relocation or Replacement

F6. **Review Criteria:** "Except where an application is exempt, or where otherwise noted, the following standards shall govern the review of an application for a Type A, B, C or D Tree Removal Permit:" Listed A. through J.

Finding: These criteria are satisfied.

Details of Finding: The standards of this subsection are met as follows:

- The proposed tree removal is not within the Significant Resource Overlay Zone
- The applicant states tree preservation was taken into consideration the preservation of trees on the site.
- No significant wooded areas or trees would be preserved by design alternatives.
- Land clearing will not exceed the permitted areas.
- The applicant states the homes are designed to blend into the landscape as much as feasible consistent with the relevant pattern book.
- It is understood the proposed development will comply with all applicable statutes and ordinances.
- The necessary tree replacement and protection is planned according to the requirements of tree preservation and protection ordinance.
- Tree removal is limited to where it is necessary for construction or to address nuisances or where the health of the trees warrants removal.
- A tree survey has been provided. See sections VB and VC of the applicant's notebook, Exhibit B1 and sheet 9 of the applicant's plan set, Exhibit B2.
- A tree maintenance and protection plan has been submitted concurrently with the request for a tentative subdivision plat.
- No utilities are proposed to be located where they would cause adverse environmental consequences.

Subsection 4.610.40 (.01) Type C Tree Plan Reviewed with Stage II Final Plan

F7. **Review Criteria:** "Approval to remove any trees on property as part of a site development application may be granted in a Type C permit. A Type C permit application shall be reviewed by the standards of this subchapter and all applicable review criteria of Chapter 4. Application of the standards of this section shall not result in a reduction of square footage or loss of density, but may require an applicant to modify plans to allow for buildings of greater height. If an applicant

proposes to remove trees and submits a landscaping plan as part of a site development application, an application for a Tree Removal Permit shall be included. The Tree Removal Permit application will be reviewed in the Stage II development review process, and any plan changes made that affect trees after Stage II review of a development application shall be subject to review by DRB. Where mitigation is required for tree removal, such mitigation may be considered as part of the landscaping requirements as set forth in this Chapter. Tree removal shall not commence until approval of the required Stage II application and the expiration of the appeal period following that decision. If a decision approving a Type C permit is appealed, no trees shall be removed until the appeal has been settled."

Finding: These criteria are satisfied.

Details of Finding: The proposed Type C Tree Plan, which includes the removal of five (5) trees, is being reviewed concurrently with the Preliminary Development Plan, which is the equivalent of a Stage II Final Plan in the Village Zone.

Section 4.610.40 (.02) Submission of Tree Maintenance and Protection Plan

F8. **Review Criteria:** "The applicant must provide ten copies of a Tree Maintenance and Protection Plan completed by an arborist that contains the following information:" Listed A. 1. through A. 7.

Finding: These criteria are satisfied.

Details of Finding: The applicant has submitted the necessary copies of a Tree Maintenance and Protection Plan. See sections VB and VC of the applicant's notebook, Exhibit B1 and sheet 9 of the applicant's plan set, Exhibit B2.

Subsection 4.620.00 (.01) Tree Replacement Requirement

F9. **Review Criterion:** "A Type B or C Tree Removal Permit grantee shall replace or relocate each removed tree having six (6) inches or greater d.b.h. within one year of removal."

Finding: This criterion is satisfied.

Details of Finding: The tree mitigation requirements for the five (5) removed trees will be more than exceeded by the planned street tree and trees in linear greens.

Subsection 4.620.00 (.02) Basis for Determining Replacement

F10. **Review Criteria:** "The permit grantee shall replace removed trees on a basis of one (1) tree replanted for each tree removed. All replacement trees must measure two inches (2") or more in diameter."

Finding: These criteria are satisfied.

Details of Finding: More trees are planned to be planted that proposed to be removed. Each tree, including street trees and trees in linear greens will meet the minimum diameter requirement.

Subsection 4.620.00 (.03) Replacement Tree Requirements

F11. **Review Criteria:** "A mitigation or replacement tree plan shall be reviewed by the City prior to planting and according to the standards of this subsection.

A. Replacement trees shall have shade potential or other characteristics comparable to the removed trees, shall be appropriately chosen for the site from an approved tree species list supplied by the City, and shall be state Department of Agriculture Nursery Grade No. 1 or better.

B. Replacement trees must be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date.
C. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced.
D. Diversity of tree species shall be encouraged where trees will be replaced, and diversity of species shall also be maintained where essential to preserving a wooded area or habitat."
Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDF 4.
Details of Finding: The condition of approval will ensure the relevant requirements of this subsection are met.

Subsection 4.620.00 (.04) Replacement Tree Stock Requirements

F12. **Review Criteria:** "All trees to be planted shall consist of nursery stock that meets requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade."
Finding: These criteria will be satisfied by Condition of Approval PDF 4.
Details of Finding: Condition of Approval PDF 4 assures this is met.

Subsection 4.620.00 (.05) Replacement Trees Locations

F13. **Review Criteria:** "The City shall review tree relocation or replacement plans in order to provide optimum enhancement, preservation and protection of wooded areas. To the extent feasible and desirable, trees shall be relocated or replaced on-site and within the same general area as trees removed."
Finding: These criteria are satisfied.
Details of Finding: The applicant proposes to mitigate for all removed trees on site and in the appropriate locations for the proposed development.

Section 4.620.10 Tree Protection During Construction

F14. **Review Criteria:** "Where tree protection is required by a condition of development under Chapter 4 or by a Tree Maintenance and Protection Plan approved under this subchapter, the following standards apply:" Listed A. through D.
Finding: These criteria are satisfied or will be satisfied by Condition of Approvals PDF 5 and PDF 6.
Details of Finding: The conditions of approval assure the applicable requirements of this Section will be met.

REQUEST G: DB13-0019 FINAL DEVELOPMENT PLAN FOR PARKS AND OPEN SPACE

The applicant's findings in Section VIA of their notebook, Exhibit B7, respond to the majority of the applicable criteria.

Subsection 4.125 (.02) Permitted Uses in the Village Zone

G1. **Review Criteria:** This subsection lists the uses typically permitted in the Village Zone including "Non-commercial parks, plazas, playgrounds, recreational facilities, community buildings and grounds, tennis courts, and other similar recreational and community uses owned and operated either publicly or by an owners association."
Finding: These criteria are satisfied.
Details of Finding: The requested Final Development Plan is for parks and open space allowed within the Village Zone.

Subsection 4.125 (.08) A. Parks and Open Space in the Village Zone-Amount Required

G2. **Review Criteria:** "In all residential developments and in mixed-use developments where the majority of the developed square footage is to be in residential use, at least twenty-five percent (25%) of the area shall be open space, excluding street pavement and surface parking. In multi-phased developments, individual phases are not required to meet the 25% standard as long as an approved Specific Area Plan demonstrates that the overall development shall provide a minimum of 25% open space. Required yard areas shall not be counted towards the required open space area."
Finding: These criteria are satisfied.
Details of Finding: The parks master plan for Villebois provides for approximately 33% of the area to be parks and open space. No parks or open spaces shown in the Master Plan are within the proposed PDP. Additional park and open space in this PDP add to the amount of parks and open space in Villebois.

Subsection 4.125 (.08) B. Parks and Open Space in the Village Zone-Ownership

G3. **Review Criteria:** "Open space area required by this Section may, at the discretion of the Development Review Board, be protected by a conservation easement or dedicated to the City, either rights in fee or easement, without altering the density or other development standards of the proposed development. Provided that, if the dedication is for public park purposes, the size and amount of the proposed dedication shall meet the criteria of the City of Wilsonville standards. The square footage of any land, whether dedicated or not, which is used for open space shall be deemed a part of the development site for the purpose of computing density or allowable lot coverage."
Finding: These criteria are satisfied.
Details of Finding: The parks areas proposed in this PDP are not subject to this requirement.

Subsection 4.125 (.08) C. Parks and Open Space in the Village Zone-Protection and Maintenance

G4. **Review Criteria:** "The Development Review Board may specify the method of assuring the long-term protection and maintenance of open space and/or recreational areas. Where such protection or

maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review and approve any pertinent bylaws, covenants, or agreements prior to recordation."
Finding: These criteria are satisfied.
Details of Finding: Protection and maintenance of the open space and recreational areas are covered in the CCR's being reviewed by the City, and the Operation and Maintenance Agreements between the developer and the City.

Subsection 4.125 (.09) Street and Access Improvement Standards

G5. **Review Criteria:** This section lists street and access improvement standards for the Village Zone including vision clearance standards.
Finding: These criteria are satisfied.
Details of Finding: This code section does not apply to the proposed parks and open space, except for vision clearance for vegetation which is met.

Subsection 4.125 (.10) Sidewalk and Pathway Improvement Standards

G6. **Review Criteria:** "The provisions of Section 4.178 shall apply within the Village zone."
Finding: These criteria are satisfied.
Details of Finding: Findings regarding Compliance with the standards of Section 4.178 can be found in Finding A74.

Subsection 4.125 (.11) Landscaping Screening and Buffering

G7. **Review Criteria:** "Except as noted below, the provisions of Section 4.176 shall apply in the Village zone:" "Streets in the Village zone shall be developed with street trees as described in the Community Elements Book."
Finding: These criteria are satisfied.
Details of Finding: Findings G18 through G29 pertain to Section 4.176. Street trees are proposed consistent with the Community Elements Book.

Section 4.125 (.12) A. Signs Compliance with Master Sign and Wayfinding Plan for SAP

G8. **Review Criterion:** "All signage and wayfinding elements within the Village Zone shall be in compliance with the adopted Signage and wayfinding Master Plan for the appropriate SAP."
Finding: This criterion does not apply.
Details of Finding: The internal site identifier signs are proposed as shown in the Master Signage and Wayfinding Program. See also Finding A24.

Subsection 4.125 (.14) Design Standards Applying to the Village Zone

The following Design Standards implement the Design Principles found in Section 4.125(.13), above, and enumerate the architectural details and design requirements applicable to buildings and other features within the Village (V) zone. The Design Standards are based primarily on the features, types, and details of the residential traditions in the Northwest, but are not intended to mandate a particular style or fashion. All development within the Village zone shall incorporate the following:

Subsection 4.125 (.14) A. 2. b. Details to Match Architectural Pattern Book and Community Elements Book

G9. **Review Criteria:** "Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Architectural Pattern Book, Community Elements Book or approved Village Center Architectural Standards."
Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDG 5.
Details of Finding: No park furnishings subject to the Community Elements Book are proposed. Any handrails and retaining walls in the park areas are required to be consistent with materials shown in the Architectural Pattern Book. See Condition of Approval PDG 5.

Subsection 4.125 (.14) A. 2. f. Protection of Significant Trees

G10. **Review Criterion:** "The protection of existing significant trees as identified in an approved Community Elements Book."
Finding: This criterion is satisfied.
Details of Finding: No significant trees are within the parks and open space covered by the proposed FDP.

Subsection 4.125 (.14) A. 2. g. Landscape Plan

G11. **Review Criterion:** "A landscape plan in compliance with Sections 4.125(.07) and (.11), above."
Finding: This criterion is satisfied.
Details of Finding: Landscape plans have been provided in compliance with the referenced sections.

Subsection 4.125 (.14) C. Lighting and Site Furnishings

G12. **Review Criteria:** "Lighting and site furnishings shall be in compliance with the approved Architectural Pattern Book, Community Elements Book, or approved Village Center Architectural Standards."
Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDA 4.
Details of Finding: The lighting and site furnishings shown by the applicant match the Community Elements Book for SAP East. A condition of approval ensures street light type and spacing is consistent with the Community Elements Book.

Subsection 4.125 (.18) L. Final Development Plan Approval Procedures

G13. **Review Criteria:** This subsection establishes the approval procedures for Final Development Plans.
Finding: These criteria are satisfied.
Details of Finding: The applicant has followed the applicable procedures set out in this subsection for approval of a FDP.

Subsection 4.125 (.18) M. Final Development Plan Submittal Requirements

G14. **Review Criteria:** "An application for approval of a FDP shall be subject to the provisions of Section 4.034."
Finding: These criteria are satisfied.
Details of Finding: The necessary materials have been submitted for review of the FDP.

Subsections 4.125 (.18) N. and P. 1. Final Development Plans Subject to Site Design Review Criteria

G15. **Review Criteria:** "An application for approval of a FDP shall be subject to the provisions of Section 4.421"
Finding: These criteria are satisfied.
Details of Finding: The provisions of Section 4.421 are being used as criteria in the review of the FDP. See Findings G30 through G37.

Subsection 4.125 (.18) O. Refinements to Preliminary Development Plan as part of Final Development Plan

G16. **Review Criteria:** This subsection identifies the process and requirements for refinements to a preliminary development plan as party of a final development plan.
Finding: These criteria are satisfied.
Details of Finding: No refinements are proposed as part of the requested FDP, as park and open space refinements were requested as part of the PDP approval request. See Request B.

Subsection 4.125 (.18) P.2. Final Development Plan Compliance with Architectural Pattern Book, Community Elements Book, and PDP Conditions of Approval

G17. **Review Criteria:** "An application for an FDP shall demonstrate that the proposal conforms to the applicable Architectural Pattern Book, Community Elements Book, Village Center Architectural Standards and any conditions of a previously approved PDP."
Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDG 5.
Details of Finding: Overall, as demonstrated by Finding G7 through G9 above, the FDP demonstrates compliance with the SAP East Community Elements Book. Any handrails and retaining walls in the park areas are required to be consistent with materials shown in the Architectural Pattern Book. See Condition of Approval PDG 5.

Landscape Standards Section 4.176

Subsection 4.176 (.02) B. Landscape Standards and Compliance with Code

G18. **Review Criterion:** "All landscaping and screening required by this Code must comply with all of the provisions of this Section, unless specifically waived or granted a Variance as otherwise provided in the Code. The landscaping standards are minimum requirements; higher standards can be substituted as long as fence and vegetation-height limitations are met. Where the standards set a minimum based on square footage or linear footage, they shall be interpreted as applying to each complete or partial increment of area or length"
Finding: This criterion is satisfied.

Details of Finding: No waivers or variances to landscape standards have been requested. Thus all landscaping and screening must comply with standards of this section.

Subsection 4.176 (.03) Landscape Area and Locations

G19. **Review Criteria:** "Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable."
Finding: These criteria are satisfied.
Details of Finding: The proposed parks are predominantly covered with vegetative plant materials other than areas for walkways. The plantings are in a variety of areas.

Subsection 4.176 (.04) Buffering and Screening

G20. **Review Criteria:** "Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.
C. All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties.
D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit.
E. In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking.
F. In any zone any fence over six (6) feet high measured from soil surface at the outside of fenceline shall require Development Review Board approval."
Finding: These criteria are satisfied.
Details of Finding: No conditions requiring buffering and screening are within the area covered by the subject FDP request.

Subsection 4.176 (.06) A. Plant Materials-Shrubs and Groundcover

G21. **Review Criteria:** This subsection establishes plant material and planting requirements for shrubs and ground cover.
Finding: These criteria are satisfied.
Details of Finding: Applicant's sheets L1.0 and L2.0 in their FDP plan set, Exhibit B3, indicates the requirements established by this subsection will be met by the proposed plantings.

Subsection 4.176 (.06) B. Plant Materials-Trees

G22. **Review Criteria:** This subsection establishes plant material requirements for trees.
Finding: These criteria are satisfied.

Details of Finding: Applicant's sheets L1.0 and L2.0 of their FDP plan set, Exhibit B3, indicates the requirements established by this subsection will be met by the proposed plantings.

Subsection 4.176 (.06) D. Plant Materials-Street Trees

G23. **Review Criteria:** This subsection establishes plant material requirements for street trees.
Finding: These criteria are satisfied.
Details of Finding: Applicant's sheets L1.0 and L2.0 of their plan set, Exhibit B3, indicates the requirements established by this subsection as well as the Community Elements Book will be met by the proposed plantings.

Subsection 4.176 (.06) E. Types of Plant Species

G24. **Review Criteria:** This subsection discusses use of existing landscaping or native vegetation, selection of plant materials, and prohibited plant materials.
Finding: These criteria are satisfied.
Details of Finding: The allowed plant materials are governed by the Community Elements Book. All proposed plant materials are consistent with the SAP Central Community Elements Book.

Subsection 4.176 (.06) F. Tree Credit

G25. **Review Criteria:** "Existing trees that are in good health as certified by an arborist and are not disturbed during construction may count for landscaping tree credit as follows: Existing trunk diameter Number of Tree Credits

18 to 24 inches in diameter	3 tree credits
25 to 31 inches in diameter	4 tree credits
32 inches or greater	5 tree credits:"

Maintenance requirements listed 1. through 2.
Finding: These criteria are satisfied.
Details of Finding: No trees are being preserved in the subject area.

Subsection 4.176 (.06) G. Exceeding Plant Material Standards

G26. **Review Criterion:** "Landscape materials that exceed the minimum standards of this Section are encouraged, provided that height and vision clearance requirements are met."
Finding: This criterion is satisfied.
Details of Finding: The selected landscape materials do not violate any height or visions clearance requirements.

Subsection 4.176 (.07) Installation and Maintenance of Landscaping

G27. **Review Criteria:** This subsection establishes installation and maintenance standards for landscaping.
Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDG 6.
Details of Finding: The installation and maintenance standards are or will be met as follows:

- Plant materials are required to be installed to current industry standards and be properly staked to ensure survival
- Plants that die are required to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City.
- A note on the applicant's sheet L1.0 in their FDP plan set, Exhibit B3, indicates "project is to be irrigated by an automatic underground system, which will provide full coverage for all plant material. System is to be design/build by landscape contractor."

Subsection 4.176 (.09) Landscape Plans

G28. **Review Criterion:** "Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated."
Finding: This criterion is satisfied.
Details of Finding: Landscape plans have been submitted with the required information. See applicant's sheets L1.0 through L3.0 in their FDP plan set, Exhibit B3.

Subsection 4.176 (.10) Completion of Landscaping

G29. **Review Criterion:** "The installation of plant materials may be deferred for a period of time specified by the Board or Planning Director acting on an application, in order to avoid hot summer or cold winter periods, or in response to water shortages. In these cases, a temporary permit shall be issued, following the same procedures specified in subsection (.07)(C)(3), above, regarding temporary irrigation systems. No final Certificate of Occupancy shall be granted until an adequate bond or other security is posted for the completion of the landscaping, and the City is given written authorization to enter the property and install the required landscaping, in the event that the required landscaping has not been installed. The form of such written authorization shall be submitted to the City Attorney for review."
Finding: This criterion is satisfied.
Details of Finding: As a condition of PDP approval the parks for the PDP or PDP phase must be completed prior to fifty percent (50%) of the homes being occupied unless certain conditions exist, similar to what is described in this subsection, in which case a bond can be posted. See Finding A59 in Request A and Condition of Approval PDA 3.

Site Design Review

Subsection 4.400 (.01) Excessive Uniformity, Inappropriateness of Design, Etc.

G30. **Review Criteria:** "Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefor."

Finding: These criteria are satisfied.
Details of Finding: It is staff's professional opinion that the proposed development will not result in excessive uniformity, inappropriateness or poor design, and the proper attention has been paid to site development and landscaping.

Subsection 4.400 (.02) Purposes of Objectives of Site Design Review

G31. **Review Criterion:** "The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:" Listed A through J.
Finding: These criteria are satisfied.
Details of Finding: It is staff's professional opinion that the applicant has provided sufficient information demonstrating compliance with the purposes and objectives of site design review. Among the information provided is a written response to these purposes and objectives on pages 15 through 18 in Section VI of the applicant's notebook, Exhibit B1.

Section 4.420 Site Design Review-Jurisdiction and Power of the Board

G32. **Review Criteria:** The section states the jurisdiction and power of the Development Review Board in relation to site design review including the application of the section, that development is required in accord with plans, and variance information.
Finding: These criteria will be satisfied by Condition of Approval PDG 3.
Details of Finding: A condition of approval has been included to ensure construction, site development, and landscaping are carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. No grading or other permits will be granted prior to development review board approval. No variances are requested from site development requirements.

Subsection 4.421 (.01) Site Design Review-Design Standards

G33. **Review Criteria:** "The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural styles is not included in these standards." Listed A through G.
Finding: These criteria are satisfied.
Details of Finding: The applicant has provided sufficient information demonstrating compliance with the standards of this subsection. Among the information provided is a written response to these standards on pages 18 through 20 of Section VI of the applicant's notebook, Exhibit B1.

Subsection 4.421 (.02) Applicability of Design Standards to Various Site Features

G34. **Review Criteria:** "The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures."

Finding: These criteria are satisfied.
Details of Finding: Design standards have been applied to all site features.

Subsection 4.421 (.03) Objectives of Section 4.400 Serve as Additional Criteria and Standards

G35. **Review Criteria:** "The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards."
Finding: These criteria are satisfied.
Details of Finding: The purposes and objectives in Section 4.400 are being used as additional criteria and standards. See Finding G31 above.

Subsection 4.421 (.05) Site Design Review-Conditions of Approval

G36. **Review Criterion:** "The Board may attach certain development or use conditions in granting an approval that are determined necessary to insure the proper and efficient functioning of the development, consistent with the intent of the Comprehensive Plan, allowed densities and the requirements of this Code."
Finding: This criterion is satisfied.
Details of Finding: No additional conditions are recommended pursuant to this subsection.

Subsection 4.421 (.06) Color or Materials Requirements

G37. **Review Criterion:** "The Board or Planning Director may require that certain paints or colors of materials be used in approving applications. Such requirements shall only be applied when site development or other land use applications are being reviewed by the City."
Finding: This criterion will be satisfied by Condition of Approvals PDG 4 and PDG 5.
Details of Finding: Condition of Approval PDG 4 requires all retaining walls within the public view shed to be a decorative stone or brick construction or veneer consistent with the Architectural Pattern Book. Final design of retaining wall design will be approved by the Planning Division through the Class I Administrative Review process. Further, if hand rails are installed Condition of Approval PDG 5 ensures they are of a design mirroring that for courtyard fences shown in the Architectural Pattern Book. Final design of any handrails in parks and open space will be approved by the Planning Division through the Class I Administrative Review process.

Section 4.440 Site Design Review-Procedures

G38. **Review Criteria:** "A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:" Listed A through F.
Finding: These criteria are satisfied.
Details of Finding: The applicant has submitted the required additional materials, as applicable.

Section 4.442 Time Limit on Approval

G39. **Review Criterion:** "Site design review approval shall be void after two (2) years unless a building permit has been issued and substantial development pursuant thereto has taken place; or an extension is granted by motion of the Board.
Finding: This criterion is satisfied.
Details of Finding: It is understood that the approval will expire after 2 years if a building permit hasn't been issued unless an extension has been granted by the board.

Subsection 4.450 (.01) Landscape Installation or Bonding

G40. **Review Criterion:** "All landscaping required by this section and approved by the Board shall be installed prior to issuance of occupancy permits, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned to the applicant."
Finding: This criterion is satisfied.
Details of Finding: As a condition of PDP approval the parks for the PDP or PDP phase must be completed prior to fifty percent (50%) of the homes being occupied. See Finding A59 in Request A and Condition of Approval PDA 3.

Subsection 4.450 (.02) Approved Landscape Plan Binding

G41. **Review Criterion:** "Action by the City approving a proposed landscape plan shall be binding upon the applicant. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, as specified in this Code."
Finding: This criterion will be satisfied by Condition of Approval PDG 6.
Details of Finding: The condition of approval shall provide ongoing assurance this criterion is met.

Subsection 4.450 (.03) Landscape Maintenance and Watering

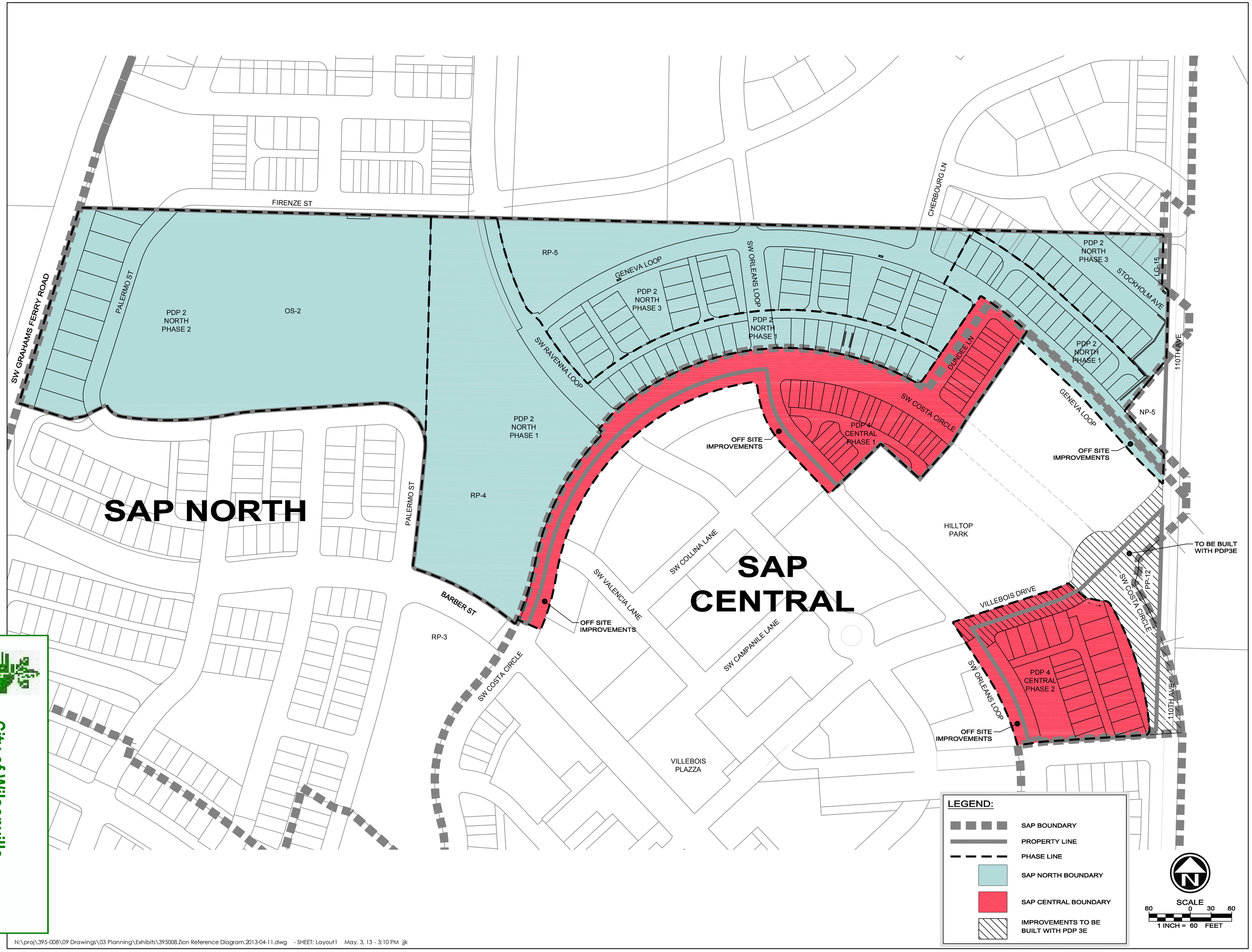
G42. **Review Criterion:** "All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered with Board approval."
Finding: This criterion will be satisfied by Condition of Approval PDG 6.
Details of Finding: The condition of approval will ensure landscaping is continually maintained in accordance with this subsection.

Subsection 4.450 (.04) Addition and Modifications of Landscaping

G43. **Review Criterion:** "If a property owner wishes to add landscaping for an existing development, in an effort to beautify the property, the Landscape Standards set forth in Section 4.176 shall not apply and no Plan approval or permit shall be required. If the owner wishes to modify or remove landscaping that has been accepted or approved through the City's development review process, that removal or modification must first be approved through the procedures of Section 4.010."

Finding: This criterion will be satisfied by Condition of Approval PDG 6.

Details of Finding: The condition of approval shall provide ongoing assurance that this criterion is met by preventing modification or removal without the appropriate City review.



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City of Wilsonville
EXHIBIT B4 DB13-0013 et seq

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL & PHASE 2 NORTH

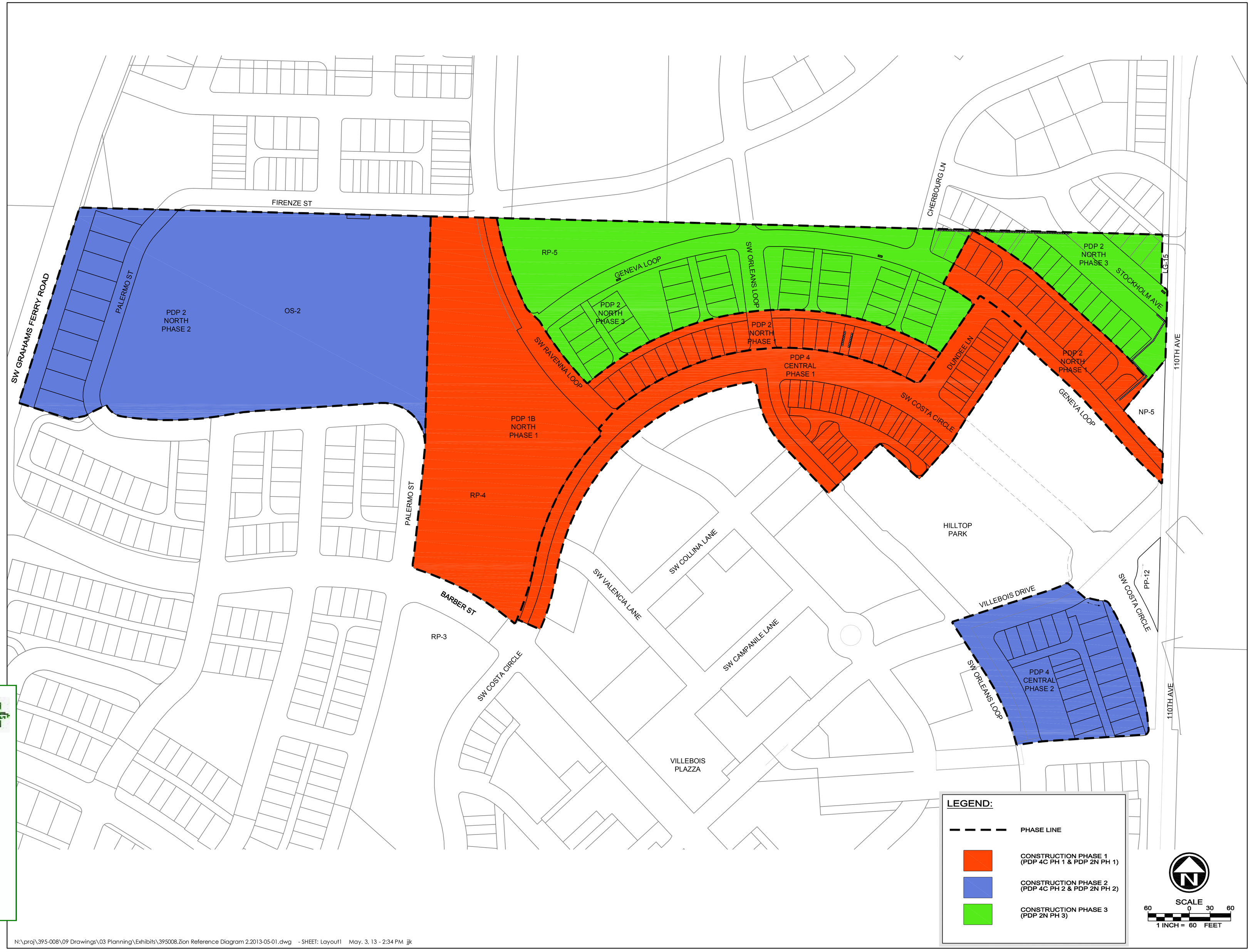
VILLEBOIS

PLANNING EXHIBIT

Reference Diagram

DATE 04/15/2013

EX1



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City of Wilsonville
EXHIBIT B5 DB13-0013 et seq

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL & PHASE 2 NORTH

VILLEBOIS

PLANNING EXHIBIT

Phasing Diagram

DATE 04/15/2013

EX2

Clackamas County Official Records
Sherry Hall, County Clerk
2013-014659
03/01/2013 02:26:13 PM
D-DED Cnt=1 Stn=6 KARLYNWUN
$45.00 $16.00 $10.00 $17.00
$88.00

After recording, return to:
City of Wilsonville, Grantee
Attn: City Recorder
29799 SW Town Center Loop E.
Wilsonville OR 97070

Recorded By Chicago Title
Courtesy Only. Not Examined

10023-1

STREET DEDICATION

KNOW ALL MEN BY THESE PRESENTS, that **Villebois Village Center, LLC**, a limited liability company, hereinafter referred to as "Grantor," whose principal place of business is 11422 SW BARBER ST. WILSONVILLE, OR 97070, does hereby dedicate, grant, transfer, and convey to the CITY OF WILSONVILLE, a municipal corporation of the State of Oregon, and its assigns, hereinafter referred to as "Grantee," for the use of the public as public way, street, and road ("Street Dedication"), forever, running with the land, certain real property legally described as follows, to-wit:

> See EXHIBIT "A" Legal Description and EXHIBIT "B" Locational Map, attached hereto, and incorporated by reference as if fully set forth herein.

TO HAVE AND TO HOLD the above-described Street Dedication unto the City of Wilsonville for the public uses and purposes hereinabove mentioned; provided, however, in the event said premises are not used or cease to be used for public purpose, the Street Dedication may be vacated.

The true and actual consideration paid for this transfer, stated in terms of dollars, is Zero Dollars, but other good and valuable consideration is provided.

This Street Dedication shall be subject to and construed pursuant to the laws of the State of Oregon, and venue shall be in the County of Clackamas.

No modifications may be made to this Easement, except in writing, signed by both parties.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS

City of Wilsonville
EXHIBIT B6 DB13-0013 et seq

AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

IN WITNESS WHEREOF, the undersigned have executed this Street Dedication this 6th Day of February ,2013

GRANTOR:

VILLEBOIS VILLAGE CENTER, LLC
By: Costa Villebois, LLC, Member

By: _____
Rudy A. Kadlub, Manager

COSTA PACIFIC HOMES, LLC, MEMBER

By: RAK Development Company, Member

By: _____
Rudy A. Kadlub, President

STATE OF OREGON)
) ss.
County of Multnomah

This instrument was acknowledged before me on February 6, 2013, by Rudy A. Kadlub as Manager of Costa Villebois, LLC, as Member of Villebois Village Center, LLC, on its behalf.

OFFICIAL SEAL
KINDRA M MILLIMAN
NOTARY PUBLIC - OREGON
COMMISSION NO. 457326
MY COMMISSION EXPIRES APRIL 03, 2015

_____
Notary Public - State of Oregon

STATE OF OREGON)
) ss.
County of Multnomah

This instrument was acknowledged before me on February 6, 2013, by Rudy A. Kadlub as President of RAK Development Company, as Member of Costa Pacific Homes, LLC as Member of Villebois Village Center, LLC, on its behalf.

OFFICIAL SEAL
KINDRA M MILLIMAN
NOTARY PUBLIC - OREGON
COMMISSION NO. 457326
MY COMMISSION EXPIRES APRIL 03, 2015

_____
Notary Public - State of Oregon

GRANTEE:

ACCEPTED on behalf of the City of Wilsonville, Oregon
this 27TH day of February, 2013.

Bryan Cosgrove, City Manager

STATE OF OREGON)
) ss.
County of Clackamas)

This instrument was acknowledged before me on February 27, 2013, by Bryan Cosgrove, as the City Manager of the City of Wilsonville.

OFFICIAL SEAL
TAMARA E CALLAWAY
NOTARY PUBLIC-OREGON
COMMISSION NO. 438607
MY COMMISSION EXPIRES APRIL 20, 2013

Notary Public-State of Oregon

APPROVED AS TO FORM
this 26th day of February, 2013.

Barbara A. Jacobson, Assistant City Attorney
City of Wilsonville, Oregon

APPROVED AS TO LEGAL DESCRIPTION
this 26th day of February, 2013.

02/26/2013
Nancy Kraushaar, P.E., Interim City Engineer
City of Wilsonville, Oregon

ATTESTED TO:

Sandra C. King, MMC, City Recorder
Date: 2/27/2013

Pacific Community Design

EXHIBIT "A"

February 15, 2013

LEGAL DESCRIPTION Job No. 395-008
Street Dedication

Two tracts of land, being portions of Parcel 3, Partition Plat No. 2007-128, Clackamas County Plat Records, situated in the Northwest and Northeast Quarters of Section 15, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, more particularly described as follows:

Tract 1 - Street Dedication

BEGINNING at the north terminus point of the easterly right-of-way line of Costa Circle West, as dedicated on the plat of "Villebois Village Center No. 2", also being an angle point of said plat boundary;

thence along the northerly line of said plat boundary, North 66°35'56" West, a distance of 33.45 feet to the southeast corner of Parcel 10, Partition Plat No. 2012-019;

thence along the easterly boundary line of said Parcel 10, Partition Plat No. 2007-127, on a 660.00 foot radius non-tangential curve, concave westerly, with a radius point bearing North 66°09'10" West, central angle of 12°53'45", arc length of 148.55 feet, chord bearing of North 17°23'57" East, and chord distance of 148.23 feet;

thence continuing along said easterly boundary line of Parcel 10 and along the southerly boundary line of Parcel 3, Partition Plat No. 2007-127, on a 590.00 foot radius tangential curve to the right, through a central angle of 74°29'25", arc length of 767.06 feet, chord bearing of North 48°11'50" East, and chord distance of 714.17 feet;

thence continuing along said southerly boundary line of Parcel 3, South 07°28'09" East, a distance of 53.01 feet;

thence continuing along said southerly boundary line of Parcel 3, on a 207.00 foot radius tangential curve to the left, through a central angle of 35°28'22", arc length of 128.16 feet, chord bearing of South 25°12'21" East, and chord distance of 126.12 feet;

thence continuing along said southerly boundary line of Parcel 3, South 43°36'51" East, a distance of 160.98 feet;

13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

thence leaving said line, South 46°23'09" West, a distance of 27.50 feet;

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the said southerly boundary line of Parcel 3, North 43°36'51" West, a distance of 161.14 feet;

thence continuing along said parallel line, on a 234.50 foot radius non-tangential curve to the right (the radius point bearing North 47°01'02" East), through a central angle of 35°30'48", arc length of 145.35 feet, chord bearing of North 25°13'34" West, and chord distance of 143.03 feet;

thence continuing along said parallel line, North 07°28'09" West, a distance of 10.63 feet;

thence leaving said parallel line, along a 15.00 foot radius tangential curve to the left, through a central angle of 91°18'46", arc length of 23.91 feet, chord bearing of North 53°07'32" West, and chord distance of 21.45 feet;

thence along a line being parallel to and measuring 28.00 feet at right angle distances to the said southerly boundary line of Parcel 3 and the said easterly boundary line of Parcel 10, on a 562.00 foot radius tangential curve to the left, through a central angle of 72°16'22", arc length of 708.91 feet, chord bearing of South 45°04'54" West, and chord distance of 662.83 feet;

thence leaving said parallel line, on a 538.00 foot radius tangential curve to the right, through a central angle of 14°27'26", arc length of 135.75 feet, chord bearing of South 16°10'26" West, and chord distance of 135.39 feet to the POINT OF BEGINNING.

Containing 0.796 acres, more or less.

Tract 2 - Street Dedication

BEGINNING at the most northerly corner of Parcel 2, Partition Plat No. 2010-046;

thence along the northerly boundary line of said Parcel 2, South 45°34'29" West, a distance of 278.00 feet;

thence continuing along said northerly boundary line, South 63°29'14" West, a distance of 61.38 feet;

thence continuing along said northerly boundary line, South 72°02'29" West, a distance of 217.00 feet;

thence along the westerly boundary line of said Parcel 2, South 32°57'13" East, a distance of 117.17 feet;

thence continuing along said westerly boundary line, along a 535.50 foot radius tangential curve to the right, through a central angle of 20°06'00", arc length of

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13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

187.86 feet, chord bearing of South 22°54'13" East, and chord distance of 186.90 feet to the northeast corner of that portion of Orleans Avenue dedicated in Document No. 2010-060545, Clackamas County Deed Records;

thence along the northerly line of said land described in Document No. 2010-060545, South 77°08'47" West, a distance of 30.64 feet to the northwest corner of Orleans Avenue as dedicated in said Document No. 2010-060545;

thence leaving said line, along a 506.00 foot radius non-tangential curve, concave southwesterly, with a radius point bearing South 77°00'21" West, central angle of 19°57'35", arc length of 176.27 feet, chord bearing of North 22°58'26" West, and chord distance of 175.38 feet;

thence along a line being parallel to and measuring 31.00 feet at right angle distances to the said westerly boundary line of Parcel 2, North 32°57'13" West, a distance of 156.01 feet;

thence along a line being parallel to and measuring 28.75 feet at right angle distances to the said northerly boundary line of Parcel 2, North 72°02'29" East, a distance of 257.03 feet;

thence leaving said parallel line, along a 176.00 foot radius tangential curve to the left, through a central angle of 11°29'36", arc length of 35.31 feet, chord bearing of North 66°17'41" East, and chord distance of 35.25 feet;

thence along a 15.00 foot radius tangential curve to the left, through a central angle of 77°56'14", arc length of 20.40 feet, chord bearing of North 21°34'46" East, and chord distance of 18.87 feet;

thence along an 85.00 foot radius tangential curve to the right, through a central angle of 116°31'09", arc length of 172.86 feet, chord bearing of North 40°52'13" East, and chord distance of 144.57 feet;

thence along a 15.00 foot radius tangential curve to the left, through a central angle of 52°24'38", arc length of 13.72 feet, chord bearing of North 72°55'29" East, and chord distance of 13.25 feet;

thence North 46°43'10" East, a distance of 88.90 feet;

thence along a 554.00 foot radius tangential curve to the left, through a central angle of 05°58'18", arc length of 57.74 feet, chord bearing of North 43°44'01" East, and chord distance of 57.71 feet;

thence along a 15.00 foot radius tangential curve to the left, through a central angle of 86°31'24", arc length of 22.65 feet, chord bearing of North 02°30'50" West, and chord distance of 20.56 feet;

thence North 45°46'32" West, a distance of 53.84 feet;

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thence along a 555.00 foot radius tangential curve to the right, through a central angle of 04°16'28", arc length of 41.40 feet, chord bearing of North 43°38'18" West, and chord distance of 41.39 feet;

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the southerly boundary line of Parcel 3, Partition Plat No. 2007-127, North 41°30'04" West, a distance of 134.05 feet;

thence continuing along said parallel line, on a 872.50 foot radius tangential curve to the left, through a central angle of 06°21'49", arc length of 96.91 feet, chord bearing of North 44°40'59" West, and chord distance of 96.86 feet;

thence continuing along said parallel line, North 47°51'53" West, a distance of 143.61 feet to a point on the southerly boundary line of said Parcel 3, Partition Plat No. 2007-127;

thence along said southerly boundary line, North 34°32'15" East, a distance of 27.75 feet;

thence continuing along said southerly boundary line, South 47°51'53" East, a distance of 147.24 feet;

thence continuing along said southerly boundary line, on a 900.00 foot radius tangential curve to the right, through a central angle of 06°21'49", arc length of 99.96 feet, chord bearing of South 44°40'59" East, and chord distance of 99.91 feet;

thence continuing along said southerly boundary line, South 41°30'04" East, a distance of 226.09 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence along said right-of-way line, South 01°35'01" West, a distance of 90.41 feet to the POINT OF BEGINNING.

Containing 1.121 acres, more or less.

Basis of bearings per Partition Plat No. 2007-128, Clackamas County Plat Records.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

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13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

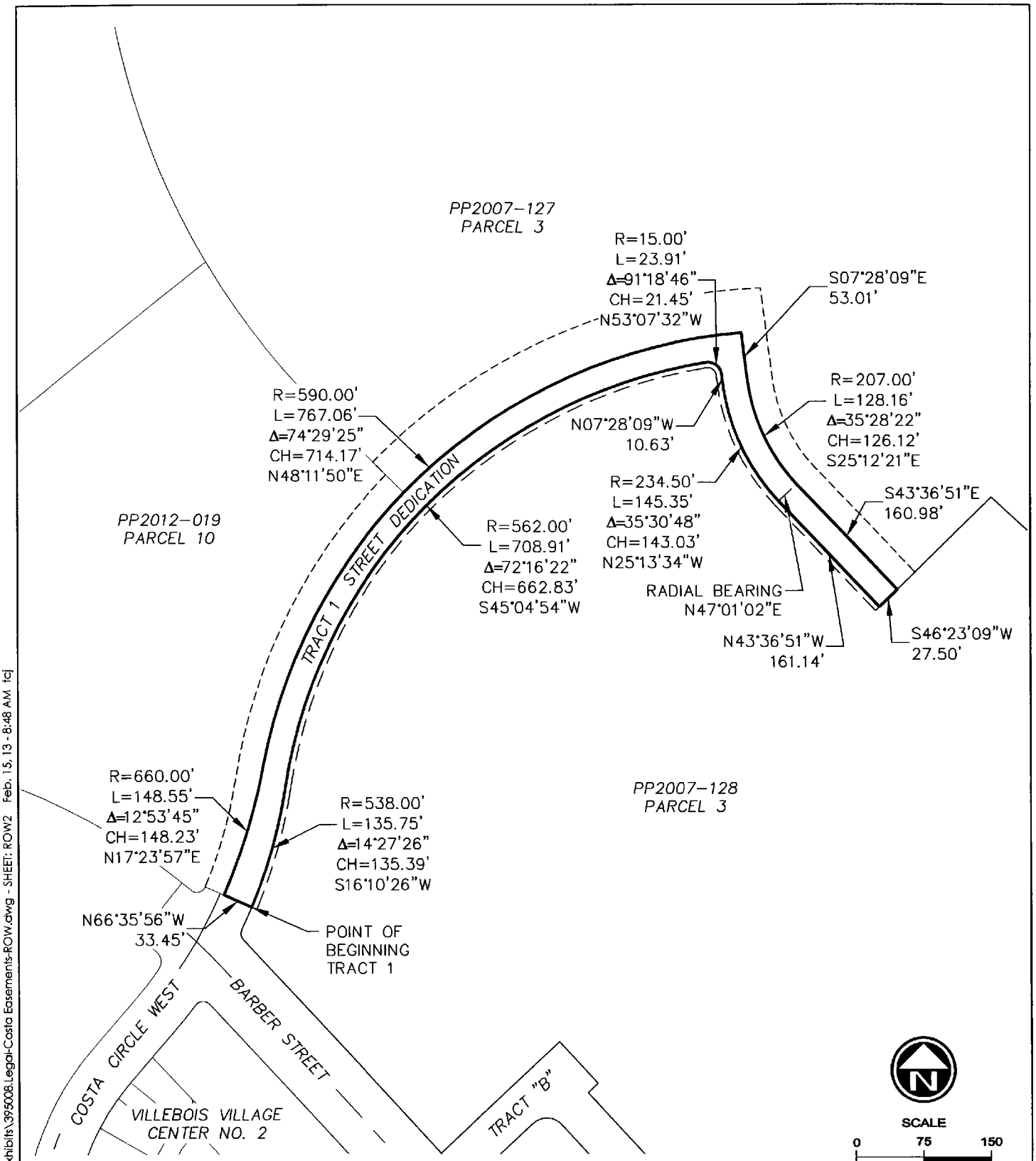

EXHIBIT "B"
STREET DEDICATION

DRAWN BY: T2 DATE: 2/15/13
REVIEWED BY: TCJ DATE: 2/15/13
PROJECT NO.: 395-008
SCALE: 1"=150'
PAGE 1 OF 2

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

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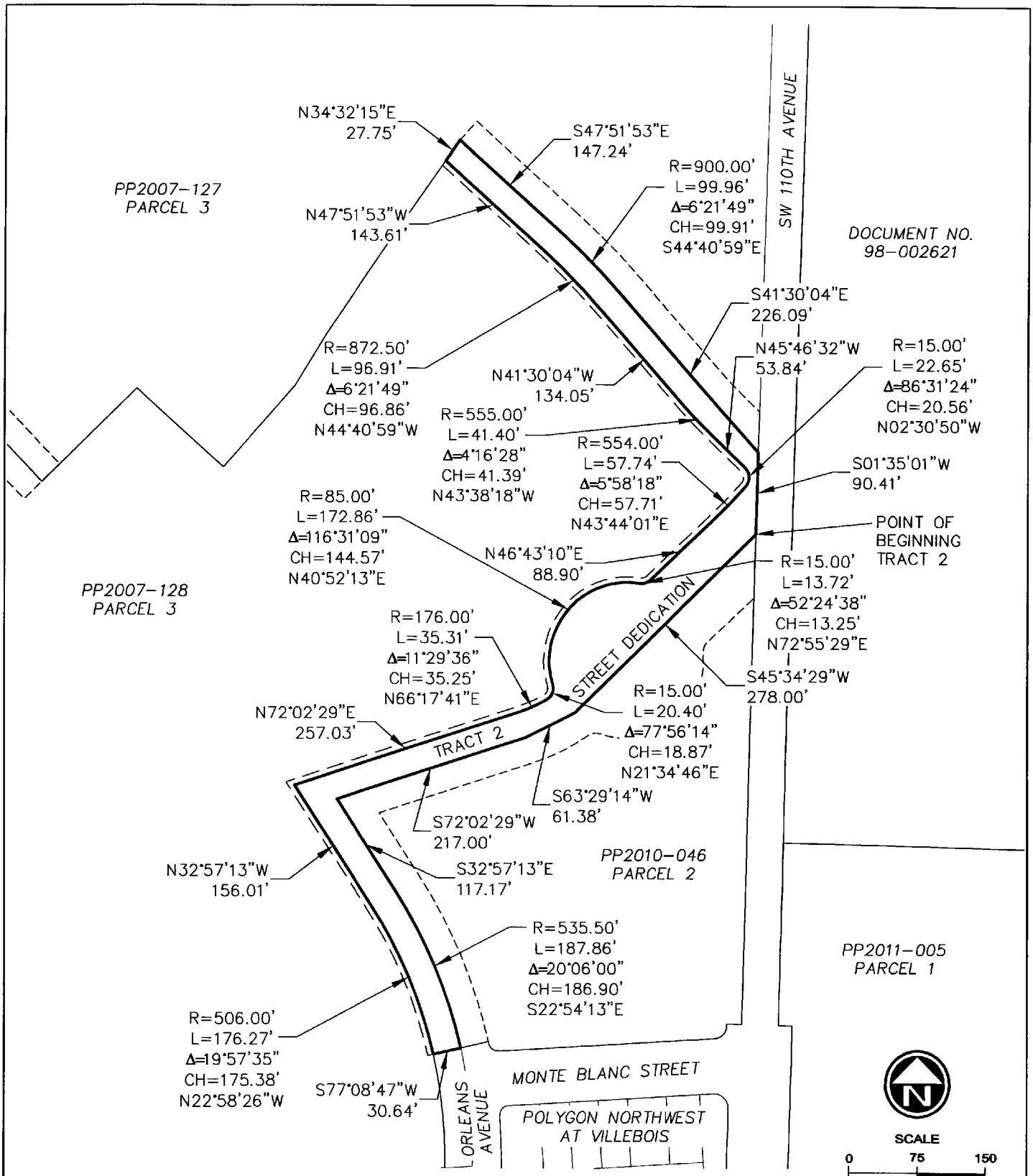

EXHIBIT "B"
STREET DEDICATION

DRAWN BY: T2 DATE: 2/15/13
REVIEWED BY: TCJ DATE: 2/15/13
PROJECT NO.: 395-008
SCALE: 1"=150'
PAGE 2 OF 2

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

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2

Clackamas County Official Records
Sherry Hall, County Clerk
2013-014660
03/01/2013 02:26:13 PM
D-E Cnt=1 Stn=6 KARLYNWUN
$50.00 $16.00 $10.00 $17.00
$93.00

After recording, return to:
City of Wilsonville, Grantee
Attn: City Recorder
29799 SW Town Center Loop E.
Wilsonville OR 97070

Recorded By Chicago Title
Courtesy Only. Not Examined

100313-1

PUBLIC UTILITY EASEMENT

KNOW ALL MEN BY THESE PRESENTS, that **Villebois Village Center, LLC**, a limited liability company, hereinafter referred to as "Grantor," whose principal place of business is 11422 SW BARBER ST. WILSONVILLE, OR 97070, for the consideration hereinafter stated, does forever grant unto the **City of Wilsonville**, a municipal corporation of the State of Oregon, hereinafter referred to as "Grantee," a permanent right-of-way and public utility easement ("PUE") over and along the full width and length of the land, to run with the land, legally described as follows, to-wit:

> See **Exhibit "A"** Legal Description and **Exhibit "B"** Locational Map, attached hereto and incorporated by reference as if fully set forth herein (the "Easement Area").

The true and actual consideration paid for this PUE, stated in terms of dollars, is Zero Dollars, but other good and valuable consideration is provided.

In the event the PUE shall no longer be used by the Grantee for the purposes set forth below, it shall revert back to the Grantor, its successors, and/or assigns.

TO HAVE AND TO HOLD the above-described permanent right-of-way and easement unto said Grantee in accordance with the conditions and covenants as follows:

1. **Use**. This PUE is for the benefit of Grantee and the public in order to allow the installation of utilities, as described below, in order to serve future developments. The Grantee, through its officers, employees, agents, or contractors shall have the right to enter upon the Easement Area in such a manner and at such times from this date as may be reasonably necessary for the purpose of installing, constructing, building, patrolling, replacing, allowing, and maintaining thereon public utilities (collectively, "Improvements") along the Easement Area for the conveyance of power, electric, natural gas, telephone, or cable, including such renewals, repairs, replacements, and removals as may be from time to time required. This PUE shall be perpetual for so long as Grantee shall operate, or cause or enable to be operated, Improvements for said purposes as herein provided. No building or structure shall be constructed over the Easement Area, except as reasonably approved in writing by Grantee, but Grantor shall otherwise have use of the land contained within the Easement Area.

2. **Restoration.** Grantee shall require any party who installs, maintains, or repairs Improvements within the Easement Area to promptly restore the Easement Area equal to its equivalent original condition so that the Grantor and its successors and/or assigns shall have the free and unobstructed use thereof, subject to rights of Grantee and the public herein provided.

3. **Interference.** Grantee will make no unreasonable interference with such use of the surface of said land by Grantor and its successors and/or assigns.

4. **Damage.** Grantor and its successors and/or assigns will not be responsible for damage by others to the Improvements.

5. **Indemnification.** To the extent allowed by law, Grantee will indemnify, defend, and hold harmless the Grantor and its successors and/or assigns from claims or injury to person or property as a result of the negligence of the Grantee, its agents or employees in the construction, operation or maintenance of the Improvements.

6. **Compliance with Laws.** This PUE is subject to, and shall be construed pursuant to, the laws of the State of Oregon, and venue is in the County of Clackamas.

7. **Modifications.** No modifications may be made to this PUE, except in writing, signed by both parties.

8. **Run with the Land.** The parties' rights and obligations contained herein shall run with the land.

9. **Attorney Fees and Jurisdiction.** If legal action is commenced in connection with this Agreement, the prevailing party in such action shall be entitled to recover its reasonable attorney fees and costs incurred in the trial court and in the appeal therefrom. The term "action" shall be deemed to include action commenced in the bankruptcy courts of the United States and any other court of general or limited jurisdiction. This Agreement will be governed m accordance with the laws of the State of Oregon. Venue will be in Clackamas County.

10. **Authority.** If Grantor is an entity, the individual executing the Agreement on behalf of the entity represents and warrants to the City that he/she has the full power and authority to do so and that Grantor has full right and authority to enter into this Agreement and perform its obligations under this Agreement.

11 . **Time of the Essence.** Time is of the essence in performance of this Agreement.

12. **Nonwaiver.** Any failure to enforce any provision of this Agreement will not be deemed a waiver of the right to enforce that provision or any other provision of this Agreement.

13. **Severability.** If any provision of this Agreement is found to be void or unenforceable, it is the intent of the parties that the rest of the Agreement shall remain in full force and effect, to the greatest extent allowed by law.

14. **Modification.** This Agreement may not be modified unless signed by both Grantor and Grantee and recorded.

IN WITNESS WHEREOF, the undersigned have executed this PUE this 6th day of February 2013.

GRANTOR:

VILLEBOIS VILLAGE CENTER, LLC
By: Costa Villebois, LLC, Member

By: _____
Rudy A. Kadlub, Manager

COSTA PACIFIC HOMES, LLC, MEMBER

By: RAK Development Company, Member

By: _____
Rudy A. Kadlub, President

STATE OF OREGON)
) ss.
County of Multnomah)

This instrument was acknowledged before me on February 6, 20 13, by Rudy A. Kadlub as Manager of Costa Villebois, LLC, as Member of Villebois Village Center, LLC, on its behalf.

OFFICIAL SEAL
KINDRA M MILLIMAN
NOTARY PUBLIC - OREGON
COMMISSION NO. 457326
MY COMMISSION EXPIRES APRIL 03, 2015

_____
Notary Public - State of Oregon
#457326

STATE OF OREGON)
) ss.
County of Multnomah

This instrument was acknowledged before me on February 6, 20 13, by Rudy A. Kadlub as President of RAK Development Company, as Member of Costa Pacific Homes, LLC as Member of Villebois Village Center, LLC, on its behalf.

OFFICIAL SEAL
KINDRA M MILLIMAN
NOTARY PUBLIC - OREGON
COMMISSION NO. 457326
MY COMMISSION EXPIRES APRIL 03, 2015

_____
Notary Public - State of Oregon

GRANTEE:

ACCEPTED on behalf of the City of Wilsonville, Oregon
This 27TH day of February, 2013.

Bryan Cosgrove, City Manager
STATE OF OREGON)
) ss.
County of Clackamas)

This instrument was acknowledged before me on February 27, 2013, by Bryan Cosgrove, as the City Manager of the City of Wilsonville.

OFFICIAL SEAL
TAMARA E CALLAWAY
NOTARY PUBLIC-OREGON
COMMISSION NO. 438607
MY COMMISSION EXPIRES APRIL 20, 2013

Notary Public - State of Oregon

ATTESTED TO:

Sandra C. King, MMC, City Recorder
Date: 2/27/2013

APPROVED AS TO FORM
This 26th day of February, 2013.

Barbara A. Jacobson, Assistant City Attorney
City of Wilsonville, Oregon

APPROVED AS TO LEGAL DESCRIPTION
this 26th day of February, 2013.

02/26/2013
Nancy Kraushaar, P.E., Interim City Engineer
City of Wilsonville; Oregon

Pacific Community Design

EXHIBIT "A"

February 15, 2013

LEGAL DESCRIPTION Job No. 395-008
Public Utility Easement

Two tracts of land, being portions of Parcel 3, Partition Plat No. 2007-128, Clackamas County Plat Records, situated in the Northwest and Northeast Quarters of Section 15, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, more particularly described as follows:

Tract 1 - PUE

The land contained within 6.00 feet measured at right angle distances in an easterly and southerly direction of the following described Street Dedication:

BEGINNING at the north terminus point of the easterly right-of-way line of Costa Circle West, as dedicated on the plat of "Villebois Village Center No. 2", also being an angle point of said plat boundary;

thence along the northerly line of said plat boundary, North 66°35'56" West, a distance of 33.45 feet to the southeast corner of Parcel 10, Partition Plat No. 2012-019;

thence along the easterly boundary line of said Parcel 10, Partition Plat No. 2007-127, on a 660.00 foot radius non-tangential curve, concave westerly, with a radius point bearing North 66°09'10" West, central angle of 12°53'45", arc length of 148.55 feet, chord bearing of North 17°23'57" East, and chord distance of 148.23 feet;

thence continuing along said easterly boundary line of Parcel 10 and along the southerly boundary line of Parcel 3, Partition Plat No. 2007-127, on a 590.00 foot radius tangential curve to the right, through a central angle of 74°29'25", arc length of 767.06 feet, chord bearing of North 48°11'50" East, and chord distance of 714.17 feet;

thence continuing along said southerly boundary line of Parcel 3, South 07°28'09" East, a distance of 53.01 feet;

thence continuing along said southerly boundary line of Parcel 3, on a 207.00 foot radius tangential curve to the left, through a central angle of 35°28'22", arc length of 128.16 feet, chord bearing of South 25°12'21" East, and chord distance of 126.12 feet;

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thence continuing along said southerly boundary line of Parcel 3, South 43°36'51" East, a distance of 160.98 feet;

thence leaving said line, South 46°23'09" West, a distance of 27.50 feet;

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the said southerly boundary line of Parcel 3, North 43°36'51" West, a distance of 161.14 feet;

thence continuing along said parallel line, on a 234.50 foot radius non-tangential curve to the right (the radius point bearing North 47°01'02" East), through a central angle of 35°30'48", arc length of 145.35 feet, chord bearing of North 25°13'34" West, and chord distance of 143.03 feet;

thence continuing along said parallel line, North 07°28'09" West, a distance of 10.63 feet;

thence leaving said parallel line, along a 15.00 foot radius tangential curve to the left, through a central angle of 91°18'46", arc length of 23.91 feet, chord bearing of North 53°07'32" West, and chord distance of 21.45 feet;

thence along a line being parallel to and measuring 28.00 feet at right angle distances to the said southerly boundary line of Parcel 3 and the said easterly boundary line of Parcel 10, on a 562.00 foot radius tangential curve to the left, through a central angle of 72°16'22", arc length of 708.91 feet, chord bearing of South 45°04'54" West, and chord distance of 662.83 feet;

thence leaving said parallel line, on a 538.00 foot radius tangential curve to the right, through a central angle of 14°27'26", arc length of 135.75 feet, chord bearing of South 16°10'26" West, and chord distance of 135.39 feet to the POINT OF BEGINNING.

Tract 2 - PUE

The land contained within 6.00 feet measured at right angle distances in a westerly direction of the following described Street Dedication:

BEGINNING at the most northerly corner of Parcel 2, Partition Plat No. 2010-046;

thence along the northerly boundary line of said Parcel 2, South 45°34'29" West, a distance of 278.00 feet;

thence continuing along said northerly boundary line, South 63°29'14" West, a distance of 61.38 feet;

thence continuing along said northerly boundary line, South 72°02'29" West, a distance of 217.00 feet;

Pacific Community Design, Inc.
13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

thence along the westerly boundary line of said Parcel 2, South 32°57'13" East, a distance of 117.17 feet;

thence continuing along said westerly boundary line, along a 535.50 foot radius tangential curve to the right, through a central angle of 20°06'00", arc length of 187.86 feet, chord bearing of South 22°54'13" East, and chord distance of 186.90 feet to the northeast corner of that portion of Orleans Avenue dedicated in Document No. 2010-060545, Clackamas County Deed Records;

thence along the northerly line of said land described in Document No. 2010-060545, South 77°08'47" West, a distance of 30.64 feet to the northwest corner of Orleans Avenue as dedicated in said Document No. 2010-060545;

thence leaving said line, along a 506.00 foot radius non-tangential curve, concave southwesterly, with a radius point bearing South 77°00'21" West, central angle of 19°57'35", arc length of 176.27 feet, chord bearing of North 22°58'26" West, and chord distance of 175.38 feet;

thence along a line being parallel to and measuring 31.00 feet at right angle distances to the said westerly boundary line of Parcel 2, North 32°57'13" West, a distance of 156.01 feet;

thence along a line being parallel to and measuring 28.75 feet at right angle distances to the said northerly boundary line of Parcel 2, North 72°02'29" East, a distance of 257.03 feet;

thence leaving said parallel line, along a 176.00 foot radius tangential curve to the left, through a central angle of 11°29'36", arc length of 35.31 feet, chord bearing of North 66°17'41" East, and chord distance of 35.25 feet;

thence along a 15.00 foot radius tangential curve to the left, through a central angle of 77°56'14", arc length of 20.40 feet, chord bearing of North 21°34'46" East, and chord distance of 18.87 feet;

thence along an 85.00 foot radius tangential curve to the right, through a central angle of 116°31'09", arc length of 172.86 feet, chord bearing of North 40°52'13" East, and chord distance of 144.57 feet;

thence along a 15.00 foot radius tangential curve to the left, through a central angle of 52°24'38", arc length of 13.72 feet, chord bearing of North 72°55'29" East, and chord distance of 13.25 feet;

thence North 46°43'10" East, a distance of 88.90 feet;

thence along a 554.00 foot radius tangential curve to the left, through a central angle of 05°58'18", arc length of 57.74 feet, chord bearing of North 43°44'01" East, and chord distance of 57.71 feet;

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13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

thence along a 15.00 foot radius tangential curve to the left, through a central angle of 86°31'24", arc length of 22.65 feet, chord bearing of North 02°30'50" West, and chord distance of 20.56 feet;

thence North 45°46'32" West, a distance of 53.84 feet;

thence along a 555.00 foot radius tangential curve to the right, through a central angle of 04°16'28", arc length of 41.40 feet, chord bearing of North 43°38'18" West, and chord distance of 41.39 feet;

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the southerly boundary line of Parcel 3, Partition Plat No. 2007-127, North 41°30'04" West, a distance of 134.05 feet;

thence continuing along said parallel line, on a 872.50 foot radius tangential curve to the left, through a central angle of 06°21'49", arc length of 96.91 feet, chord bearing of North 44°40'59" West, and chord distance of 96.86 feet;

thence continuing along said parallel line, North 47°51'53" West, a distance of 143.61 feet to a point on the southerly boundary line of said Parcel 3, Partition Plat No. 2007-127;

thence along said southerly boundary line, North 34°32'15" East, a distance of 27.75 feet;

thence continuing along said southerly boundary line, South 47°51'53" East, a distance of 147.24 feet;

thence continuing along said southerly boundary line, on a 900.00 foot radius tangential curve to the right, through a central angle of 06°21'49", arc length of 99.96 feet, chord bearing of South 44°40'59" East, and chord distance of 99.91 feet;

thence continuing along said southerly boundary line, South 41°30'04" East, a distance of 226.09 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence along said right-of-way line, South 01°35'01" West, a distance of 90.41 feet to the POINT OF BEGINNING.

Basis of bearings per Partition Plat No. 2007-128, Clackamas County Plat Records.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

Pacific Community Design, Inc.
13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

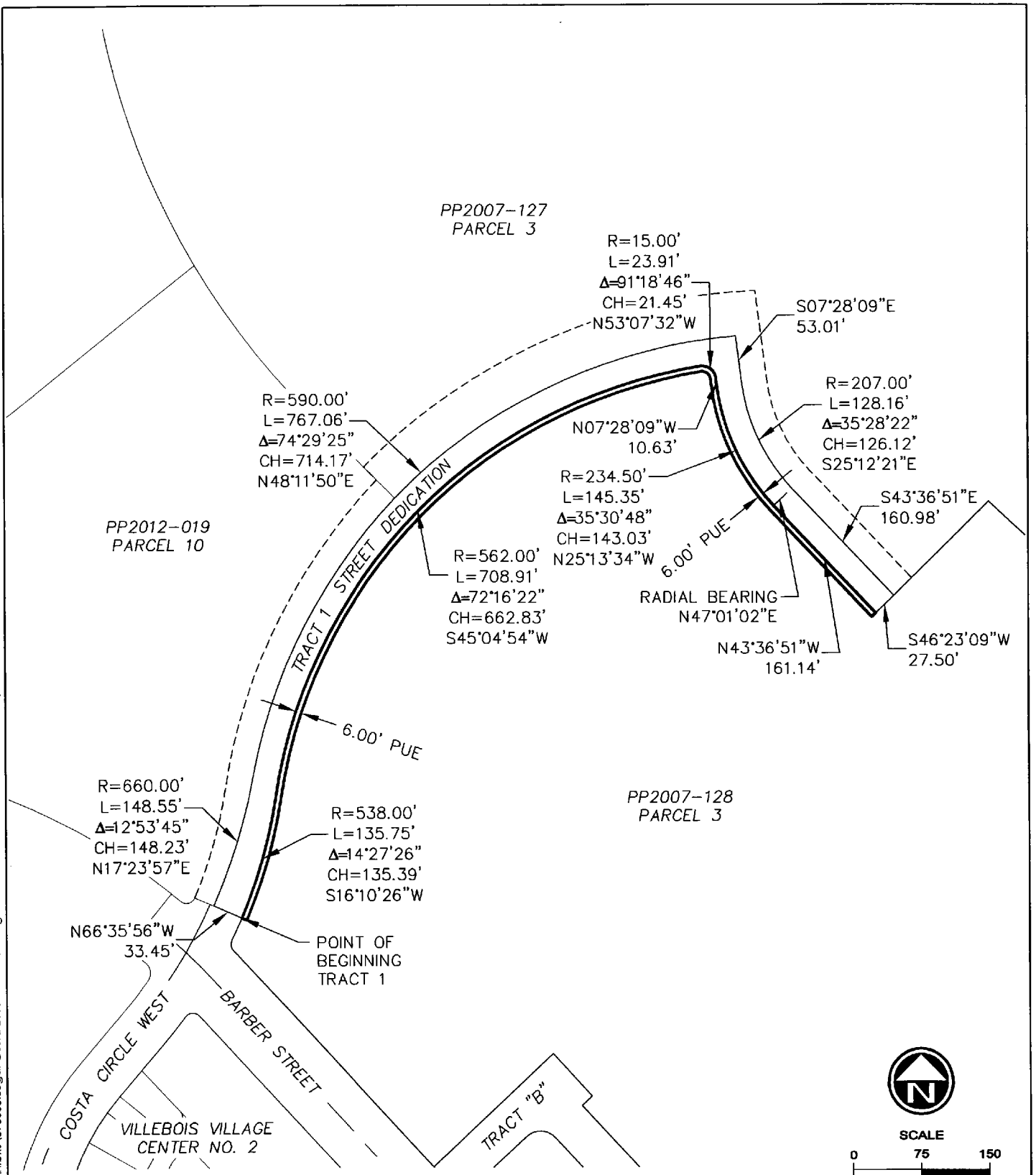

EXHIBIT "B"
PUBLIC UTILITY EASEMENT

DRAWN BY: T2 DATE: 2/15/13
REVIEWED BY: TCJ DATE: 2/15/13
PROJECT NO.: 395-008
SCALE: 1"=150'
PAGE 1 OF 2

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

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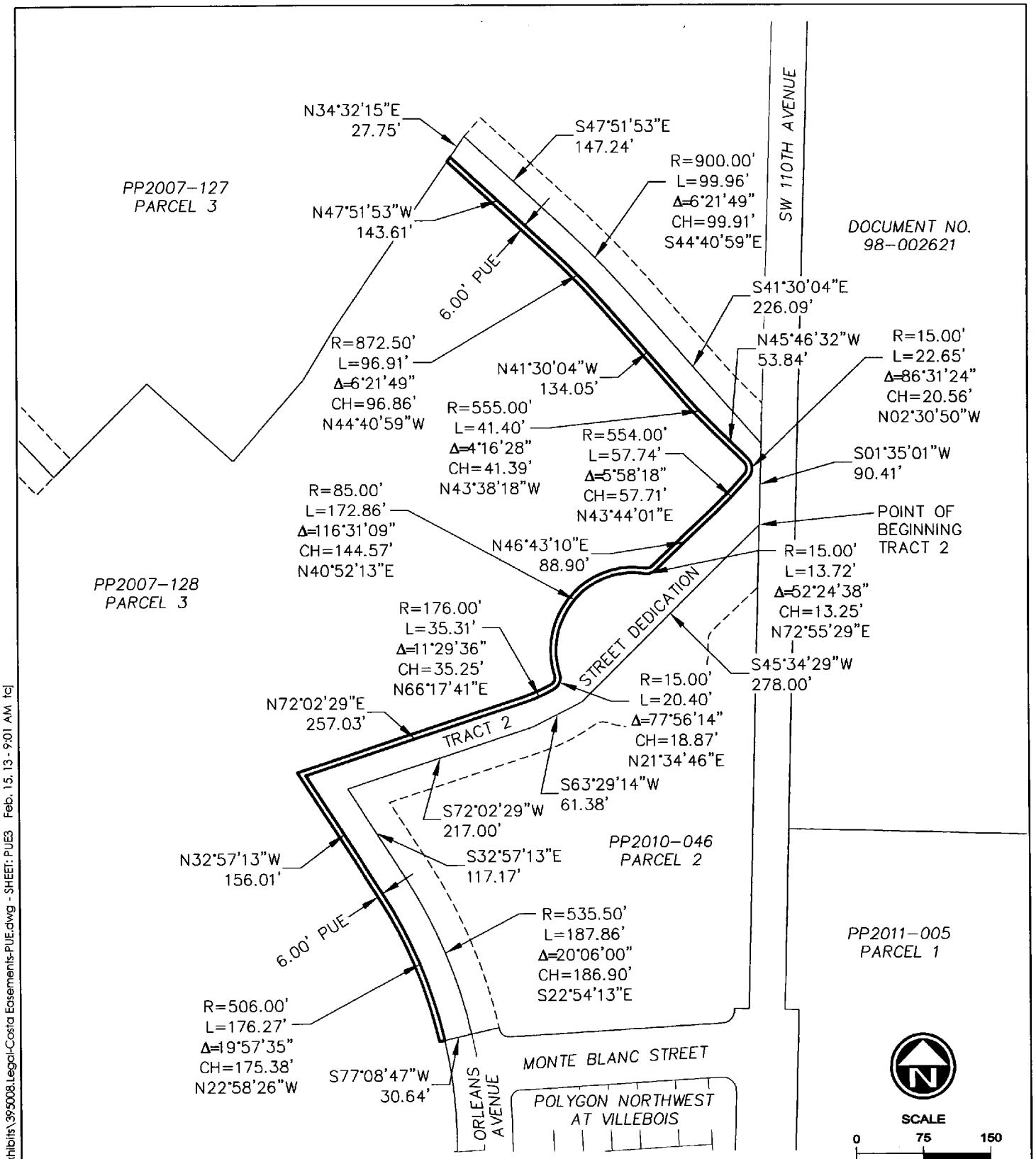

EXHIBIT "B"

PUBLIC UTILITY EASEMENT

DRAWN BY: T2 DATE: 2/15/13

REVIEWED BY: TCJ DATE: 2/15/13

PROJECT NO.: 395-008

SCALE: 1"=150'

PAGE 2 OF 2

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

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Clackamas County Official Records
Sherry Hall, County Clerk
2013-026883
04/19/2013 01:48:59 PM
D-DED Cnt=1 Stn=6 KARLYNWUN
$45.00 $16.00 $10.00 $17.00
$88.00

After recording, return to:
City of Wilsonville
Attn: City Recorder
29799 SW Town Center Loop E.
Wilsonville OR 97070

88

STREET DEDICATION

KNOW ALL BY THESE PRESENTS, that **Polygon at Villebois III, L.L.C.**, a Washington limited liability company, hereinafter referred to as "Grantor," as legal owner of that certain real property legally described below ("Property"), does hereby dedicate, grant, transfer, and convey to the **City of Wilsonville**, a municipal corporation of the State of Oregon, and its assigns, hereinafter referred to as "Grantee," for the use of the public as public way, street, and road ("Street Dedication"), forever, running with the land, certain real property legally described as follows, to-wit:

> See **Exhibit A**, Legal Description, and **Exhibit B**, Locational Map, attached hereto, and incorporated by reference as if fully set forth herein.

TO HAVE AND TO HOLD the above-described Street Dedication unto Grantee for the public uses and purposes hereinabove mentioned; provided, however, in the event said Property is not used or ceases to be used for public purpose, the Street Dedication may be vacated.

The true and actual consideration paid for the transfer, stated in terms of dollars, is Zero Dollars. However, the actual consideration consists of or includes other property or value given or promised which is the whole consideration.

This Street Dedication shall be subject to and construed pursuant to the laws of the State of Oregon, and venue shall be in the County of Clackamas.

No modifications may be made to this Dedication, except in writing, signed by both parties.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE

This instrument filed for record by LEX Fidelity National Title as an accommodation only. It has not been examined as to its execution or as to its effect upon the title.
2119CCO

After recording, return to:
City of Wilsonville
Attn: City Recorder
29799 SW Town Center Loop E.
Wilsonville OR 97070

88

STREET DEDICATION

KNOW ALL BY THESE PRESENTS, that **Polygon at Villebois III, L.L.C.**, a Washington limited liability company, hereinafter referred to as "Grantor," as legal owner of that certain real property legally described below ("Property"), does hereby dedicate, grant, transfer, and convey to the **City of Wilsonville**, a municipal corporation of the State of Oregon, and its assigns, hereinafter referred to as "Grantee," for the use of the public as public way, street, and road ("Street Dedication"), forever, running with the land, certain real property legally described as follows, to-wit:

> See **Exhibit A**, Legal Description, and **Exhibit B**, Locational Map, attached hereto, and incorporated by reference as if fully set forth herein.

TO HAVE AND TO HOLD the above-described Street Dedication unto Grantee for the public uses and purposes hereinabove mentioned; provided, however, in the event said Property is not used or ceases to be used for public purpose, the Street Dedication may be vacated.

The true and actual consideration paid for the transfer, stated in terms of dollars, is Zero Dollars. However, the actual consideration consists of or includes other property or value given or promised which is the whole consideration.

This Street Dedication shall be subject to and construed pursuant to the laws of the State of Oregon, and venue shall be in the County of Clackamas.

No modifications may be made to this Dedication, except in writing, signed by both parties.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE

This instrument filed for record by LEX Fidelity National Title as an accommodation only. It has not been examined as to its execution or as to its effect upon the title.

APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

IN WITNESS WHEREOF, the undersigned have executed this Street Dedication this 22 day of March, 2013.

GRANTOR:

POLYGON AT VILLEBOIS III, L.L.C.,
a Washington limited liability company

By: PNW HOME BUILDERS SOUTH, L.L.C.,
a Washington limited liability company
Its: Manager

By: PNW HOME BUILDERS, L.L.C.,
a Washington limited liability company
Its: Sole Member

By: PNW HOME BUILDERS GROUP, INC.,
a Washington corporation
Its: Managing Member

By: [signature]
Printed Name: FRED GAST
As Its: ASST. V.P.

STATE OF Washington)
) ss.
County of Clark)

This instrument was acknowledged before me on March 22nd, 2013, by Fred Gast, as Assistant Vice President of Polygon at Villebois III, LLC.

[signature]
Notary Public – State of Washington

LATASHA R NIX
NOTARY PUBLIC
STATE OF WASHINGTON
My Comm. Expires July 6, 2015

GRANTEE:

ACCEPTED on behalf of the City of Wilsonville, Oregon
this 5 day of April, 2013.

Bryan Cosgrove, City Manager

OFFICIAL SEAL
ANGELA MARIE HANDRAN
NOTARY PUBLIC - OREGON
COMMISSION NO. 471206
MY COMMISSION EXPIRES AUGUST 28, 2016

STATE OF OREGON)
) ss.
County of Clackamas)

This instrument was acknowledged before me on April 5, 2013, by Bryan Cosgrove, as the City Manager of the City of Wilsonville.

Angela M. Handran
Notary Public – State of Oregon

ATTESTED TO:

Sandra C. King, MMC, City Recorder

APPROVED AS TO FORM:

Barbara A. Jacobson, Assistant City Attorney
City of Wilsonville, Oregon

APPROVED AS TO LEGAL DESCRIPTION:

04/02/2013
Nancy J.T. Kraushaar, P.E., City Engineer/
Community Development Director
City of Wilsonville, Oregon

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Pacific Community Design

EXHIBIT "A"

March 1, 2013

LEGAL DESCRIPTION Job No. 395-008
Street Dedication

Three tracts of land, being portions of Parcel 3, Partition Plat No. 2007-127, and Parcel 2, Partition Plat No. 2010-046, Clackamas County Plat Records, situated in the Northwest and Northeast Quarters of Section 15, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, more particularly described as follows:

Tract 1 - Street Dedication

BEGINNING at the southwest corner of said Parcel 3, Partition Plat No. 2007-127;

thence along the southerly boundary line of said Parcel 3, on a 590.00 foot radius curve, concave southerly, with a radius point bearing South 45°42'28" East, arc length of 423.74 feet, central angle of 41°09'00", chord bearing of North 64°52'02" East, and chord distance of 414.69 feet;

thence continuing along said southerly boundary line, South 07°28'09" East, a distance of 53.01 feet;

thence continuing along said southerly boundary line, on a 207.00 foot radius tangential curve to the left, arc length of 128.16 feet, central angle of 35°28'22", chord bearing of South 25°12'21" East, and chord distance of 126.12 feet;

thence continuing along said southerly boundary line, South 43°36'51" East, a distance of 160.98 feet;

thence continuing along said southerly boundary line, North 45°36'51" East, a distance of 27.50 feet;

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the said southerly boundary line of Parcel 3, North 43°36'51" West, a distance of 158.20 feet;

thence leaving said parallel line, along a 179.50 foot radius tangential curve to the right, arc length of 113.24 feet, central angle of 36°08'42", chord bearing of North 25°32'30" West, and chord distance of 111.37 feet;

13500 SW Pacific Highway PMB #519, Tigard, OR 97223 • [T] 503-941-9484 [F] 503-941-9485

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the said southerly boundary line of Parcel 3, North 07°28'09" West, a distance of 99.16 feet;

thence along a line being parallel to and measuring 48.00 feet at right angle distances to the said southerly boundary line of Parcel 3, on a 638.00 foot radius non-tangential curve, concave southeasterly, with a radius point bearing South 02°18'04" East, arc length of 482.98 feet, central angle of 43°22'27", chord bearing of South 66°00'42" West, and chord distance of 471.53 feet to a point on the westerly boundary line of said Parcel 3;

thence along said westerly boundary line, South 45°16'40" East, a distance of 48.00 feet to the POINT OF BEGINNING.

Containing 0.725 acres, more or less.

Tract 2 - Street Dedication

BEGINNING at the most northerly corner of Parcel 3, Partition Plat No. 2007-128;

thence along the northerly boundary line of said Parcel 3, South 47°51'53" East, a distance of 147.24 feet;

thence continuing along said northerly boundary line, on a 900.00 foot radius tangential curve to the right, arc length of 99.96 feet, central angle of 06°21'49", chord bearing of South 44°40'59" East, and chord distance of 99.91 feet;

thence continuing along said northerly boundary line, South 41°30'04" East, a distance of 226.09 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence along said westerly right-of-way line, North 01°35'01" East, a distance of 44.72 feet;

thence leaving said westerly right-of-way line, North 45°46'32" West, a distance of 22.14 feet;

thence along a 500.00 foot radius tangential curve to the right, arc length of 37.30 feet, central angle of 04°16'28", chord bearing of North 43°38'18" West, and chord distance of 37.29 feet;

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the said northerly boundary line of Parcel 3, thence North 41°30'04" West, a distance of 134.05 feet;

thence continuing along said parallel line, on a 927.50 foot radius tangential curve to the left, arc length of 103.02 feet, central angle of 06°21'49", chord bearing of North 44°40'58" West, and chord distance of 102.96 feet;

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thence continuing along said parallel line, North 47°51'53" West, a distance of 147.28 feet;

thence leaving said parallel line, South 42°08'07" West, a distance of 27.50 feet to the POINT OF BEGINNING.

Containing 0.292 acres, more or less.

Tract 3 - Street Dedication

BEGINNING at the most northerly corner of Parcel 2, Partition Plat No. 2010-046;

thence along the northerly boundary line of said Parcel 2, South 45°34'29" West, a distance of 278.00 feet;

thence continuing along said northerly boundary line, South 63°29'14" West, a distance of 61.38 feet;

thence continuing along said northerly boundary line, South 72°02'29" West, a distance of 217.00 feet to the northwest corner of said Parcel 2;

thence along the westerly boundary line of said Parcel 2, South 32°57'13" East, a distance of 117.17 feet;

thence continuing along the said westerly boundary line, on a 535.50 foot radius tangential curve to the right, arc length of 187.86 feet, central angle of 20°06'00", chord bearing of South 22°54'13" East, and chord distance of 186.90 feet to the southwest corner of said Parcel 2;

thence along the southerly boundary line of said Parcel 2, North 77°08'47" East, a distance of 31.36 feet to an angle point in said Parcel 2;

thence leaving said line, along a 568.00 foot radius non-tangential curve, concave southwesterly, with a radius point bearing South 77°01'16" West, arc length of 198.02 feet, central angle of 19°58'30", chord bearing of North 22°57'59" West, and chord distance of 197.02 feet;

thence North 32°57'14" West, a distance of 79.87 feet;

thence along a line being parallel to and measuring 28.75 feet at right angle distances to the said northerly boundary line of Parcel 2, North 72°02'29" East, a distance of 177.44 feet;

thence leaving said parallel line, along a 233.50 foot radius tangential curve to the left, arc length of 67.83 feet, central angle of 16°38'43", chord bearing of North 63°43'08" East, and chord distance of 67.60 feet;

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thence along a 15.00 foot radius reverse curve to the right, arc length of 14.18 feet, central angle of 54°09'29", chord bearing of North 82°28'31" East, and chord distance of 13.66 feet;

thence along a 85.00 foot radius reverse curve to the left, arc length of 170.97 feet, central angle of 115°14'42", chord bearing of North 51°55'54" East, and chord distance of 143.57 feet;

thence along a 15.00 foot radius reverse curve to the right, arc length of 13.72 feet, central angle of 52°24'38", chord bearing of North 20°30'51" East, and chord distance of 13.25 feet;

thence North 46°43'10" East, a distance of 69.57 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence along said westerly right-of-way line, North 01°35'01" East, a distance of 68.95 feet to the POINT OF BEGINNING.

Containing 0.741 acres, more or less.

Basis of bearings per Partition Plat No. 2007-128, Clackamas County Plat Records.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

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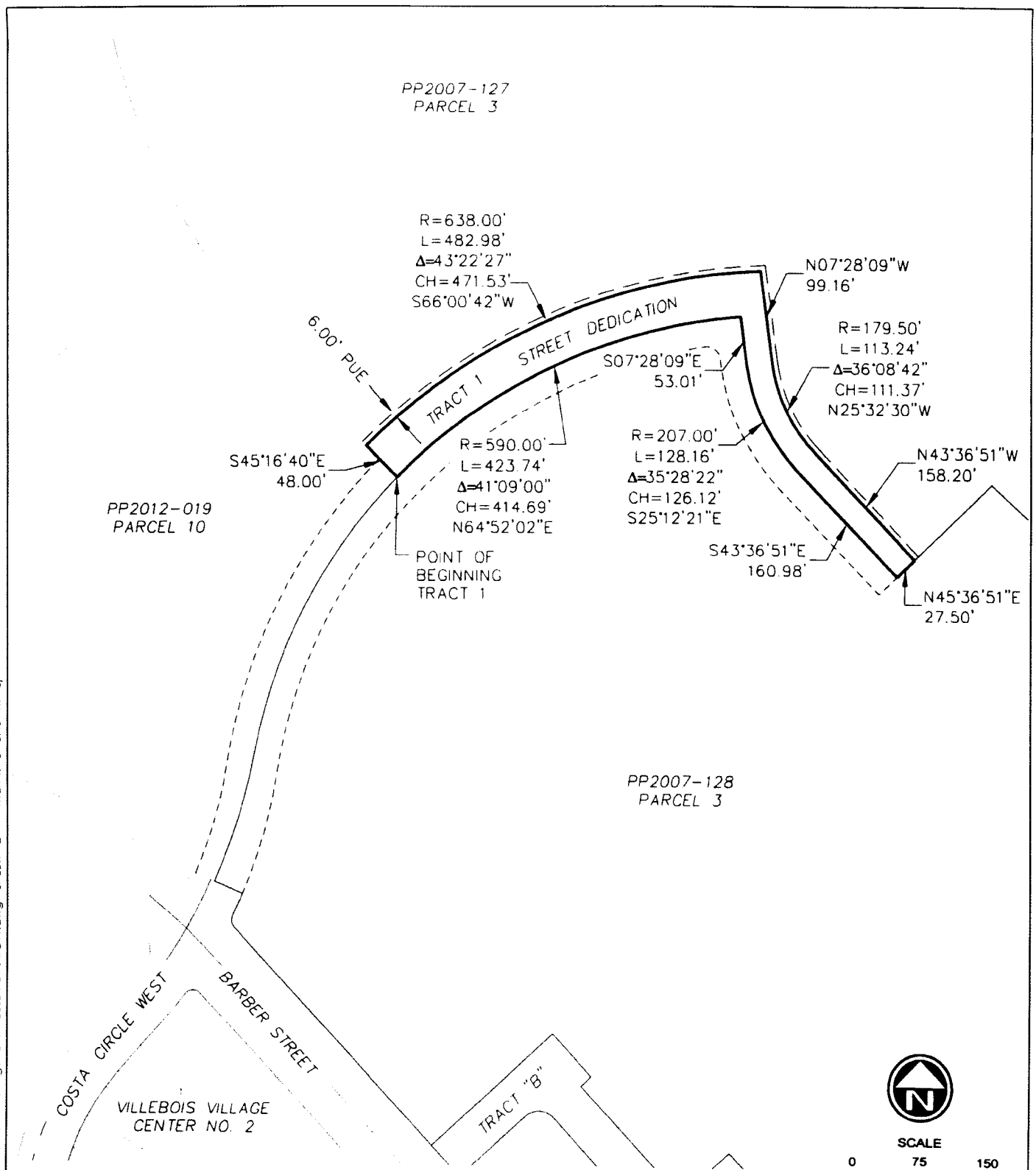

EXHIBIT "B"
STREET DEDICATION

DRAWN BY: T2 DATE: 3/1/13
REVIEWED BY: TCJ DATE: 3/1/13
PROJECT NO.: 395-008
SCALE: 1"=150'
PAGE 1 OF 2

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

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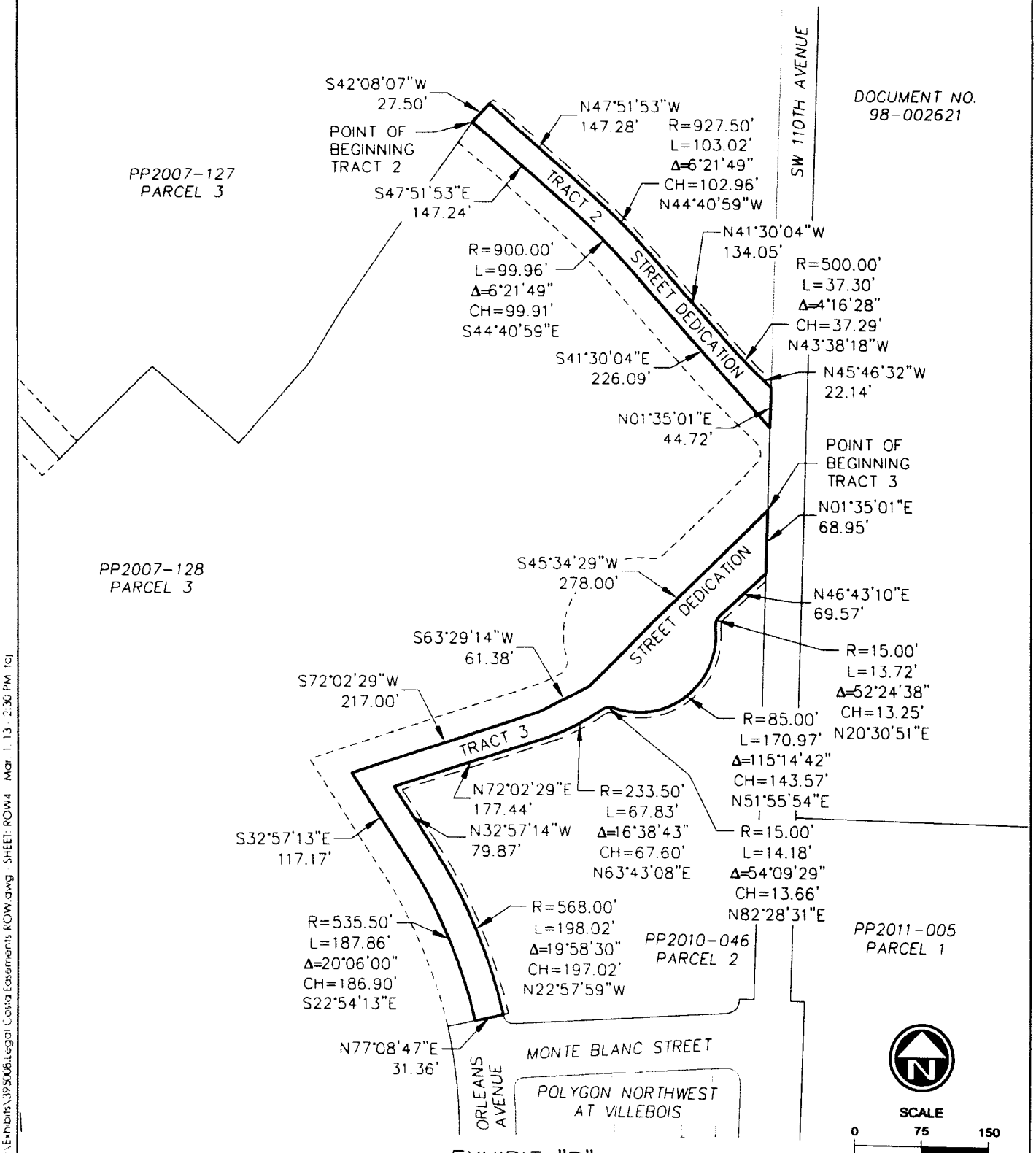

EXHIBIT "B"
STREET DEDICATION

DRAWN BY: T2 DATE: 3/1/13
REVIEWED BY: TCJ DATE: 3/1/13
PROJECT NO.: 395-008
SCALE: 1"=150'
PAGE 2 OF 2

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

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PARTITION PLAT NO._____

PARTITION PLAT

A REPLAT OF A PORTION OF
PARCEL 3, PARTITION PLAT NO. 2007–128
LOCATED IN THE NORTHEAST AND NORTHWEST QUARTERS OF SECTION 15
TOWNSHIP 3S, RANGE 1W, WILLAMETTE MERIDIAN

CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON

SURVEYED _____

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	DISTANCE
C1	36.13'	23.00'	90°00'00"	N87°56'36"W	32.53'

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO PARTITION INTO THREE PARCELS THAT LAND KNOWN AS PARCEL 1 OF PARTITION PLAT NO. 2007–128 PER CITY OF WILSONVILLE CASE FILE NOS. DB12–0057 AND DB12–0059.

EAST BOUNDARY LINE: TWO MONUMENTS WERE MISSING ON THE WESTERLY LINE OF PARCEL 2 OF PARTITION PLAT NO. 2010–046, AND WERE RESET AT RECORD LOCATIONS PER PARTITION PLAT NO. 2010–046. THE NORTHWEST CORNER OF THE LAND DESCRIBED IN RIGHT–OF–WAY DEDICATION DOCUMENT NO. 2010–060545 WAS MONUMENTED AT RECORD LOCATION FROM THE SOUTHWEST CORNER OF SAID PARCEL 2 AS ESTABLISHED IN SAID DOCUMENT. ALL FOUND MONUMENTS WERE HELD PER PLAT OF "VILLEBOIS", AS SHOWN AND NOTED.

SOUTH BOUNDARY LINE: THE SOUTHEAST CORNER OF THIS PARTITION PLAT WAS ESTABLISHED AT THE INTERSECTION POINT OF THE SOUTHERLY BOUNDARY LINE PROJECTION FROM FOUND MONUMENTS AS SHOWN, WITH RECORD CURVE DATA FROM THE ESTABLISHED NORTHWEST CORNER OF THE LAND DESCRIBED IN SAID DOCUMENT NO. 2010–060545. THE MISSING MONUMENT AT AN ANGLE POINT NEAR THE SOUTHWEST CORNER OF THIS PARTITION PLAT WAS RESET AT RECORD LOCATIONS PER VILLEBOIS VILLAGE CENTER NO. 2. ALL FOUND MONUMENTS WERE HELD PER PLATS OF "VILLEBOIS", "VILLEBOIS VILLAGE CENTER", AND "VILLEBOIS VILLAGE CENTER NO. 2", AS SHOWN AND NOTED.

WEST BOUNDARY LINE: TWO MONUMENTS WERE MISSING AND WERE RESET AT RECORD LOCATIONS PER PARTITION PLAT NO. 2012–019. ALL FOUND MONUMENTS WERE HELD PER PLATS OF "VILLEBOIS" AND "VILLEBOIS VILLAGE CENTER NO. 2", AS SHOWN AND NOTED.

NORTH BOUNDARY LINE: ONE MONUMENT WAS MISSING AND WAS RESET AT RECORD LOCATION PER PARTITION PLAT NO. 2007–127. ALL FOUND MONUMENTS WERE HELD PER PLAT OF "VILLEBOIS", AS SHOWN AND NOTED.

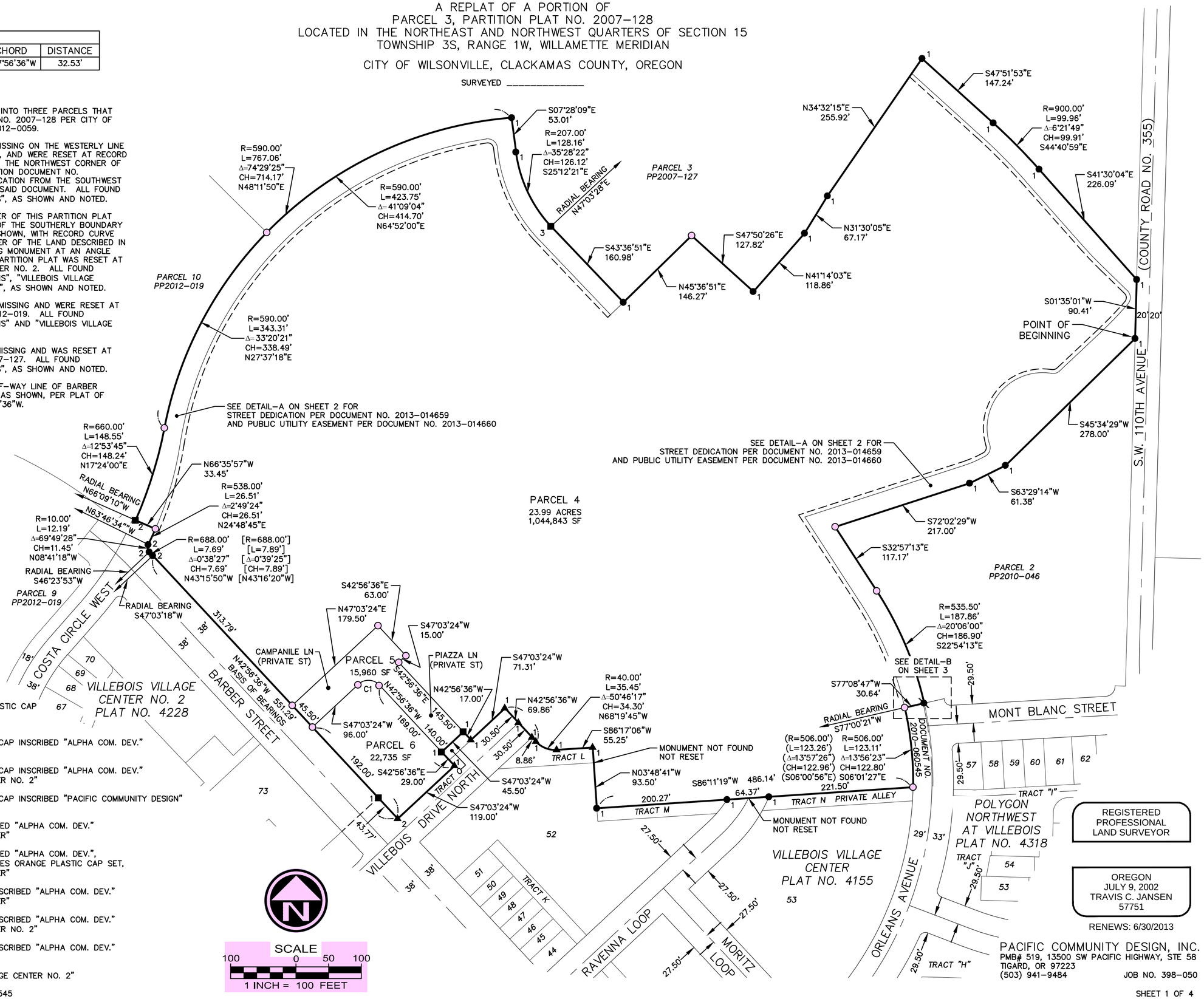
BASIS OF BEARINGS IS THE NORTHERLY RIGHT–OF–WAY LINE OF BARBER STREET BETWEEN FOUND AND HELD MONUMENTS AS SHOWN, PER PLAT OF "VILLEBOIS VILLAGE CENTER NO. 2, BEING N42°56'36"W.

SHEET INDEX

1. NARRATIVE
   BASIS OF BEARINGS
   PLAT BOUNDARY
   CURVE TABLE
2. REFERENCE SURVEYS
   DETAIL–A
3. SURVEYOR'S CERTIFICATE
   DETAIL–B
4. CITY OF WILSONVILLE APPROVALS
   CLACKAMAS COUNTY APPROVALS
   DECLARATION
   ACKNOWLEDGEMENT
   CONSENT AFFIDAVITS
   PLAT NOTES

LEGEND

- ○ SET 5/8" X 30" IRON ROD WITH ORANGE PLASTIC CAP INSCRIBED "PACIFIC COMMUNITY DESIGN" SET ON _____
- ●1 FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS"
- ●2 FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER NO. 2"
- FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INSCRIBED "PACIFIC COMMUNITY DESIGN" HELD PER PARTITION PLAT NO. 2010–046
- ▲1 FOUND 1" COPPER DISK IN CONCRETE INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER"
- ▲2 FOUND 1" COPPER DISK IN CONCRETE INSCRIBED "ALPHA COM. DEV.", PLAT OF "VILLEBOIS VILLAGE CENTER" INDICATES ORANGE PLASTIC CAP SET, HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER"
- ■1 FOUND 5/8" IRON ROD W/ ALUMINUM CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER"
- ■2 FOUND 5/8" IRON ROD W/ ALUMINUM CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER NO. 2"
- ■3 FOUND 5/8" IRON ROD W/ ALUMINUM CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS"
- [ ] RECORD DATA PER PLAT OF "VILLEBOIS VILLAGE CENTER NO. 2"
- ( ) RECORD DATA PER DOCUMENT NO. 2010–060545



REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

PACIFIC COMMUNITY DESIGN, INC.
PMB# 519, 13500 SW PACIFIC HIGHWAY, STE 58
TIGARD, OR 97223
(503) 941–9484

JOB NO. 398–050

SHEET 1 OF 4

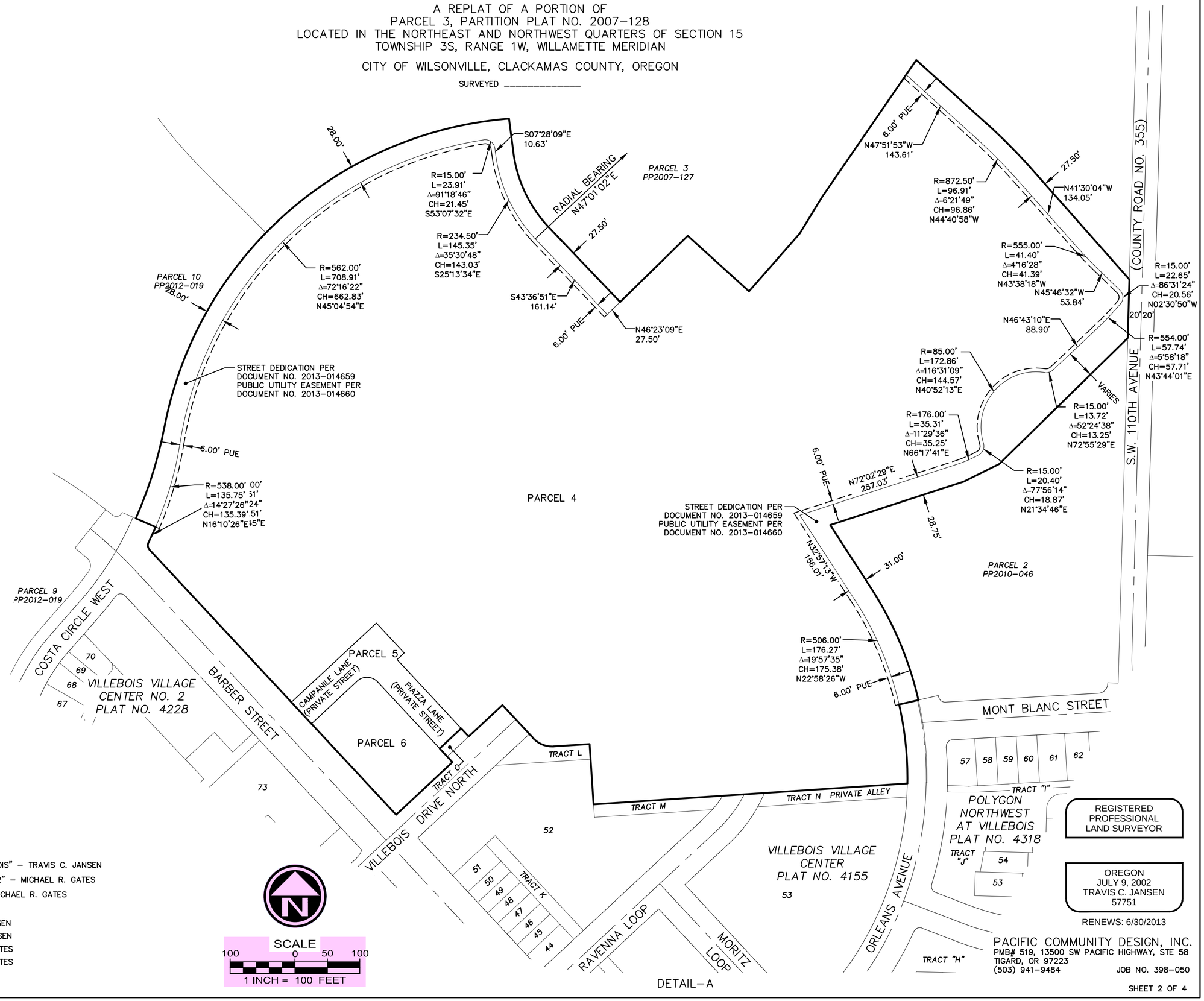
PARTITION PLAT

PARTITION PLAT NO._____

A REPLAT OF A PORTION OF
PARCEL 3, PARTITION PLAT NO. 2007–128
LOCATED IN THE NORTHEAST AND NORTHWEST QUARTERS OF SECTION 15
TOWNSHIP 3S, RANGE 1W, WILLAMETTE MERIDIAN

CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON

SURVEYED _____



REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

LEGEND

PUE PUBLIC UTILITY EASEMENT

REFERENCE SURVEYS

PLAT NO. 4318 "POLYGON NORTHWEST AT VILLEBOIS" – TRAVIS C. JANSEN
PLAT NO. 4228 "VILLEBOIS VILLAGE CENTER NO. 2" – MICHAEL R. GATES
PLAT NO. 4155 "VILLEBOIS VILLAGE CENTER" – MICHAEL R. GATES
PLAT NO. 4052 "VILLEBOIS" – MICHAEL R. GATES
PARTITION PLAT NO. 2012–019 – TRAVIS C. JANSEN
PARTITION PLAT NO. 2010–046 – TRAVIS C. JANSEN
PARTITION PLAT NO. 2007–128 – MICHAEL R. GATES
PARTITION PLAT NO. 2007–127 – MICHAEL R. GATES

PACIFIC COMMUNITY DESIGN, INC.
PMB# 519, 13500 SW PACIFIC HIGHWAY, STE 58
TIGARD, OR 97223
(503) 941–9484

JOB NO. 398–050

SHEET 2 OF 4

PARTITION PLAT

PARTITION PLAT NO._____

A REPLAT OF A PORTION OF
PARCEL 3, PARTITION PLAT NO. 2007–128
LOCATED IN THE NORTHEAST AND NORTHWEST QUARTERS OF SECTION 15
TOWNSHIP 3S, RANGE 1W, WILLAMETTE MERIDIAN

CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON

SURVEYED _____

SURVEYOR'S CERTIFICATE

I, TRAVIS C. JANSEN, HEREBY CERTIFY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS THE LAND REPRESENTED ON THIS PARTITION PLAT, A REPLAT OF A PORTION OF PARCEL 1 OF PARTITION PLAT NO. 2007–128, LOCATED IN THE NORTHEAST AND NORTHWEST QUARTERS OF SECTION 15, TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INITIAL POINT, A 5/8" IRON ROD WITH ORANGE PLASTIC CAP INSCRIBED "ALPHA COM. DEV." FOUND AT THE MOST NORTHERLY CORNER OF PARCEL 2 OF PARTITION PLAT NO. 2010–046;

THENCE ALONG THE NORTHERLY BOUNDARY LINE OF SAID PARCEL 2, THE FOLLOWING THREE COURSES:

SOUTH 45°34'29" WEST, A DISTANCE OF 278.00 FEET;
SOUTH 63°29'14" WEST, A DISTANCE OF 61.38 FEET;
SOUTH 72°02'29" WEST, A DISTANCE OF 217.00 FEET TO THE NORTHWEST CORNER OF SAID PARCEL 2;

THENCE ALONG THE WESTERLY BOUNDARY LINE OF SAID PARCEL 2, THE FOLLOWING 2 COURSES:

SOUTH 32°57'13" EAST, A DISTANCE OF 117.17 FEET TO A POINT OF CURVATURE;
ALONG A 535.50 FOOT RADIUS TANGENTIAL CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 20°06'00", ARC LENGTH OF 187.86 FEET, CHORD BEARING OF SOUTH 22°54'13" EAST, AND CHORD DISTANCE OF 186.90 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL 2;

THENCE ALONG THE NORTHERLY RIGHT–OF–WAY LINE OF ORLEANS AVENUE AS DESCRIBED IN DEDICATION DOCUMENT NO. 2010–060545, CLACKAMAS COUNTY OFFICIAL RECORDS, SOUTH 77°08'47" WEST, A DISTANCE OF 30.64 FEET;

THENCE ALONG THE WESTERLY RIGHT–OF–WAY LINE OF ORLEANS AVENUE AS DESCRIBED IN SAID DEDICATION DOCUMENT NO. 2010–060545, ON A 506.00 FOOT RADIUS NON–TANGENTIAL CURVE, CONCAVE WESTERLY, WITH A RADIUS POINT BEARING SOUTH 77°00'21" WEST, CENTRAL ANGLE OF 13°56'23", ARC LENGTH OF 123.11 FEET, CHORD BEARING OF SOUTH 06°01'27" EAST, AND CHORD DISTANCE OF 122.80 FEET TO THE NORTHEAST CORNER OF TRACT N OF THE PLAT OF "VILLEBOIS VILLAGE CENTER";

THENCE ALONG THE NORTHERLY LINE OF THE PLATS OF "VILLEBOIS VILLAGE CENTER" AND "VILLEBOIS VILLAGE CENTER NO. 2", THE FOLLOWING FIFTEEN COURSES:

SOUTH 86°11'19" WEST, A DISTANCE OF 486.14 FEET;
NORTH 03°48'41" WEST, A DISTANCE OF 93.50 FEET;
SOUTH 86°17'06" WEST, A DISTANCE OF 55.25 FEET TO A POINT OF CURVATURE;

ALONG A 40.00 FOOT RADIUS TANGENTIAL CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 50°46'17", ARC LENGTH OF 35.45 FEET, CHORD BEARING OF NORTH 68°19'45" WEST, AND CHORD DISTANCE OF 34.30 FEET TO A POINT OF TANGENCY;

NORTH 42°56'36" WEST, A DISTANCE OF 69.86 FEET;
SOUTH 47°03'24" WEST, A DISTANCE OF 71.31 FEET;
NORTH 42°56'36" WEST, A DISTANCE OF 17.00 FEET;
SOUTH 47°03'24" WEST, A DISTANCE OF 45.50 FEET;
SOUTH 42°56'36" EAST, A DISTANCE OF 29.00 FEET;
SOUTH 47°03'24" WEST, A DISTANCE OF 119.00 FEET;
NORTH 42°56'36" WEST, A DISTANCE OF 551.29 FEET TO A POINT OF CURVATURE;

ALONG A 688.00 FOOT RADIUS TANGENTIAL CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 00°38'27", ARC LENGTH OF 7.69 FEET, CHORD BEARING OF NORTH 43°15'50" WEST, AND CHORD DISTANCE OF 7.69 FEET TO A POINT OF COMPOUND CURVATURE;

ALONG A 10.00 FEET RADIUS TANGENTIAL CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 69°49'28", ARC LENGTH OF 12.19 FEET, CHORD BEARING OF NORTH 08°41'18" WEST, AND CHORD DISTANCE 11.45 FEET TO A POINT OF COMPOUND CURVATURE;

ALONG A 538.00 FEET RADIUS TANGENTIAL CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 02°49'24", ARC LENGTH OF 26.51 FEET, CHORD BEARING OF NORTH 24°48'45" EAST, AND CHORD DISTANCE 26.51 FEET;

NORTH 66°35'57" WEST, A DISTANCE OF 33.45 FEET TO THE SOUTHEAST CORNER OF PARCEL 10 OF PARTITION PLAT NO. 2012–019;

THENCE ALONG THE EASTERLY BOUNDARY LINE OF SAID PARCEL 10 AND THE SOUTHERLY BOUNDARY LINE OF PARCEL 3 OF PARTITION PLAT NO. 2007–127, THE FOLLOWING THIRTEEN COURSES:

ALONG A 660.00 FOOT RADIUS NON–TANGENTIAL CURVE, CONCAVE WESTERLY, WITH A RADIUS POINT BEARING NORTH 66°09'10" WEST, CENTRAL ANGLE OF 12°53'45", ARC LENGTH OF 148.55 FEET, CHORD BEARING OF NORTH 17°24'00" EAST, AND CHORD DISTANCE OF 148.24 FEET TO POINT OF REVERSE CURVATURE;

ALONG A 590.00 FEET RADIUS TANGENTIAL CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 74°29'25", ARC LENGTH OF 767.06 FEET, CHORD BEARING OF NORTH 48°11'50" EAST, AND CHORD DISTANCE 714.17 FEET;

SOUTH 07°28'09" EAST, A DISTANCE OF 53.01 FEET TO POINT OF CURVATURE;

ALONG A 207.00 FOOT RADIUS TANGENTIAL CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 35°28'22", ARC LENGTH OF 128.16 FEET, CHORD BEARING OF SOUTH 25°12'21" EAST, AND CHORD DISTANCE OF 126.12 FEET;

SOUTH 43°36'51" EAST, A DISTANCE OF 160.98 FEET;
NORTH 45°36'51" EAST, A DISTANCE OF 146.27 FEET;
SOUTH 47°50'26" EAST, A DISTANCE OF 127.82 FEET;
NORTH 41°14'03" EAST, A DISTANCE OF 118.86 FEET;
NORTH 31°30'05" EAST, A DISTANCE OF 67.17 FEET;
NORTH 34°32'15" EAST, A DISTANCE OF 255.92 FEET;
SOUTH 47°51'53" EAST, A DISTANCE OF 147.24 FEET TO A POINT OF CURVATURE;

ALONG A 900.00 FOOT RADIUS TANGENTIAL CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 06°21'49", ARC LENGTH OF 99.96 FEET, CHORD BEARING OF SOUTH 44°40'59" EAST, AND CHORD DISTANCE OF 99.91 FEET TO POINT OF TANGENCY;

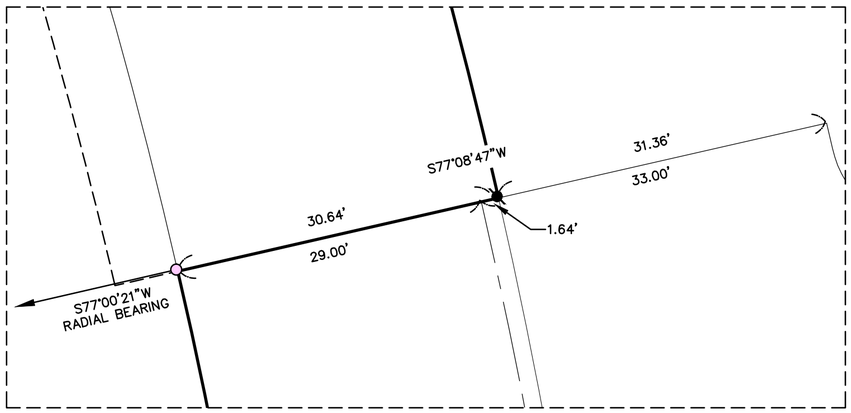
SOUTH 41°30'04" EAST, A DISTANCE OF 226.09 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL 3;

THENCE ALONG THE WESTERLY RIGHT–OF–WAY LINE OF SW 110TH AVENUE, SOUTH 01°35'01" WEST, A DISTANCE OF 90.41 FEET TO THE INITIAL POINT.

CONTAINING APPROXIMATELY 24.88 ACRES.

LEGEND

- ○ SET 5/8" X 30" IRON ROD WITH ORANGE PLASTIC CAP INSCRIBED "PACIFIC COMMUNITY DESIGN" SET ON _____
- ●1 FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS"
- ●2 FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER NO. 2"
- FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INSCRIBED "PACIFIC COMMUNITY DESIGN" HELD PER PARTITION PLAT NO. 2010–046
- ▲1 FOUND 1" COPPER DISK IN CONCRETE INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER"
- ▲2 FOUND 1" COPPER DISK IN CONCRETE INSCRIBED "ALPHA COM. DEV.", PLAT OF "VILLEBOIS VILLAGE CENTER" INDICATES ORANGE PLASTIC CAP SET, HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER"
- ■1 FOUND 5/8" IRON ROD W/ ALUMINUM CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER"
- ■2 FOUND 5/8" IRON ROD W/ ALUMINUM CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER NO. 2"
- ■3 FOUND 5/8" IRON ROD W/ ALUMINUM CAP INSCRIBED "ALPHA COM. DEV." HELD PER PLAT OF "VILLEBOIS"



DETAIL–B
1"=10'

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

PACIFIC COMMUNITY DESIGN, INC.
PMB# 519, 13500 SW PACIFIC HIGHWAY, STE 58
TIGARD, OR 97223
(503) 941–9484

JOB NO. 398–050

SHEET 3 OF 4

PARTITION PLAT

PARTITION PLAT NO._____

A REPLAT OF A PORTION OF
PARCEL 3, PARTITION PLAT NO. 2007–128
LOCATED IN THE NORTHEAST AND NORTHWEST QUARTERS OF SECTION 15
TOWNSHIP 3S, RANGE 1W, WILLAMETTE MERIDIAN

CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON

SURVEYED _____

DECLARATION

KNOW ALL PEOPLE BY THESE PRESENTS: VILLEBOIS VILLAGE CENTER, LLC, AN OREGON LIMITED LIABILITY COMPANY, OWNER OF THE LAND DESCRIBED IN THE ACCOMPANYING SURVEYOR'S CERTIFICATE, DOES HEREBY MAKE, ESTABLISH AND DECLARE THE ANNEXED MAP TO BE A TRUE AND CORRECT PLAT THEREOF, ALL PARCELS BEING OF THE DIMENSIONS SHOWN, WITH RESTRICTIONS AND EASEMENTS GRANTED AS NOTED ALL ACCORDING WITH THE PROVISIONS OF ORS CHAPTER 92.

VILLEBOIS VILLAGE CENTER, LLC

BY: COSTA VILLEBOIS, LLC, MEMBER

BY: _____
RUDY A. KADLUB, MANAGER

COSTA PACIFIC HOMES, LLC, MEMBER

BY: RAK DEVELOPMENT COMPANY, MEMBER

BY: _____
RUDY A. KADLUB, PRESIDENT

ACKNOWLEDGEMENT

STATE OF _____)
COUNTY OF _____) SS

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON _____,
BY RUDY A. KADLUB AS MANAGER OF COSTA VILLEBOIS, LLC, AS MEMBER OF VILLEBOIS VILLAGE CENTER, LLC, ON ITS BEHALF.

_____ COMMISSION NO. _____
NOTARY SIGNATURE

_____ MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) SS

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON _____,
BY RUDY A. KADLUB AS PRESIDENT OF RAK DEVELOPMENT COMPANY, AS MEMBER OF COSTA PACIFIC HOMES, LLC AS MEMBER OF VILLEBOIS VILLAGE CENTER, LLC, ON ITS BEHALF.

_____ COMMISSION NO. _____
NOTARY SIGNATURE

_____ MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

PLAT NOTES

1. SUBJECT TO CONDITIONS OF APPROVAL PER CITY OF WILSONVILLE CASE FILE NOS. DB12–0057 AND DB12–0059.
2. THIS PLAT IS SUBJECT TO CONDITIONS AND RESTRICTIONS AS SHOWN IN PARTITION PLAT NO. 2003–090, PARTITION PLAT NO. 2005–063, AND THE PLAT OF VILLEBOIS.
3. THIS PLAT IS SUBJECT TO COVENANTS, CONDITIONS, AND RESTRICTIONS AS RECORDED IN DEED DOCUMENT NOS. 2004–061031 AND DECLARATION OF COVENANTS AND RESTRICTIONS AND 2004–070933 AND EXTENDED TO SUBJECT PROPERTY BY THE PLAT OF VILLEBOIS AND PARTITION PLAT NO. 2007–128.
4. THIS PLAT IS SUBJECT TO DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS PER DECLARATION OF ANNEXATION AS RECORDED IN DOCUMENT NO. _____, CLACKAMAS COUNTY DEED RECORDS.
5. THIS PLAT IS SUBJECT TO UNRECORDED DEVELOPMENT AGREEMENT, INCLUDING THE TERMS AND PROVISIONS THEREOF, AS DISCLOSED OF RECORD BY INSTRUMENT IN DOCUMENT NO. 2005–102816.
6. THIS PLAT IS SUBJECT TO AN OWNERSHIP AND MAINTENANCE AGREEMENT RECORDED AS DOCUMENT NO. _____, CLACKAMAS COUNTY DEED RECORDS.
7. PARCEL 5 AND PARCEL 6 ARE TO BE OWNED AND MAINTAINED BY "VILLEBOIS VILLAGE CENTER MASTER ASSOCIATION".
8. PARCEL 5 IS A PRIVATE STREET AND IS SUBJECT TO A PUBLIC ACCESS EASEMENT, AN EMERGENCY VEHICLE ACCESS EASEMENT, AND PUBLIC UTILITY EASEMENT OVER ITS ENTIRETY.
9. PARCEL 6 IS FOR PARK PURPOSES AND IS SUBJECT TO A PUBLIC PEDESTRIAN AND BICYCLE ACCESS EASEMENT OVER ITS ENTIRETY.

CITY OF WILSONVILLE APPROVALS

APPROVED THIS _____ DAY OF _____

BY: _____
CITY OF WILSONVILLE PLANNING DIRECTOR

~ *** ~

APPROVED THIS _____ DAY OF _____

BY: _____
CITY OF WILSONVILLE COMMUNITY DEVELOPMENT DIRECTOR

~ *** ~

CLACKAMAS COUNTY APPROVALS

APPROVED THIS _____ DAY OF _____

_____
CLACKAMAS COUNTY SURVEYOR

~ *** ~

ALL TAXES, FEES, ASSESSMENTS AND OTHER CHARGES AS PROVIDED BY ORS 92.095 HAVE BEEN PAID THRU JUNE 30, 20__ .

APPROVED THIS _____ DAY OF _____

CLACKAMAS COUNTY ASSESSOR & TAX COLLECTOR

BY _____
DEPUTY

~ *** ~

STATE OF OREGON)
COUNTY OF CLACKAMAS) SS

I DO HEREBY CERTIFY THAT THE ATTACHED PLAT WAS RECEIVED FOR RECORD

ON THE _____ DAY OF _____

AT _____ O'CLOCK __ .M.

AS PER PARTITION PLAT NO. _____

DOCUMENT NO. _____

SHERRY HALL, CLACKAMAS COUNTY CLERK

BY _____
DEPUTY

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

PACIFIC COMMUNITY DESIGN, INC.
PMB# 519, 13500 SW PACIFIC HIGHWAY, STE 58
TIGARD, OR 97223
(503) 941–9484

JOB NO. 398–050

SHEET 4 OF 4

EXHIBIT A
PLANNING DIVISION
STAFF REPORT

VILLEBOIS PHASE 4 CENTRAL

DEVELOPMENT REVIEW BOARD PANEL '___'
QUASI JUDICIAL HEARING

Public Hearing Date:
Date of Report:
Application Numbers:

Request A: DB13-0013 SAP-Central PDP-4C Preliminary Development Plan
Request B: DB13-0014 SAP-Central Refinements
Request C: DB13-0015 SAP-Central Amendments
Request D: DB13-0016 Zone Map Amendment
Request E: DB13-0017 Tentative Subdivision Plat
Request F: DB13-0018 Type C Tree Plan
Request G: DB13-0019 Final Development Plan for Parks and Open Space

Property Owners/Applicants:

PD = Planning Division conditions
BD – Building Division Conditions
PF = Engineering Conditions.
NR = Natural Resources Conditions
TR = SMART/Transit Conditions
FD = Tualatin Valley Fire and Rescue Conditions

City of Wilsonville
EXHIBIT C1 DB13-0013 et seq

Standard Comments:	
PFA 1.	All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards.
PFA 2.	Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:

Coverage (Aggregate, accept where noted)	*Limit*
Commercial General Liability	
General Aggregate (per project)	$ 2,000,000
Fire Damage (any one fire)	$ 50,000
Medical Expense (any one person)	$ 10,000
Business Automobile Liability Insurance	
Each Occurrence	$ 1,000,000
Aggregate	$ 2,000,000
Workers Compensation Insurance	$ 500,000

PFA 3.	No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved by Staff, all fees have been paid, all necessary permits, right-of-way and easements have been obtained and Staff is notified a minimum of 24 hours in advance.
PFA 4.	All public utility/improvement plans submitted for review shall be based upon a 22”x 34” format and shall be prepared in accordance with the City of Wilsonville Public Work’s Standards.
PFA 5.	Plans submitted for review shall meet the following general criteria:

a. Utility improvements that shall be maintained by the public and are not contained within a public right-of-way shall be provided a maintenance access acceptable to the City. The public utility improvements shall be centered in a minimum 15-ft. wide public easement for single utilities and a minimum 20-ft wide public easement for two parallel utilities and shall be conveyed to the City on its dedication forms.
b. Design of any public utility improvements shall be approved at the time of the issuance of a Public Works Permit. Private utility improvements are subject to review and approval by the City Building Department.
c. In the plan set for the Public Works Permit, existing utilities and features, and proposed new private utilities shall be shown in a lighter, grey print. Proposed public improvements shall be shown in bolder, black print.
d. All elevations on design plans and record drawings shall be based on NAVD 88 Datum.
e. All proposed on and off-site public/private utility improvements shall comply with the State of Oregon and the City of Wilsonville requirements and any other applicable codes.
f. Design plans shall identify locations for street lighting, gas service, power lines,

telephone poles, cable television, mailboxes and any other public or private utility within the general construction area.

g. As per City of Wilsonville Ordinance No. 615, all new gas, telephone, cable, fiber-optic and electric improvements etc. shall be installed underground. Existing overhead utilities shall be undergrounded wherever reasonably possible.
h. Any final site landscaping and signing shall not impede any proposed or existing driveway or interior maneuvering sight distance.
i. Erosion Control Plan that conforms to City of Wilsonville Ordinance No. 482.
j. Existing/proposed right-of-way, easements and adjacent driveways shall be identified.
k. All engineering plans shall be stamped by a Professional Engineer registered in the State of Oregon.

PFA 6. Submit plans in the following general format and order for all public works construction to be maintained by the City:

a. Cover sheet
b. City of Wilsonville construction note sheet
c. General construction note sheet
d. Existing conditions plan.
e. Erosion control and tree protection plan.
f. Site plan. Include property line boundaries, water quality pond boundaries, sidewalk improvements, right-of-way (existing/proposed), easements (existing/proposed), and sidewalk and road connections to adjoining properties.
g. Grading plan, with 1-foot contours.
h. Composite utility plan; identify storm, sanitary, and water lines; identify storm and sanitary manholes.
i. Detailed plans; show plan view and either profile view or provide i.e.'s at all utility crossings; include laterals in profile view or provide table with i.e.'s at crossings; vertical scale 1"= 5', horizontal scale 1"= 20' or 1"= 30'.
j. Street plans.
k. Storm sewer/drainage plans; number all lines, manholes, catch basins, and cleanouts for easier reference
l. Water and sanitary sewer plans; plan; number all lines, manholes, and cleanouts for easier reference.
m. Detailed plan for storm water detention facility (both plan and profile views), including water quality orifice diameter and manhole rim elevations. Provide detail of inlet structure and energy dissipation device. Provide details of drain inlets, structures, and piping for outfall structure. Note that although storm water detention facilities are typically privately maintained they will be inspected by engineering, and the plans must be part of the Public Works Permit set.
n. Detailed plan for water quality facility (both plan and profile views). Note that although storm water quality facilities are typically privately maintained they will be inspected by Natural Resources, and the plans must be part of the Public Works Permit set.
o. Composite franchise utility plan.
p. City of Wilsonville detail drawings.
q. Illumination plan.
r. Striping and signage plan.
s. Landscape plan.

PFA 7. Prior to manhole and sewer line testing, design engineer shall coordinate with the City and update the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to the updated numbering system. Design engineer shall also show the updated numbering system on As-Built drawings submitted to the City.

PFA 8.	The applicant shall install, operate and maintain adequate erosion control measures in conformance with the standards adopted by the City of Wilsonville Ordinance No. 482 during the construction of any public/private utility and building improvements until such time as approved permanent vegetative materials have been installed.
PFA 9.	Applicant shall work with City's Natural Resources office before disturbing any soil on the respective site. If 5 or more acres of the site will be disturbed applicant shall obtain a 1200-C permit from the Oregon Department of Environmental Quality. If 1 to less than 5 acres of the site will be disturbed a 1200-CN permit from the City of Wilsonville is required.
PFA 10.	To lessen the impact of the proposed project on the downstream storm drain system, and adjacent properties, project run-off from the site shall be detained and limited to the difference between a developed 25-year storm and an undeveloped 25-year storm. The detention and outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
PFA 11.	A storm water analysis prepared by a Professional Engineer registered in the State of Oregon shall be submitted for review and approval by the City to address appropriate pipe and detention facility sizing.
PFA 12.	The applicant shall be in conformance with all water quality requirements for the proposed development per the Public Works Standards. If a mechanical water quality system is used, prior to City acceptance of the project the applicant shall provide a letter from the system manufacturer stating that the system was installed per specifications and is functioning as designed.
PFA 13.	Storm water quality facilities shall have approved landscape planted and/or some other erosion control method installed and approved by the City of Wilsonville prior to streets and/or alleys being paved.
PFA 14.	The applicant shall provide the City with a Stormwater Maintenance and Access Easement (on City approved forms) for City inspection of those portions of the storm system to be privately maintained. Applicant shall maintain all LID storm water components and private conventional storm water facilities located within medians and from the back of curb onto and including the project site.
PFA 15.	Fire hydrants shall be located in compliance with TVF&R fire prevention ordinance and approval of TVF&R.
PFA 16.	The applicant shall contact the Oregon Water Resources Department and inform them of any existing wells located on the subject site. Any existing well shall be limited to irrigation purposes only. Proper separation, in conformance with applicable State standards, shall be maintained between irrigation systems, public water systems, and public sanitary systems. Should the project abandon any existing wells, they shall be properly

	abandoned in conformance with State standards.
PFA 17.	All survey monuments on the subject site, or that may be subject to disturbance within the construction area, or the construction of any off-site improvements shall be adequately referenced and protected prior to commencement of any construction activity. If the survey monuments are disturbed, moved, relocated or destroyed as a result of any construction, the project shall, at its cost, retain the services of a registered professional land surveyor in the State of Oregon to restore the monument to its original condition and file the necessary surveys as required by Oregon State law. A copy of any recorded survey shall be submitted to Staff.
PFA 18.	Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
PFA 19.	No surcharging of sanitary or storm water manholes is allowed.
PFA 20.	The project shall connect to an existing manhole or install a manhole at each connection point to the public storm system and sanitary sewer system.
PFA 21.	A City approved energy dissipation device shall be installed at all proposed storm system outfalls. Storm outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
PFA 22.	The applicant shall provide a 'stamped' engineering plan and supporting information that shows the proposed street light locations meet the appropriate AASHTO lighting standards for all proposed streets and pedestrian alleyways.
PFA 23.	All required pavement markings, in conformance with the Transportation Systems Plan and the Bike and Pedestrian Master Plan, shall be completed in conjunction with any conditioned street improvements.
PFA 24.	Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
PFA 25.	The applicant shall provide adequate sight distance at all project driveways by driveway placement or vegetation control. Specific designs to be submitted and approved by the City Engineer. Coordinate and align proposed driveways with driveways on the opposite side of the proposed project site.
PFA 26.	Access requirements, including sight distance, shall conform to the City's Transportation Systems Plan (TSP) or as approved by the City Engineer. Landscaping plantings shall be low enough to provide adequate sight distance at all street intersections and alley/street intersections.
PFA 27.	Applicant shall design interior streets and alleys to meet specifications of Tualatin Valley Fire & Rescue and Allied Waste Management (United Disposal) for access and use of their vehicles.
PFA 28.	Applicant shall prepare an Ownership and Maintenance agreement

	between the City and the Owner. Stormwater or rainwater facilities may be located within the public right-of-way upon approval of the City Engineer. The Ownership and Maintenance agreement shall specify that the rainwater and stormwater facilities shall be privately maintained by the Applicant; maintenance shall transfer to the respective homeowners association when it is formed.
PFA 29.	The applicant shall "loop" proposed waterlines by connecting to the existing City waterlines where applicable.
PFA 30.	All water lines that are to be temporary dead-end lines due to the phasing of construction shall have a valved tee with fire-hydrant assembly installed at the end of the line.
PFA 31.	Applicant shall provide a minimum 6-foot Public Utility Easement on lot frontages to all public right-of-ways. An 8-foot PUE shall be provided along Minor and Major Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
PFA 32.	For any new public easements created with the project the Applicant shall be required to produce the specific survey exhibits establishing the easement and shall provide the City with the appropriate Easement document (on City approved forms).
PFA 33.	Mylar Record Drawings: At the completion of the installation of any required public improvements, and before a 'punch list' inspection is scheduled, the Engineer shall perform a record survey. Said survey shall be the basis for the preparation of 'record drawings' which will serve as the physical record of those changes made to the plans and/or specifications, originally approved by Staff, that occurred during construction. Using the record survey as a guide, the appropriate changes will be made to the construction plans and/or specifications and a complete revised 'set' shall be submitted. The 'set' shall consist of drawings on 3 mil. Mylar and an electronic copy in AutoCAD, current version, and a digitally signed PDF.
PFA 34.	Subdivision or Partition Plats: Paper copies of all proposed subdivision/partition plats shall be provided to the City for review. Once the subdivision/partition plat is approved, applicant shall have the documents recorded at the appropriate County office. Once recording is completed by the County, the applicant shall be required to provide the City with a 3 mil Mylar copy of the recorded subdivision/partition plat.
PFA 35.	Subdivision or Partition Plats: All newly created easements shown on a subdivision or partition plat shall also be accompanied by the City's appropriate Easement document (on City approved forms) with accompanying survey exhibits that shall be recorded immediately after the subdivision or partition plat.
PFA 36.	The applicant shall work with the other developers of Villebois and the City

	to develop an equitable storm water and parks maintenance fee or a maintenance memorandum of understanding prior to any final plat approval.
Specific Comments:	
PFA 37.	At the request of Staff, DKS Associates completed a Transportation Review dated May 17, 2013. The project is hereby limited to no more than the following impacts. Estimated New PM Peak Hour Trips 38 Estimated Weekday PM Peak Hour Trips Through Wilsonville Road Interchange Area 12
PFA 38.	The initial approval of SAP Central consisted of 9 single family units, 500 townhome/condo units, and 501 apartment units for a total of 1,010 residential units, along with 20,000 sq. ft. of commercial space. Based on assumed trip generation rates, these land uses were estimated to generate 616 p.m. peak hour trips. The currently proposed land use includes 49 single family units, 459 townhome/condo units, and 501 apartment units for a total of 1,009 residential units, along with 33,000 of commercial space. Based on these counts, it is estimated that SAP Central will generate 659 p.m. peak hour trips. This is 43 p.m. peak hour trips above what was initially approved for SAP Central. Many of the changes from townhome/condo units to single family units occur with this proposed development. The applicant may be required to pay Street SDC fees for these additional 43 PM Peak Hour Trips, unless applicant can show evidence of other arrangements with the City having been made.
PFA 39.	All construction traffic shall access the site via Grahams Ferry Road to Barber Street or via 110th Avenue. No construction traffic will be allowed on Brown Road or Barber Street east of Costa Circle West.
PFA 40.	Applicant shall construct full street improvements for the extension of Costa Circle West from the edge of the proposed development, Orleans Loop, southward to connect with Barber Street as shown on plans dated 04/15/2013, and shall provide service lines to those undeveloped properties lying to the east and south of Costa Circle West.
PFA 41.	Applicant shall be required to complete full design and construction through the far right-of-way and all intersections through the far corner radii of all planned streets bordering the development. Streets shall be designed in conformance to the applicable street type as shown in the Villebois Village Master Plan.

PFA 42.	The applicant shall provide 'stamped' engineering details with dimensions for intersection sight distance verification and AutoTURN layouts for all proposed intersections, including alley/street connections. Adequate clearance shall be provided at all intersections and alleyways. The sight distance point for exiting vehicles shall be located 14.4 feet from the edge of the traveled way. At a minimum, the applicant shall provide 'stamped' engineering AutoTURN layouts for fire trucks and buses (WB-60) that show the overhang and/or mirrors of the vehicle as opposed to the wheel paths. Turning vehicles may use the width of the minor street to start the appropriate turn. The vehicle must however, stay within the appropriate receiving (inside) lane of the major street. Additionally, the turning vehicle must not intrude onto the wheel chair ramp on the inside of the turning movement.
PFA 43.	The larger portion of the proposed subdivision, lying on tax lot 31W15 02916, lacks direct sidewalk access to Villebois SAP South PDP 6 or SAP East PDP 1 and to the Lowrie Primary School. Applicant shall construct a temporary sidewalk, and provide the necessary easements, linking the proposed development to existing sidewalks and/or crosswalks to provide a safe route to Lowrie Primary School.
PFA 44.	Pedestrian Links- sidewalk connections shall be provided between alleys and roadways where alleys do not intersect with the local road network. City of Wilsonville guidelines recommend that the distance between pedestrian access points along a roadway not exceed 300 feet.
PFA 45.	Alleys that are identified by Tualatin Valley Fire and Rescue (TVF&R) as possible routes for medical and/or fire emergencies shall meet TVF&R's design requirements.
PFA 46.	At the time of plan submittal for a Public Works Permit, the applicant shall provide to the City a copy of correspondence showing that the plans have also been distributed to the franchise utilities. Prior to issuance of a Public Works Permit, the applicant shall have coordinated the proposed locations and associated infrastructure design for the franchise utilities. Should permanent/construction easements or right-of-way be required to construct the public improvements or to relocate a franchised utility, the applicant shall provide a copy of the recorded documents. Should the construction of public improvements impact existing utilities within the general area, the applicant shall obtain written approval from the appropriate utility prior to commencing any construction.
PFA 47.	The proposed subdivision straddles the division line for street lighting type. All street lighting on Costa Circle and streets lying within the boundary of Costa Circle shall be lighted with approved Acorn style lights. All street lying north and outside of Costa Circle shall be lighted with approved Westbrooke style lights.

PFA 48.	Bus stop locations have been previously identified along Costa Circle East @ Mont Blanc Lane. Applicant shall coordinate with SMART in locating and constructing necessary transit facilities.
PFA 49.	Applicant shall provide sufficient mail box units for the proposed phasing plan; applicant shall construct mail pick-up facilities at locations coordinated with City staff and the Wilsonville U.S. Postmaster.
PFA 50.	If the adjacent segment of Costa Circle East has not yet been constructed, then that portion of the proposed subdivision on tax lot 31W15 02919 shall be required to construct full street improvements to the adjacent segment of Costa Circle East concurrently with the project.
PFA 51.	Plans show several water, storm and sanitary lines lying outside of the project boundaries. Applicant shall construct SAP Central PDP 4 concurrently with SAP North PDP 2. Applicant shall provide a complete utility system capable of servicing all proposed lots in compliance with Public Works Standards. For proposed lines lying outside of planned right-of-ways, applicant shall provide the City with construction easement(s) and permanent pipeline easement(s) prior to the City issuing a Public Works Permit for their construction. Pipeline easements lying within planned street right-of-ways shall expire at time of future street dedication.
PFA 52.	The project site appears to straddle both the Arrowhead Creek basin and the Coffee Lake Creek basins. Applicant shall direct stormwater runoff to the correct basin; no interbasin transfer of stormwater is allowed.
PFA 53.	Detention of stormwater flows within the Arrowhead Creek basin have already been accounted for in existing stormwater detention features. No additional detention is required.
PFA 54.	Much of the proposed development lies within the Coffee Lake Creek basin. Per City Ord. 608, detention is not required for areas of Villebois that drain directly to the Coffee Lake Wetlands; however, until the stormwater system is completed east of 110th Avenue (Costa Circle), applicant shall be in conformance with PFA 10 and PFA 11 for this portion of the development.
PFA 55.	With the Villebois SAP South PDP 6 development, a temporary stormwater detention and water quality facility was constructed at the northwest corner of Costa Circle East & Mont Blanc Street. When this area is developed, this detention and water quality facility will need to be relocated, unless a direct stormwater connection has been made to the Coffee Lake Wetlands and an appropriately sized water quality facility has been constructed.
PFA 56.	Storm water is shown on sheet 5 (dated 4/15/20313) as being temporarily detained by Villebois Phase 2 North. If storm water is detained or treated by Phase 2 North, agreements between PDP 2 North and PDP 4 Central must be signed and recorded with Clackamas County for the detention and/or treatment of storm water as applicable.

PFA 57.	Applicant shall connect to existing sanitary line at Barber & Costa Circle West and extend the line to service the undeveloped properties east of Costa Circle West and South of Ravenna Loop.
PFA 58.	Applicant shall be required to build the off-site sanitary sewer line prior to or concurrently with this project. This off-site line runs from near the intersection of 110th Ave. and Stockholm Ave. to the existing main line in the future Coffee Lake Drive.
PFA 59.	In accordance with the Public Works Standards, sewer lines entering manholes must be greater than 90 degrees from the line out to minimize turbidity within the manhole.
PFA 60.	Applicant shall install a 12" water main in Villebois Drive per the approved Villebois Master plan.
PFA 61.	Both Northwest Natural Gas line and Kinder Morgan have existing gas/fuel lines located on the west side of the existing 110th Avenue right-of-way. No obstruction can be placed within, adjacent or across the pipelines that will impede access to the pipelines or easement. Applicant's contractor shall contact representatives from both Northwest Natural Gas line and Kinder Morgan prior to commencing any work within 10 feet of the lines.
PFA 62.	Applicant shall be required to reimburse the City for their share of a sanitary sewer reimbursement fee established per Res. 2350 for tax lot 31W15 02919 and for their corresponding share of tax lot 31W15 02916 at time of issuance of a Public Works Permit.
PFA 63.	SAP Central PDP 4 consists of 57 lots. All construction work in association with the Public Works Permit and Project Corrections List shall be completed prior to the City Building Division issuing a certificate of occupancy, or a building permit for the housing unit(s) in excess of 50% of total (29th lot).

Development Review Template

DATE: **5/29/13**
TO: **DAN PAULY AICP, ASSOCIATE PLANNER**
FROM: **DON WALTERS**
SUBJECT: **DEVELOPMENT REVIEW # DB13-0013 -19**

WORK DESCRIPTION: VILLEBOIS PHASE 4 CENTRAL PRELIMINARY DEVELOPMENT REVIEW.

****

Building Division Conditions:	
BD 1.	FIRE HYDRANTS shall be provided along required fire apparatus access roads and adjacent public streets with locations approved by the fire marshal. (2010 OFC C102.1)
BD 2.	SW ORLEANS LOOP appears to temporarily end near proposed Lot 16. Dead-end fire apparatus access roads in excess of 150' [or a little longer because of the home fire sprinkler systems] shall be provided with width and turn-around provisions in accordance with Table D103.4 of the fire code. (OFC D103.4) An approved fire department turn-around or temporary roadway meeting fire access roadway requirements allowing fire vehicles to access adjacent streets, or other means meeting the approval of the fire marshal may be required here. Please contact the fire marshal, Drew Dubois, at 503.259.1404 for additional discussion.

City of Wilsonville
EXHIBIT C2 DB13-0013 et seq

COMMUNITY DEVELOPMENT MEMORANDUM

To: Daniel Pauly, Associate Planner

From: Kerry Rappold, Natural Resources Program Manager

Date: May 30, 2013

RE: Villebois Village SAP Central, PDP 4 (DB13-0013/0019)

This memorandum includes staff conditions of approval. The conditions are based on the preliminary and final development plans for PDP 4. The conditions of approval apply to the applicant's submittal of construction plans (i.e. engineering drawings).

Rainwater Management Plan:

NR11. Pursuant to the City of Wilsonville Public Works Standards, access should be provided for the entire perimeter of the rainwater management components. At a minimum, at least one access shall be provided for maintenance and inspection.

NR12. All Rainwater Management Components and associated infrastructure located in public areas shall be designed to the Public Works Standards. Rainwater Management Components in private areas shall comply with the plumbing code.

NR13. Plantings in Rainwater Management Components located in public areas shall comply with the Public Works Standards. Plantings in Rainwater Management Components located in private areas shall comply with the Plant List in the Rainwater Management Program or Community Elements Plan.

NR14. The rainwater management components shall comply with the requirements of the Oregon DEQ UIC (Underground Injection Control) Program.

Stormwater Management:

NR15. Provide profiles, plan views and specifications for the proposed water quality treatment facilities consistent with the requirements of the City of Wilsonville's Public Works Standards.

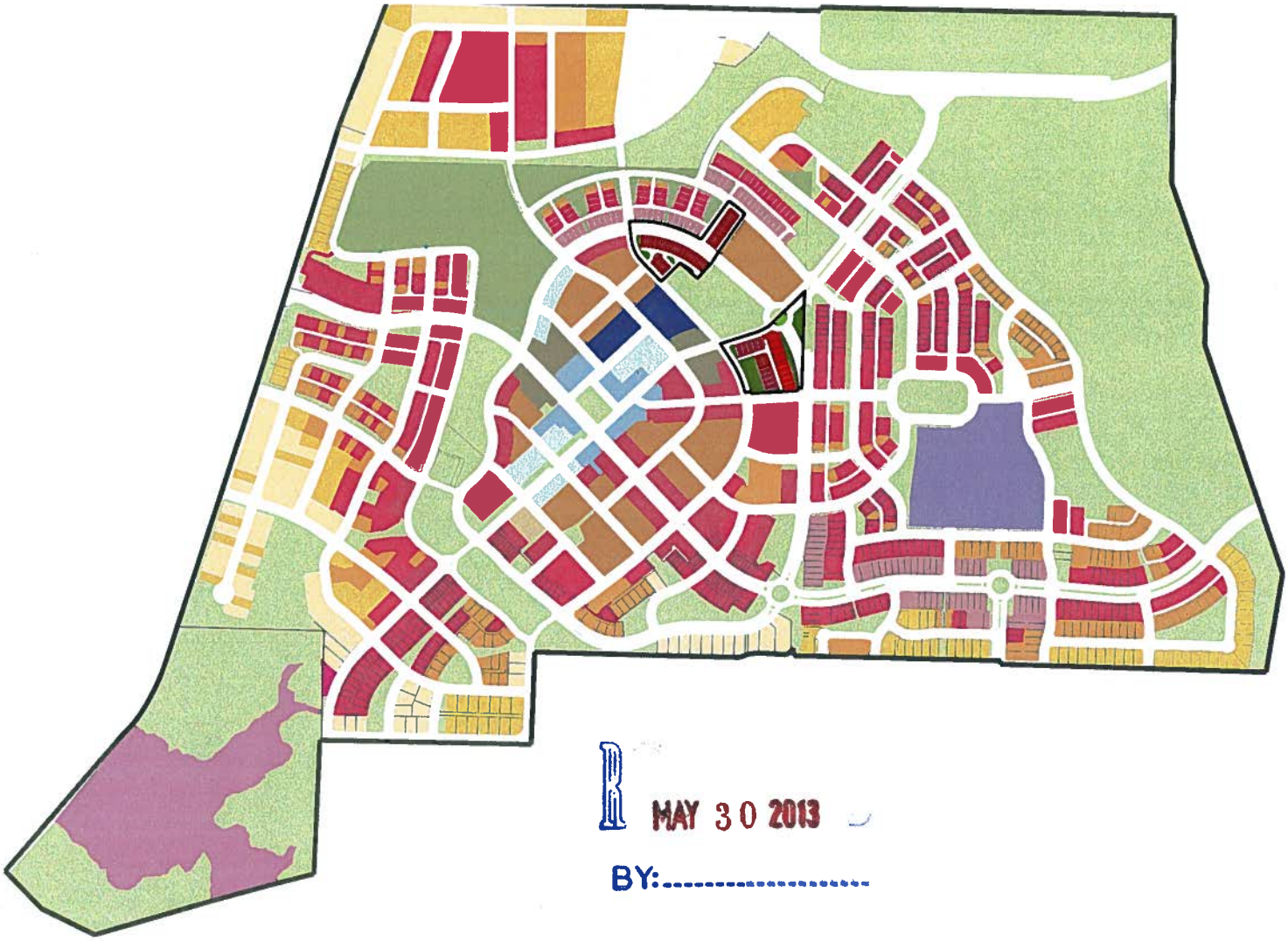
NR16. Pursuant to the Public Works Standards, the applicant shall submit a maintenance plan (including the City's stormwater maintenance covenant) for the proposed stormwater facilities, inclusive of the rainwater management components, prior to approval for occupancy of the associated development.

City of Wilsonville
EXHIBIT C3 DB13-0013 et seq

NR17. Pursuant to the City of Wilsonville's Public Works Standards, access shall be provided to all areas of the proposed water quality treatment facilities. At a minimum, at least one access shall be provided for maintenance and inspection.

Other:

NR18. The applicant shall comply with all applicable state and federal requirements for the proposed construction activities and proposed facilities (e.g. DEQ NPDES #1200–C permit).



MAY 30 2013
BY:

Phase 4 of SAP Central

Preliminary Development Plan, Tentative Plat, Zone Change, Tree Removal Plan, Final Development Plan & SAP Amendments for Phasing & Pattern Book

"Polygon Northwest at Villebois No. 2"& "Tonquin Woods at Villebois No. 5"

Submitted to City of Wilsonville, Oregon April 15, 2013

POLYGON NORTHWEST COMPANY

Pacific Community Design

City of Wilsonville
EXHIBIT B1 DB13-0013 et seq

INTRODUCTORY NARRATIVE

PHASE 4 – CENTRAL

INCLUDING:
PRELIMINARY DEVELOPMENT PLAN (REFINEMENTS & SAP PHASING AMENDMENT), TENTATIVE PLAT, ZONE CHANGE, TREE REMOVAL PLAN, FINAL DEVELOPMENT PLAN & SAP AMENDMENT (PATTERN BOOK)

SECTION IA

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I. GENERAL INFORMATION

Applicant/Property Owner:	**Polygon Northwest Company** 109 E. 13th Street Vancouver, WA 98660 Tel: (360) 695-7700 Fax: (425) 455-0462 **Contact: Fred Gast**
Design Team:	
Primary Contact:	**Stacy Connery** **Pacific Community Design, Inc.** Tel: (503) 941-9484 Fax: (503) 941-9485 Email: stacy@pacific-community.com
Process Planner/Civil Engineer/Surveyor:	**Pacific Community Design, Inc.** PMB #519, 13500 SW Pacific HWY, STE 58 Tigard, OR 97223 Tel: (503) 941-9484 Fax: (503) 941-9485 **Contact: Stacy Connery, AICP** **Jim Lange, PE** **Patrick Espinosa, PE** **Travis Jansen, PLS/PE**
Landscape Architect:	**Otten Landscape Architects, Inc.** 3933 SW Kelly Ave., Suite B Portland, Oregon 97239 Tel: (503) 972-0311 **Contact: Janet Otten, ASLA** **Erin Holsonback**
Arborist:	**Walter H. Knapp & Associates, LLC** 7615 SW Dunsmuir Lane Beaverton, OR 97007 Tel: (503) 646-4349 Fax: (503) 265-8117 **Contact: Walt Knapp** **Morgan Holan**

Site and Proposal Information:

Site:	3S 1W 15, Tax Lots 2919 & part of 2916 & 2922
Size:	6.83 gross acres
Comprehensive Plan Designation:	City - Residential – Village (R-V)
Specific Area Plan:	SAP – Central
Proposal:	Preliminary Development Plan (includes refinements & SAP Phasing Amendment) Tentative Plat Zone Change to Village (V) Tree Removal Plan Final Development Plan SAP Amendment (Pattern Book)
Unit Count:	57 dwelling units
Net Residential Density:	20 units/net acre
Project Name:	Villebois PDP 4 – Central "Polygon Northwest at Villebois No. 2" & "Tonquin Woods at Villebois No. 5"

II. REQUEST

This application requests approval of the following six (6) applications for the Phase 4 area of SAP Central.

- Preliminary Development Plan (PDP 4C), including refinements & SAP Phasing Amendment – Section II of Notebook
- Tentative Plat Approval (PDP 4C) – Section III of Notebook
- Zone Change to Village (V) for PDP 4C area – Section IV of Notebook
- Tree Preservation/Removal Plan for PDP 4C area – Section V of Notebook
- Final Development Plan for PDP 4C area – Section VI of Notebook
- SAP Amendment (Pattern Book) – Section VII of Notebook

III. PLANNING CONTEXT

VILLEBOIS VILLAGE MASTER PLAN & SAP CENTRAL

The proposed PDP 4C area is located within the central portion of the *Villebois Village Master Plan* as illustrated on the Notebook Cover. The *Master Plan* and SAP Central show Small and Row House Land Use Types for the subject area. The *Master Plan* and SAP Central do not show any parks and open space areas or pathways on the subject property. The PDP 4C area is outside the boundary of the Village Center and is therefore subject to the SAP Central *Architectural Pattern Book* (not the *Village Center Architectural Standards*).

IV. PROPOSAL DESCRIPTION

Phase 4 of Specific Area Plan Central (also known as PDP 4C) includes approximately 6.83 gross acres. PDP 4C includes two (2) areas separated by a parcel in different ownership and not proposed for development at this time. One (1) of these areas is the block located southwest of the future Villebois Drive and Costa Circle roundabout. The second area is located west of the future Hilltop Park on the north and south sides of a future segment of Costa Circle. PDP 4C proposes 57 single family homes, 0.84 acres of park/open space areas, and associated infrastructure improvements.

LAND USES

PDP 4C proposes 57 lots, including 40 Row House, 9 Small Cottage and 8 Small lots. The proposed distribution in units provides for a mix of unit types within blocks that is compatible with adjacent land uses. The table in Section IE of this Notebook lists the residential units broken down by development phase for all of SAP Central. PDP 1C and PDP 2C are approved and built (homes are in process of being built). PDP 3C is the site of the Villebois Piazza, which is approved and is nearing completion of construction.

PARKS & OPEN SPACE

The Master Plan and SAP Central do not show any parks within the subject area. PDP 4C proposes the addition of 0.83 acres of linear green parks. A concurrent Final Development Plan (FDP) for the linear green parks is included with this submittal.

UTILITIES

<u>Sanitary Sewer</u>

The sanitary sewer system for Phase 4 Central is shown on the *Composite Utility Plan* in Section IIB of this Notebook. The sanitary sewer will be a gravity system that will ultimately discharge to the Tooze main. This main will then discharge to the Kinsman main via the connection installed in 2006. Sanitary sewer service can adequately be provided to this area in compliance with the *Villebois Village Master Plan* and the City's Wastewater Collection System Master Plan, as demonstrated in

the attached Sanitary Sewer Capacity Memorandum prepared by Patrick Espinosa, PE (see Exhibit IIC).

Water

The proposed water system for Phase 4 Central is shown on the Composite Utility Plan in Section IIB of this Notebook. The proposed public water system will be primarily an 8" system with some 6" lines. The system will be looped throughout the development to maximize flows. Water service can adequately be provided to this area in compliance with the *Villebois Village Master Plan* and the City's Water System Master Plan.

Stormwater

The proposed site drains to the east to the Coffee Lake Creek drainage basin (CLC Basin). The City's Stormwater Master Plan for Coffee Lake Creek specifies that detention will not be required for the portion of Villebois Village that drains to the CLC Basin. Stormwater runoff will be collected by a series of catch basins leading to an underground piping system to be constructed with the PDP 4C infrastructure. As shown within the attached plans (see Section IIB of this Notebook), the system will ultimately connect with the system in PDP 3E. A Water Quality and Detention Analysis prepared by Patrick Espinosa, PE (see Exhibit IIC), demonstrates that the proposed system will provide adequate sizing and treatment.

Rainwater

A Rainwater Management Plan is included with the Supporting Utility Reports in Section IIC of this Notebook. Rainwater management within PDP 4C will be provided through street trees and bio-retention cells located in landscape tracts and planter strips in rights-of-way, as shown within the attached plans (Section IIB of this Notebook).

CIRCULATION

The transportation infrastructure proposed for PDP 4 Central will provide convenient neighborhood circulation and a range of transportation options. The *Circulation Plan* (see Exhibit IIB) illustrates the circulation system within this Preliminary Development Plan area.

PHASING

Construction of PDP 4C is proposed to be phased as shown on the *Phasing Plan* (see Exhibit IIB). Proposed PDP phases may be constructed individually in sequence or may be combined. The first phase is planned to be built summer/fall of 2013 and the second phase is planned to be built in summer 2014.

The attached plans (see Section IIB) show ultimate improvements that are consistent with the *Master Plan* and SAP Central. The eastern edge of PDP 4C abuts the existing 110th Avenue right-of-way and PDP 3E on the east side of the 110th Avenue right-of-way. PDP 3E received planning approval in November 2012. A Development Agreement (Addendum No. 4, Resolution No. 2385) has been approved in conjunction with PDP 3E which addresses improvements related to the Villebois Drive/Costa Circle roundabout and street extensions, parks and the 18" water line in Villebois

Drive along this edge. The western edge of PDP 4C will be accessed through extension of Costa Circle West. Easements exist to allow for construction of this street and right-of-way will be dedicated as needed.

Phase 2 of this PDP is currently planned to be constructed at the same time as the initial phases of PDP 3E at which time the 110th Avenue right-of-way will be vacated and the Villebois Drive/Costa Circle roundabout and street extensions will be constructed. If phase 2 of PDP 4C should be constructed prior to PDP 3E, a temporary road connection to 110th Avenue would be provided to serve the subject area until the ultimate improvements could occur. Pocket Park 12, which is planned along this eastern edge of PDP 4C, was added into the boundary of PDP 3E and is to be constructed with PDP 3E.

Interim storm facilities will be established on the adjacent property to the north (part of the concurrent PDP 1B North application) as needed for the first phase of PDP 4C and will be removed with the phase 2 construction and concurrent PDP 3E construction. The design of interim improvements will be coordinated with the City during construction plan review for phase 1.

V. AMENDMENTS TO SAP CENTRAL

SAP PHASING AMENDMENT

The PDP includes a request to amend the SAP Central Phasing Plan. The current SAP Central Phasing Plan includes 16 phases. The proposed Phasing Plan combines and renumbers phases for a total of 13 phases. The proposed SAP Central Phasing Plan and corresponding unit counts by phase are included in Section IE of this Notebook.

SAP AMENDMENT (PATTERN BOOK)

The Applicant proposes to amend the SAP Central *Pattern Book* to add information for Small Cottages. The following is a list of the proposed additions and a 'Mock Up' of these is included in Exhibit VIIB to illustrate the amendment.

- Cover Page – Revise to update approval date and add case file reference (to be determined).
- Table of Contents (A1) – Update accordingly for the following additions for Small Cottages.

  'Introduction'

- Introduction (A5) – Update image to include Small Cottages.

  'Land Use Patterns & Lot Diagrams'

- Lot Diagrams (B5) – Add Lot Diagram page for Small Cottages.
- Lot Diagrams (B6) – Renumber the 'Row Houses' page from B5 to B6.
- Lot Diagrams (B7) – Renumber the 'Building Placement at Typical Slope Condition' page from B6 to B7.

'Architectural Scale & Proportions'

- Diversity & Rules of Adjacencies (D1) – Add Small Cottages to rules of adjacencies affecting Small Lots.
- Scale & Proportions (D3) – Add Small Cottages to label.

'Master Fencing Program'

- Fencing Lot Diagrams (E9-E11) – Update Small Lots diagrams to include Small Cottages in label.

No changes are proposed to the following sections of the Pattern Book:

'*Appropriate Architectural Styles*' (C 1-2);
'*Basic Elements of Architectural Styles*' (C3-20); and
'*Appendices*' (F1-2).

VI. REFINEMENTS TO SAP CENTRAL

The following sections of this Narrative describe the proposed refinements to SAP Central that are included in the PDP application. Detailed findings regarding the requested refinements can be found in the PDP Supporting Compliance Report in Section IIA of this Notebook.

CIRCULATION

A comparison of the *Circulation Plan* from the proposed PDP 4C (see Exhibit IIB) and the *Circulation Plan* from SAP Central (Volume II) shows that the proposed circulation system is consistent. No refinements are proposed.

LAND USES

PDP 4C refines the subject area beyond what was described in SAP Central. The total density shown for the subject area in SAP Central is 44-62 units, all of which are grouped into the smaller land use group, and included 8-10 Small Detached lots and 36-52 Row House lots. PDP 4C proposes the following refinements to the location and mix of units within the same area of SAP Central.

- The block bounded by Villebois Drive, Costa Circle East, Mont Blanc Street, and Orleans Loop included 10-18 Row Houses and 8-10 Smalls. The PDP plan proposed 4 Row Houses, 9 Small Cottages, and 8 Smalls.
- The block bounded by Verdun Loop, Geneva Loop, "Village Apartments", and Costa Circle West included 6-10 Row Houses. The PDP plan proposes 11 Row Houses.
- The block bounded by Costa Circle West, "Hilltop Park", and Orleans Loop included 20-24 Row Houses. The PDP plan proposes 25 Row Houses.

The PDP proposes a total of 57 units, including 40 Row House, 9 Small Cottage, and 8 Small lots. The proposed refinements result in the addition of linear greens to two of the three blocks within this PDP.

The table below shows the number of units in each land use category currently within SAP Central and the number of units in the SAP with the proposed refinement as well as the percent change in each aggregate land use category.

	Current Unit Count in SAP C	Proposed Unit Count in SAP C	% Change
Medium/Standard/ Large/Estate	0	0	0%
Small Detached/ Small Cottage/ Row Homes/ Neighborhood Apt.	1,007	1,011	+0.04%
Total	1,007	1,011	+0.04%

NOTE: The Current Unit Count for SAP Central reflects the final approved unit counts for PDP 1C, PDP 2C and PDP 3C, as well as recent Modifications to PDP 1C and PDP 2C.

The proposed refinements do not exceed the 10% standard. This proposal results in a total of 2,532 units within Villebois. This is above the density of 2,300 units required to be obtained across Villebois, meeting the refinement criteria.

None of the conditions of approval for SAP Central are specific to the proposed refinements. As the proposed refinements will not compromise the project's ability to comply with SAP conditions of approval, they will equally meet the conditions of approval of SAP Central.

The proposed refinements will better meet the following Goals, Policies and Implementation Measures of the *Villebois Village Master Plan* than the SAP Central plan.

- ***Land Use, General Land Use Plan Goal*** *– Villebois Village shall be a complete community that integrates land use, transportation, and natural resource elements to foster a unique sense of place and cohesiveness.*

  The proposed PDP 4C plan better integrates natural resource elements with land uses and transportation through additional park areas for linear greens providing more areas for recreational and community uses.

- ***Land Use, General Land Use Plan Policy 1*** *– The Villebois Village shall be a complete community with a wide range of living choices, transportation choices, and working and shopping choices. Housing shall be provided in a mix of types and densities resulting in a minimum of 2,300 dwelling units within the Villebois Village Master Plan area.*

  The proposed PDP 4C plan better meets this Land Use Plan Policy by contributing to the range of living choices through the replacement of some of the Row Houses with Small Cottages. This area previously included 36-52 Row Houses and just 8-10 Smalls. Now, 40 Row Houses, 9 Small Cottages, and 8 Smalls are proposed. The proposed PDP plan is made up of three (3) unit types instead of two (2), which results in a greater mix in sizes and types of housing, densities and price ranges.

- ***Land Use, Residential Neighborhood Housing Policy 1*** *– Each of the Villebois Village's neighborhoods shall include a wide variety of housing*

options and shall provide home ownership options ranging from affordable housing to estate lots.

The areas included in PDP 4C are not inside the Village Center boundary, and, architecturally, are anticipated to be more like the surrounding neighborhoods to the North, East and South. Since the subject areas are adjacent to the Village Center, they provide a level of transition as densities in housing options increase from the edges of the project to the Village Center. By adding Small Cottages to the mix of Row Houses and Smalls, the proposed PDP plan increases to the variety of housing options and the range of affordability options within the subject area, while still meeting a transition function.

- ***Land Use, Residential Neighborhood Housing Policy 10*** *– Natural features shall be incorporated into the design of each neighborhood to maximize their aesthetic character while minimizing impacts to said natural features.*

  The addition of linear greens better incorporates the design of the subject area which enhances the aesthetic character of the neighborhood.

In summary, the proposed refinements will better integrate green spaces throughout the PDP and expand the range of housing options in the subject area. As the proposed refinements will not compromise the project's ability to comply with all other Goals, Policies and Implementation Measures of the *Villebois Village Master Plan*, they will equally meet all other Goals, Policies and Implementation Measures of the *Villebois Village Master Plan*.

PARKS & OPEN SPACE

A comparison of the proposed plan for PDP 4C and the original SAP Central plan for this area shows an increase in the areas planned for parks. The addition of green spaces provides enhanced pedestrian connectivity and direct access to green space for more of the homes in the PDP area. The proposed plan distributes green space through the PDP area. A detailed description and analysis of the parks and open space refinements can be found in the PDP Supporting Compliance Report in Exhibit IIA of the Notebook.

UTILITIES

A comparison of the *Composite Utility Plan* of the proposed PDP (see Section IIB of this Notebook) with the *Utility Plan* in SAP Central (Volume II) shows that the proposed utility system is consistent. No refinements are proposed.

VI. PROPOSAL SUMMARY & CONCLUSION

This 'Introductory Narrative,' in conjunction with the referenced sections, describes the proposed Preliminary Development Plan, Tentative Plat, Zone Change, Tree Preservation/Removal Plan, Final Development Plan, and SAP Amendments. The Supporting Compliance Reports located in Sections II through VII, respectively, support these requests for approval of the subject applications and demonstrate compliance with the applicable standards of the Wilsonville Planning and Land Development Ordinance.

SUPPORTING COMPLIANCE REPORT

PRELIMINARY DEVELOPMENT PLAN 4 - CENTRAL

SECTION IIA

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I. WILSONVILLE PLANNING & LAND DEVELOPMENT ORDINANCE

SECTION 4.125 VILLAGE (V) ZONE

(.02) PERMITTED USES

Examples of principle uses that are typically permitted:

A. Single Family Dwellings

D. Row Houses

H. Non-commercial parks, plazas, playgrounds, recreational facilities, community buildings and grounds, tennis courts, and other similar recreational and community uses owned and operated either publicly or by an owners association.

Response: This Preliminary Development Plan (PDP) application proposes to create 57 lots for development of detached single family dwellings and row houses, as well as tracts for linear greens. All proposed uses within the subject PDP are permitted pursuant to this section.

(.05) DEVELOPMENT STANDARDS APPLYING TO ALL DEVELOPMENTS IN THE VILLAGE ZONE

All development in this zone shall be subject to the V Zone and the applicable provisions of the Wilsonville Planning and Land Development Ordinance. If there is a conflict, then the standards of this section shall apply. The following standards shall apply to all development in the V zone:

A. Block, Alley, Pedestrian and Bicycle Standards:

1. Maximum Block Perimeter: 1,800 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent a block perimeter from meeting this standard.

Response: Blocks within the proposed PDP plan meet the maximum 1,800-foot block perimeter, except as follows. The two (2) blocks in the northwestern portion of the PDP can only be developed to the Village Center boundary which is also a property line. When the adjacent property develops in accordance with the SAP Central plan, it will result in these blocks meeting the maximum 1,800-foot block perimeter. Barriers exist that prevent two (2) blocks in PDP 4C from meeting the maximum block perimeter standard at this time due to the adjacent property not being proposed for development. Compliance will occur with adjacent development in conformance with SAP Central.

2. Maximum spacing between streets for local access: 530 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent street extensions from meeting this standard.

Response: Blocks within the proposed PDP plan meet the maximum 530-foot spacing for local street access, except as follows. The two (2) blocks in the northwestern portion of the PDP can only be developed to the Village Center boundary which is also a property line. When the adjacent property develops in accordance with the SAP Central plan, it will result in these blocks meeting the maximum 530-foot spacing for local street access. Barriers exist that prevent two (2) blocks in PDP 4C from meeting the maximum street spacing standard at this time due to the adjacent property not being proposed for development. Compliance will occur with adjacent development in conformance with SAP Central.

3. If the maximum spacing for streets for local access exceeds 530 feet, intervening pedestrian and bicycle access shall be provided, with a maximum spacing of 330 feet from those local streets, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions from meeting this standard.

Response: As described above, blocks will comply with development of adjacent properties. The proposed PDP complies with this standard to the extent feasible, as described above.

B. Access: All lots with access to a public street, and an alley, shall take vehicular access from the alley to a garage or parking area, except as determined by the City Engineer.

Response: All of the lots within the proposed PDP that have frontage on a public street and an alley will take vehicular access from an alley to a garage or parking area.

C. Trailers, travel trailers, mobile coaches, or any altered variation thereof shall not be used for the purpose of conducting a trade or calling, or for storage of material, unless approved for such purpose as a temporary use.

Response: No trailers, travel trailers, mobile coaches, or such vehicles will be used for the purpose of conducting a trade or calling or for the storage of material unless approved as a temporary use.

D. Fences:

1. General Provisions:

a. Fencing within the Village Zone shall be in compliance with the Master Fencing Program in the adopted Architectural Pattern Book for the appropriate SAP.

b. When two or more properties with different setbacks abut, the property with the largest front yard setback requirement shall be used to determine the length and height of the shard side yard fence, as required by section 4.125 above.

c. **The development Review Board may, in their discretion, require such fencing as deemed necessary to promote and provide traffic safety, noise mitigation, and nuisance abatement, and the compatibility of different uses permitted on adjacent lots of the same zone and on adjacent lots of different zones.**

2. **Residential:**

a. **The maximum height of any fence located in the required front yard of a residential development shall not exceed three (3) feet.**

b. **Fences on residential lots shall not include chain link, barbed wire, razor wire, electrically charged wire, or be constructed of sheathing material such as plywood or flake board. Fences in residential areas that protect wetlands, or other sensitive areas, may be chain link.**

Response: The SAP Central Master Fencing Plan does not indicate any required community fencing within the subject PDP. Residential lot fencing occurs when each home is constructed, details of which are provided with Building Permit review. Residential lot fencing will occur in compliance with the fencing specified for the specific lot type and style in accordance with the SAP Central Master Fencing Plan.

E. Recreational Area in Multi-Family Residential and Mixed Use Developments

Response: The proposed PDP includes lots for the development of single family residential homes; therefore this standard does not apply.

F. Fire Protection:

1. **All structures shall include a rated fire suppression system (i.e., sprinklers), as approved by the Fire Marshal**

Response: All of the homes within the proposed PDP area will include appropriate fire suppression systems. This will be verified with review of future building permit applications.

Table V-1 Development Standards

Response: The *Tentative Plat* (see Section IIB in this Notebook) depicts proposed lot sizes and dimensions. All of the lots will be developed with single family detached dwelling units or row houses. All of the lots meet applicable requirements, as addressed below. No buildings are proposed with this application. Final compliance with these standards will be reviewed at building permit submittal.

Single-Family Dwellings

Minimum lot size: 2,250 square feet

Minimum lot width: 35 feet

Minimum lot depth: 50 feet

Row Houses

Minimum lot size: No Requirement

Minimum lot width: 15 feet

Minimum lot depth: 50 feet

Response: All of the lots within the proposed tentative plat meet the minimum lot size requirement and meet the minimum lot width and depth specified for Row House, Small Cottage, and Small lots in the approved SAP Central *Architectural Pattern Book* (see proposed SAP Amendment in Section VII of this Notebook), with allowed variations for road curvatures and tree preservation.

(.07) GENERAL REGULATIONS – OFF-STREET PARKING, LOADING & BICYCLE PARKING

Except as required by Subsections (A) through (D), below, the requirements of Section 4.155 shall apply within the village zone.

A. General Provisions:

1. The provision and maintenance of off-street parking spaces is a continuing obligation of the property owner. The standards set forth herein shall be considered by the Development Review Board as minimum criteria.

2. The Board shall have the authority to grant variances or refinements to these standards in keeping with the purposes and objectives set forth in this zone.

Response: The applicant acknowledges that the provision and maintenance of off-street parking is the continuing obligation of the property owner. There are no variances or refinements to the standards of this section proposed with this application.

B. Minimum and Maximum Off-Street Parking Requirements:

1. Table V-2, Off-Street Parking Requirements, below, shall be used to determine the minimum and maximum parking standards for noted land uses. The number of required parking spaces shown in Table V-2 shall be determined by rounding to the nearest whole parking space…

Table V-2: Off-Street Parking Requirements

Category	Min. Vehicle Spaces	Max. Vehicle Spaces	Bicycle Short Term	Bicycle Long Term
Single Family Detached Dwelling Units	1.0 / DU	NR	NR	NR
Row Houses	1.0 / DU	NR	NR	NR

Response: Each of the homes will provide a minimum of a one-car garage in compliance with this standard.

C. Minimum Off-Street Loading Requirements:

Response: The proposed PDP includes lots for development of single family homes; therefore no loading areas are required.

D. Bicycle Parking Requirements:

Response: The proposed PDP includes single family detached dwelling units and row houses. There is no bicycle parking requirement for these unit types, as noted in *Table V-2* above, therefore these standards do not apply.

(.08) OPEN SPACE

Open space shall be provided as follows:

A. In all residential developments and in mixed-use developments where the majority of the developed square footage is to be in residential use, at least twenty-five percent (25%) of the area shall be open space, excluding street pavement and surface parking. In multi-phased developments, individual phases are not required to meet the 25% standard as long as an approved Specific Area Plan demonstrates that the overall development shall provide a minimum of 25% open space. Required front yard areas shall not be counted towards the required open space area. Required rear yard areas and other landscaped areas that are not within required front or side yards may be counted as part of the required open space.

B. Open space area required by this Section may, at the discretion of the Development Review Board, be protected by a conservation easement or dedicated to the City, either rights in fee or easement, without altering the density or other development standards of the proposed development. Provided that, if the dedication is for public park purposes, the size and amount of the proposed dedication shall meet the criteria of the City of Wilsonville standards. The square footage of any land, whether dedicated or not, which is used for open space shall be deemed a part of the development site for the purpose of computing density or allowable lot coverage. See SROZ provisions, Section 4.139.10.

C. The Development Review Board may specify the method of assuring the long-term protection and maintenance of open space and/or recreational areas. Where such protection or maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review and approve any pertinent bylaws, covenants, or agreements prior to recordation.

Response: The Parks *Master Plan* for Villebois states that there are 57.87 acres of parks and 101.46 acres of open space for a total of 159.33 acres within Villebois, approximately 33%. SAP Central includes parks and open space areas consistent with the *Master Plan*. PDP 4C includes parks not shown in the *Villebois Village Master*

Plan for this area, thereby increasing park areas. This proposal provides more park areas than originally included in this phase.

(.09) STREET & ACCESS IMPROVEMENT STANDARDS

A. Except as noted below, the provisions of Section 4.177 apply within the Village zone:

1. Generally:

a) All street alignment and access improvements shall conform to the Villebois Village Master Plan, or as refined in the Specific Area Plan, Preliminary Development Plan, or Final Development Plan and the following standards:

Response: The street alignments and access improvements within this PDP are generally consistent with those approved in the *Villebois Village Master Plan* and SAP Central, as refined by this PDP application.

i. All street improvements shall conform to the Public Works Standards and shall provide for the continuation of streets through proposed developments to adjoining properties or subdivisions, according to the Master Plan.

Response: All street improvements within this PDP will comply with the applicable Public Works Standards. The street system within this PDP is designed to provide for the continuation of streets within Villebois and to adjoining properties or subdivisions according to the *Master Plan*. The street system is illustrated on the *Circulation Plan* (see Section IIB of this Notebook).

ii. All streets shall be developed with curbs, landscape strips, bikeways or pedestrian pathways, according to the Master Plan.

Response: All streets within this PDP will be developed with curbs, landscape strips, sidewalks, and bikeways or pedestrian pathways as depicted on the *Circulation Plan* (Section IIB of this Notebook) and in accordance with the *Master Plan*.

2. Intersections of streets

a) Angles: Streets shall intersect one another at angles not less than 90 degrees, unless existing development or topography makes it impractical.

b) Intersections: If the intersection cannot be designed to form a right angle, then the right-of-way and paving within the acute angle shall have a minimum of thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than ninety (90) degrees shall require approval

by the City Engineer after consultation with the Fire District.

Response: The plan sheets located in Section IIB of this Notebook demonstrate that all proposed streets will intersect at angles consistent with the above standards (see the *Tentative Plat* in Section IIB).

c) Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections shall be separated by at least:

i. 1000 ft. for major arterials
ii. 600 ft. for minor arterials
iii. 100 ft. for major collector
iv. 50 ft. for minor collector

Response: The plan sheets located in Section IIB of this Notebook demonstrate that opposing intersections on public streets are offset, as appropriate, so that no danger to the traveling public is created (see the *Tentative Plat* in Section IIB).

d) Curb Extensions:

i. Curb extensions at intersections shall be shown on the Specific Area Plans required in subsection 4.125(.18)(C) through (F) below, and shall:

- **Not obstruct bicycle lanes on collector streets.**
- **Provide a minimum 20 foot wide clear distance between curb extensions all local residential street intersections shall have, shall meet minimum turning radius requirements of the Public Works Standards, and shall facilitate fire truck turning movements as required by the Fire District.**

Response: Curb extensions are shown on the *Circulation Plan* (see Section IIB). Curb extensions will not obstruct bicycle lanes on collector streets (Villebois Drive and Costa Circle). The attached drawings illustrate that all street intersections will have a minimum 20 foot wide clear distance between curb extensions on all local residential street intersections.

3. Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate, grades in excess of 8%, but not more than 12%, may be permitted for short distances, as approved by the City Engineer, where topographic conditions or existing improvements warrant modification of these standards.

Response: The *Grading & Erosion Control Plan* located in Section IIB, demonstrates that proposed streets can comply with this standard.

4. Centerline Radius Street Curves:

The minimum centerline radius street curves shall be as follows:

a) Arterial streets: 600 feet, but may be reduced to 400 feet in commercial areas, as approved by City Engineer.

b) Collector streets: 600 feet, but may be reduced to conform with the Public Works Standards, as approved by the City Engineer.

c) Local streets: 75 feet

Response: The *Tentative Plat* (see Section IIB) demonstrates that all streets will comply with the above standards.

5. Rights-of-way:

a) See (.09) (A), above.

Response: Proposed rights-of-way are shown on the plan sheets located in Section IIB of this Notebook. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with recordation of a final plat in accordance with Section 4.177.

6. Access drives.

a) See (.09) (A), above.

b) 16 feet for two-way traffic.

Response: Access drives (alleys) will be paved at least 16-feet in width within a 20-foot tract, as shown on the *Circulation Plan*. In accordance with Section 4.177, all access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions

7. Clear Vision Areas

a) See (.09) (A), above.

Response: Clear vision areas will be provided and maintained in compliance with the Section 4.177.

8. Vertical clearance:

a) See (.09) (A), above.

Response: Vertical clearance will be provided and maintained in compliance with the Section 4.177.

9. Interim Improvement Standard:

a) See (.09) (A), above.

Response: Construction documents will include interim improvements as needed to provide for adequate street access until the future vacation of 110th Avenue, construction of the roundabout at Villebois Drive and Costa Circle, and the corresponding street connections/extensions can be built with PDP 3E.

(.10) SIDEWALK AND PATHWAY IMPROVEMENT STANDARDS

A. The provisions of Section 4.178 shall apply within the Village zone.

Response: All sidewalks and pathways within SAP Central will be constructed in accordance with the standards of Section 4.178 and the *Villebois Village Master Plan*. Sidewalks and pathways are shown in the street cross-sections on the *Circulation Plan* (see Section IIB of this notebook).

(.11) LANDSCAPING, SCREENING AND BUFFERING

A. Except as noted below, the provisions of Section 4.176 shall apply in the Village zone:

1. Streets in the Village zone shall be developed with street trees as described in the Community Elements Book.

Response: The *Street Tree/Lighting Plan* shows the street trees proposed within this PDP. The trees are in conformance with the Community Elements Book.

(.12) MASTER SIGNAGE AND WAYFINDING

Response: The SAP Central *Signage & Wayfinding Plan* indicates the provision of 'Internal Site Identifier' with the roundabout at the intersection of Villebois Drive and Costa Circle. The attached PDP plans (see Section IIB of this Notebook) and FDP plans (see Section VIB of this Notebook) show provision of the 'Internal Site Identifier' with the future roundabout construction.

(.14) DESIGN STANDARDS APPLYING TO THE VILLAGE ZONE

A. The following design standards implement the Design Principles found in (.13), above, and enumerate the architectural details and design requirements applicable to buildings and other features within the Village (V) zone. The Design Standards are based primarily on the features, types, and details of the residential traditions in the Northwest, but are not intended to mandate a particular style or fashion. All development within the Village zone shall incorporate the following:

1. Generally:

a. Flag lots are not permitted.

Response: No flag lots are proposed (see the *Tentative Plat* in Section IIB of this Notebook).

b. Dwellings on lots without alley access shall be at least 36 feet wide.

Response: No lots without alley access are proposed in this PDP.

c. The minimum lot depth for a single-family dwelling with an accessory dwelling unit shall be 70 feet.

Response: None of the lots include accessory dwellings; therefore this standard does not apply.

d. For Village Center lots facing two or more streets, two of the facades shall be subject to the minimum frontage width requirement. Where multiple buildings are located on one lot, the facades of all buildings shall be used to calculate the Minimum Building Frontage Width.

Response: The proposed PDP is not located in the Village Center; therefore this standard does not apply.

2. Building and site design shall include:

a. Proportions and massing of architectural elements consistent with those established in an approved Pattern Book or Village Center Design.

b. Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Pattern Book, Community Elements Book or approved Village Center Architectural Standards.

c. Protective overhangs or recesses at windows and doors.

d. Raised stoops, terraces or porches at single-family dwellings.

e. Exposed gutters, scuppers, and downspouts.

f. The protection of existing significant trees as identified in an approved Community Elements Book.

g. A landscape plan in compliance with Section (.11), above.

h. Building elevations of block complexes shall not repeat an elevation found on an adjacent block.

i. Building elevations of detached buildings shall not repeat an elevation found on buildings on adjacent lots.

j. A porch shall have no more than three walls.

k. A garage shall provide enclosure for the storage of no more than three vehicles.

Response: This application requests PDP approval for single family detached and row house lots. No buildings are proposed at this time. Conformance with the Pattern Book and Community Elements Book will assure consistency with the Design Standards of subsection (.14). Subsequent Building Permit applications will review building and site design for consistency with the Pattern Book.

The *Street Tree/Lighting Plan* shows the street trees proposed within this PDP in compliance with Section (.11), above. The trees have been selected in conformance with the Community Elements Book.

Protection of existing trees is shown on the *Tree Preservation Plan*, in accordance with the Community Elements Book. The *Street Tree/Lighting Plan* (see Section IIB) depicts street trees along rights-of-way within the subject Preliminary Development Plan area. The *Street Tree/Lighting Plan* has been developed in conformance with the Community Elements Book and the applicable standards of Section 4.176.

3. Lighting and site furnishings shall be in compliance with the approved Community Elements Book.

Response: The FDP application in Section VI of the Notebook shows site furnishings within the parks. The *Street Tree/Lighting Plan* (see Section IIB) shows proposed street trees and lighting for this Preliminary Development Plan. These plans illustrate that lighting and site furnishings will be provided in compliance with the Community Elements Book.

4. Building systems, as noted in Tables V-3 and V-4 (Permitted Materials and Configurations), below, shall comply with the materials, applications and configurations required therein.

Response: The PDP does not propose any buildings. Subsequent Building Permit applications will review proposed buildings for consistency with the criteria of *Table V-3* and the *Architectural Pattern Book*.

(.18) VILLAGE ZONE DEVELOPMENT PERMIT PROCESS

B. Unique Features and Processes of the Village (V) Zone. To be developed, there are three (3) phases of project approval. Some of these phases may be combined, but generally the approvals move from the conceptual stage through to detailed architectural, landscape and site plan review in stages. All development within the Village zone shall be subject to the following processes:

2. Preliminary Development Plan (PDP) approval by the Development Review Board, as set forth in Section 4.125(.18)(G) through (K) (Stage II equivalent), below. Following SAP approval, an applicant may file applications for Preliminary Development Plan approval (Stage II equivalent) for an approved phase in accordance with the approved SAP, and any conditions attached thereto. Land divisions may also be preliminarily approved at this stage. Except for land within the Central SAP or multi-family dwellings outside the Central SAP, application for a zone change and Final Development Plan (FDP) shall be made concurrently with an application for PDP approval. The SAP and PDP/FDP may be reviewed simultaneously when a common ownership exists.

Final Development (FDP) approval by the Development Review Board or the Planning Director, as set forth in

Sections 4.125(.18)(L) through (P) (Site Design Review equivalent), below, may occur as a separate phase for lands in the Central SAP or multi-family dwellings outside the Central SAP.

Response: The Applicant is requesting approval of a Preliminary Development Plan (PDP). Compliance with Sections 4.125(.18)(G) through (K) is demonstrated in the following sections of this report. This PDP addresses Phase 4 on the amended SAP Central Phasing Plan, as shown in Exhibit IE of this Notebook. This PDP includes a request to amend the SAP Central Phasing as shown in Exhibit IE.

A request for preliminary approval of a tentative subdivision plat is submitted concurrent with this PDP application (see Section III of this Notebook). A request for a zone change to Village (V) zone is also submitted concurrent with this PDP application (see Section IV of this Notebook). A Final Development Plan is also submitted concurrent with this PDP (see Section VI of this Notebook).

G. Preliminary Development Plan Approval Process:

1. An application for approval of a Preliminary Development Plan for a development in an approved SAP shall:

a) Be filed with the City Planning Division for the entire SAP, or when submission of the SAP in phases has been authorized by the Development Review Board, for a phase in the approved sequence.

Response: This PDP addresses Phase 4 on the amended SAP Central Phasing Plan, as shown in Exhibit IE of this Notebook. This PDP includes a request to amend the SAP Central Phasing as shown in Exhibit IE.

b) Be made by the owner of all affected property or the owner's authorized agent; and.

Response: This application is made by Polygon Northwest Company, who is also the property owner. The application form can be found in Exhibit IB along with a copy of the vesting deed.

c) Be filed on a form prescribed by the City Planning Division and filed with said division and accompanied by such fee as the City Council may prescribe by resolution; and.

Response: The appropriate application form and fee have been filed with this submittal. A copy of the form and fee are included in Sections IB and IC, respectively.

d) Set forth the professional coordinator and professional design team for the project; and.

Response: The professional coordinator and professional design team are set forth in the Introductory Narrative, located in Section IA of this Notebook.

e) State whether the development will include mixed land uses, and if so, what uses and in what proportions and locations.

Response: This PDP does not include mixed land uses. The proposed land uses are shown on the *Site/Land Use Plan,* in Section IIB of this Notebook.

f) Include a preliminary land division (concurrently) per Section 4.400, as applicable.

Response: This application includes a request for preliminary land division approval. This request for approval of a Tentative Plat can be seen in Section III of this Notebook. This section includes a Supporting Compliance Report, the proposed Tentative Plat, draft CC&R's, a copy of the certification of liens & assessments form, and the subdivision name approval from the County Surveyor's Office.

g) Include a concurrent application for a Zone Map Amendment (i.e., Zone Change) for the subject phase.

Response: This application includes a request for a zone map amendment to zone the subject Preliminary Development Plan area Village (V). This zone change request can be seen in Section IV of this Notebook. This section includes a Supporting Compliance Report, a Zone Change Map, and a legal description & sketch of the proposed zone change area.

2. The application for Preliminary Development Plan approval shall include conceptual and quantitatively accurate representations of the entire development sufficient to demonstrate conformance with the approved SAP and to judge the scope, size and impact of the development on the community and shall be accompanied by the following information:

a) A boundary survey or a certified boundary description by a surveyor licensed in the State of Oregon.

b) Topographic information sufficient to determine direction and percentage of slopes, drainage patterns, and in environmentally sensitive areas, (e.g., flood plain, wetlands, forested areas, steep slopes or adjacent to stream banks). Contour lines shall relate to North American Vertical Datum of 1988 and be at minimum intervals as follows:

i) One (1) foot contours for slopes of up to five percent (5%);

ii) Two (2) foot contours for slopes from six percent (6%) to twelve (12%);

iii) Five (5) foot contours for slopes from twelve percent (12%) to twenty percent (20%). These slopes shall be clearly identified, and

iv) Ten (10) foot contours for slopes exceeding twenty percent (20%).

c) The location of areas designated Significant Resource Overlay Zone (SROZ), and associated 25-foot Impact Areas, within the PDP and within 50 feet of the PDP boundary, as required by Section 4.139.

Response: A certified boundary description by a surveyor licensed in the State of Oregon is provided as the legal description and sketch for the zone map amendment (see Section IVC of this Notebook). Topographic information in accordance with Section 4.125(.18)G.2.b. is shown on the *Existing Conditions*, located in Section IIB of this Notebook. The site does not include any designated SROZ areas.

d) A tabulation of the land area to be devoted to various uses, and a calculation of the average residential density per net acre.

Response: Following is a tabulation of land area devoted to the various uses and a calculation of net residential density:

Gross Acreage	6.83 Acres
Parks	0.84 Acres
Public Streets	3.14 Acres
Lots and Alleys	2.85 Acres

Net Residential Density: 57 lots / 2.85 Acres = 20 units per net acre

e) The location, dimensions and names, as appropriate, of existing and platted streets and alleys on and within 50 feet of the perimeter of the PDP, together with the location of existing and planned easements, sidewalks, bike routes and bikeways, trails, and the location of other important features such as section lines, section corners, and City boundary lines. The plan shall also identify all trees 6 inches and greater d.b.h. on the project site only.

Response: The above information is shown on the *Existing Conditions,* the *Tentative Plat,* and the *Circulation Plan*. The *Tree Preservation Plan* identifies all trees 6 inches and greater diameter at breast height (d.b.h.) on the project site. Tree numbers are identified on the Tree Preservation Plan Sheets which correspond with the Tree Inventory in the Tree Report (see Section VB). The plan sheets mentioned above can be found in Section IIB of this Notebook.

f) Conceptual drawings, illustrations and building elevations for each of the listed housing products and typical non-residential and mixed-use buildings to be constructed within the Preliminary Development Plan boundary, as identified in the approved SAP, and where required, the approved Village Center Design.

Response: The proposed PDP includes Row House, Small Cottage, and Small lot types, which are all single-family homes. Conceptual elevations for the homes within the PDP are included in Exhibit IIF.

g) A composite utility plan illustrating existing and proposed water, sanitary sewer, and storm drainage facilities necessary to serve the SAP.

Response: Proposed storm drainage facilities, and water and sanitary lines are shown on the *Composite Utility Plan* (see Section IIB in this Notebook).

h) If it is proposed that the Preliminary Development Plan will be executed in Phases, the sequence thereof shall be provided.

Response: The PDP is proposed to be executed in two phases. The proposed phases of the subject PDP are shown on the *PDP Phasing Plan* (see Section IIB).

i) A commitment by the applicant to provide a performance bond or other acceptable security for the capital improvements required by the project.

Response: The applicant will provide a performance bond or other acceptable security for the capital improvements required by the project.

j) At the applicant's expense, the City shall have a Traffic Impact Analysis prepared, as required by Section 4.030(.02)(B), to review the anticipated traffic impacts of the proposed development. This traffic report shall include an analysis of the impact of the SAP on the local street and road network, and shall specify the maximum projected average daily trips and maximum parking demand associated with buildout of the entire SAP, and it shall meet Subsection 4.140(.09)(J)(2).

Response: A copy of the Traffic Impact Analysis is provided in Section IID.

H. PDP Application Submittal Requirements:

1. The Preliminary Development Plan shall conform with the approved Specific Area Plan, and shall include all information required by (.18)(D)(1) and (2), plus the following:

a) The location of water, sewerage and drainage facilities;
b) Conceptual building and landscape plans and elevations, sufficient to indicate the general character of the development;
c) The general type and location of signs;
d) Topographic information as set forth in Section 4.035;

e) A map indicating the types and locations of all proposed uses; and

f) A grading and erosion control plan illustrating existing and proposed contours as prescribed previously in this section.

Response: The proposed PDP generally conforms to the approved SAP Central, with the proposed refinements described in the following sections of this report. As demonstrated above, the PDP application includes all information required by 4.125(.18)(D)(1) and (2), as applicable to a PDP. The *Existing Conditions* shows the existing site features, including topographic features. Proposed lots to be created for development are shown on the *Tentative Plat).* The *Grading and Erosion Control Plan* shows the location of drainage facilities, topographic information, and a grading and erosion control facilities. The *Composite Utility Plan* indicates the proposed location of water and sanitary sewer lines and drainage facilities. The *Site/Land Use Plan* indicates the types and locations of all proposed uses in the Preliminary Development Plan. The plan sheets mentioned above can be found in Section IIB of this Notebook.

Landscape plans for the park areas are located with the FDP application materials in Section VI of the Notebook. No signs are proposed at this time; however, the SAP Central *Signage & Wayfinding Plan* indicates the provision of 'Internal Site Identifier' with the roundabout at the intersection of Villebois Drive and Costa Circle. The attached PDP plans (see Section IIB of this Notebook) and FDP plans (see Section VIB of this Notebook) show provision of the 'Internal Site Identifier' with the future roundabout construction.

The proposed PDP includes Row House, Small Cottage, and Small lot types, which are all single-family homes. Conceptual elevations for the homes within the PDP are included in Exhibit IIF. Future proposed homes will be designed to be consistent with the conceptual elevations in the *Architectural Pattern Book*.

2. In addition to this information, and unless waived by the City's Community Development Director as enabled by Section 4.008(.02))B), at the applicant's expense, the City shall have a Traffic Impact Analysis prepared, as required by Section 4.030(.02)(B), to review the anticipated traffic impacts of the proposed development. This traffic report shall include an analysis of the impact of the PDP on the local street and road network, and shall specify the maximum projected average daily trips and maximum parking demand associated with buildout of the entire PDP, and it shall meet Subsection 4.140(.09)(J)(2) for the full development of all five SAPs.

Response: A copy of the Traffic Impact Analysis is provided in Section IID.

3. The Preliminary Development Plan shall be sufficiently detailed to indicate fully the ultimate operation and appearance of the phase of development. However, approval of a Final Development Plan is a separate and more detailed review of proposed design features, subject to the

standards of Section 4.125(.18)(L) through (P), and Section 4.400 through Section 4.450.

Response: The plan sheets for the proposed Preliminary Development Plan provide sufficient detail to show the ultimate operation and appearance of the subject phase of development. The FDP application for design of the included park areas within the PDP area is submitted concurrent with this application (see Section VI of this Notebook).

4. Copies of legal documents required by the Development Review Board for dedication or reservation of public facilities, or for the creation of a non-profit homeowner's association, shall also be submitted.

Response: Copies of legal documents will be provided as appropriate and required by the Development Review Board.

I. PDP Approval Procedures

1. An application for PDP approval shall be reviewed using the following procedures:

a) Notice of a public hearing before the Development Review Board regarding a proposed PDP shall be made in accordance with the procedures contained in Section 4.012.

b) A public hearing shall be held on each such application as provided in Section 4.013.

c) After such hearing, the Development Review Board shall determine whether the proposal conforms to the permit criteria set forth in this Code, and shall approve, conditionally approve, or disapprove the application.

Response: In accordance with the procedures contained in Section 4.012, the City shall provide notice of a public hearing before the Development Review Board on the proposed Preliminary Development Plan. This report, in conjunction with all submitted information, demonstrates that the proposal conforms to the applicable permit criteria set forth in the City's Code.

J. PDP Refinements to Approved Specific Area Plan

1. In the process of reviewing a PDP for consistency with the approved Specific Area Plan, the Development Review Board may approve refinements, but not amendments, to the SAP. Refinements to the SAP may be approved by the Development Review Board as set forth in Section (.18)(J)(2), below.

a) Refinements to the SAP are defined as:

i. Changes to the street network or functional classification of streets that do not significantly reduce circulation system

function or connectivity for vehicles, bicycles or pedestrians.

Response: The PDP design does not propose any refinements to the street network or functional classification of streets.

ii. Changes to the nature or location of parks types, trails or open space that to not significantly reduce function, usability, connectivity, or overall distribution or availability of these uses in the Preliminary Development Plan.

Response: The *Villebois Village Master Plan* and SAP Central do not show any parks, linear greens, open space or pathways within the proposed PDP area. Several new linear greens are added to this area with the proposed design for PDP 4C. The additional linear greens add park areas to the PDP and are dispersed throughout the PDP distributing greenspace to every block within PDP 4C. The proposed refinement, addition of new linear greens, increases the usable park space within the PDP and achieves greater distribution of parks among all of the blocks in PDP 4C. The proposed refinement does not significantly reduce function, usability, connectivity, or overall distribution or availability of parks, trails or open space. The proposed refinement actually increases all of these factors.

iii. Changes to the nature or location of utilities or storm water facilities that do not significantly reduce the service or function of the utility or facility.

Response: The PDP design does not propose any refinements to the nature or location of utilities or storm facilities.

iv. Changes to the location or mix of land uses that do not significantly alter the overall distribution or availability of uses in the Preliminary Development Plan. For the purposes of this subsection, "land uses" or "uses" are defined in the aggregate, with specialty condos, mixed use condos, urban apartments, condos, village apartments, neighborhood apartments, row houses and small detached uses comprising a land use group and medium detached, standard detached, large and estate uses comprising another.

v. A change in density that does not exceed ten percent, provided such density change has not already been approved as a refinement to the underlying SAP or PDP, and does not result in fewer than 2,300 dwelling units in the Village.

Response: SAP Central was approved in 2006. Since the approval of SAP Central, three separate PDP's have been approved and some modifications of original approvals have also occurred. The following analysis reflects the final and current approved unit counts in PDP 1C, PDP 2C and PDP 3C.

For purposes of this analysis, it is important to keep in mind that changes to the mix/location of "land uses" are to be evaluated as described by the code – in the aggregate. The code defines one land use group as condos, apartments, row houses, and small detached uses – which will be referred to as the 'smaller land use group' in the following analysis. The recent Planning Director's Interpretation approved under Case File AR12-0021 found small attached uses to be included in this smaller land use group. Recent approvals of PDP 3E and PDP 4E, as well as modifications in PDP 5S and PDP 1N, have approved Small Cottages as a replacement for the Small Attached and Row House uses. The code defines the second land use group as mediums, standards, large and estate uses – which will be referred to as the 'larger land use group' in the following analysis.

The total density shown for the subject area in SAP Central is 44-62 units, all of which are grouped into the smaller land use group, and included 8-10 Small Detached lots and 36-52 Row House lots.

PDP 4C proposes the following refinements to the location and mix of units within the same area of SAP Central.

- The block bounded by Villebois Drive, Costa Circle East, Mont Blanc Street, and Orleans Loop included 10-18 Row Houses and 8-10 Smalls. The PDP plan proposed 4 Row Houses, 9 Small Cottages, and 8 Smalls.
- The block bounded by Verdun Loop, Geneva Loop, "Village Apartments", and Costa Circle West included 6-10 Row Houses. The PDP plan proposes 11 Row Houses.
- The block bounded by Costa Circle West, "Hilltop Park", and Orleans Loop included 20-24 Row Houses. The PDP plan proposes 25 Row Houses.

The PDP proposes a total of 57 units, including 40 Row House, 9 Small Cottage, and 8 Small lots. The proposed refinements result in the addition of linear greens to two of the three blocks within this PDP. The table below shows the number of units in each land use category currently within SAP Central and the number of units in the SAP with the proposed refinement as well as the percent change in each aggregate land use category.

	Current Unit Count in SAP C	Proposed Unit Count in SAP C	% Change
Medium/Standard/ Large/Estate	0	0	0%
Small Detached/ Small Cottage/ Row Homes/ Neighborhood Apt.	1,007	1,011	+0.04%
Total	1,007	1,011	+0.04%

NOTE: The Current Unit Count for SAP Central reflects the final approved unit counts for PDP 1C, PDP 2C and PDP 3C, as well as recent Modifications to PDP 1C and PDP 2C.

The proposed refinements do not exceed the 10% standard. This proposal results in a total of 2,532 units within Villebois. This is above the density of 2,300 units required to be obtained across Villebois, meeting the refinement criteria.

vi. Changes that are significant under the above definitions, but necessary to protect an important community resource or improve the function of collector or minor arterial roadways.

Response: The PDP does not include changes that are significant under the above definitions.

2. Refinements meeting the above definition may be approved by the DRB upon the demonstration and finding that:

a) **The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan.**

Response: None of the conditions of approval for SAP Central are specific to the proposed refinements. As the proposed refinements will not compromise the project's ability to comply with SAP conditions of approval, they will equally meet the conditions of approval of SAP Central.

The proposed refinements will better meet the following Goals, Policies and Implementation Measures of the *Villebois Village Master Plan* than the SAP Central plan.

- ***Land Use, General Land Use Plan Goal*** *– Villebois Village shall be a complete community that integrates land use, transportation, and natural resource elements to foster a unique sense of place and cohesiveness.*

  The proposed PDP 4C plan better integrates natural resource elements with land uses and transportation through additional park areas for linear greens providing more areas for recreational and community uses.

- ***Land Use, General Land Use Plan Policy 1*** *– The Villebois Village shall be a complete community with a wide range of living choices, transportation choices, and working and shopping choices. Housing shall be provided in a mix of types and densities resulting in a minimum of 2,300 dwelling units within the Villebois Village Master Plan area.*

  The proposed PDP 4C plan better meets this Land Use Plan Policy by contributing to the range of living choices through the replacement of some of the Row Houses with Small Cottages. This area previously included 36-52 Row Houses and just 8-10 Smalls. Now, 40 Row Houses, 9 Small Cottages, and 8 Smalls are proposed. The proposed PDP plan is made up of three (3) unit types instead of two (2), which results in a greater mix in sizes and types of housing, densities and price ranges.

- ***Land Use, Residential Neighborhood Housing Policy 1*** *– Each of the Villebois Village's neighborhoods shall include a wide variety of housing*

options and shall provide home ownership options ranging from affordable housing to estate lots.

The areas included in PDP 4C are not inside the Village Center boundary, and, architecturally, are anticipated to be more like the surrounding neighborhoods to the North, East and South. Since the subject areas are adjacent to the Village Center, they provide a level of transition as densities in housing options increase from the edges of the project to the Village Center. By adding Small Cottages to the mix of Row Houses and Smalls, the proposed PDP plan increases to the variety of housing options and the range of affordability options within the subject area, while still meeting a transition function.

- ***Land Use, Residential Neighborhood Housing Policy 10*** *– Natural features shall be incorporated into the design of each neighborhood to maximize their aesthetic character while minimizing impacts to said natural features.*

  The addition of linear greens better incorporates natural features into the design of the subject area which enhances the aesthetic character of the neighborhood.

In summary, the proposed refinements will better integrate green spaces throughout the PDP and expand the range of housing options in the subject area. As the proposed refinements will not compromise the project's ability to comply with all other Goals, Policies and Implementation Measures of the *Villebois Village Master Plan*, they will equally meet all other Goals, Policies and Implementation Measures of the *Villebois Village Master Plan*.

b) **The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area, and**

Response: As described throughout this report, the proposed refinements will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area. The proposed refinements will better preserve the environment and natural resources of the PDP and Village area by adding more greenspaces throughout the PDP area.

c) **The refinement will not preclude an adjoining or subsequent PDP or SAP from development consistent with the approved SAP or Master Plan.**

Response: The refinements proposed with PDP 4C involve the replacement of some Row Houses with Small Cottages, an increase in the overall unit count by four (4) units and the addition of linear greens into the subject PDP area. These refinements in and of themselves have no affect on the development potential of an adjoining or subsequent PDP. Therefore, these refinements will not preclude an adjoining or subsequent PDP or SAP from developing consistent with the approved SAP or *Master Plan*.

3. Amendments to the SAP, not including SAP amendments for phasing, must follow the same procedures applicable to

adoption of the SAP itself. Amendments are defined as changes to elements of the SAP not constituting a refinement.

4. **Amendments to the SAP for phasing will be processed as a Class II administrative review proposal.**

Response: Two (2) SAP Amendments are proposed and listed as follows.

- The Applicant proposes an amendment of SAP Central to add information to the *Architectural Pattern Book* for Small Cottages. This SAP Amendment will follow the same procedures as the adoption of the SAP itself, and is, therefore, included in the Notebook as a separate application (see Section VII of the Notebook).
- The Applicant also proposes an amendment of SAP Central to modify the SAP phasing plan. The SAP phasing amendment has been added to the PDP request, which raises its review to the same level as the PDP. The requested amendment of the SAP Central phasing plan is included in Exhibit IE of this Notebook.

K. PDP Approval Criteria

The Development Review Board may approve an application for a PDP only upon finding that the following approval criteria are met:

1. **That the proposed PDP:**

   a. **Is consistent with the standards identified in this section.**

Response: This Supporting Compliance Report provides an explanation of how the proposed development is consistent with the standards of the Village zone.

   b. **Complies with the applicable standards of the Planning and Land Development Ordinance, including Section 4.140(.09)(J)(1)-(3).**

Response: This Supporting Compliance Report provides an explanation of how the proposed development is consistent with the applicable standards of the Planning and Land Development Ordinance. A description of how the proposed development complies with Section 4.140(.09)J.1-3 is included in the subsequent pages of this report.

   c. **Is consistent with the approved Specific Area Plan in which it is located.**

Response: The proposed Preliminary Development Plan is consistent with Specific Area Plan – Central, as demonstrated by the plan sheets located in Section IIB and this report, and as refined and described earlier in this report.

   d. **Is consistent with the approved Pattern Book and, where required, the approved Village Center Architectural Standards**

Response: No buildings are proposed with this Preliminary Development Plan. Subsequent Building Permit applications for residential buildings in this Preliminary Development Plan will document compliance with the *Architectural Pattern Book*. However, proposed lots are sized to accommodate proposed uses in a manner consistent with *Table V-1* and the *Architectural Pattern Book*.

COMMUNITY ELEMENTS BOOK

Lighting Master Plan

Response: This PDP application includes plans for street lighting within PDP 4C as illustrated on the *Street Tree/Lighting Plan*. The proposed lighting is consistent with the Community Elements Book.

Curb Extensions

Response: As shown on the *Tentative Plat*, curb extensions are proposed at a number of intersections in the PDP area. The location of these curb extensions is consistent with the Curb Extension Concept Plan Diagram in the Community Elements Book.

Street Tree Master Plan

Response: As shown on the *Street Tree/Lighting Plan*, street trees proposed along the streets in the PDP area are consistent with the respective designated street tree lists.

Site Furnishings

Response: No site furnishings are proposed with this PDP application; however, the concurrent FDP application for the proposed linear greens includes details regarding site furnishings in these areas (see Section VI of this Notebook).

Play Structures

Response: No play structures are proposed with this PDP application; however, the concurrent FDP application for the proposed linear greens includes details regarding these areas (see Section VI of this Notebook).

Tree Protection

Response: The Tree Protection component of the Community Elements Book for SAP – Central (page 15) describes the goal, policies, and implementation measures that were used to promote the protection of existing trees in the design of the PDP area. The *Tree Preservation Plan* shows the trees that are proposed for preservation. A *Tree Protection Plan* has been prepared for this PDP, consistent with Implementation Measures 1 and 2 of the Tree Protection component of the *Community Elements Book*. The *Tree Protection Plans* were based on a Tree Report prepared by Morgan E. Holan, a certified arborist with Walter E. Knapp & Associates, LLC (see Section V of this notebook).

Plant List

Response: The *Community Elements Book* approved with SAP – Central contains a Plant List (pages 16-18) of non-native and native trees, shrubs, and groundcovers, ferns, herbs, vines, perennials, grasses, and bulbs for species to plant throughout Villebois. Within the rights-of-way in this PDP, only street trees and rainwater components are proposed. Additional landscaping details are provided with the FDP application which is submitted concurrent with this PDP (see Section VI of this Notebook).

MASTER SIGNAGE AND WAYFINDING PLAN

Response: The SAP Central *Signage & Wayfinding Plan* indicates the provision of 'Internal Site Identifier' with the roundabout at the intersection of Villebois Drive and Costa Circle. The attached PDP plans (see Section IIB of this Notebook) and FDP plans (see Section VIB of this Notebook) show provision of the 'Internal Site Identifier' with the future roundabout construction.

RAINWATER PROGRAM

Response: A rainwater management plan is included with the supporting utility reports located in Section IIC of this Notebook. Rainwater will be treated through several components proposed within the rights-of-way as shown on the attached plans. The rainwater components within rights-of-way will be detailed within subsequent construction drawings. The rainwater management plan included in this application is consistent with the rainwater program for SAP Central.

3. **If the PDP is to be phased, that the phasing schedule is reasonable and does not exceed two years between commencement of development of the first, and completion of the last phase, unless otherwise authorized by the Development Review Board.**

Response: The PDP is proposed to be executed in two phases. The proposed phases of the subject PDP are shown on the *PDP Phasing Plan* (see Section IIB of this Notebook).

4. **Parks within each PDP or PDP phase shall be constructed prior to occupancy of 50% of the dwelling units in the PDP or PDP phase, unless weather or special circumstances prohibit completion, in which case bonding for the improvements shall be permitted.**

Response: The parks within PDP 4C will be completed prior to occupancy of 50% of the housing units, as required. Bonding will be provided if special circumstances prohibit completion.

5. **In the Central SAP, parks shall be constructed within each PDP as provided above, and that pro-rata portion of the estimated cost of Central SAP parks not within the PDP, calculated on a**

dwelling unit basis, shall be bonded or otherwise secured to the satisfaction of the city.

Response: The proposed PDP is within SAP Central. Each PDP phase will include construction of the parks identified therein. The Applicant will provide for that pro-rata portion of the estimated cost of Central SAP parks not within the PDP through bonding or other form of security satisfactory to the City.

6. The Development Review Board may require modifications to the PDP, or otherwise impose such conditions as it may deem necessary to ensure conformance with the approved SAP, the Villebois Village Master Plan, and compliance with applicable requirements and standards of the Planning and Land Development Ordinance, and the standards of this section.

Response: This report demonstrates that the proposed Preliminary Development Plan is in conformance with Specific Area Plan – Central, and thus, the *Villebois Village Master Plan* as well as the applicable requirements and standards of the Planning and Land Development Ordinance.

SECTION 4.139 SIGNIFICANT RESOURCE OVERLAY ZONE (SROZ) ORDINANCE

Response: The PDP application does not include any SROZ impacts.

SECTION 4.140 PLANNED DEVELOPMENT REGULATIONS

(.09) FINAL APPROVAL (STAGE TWO)

J. A planned development permit may be granted by the Development Review Board only if it is found that the development conforms to all the following criteria, as well as to the Planned Development Regulations in Section 4.140:

1. The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council.

Response: This Supporting Compliance Report demonstrates that the location, design, size, and uses proposed with the PDP are both separately and as a whole consistent with SAP Central, and thus the *Villebois Village Master Plan*, the City's Comprehensive Plan designation of Residential – Village for the area, and the City's Planning and Land Development Ordinance.

2. That the location, design, size and uses are such that traffic generated by the development at the most probable used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D, as defined in the Highway Capacity manual published by the National Highway Research Board, on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets.

Immediately planned arterial and collector streets are those listed in the City's adopted Capital Improvement Program, for which funding has been approved or committed, and that are scheduled for completion within two years of occupancy of the development or four year if they are an associated crossing, interchange, or approach street improvement to Interstate 5.

Response: The location, design, size and uses are such that traffic generated within the PDP at the most heavily used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D. The proposed uses and the circulation system are consistent with the SAP – Central application, which included an Internal Circulation Evaluation including an assessment of intersection performance by DKS Associates. A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

a. In determining levels of Service D, the City shall hire a traffic engineer at the applicant's expense who shall prepare a written report containing the following minimum information for consideration by the Development Review Board:

i. An estimate of the amount of traffic generated by the proposed development, the likely routes of travel of the estimated generated traffic, and the source(s) of information of the estimate of the traffic generated and the likely routes of travel; (Amended by Ord 561, adopted 12/15/03.)

ii. What impact the estimate generated traffic will have on existing level of service including traffic generated by (1) the development itself, (2) all existing developments, (3) Stage II developments approved but not yet built, and (4) all developments that have vested traffic generation rights under section 4.140(.10), through the most probable used intersection(s), including state and county intersections, at the time of peak level of traffic. This analysis shall be conducted for each direction of travel if backup from other intersections will interfere with intersection operations. (Amended by Ord 561, adopted 12/15/03.).

Response: The traffic generated by the PDP and its impact on the existing LOS will be consistent with the SAP – Central application. A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

b. The following are exempt from meeting the Level of Service D criteria standard:

i. A planned development or expansion thereof which generates three (3) new p.m. peak hour traffic trips or less;

ii. A planned development or expansion thereof which provides an essential governmental service.

Response: This PDP does not request an exemption from meeting the Level of Service D; therefore this criterion does not apply to this project.

c. Traffic generated by development exempted under this subsection on or after Ordinance No. 463 was enacted shall not be counted in determining levels of service for any future applicant. (Added by Ord 561, adopted 12/15/03.)

Response: The traffic generated by the PDP will be consistent with the SAP – Central application. A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

d. Exemptions under 'b' of this subsection shall not exempt the development or expansion from payment of system development charges or other applicable regulations. (Added by Ord 561, adopted 12/15/03.)

Response: The subject PDP is not exempt from subsection 'b' and the system development charges will be provided as required.

e. In no case will development be permitted that creates an aggregate level of traffic at LOS "F". (Added by Ord 561, adopted 12/15/03.)

Response: The traffic generated by the PDP will be consistent with the SAP – Central application. The DKS evaluation for SAP Central showed that the development will not create an aggregate level of traffic at LOS "F". A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

3. That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services.

Response: This Supporting Compliance Report, the Utility and Drainage Reports (see Section IIC of this notebook) and the plan sheets (see *Composite Utility Plan* in Section IIB) show that the future residents of PDP-4 Central will be adequately served by the planned facilities and services.

SECTION 4.171 GENERAL REGULATIONS – PROTECTION OF NATURAL FEATURES & OTHER RESOURCES

(.02) General Terrain Preparation

A. All developments shall be planned designed, constructed and maintained with maximum regard to natural terrain features and topography, especially hillside areas, floodplains, and other significant land forms.

B. All grading, filling and excavating done in connection with any development shall be in accordance with the Uniform Building Code, all development shall be planned, designed, constructed and maintained so as to:

1. Limit the extent of disturbance of soils and site by grading, excavation and other land alterations.

2. Avoid substantial probabilities of: (1) accelerated erosion; (2) pollution, contamination or siltation of lakes, rivers, streams and wetlands; (3) damage to vegetation; (4) injury to wildlife and fish habitats.

3. Minimize the removal of trees and other native vegetation that stabilize hillsides, retain moisture, reduce erosion, siltation and nutrient runoff, and preserve the natural scenic character.

Response: The plan sheets located in Section IIB demonstrate that the subject Preliminary Development Plan is designed with maximum regard to natural terrain features and topography. The subject PDP does not contain hillside areas or flood plains. The *Grading and Erosion Control Plan* shows proposed grading within the subject area and the *Tree Preservation Plan* shows proposed tree preservation.

All subsequent grading, filling and excavating will be done in accordance with the Uniform Building Code. Disturbance of soils and removal of trees and other native vegetation will be limited to the extent necessary to construct the proposed development. Construction will occur in a manner that avoids substantial probabilities of accelerated erosion; pollution, contamination or siltation of lakes, rivers, streams and wetlands; damage to vegetation; and injury to wildlife and fish habitats.

(.03) Hillsides: All developments proposed on slopes greater than 25% shall be limited to the extent that:

Response: The subject Preliminary Development Plan does not include any areas of slopes in excess of 25%. Therefore, this standard does not apply to this application.

(.04) <u>Trees and Wooded Areas</u>.

A. All developments shall be planned, designed, constructed and maintained so that:

1. Existing vegetation is not disturbed, injured, or removed prior to site development and prior to an approved plan for circulation, parking and structure location.

2. Existing wooded areas, significant clumps/groves of trees and vegetation, and all trees with a diameter at breast height of six inches or greater shall be incorporated into the development plan and protected wherever feasible.

3. Existing trees are preserved within any right-of-way when such trees are suitably located, healthy, and when approved grading allows.

B. Trees and woodland areas to be retained shall be protected during site preparation and construction according to City Public Works design specifications, by:

1. Avoiding disturbance of the roots by grading and/or compacting activity.

2. Providing for drainage and water and air filtration to the roots of trees which will be covered with impermeable surfaces.

3. Requiring, if necessary, the advisory expertise of a registered arborist/horticulturist both during and after site preparation.

4. Requiring, if necessary, a special maintenance, management program to insure survival of specific woodland areas of specimen trees or individual heritage status trees.

<u>Response:</u> The *Tree Preservation Plan,* located in Section IIB, depicts existing trees within the subject area and identifies trees to be retained and to be removed. This application includes a request for approval of a Type "C" Tree Removal Plan, which can be found in Section V of this Notebook.

Section V includes the Tree Report prepared by Morgan Holan addressing existing trees and development impacts within the subject area, a tree inventory and tree mitigation details. The information contained in Section V demonstrates that the subject Preliminary Development Plan is designed to incorporate all trees with a diameter at breast height of six inches or greater into the plan where feasible. Trees rated "Important" or "Good" have been retained to the extent feasible within the area addressed by this PDP. Trees that are retained, as identified in the *Tree Preservation Plan*, will be protected during site preparation and construction in accordance with City Public Works design specifications and Section 4.171(.04).

(.05) <u>High Voltage Power line Easements and Rights of Way and Petroleum Pipeline Easements:</u>

A. Due to the restrictions placed on these lands, no residential structures shall be allowed within high voltage powerline

easements and rights of way and petroleum pipeline easements, and any development, particularly residential, adjacent to high voltage powerline easements and rights of way and petroleum pipeline easement shall be carefully reviewed.

B. Any proposed non-residential development within high voltage powerline easements and rights of way and petroleum pipeline easements shall be coordinated with and approved by the Bonneville Power Administration, Portland General Electric Company or other appropriate utility, depending on the easement or right of way ownership.

Response: This Preliminary Development Plan does not contain any high voltage powerline or petroleum pipeline easements or rights of way.

(.06) Hazards to Safety: Purpose:

A. To protect lives and property from natural or human-induced geologic or hydrologic hazards and disasters.

B. To protect lives and property from damage due to soil hazards.

C. To protect lives and property from forest and brush fires.

D. To avoid financial loss resulting from development in hazard areas.

Response: Development of the subject area will occur in a manner that minimizes potential hazards to safety.

(.07) Standards for Earth Movement Hazard Areas:

A. No development or grading shall be allowed in areas of land movement, slump or earth flow, and mud or debris flow, except under one of the following conditions.

Response: Development of the subject area will occur in a manner that minimizes potential hazards to safety. No earth movement hazard areas have been identified within the subject PDP area.

(.08) Standards for Soil Hazard Areas:

A. Appropriate siting and design safeguards shall insure structural stability and proper drainage of foundation and crawl space areas for development on land with any of the following soil conditions: wet or high water table; high shrink-swell capability; compressible or organic; and shallow depth-to-bedrock.

B. The principal source of information for determining soil hazards is the State DOGAMI Bulletin 99 and any subsequent bulleting and accompanying maps. Approved site-specific soil studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the soil hazards database accordingly.

Response: Development of the subject area will occur in a manner that minimizes potential hazards to safety. No soil hazard areas have been identified within the subject area.

(.09) Historic Protection: Purpose:

A. To preserve structures, sites, objects, and areas within the City of Wilsonville having historic, cultural, or archaeological significance.

Response: A Historic/ Cultural Resource Inventory was previously conducted for the property identified as SAP – Central. The inventory shows that the subject PDP does not include any sites, objects, or areas having historic, cultural, or archaeological significance. Therefore, the standards of this section are not applicable.

SECTION 4.172 FLOOD PLAIN REGULATIONS

Response: The site does not include any areas identified as flood plain.

SECTION 4.176 LANDSCAPING, SCREENING & BUFFERING

Response: Landscaping will be provided in accordance with the standards in Section 4.176. The *Street Tree/Lighting Plan* depicts street trees along rights-of-way within the subject Preliminary Development Plan area. The plan has been developed in conformance with the Community Elements Book and the applicable standards of Section 4.176. Landscaping in the linear green areas will be reviewed with the concurrent FDP application in Section VI of this Notebook.

SECTION 4.177 STREET IMPROVEMENT STANDARDS

Response: The rights-of-way proposed within the subject PDP are shown on the plan sheets in Section IIB. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with the final plat.

The plan sheets located in Section IIB demonstrate that all proposed access drives (alleys) within the PDP area will have a minimum improvement width of 16 feet and will provide two-way travel. All access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions.

Clear vision areas will be maintained in accordance with the standards of Subsection 4.177(.01)(I). Vertical clearance will be maintained over all streets and access drives in accordance with Subsection 4.177(.01)(J).

SECTION 4.178 SIDEWALK & PATHWAY STANDARDS

(.01) Sidewalks. All sidewalks shall be concrete and a minimum of five (5) feet in width, except where the walk is adjacent to commercial storefronts. In such cases, they shall be increased to a minimum of ten (10) feet in width.

(.02) Pathways

A. Bicycle facilities shall be provided using a bicycle lane as the preferred facility design. The other facility designs listed will only be used if the bike lane standard cannot be constructed due to physical or financial constraints. The alternative standards are listed in order of preference.

1. Bike lane. This design includes 12-foot minimum travel lanes for autos and paved shoulders, 5-6 feet wide for bikes, that are striped and marked as bicycle lanes. This shall be the basic standard applied to bike lanes on all arterial and collector streets in the City, with the exception of minor residential collectors with less than 1,500 (existing or anticipated) vehicle trips per day.

Response: The PDP plan sheets located in Section IIB (see the *Circulation Plan*) depict cross-sections of the proposed sidewalks and pathways in compliance with the above standards and Specific Area Plan – Central.

SECTION 4.610.40 TYPE C PERMIT

A request for approval of the Tree Removal Plan for PDP 4 - Central can be found in Section V of this Notebook.

II. PROPOSAL SUMMARY & CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable requirements of the Village Zone and other applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for the requested Preliminary Development Plan. Therefore, the applicant requests approval of this application. Concurrent applications for a Tentative Plat, Zone Change, Tree Removal Plan, and Final Development Plan are included in this notebook as Sections III, IV, V, and VI, respectively, pursuant to City requirements.

PHASE 4 CENTRAL
VILLEBOIS
PRELIMINARY DEVELOPMENT PLAN

TL PART OF 2916, 2919, & 2922 TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

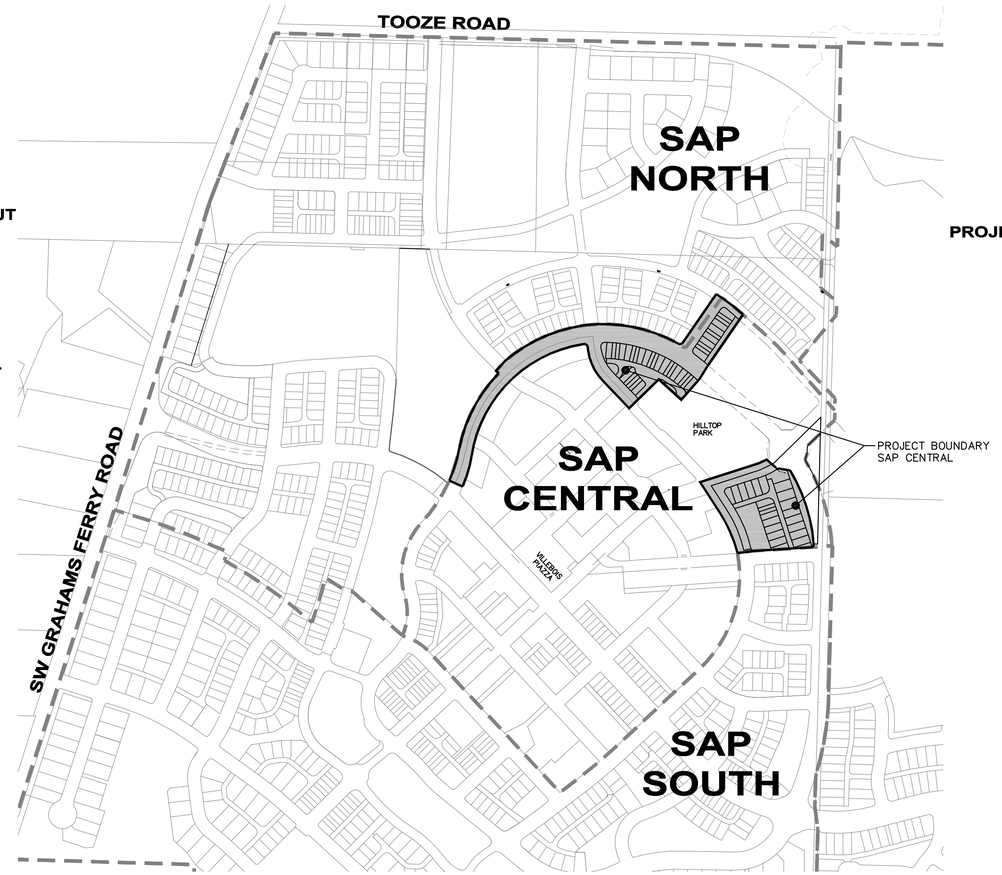
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

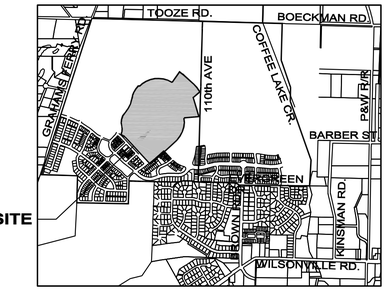
CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE





PROJECT SITE

VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1	COVER SHEET
2	EXISTING CONDITIONS
3	AERIAL PHOTOGRAPH
4.1	TENTATIVE PLAT
4.2	TENTATIVE PLAT
5	GRADING / EROSION CONTROL PLAN
6	COMPOSITE UTILITY PLAN
7.1	CIRCULATION PLAN
7.2	STREET SECTIONS
8.1	SITE / LAND USE PLAN
8.2	TYPICAL LOT PLAN
9	TREE PRESERVATION PLAN
10	STREET TREE / LIGHTING PLAN
11	PHASING PLAN

SCALE
300 0 150 300
1 INCH = 300 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

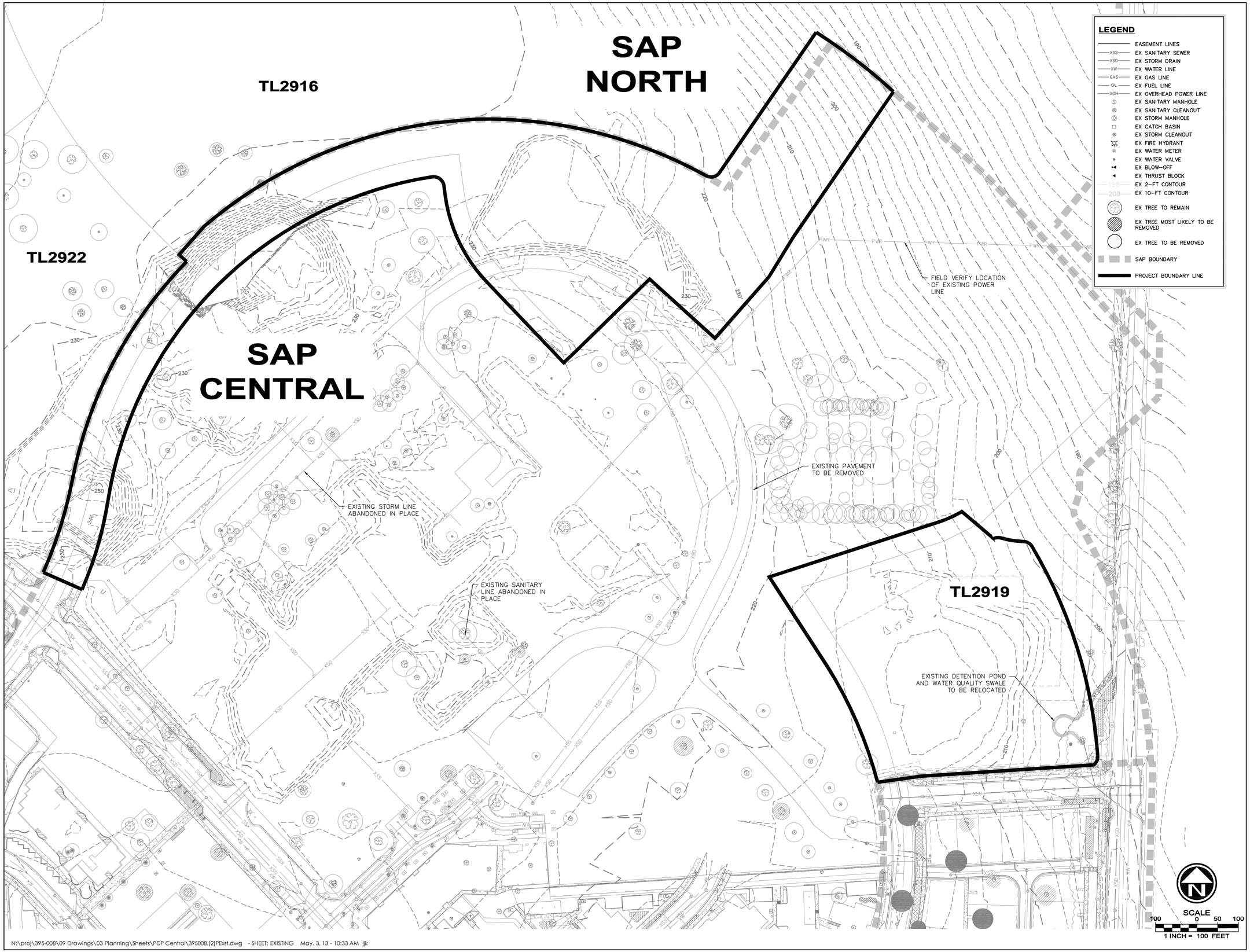
PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Cover Sheet

DATE 04/15/2013

1



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

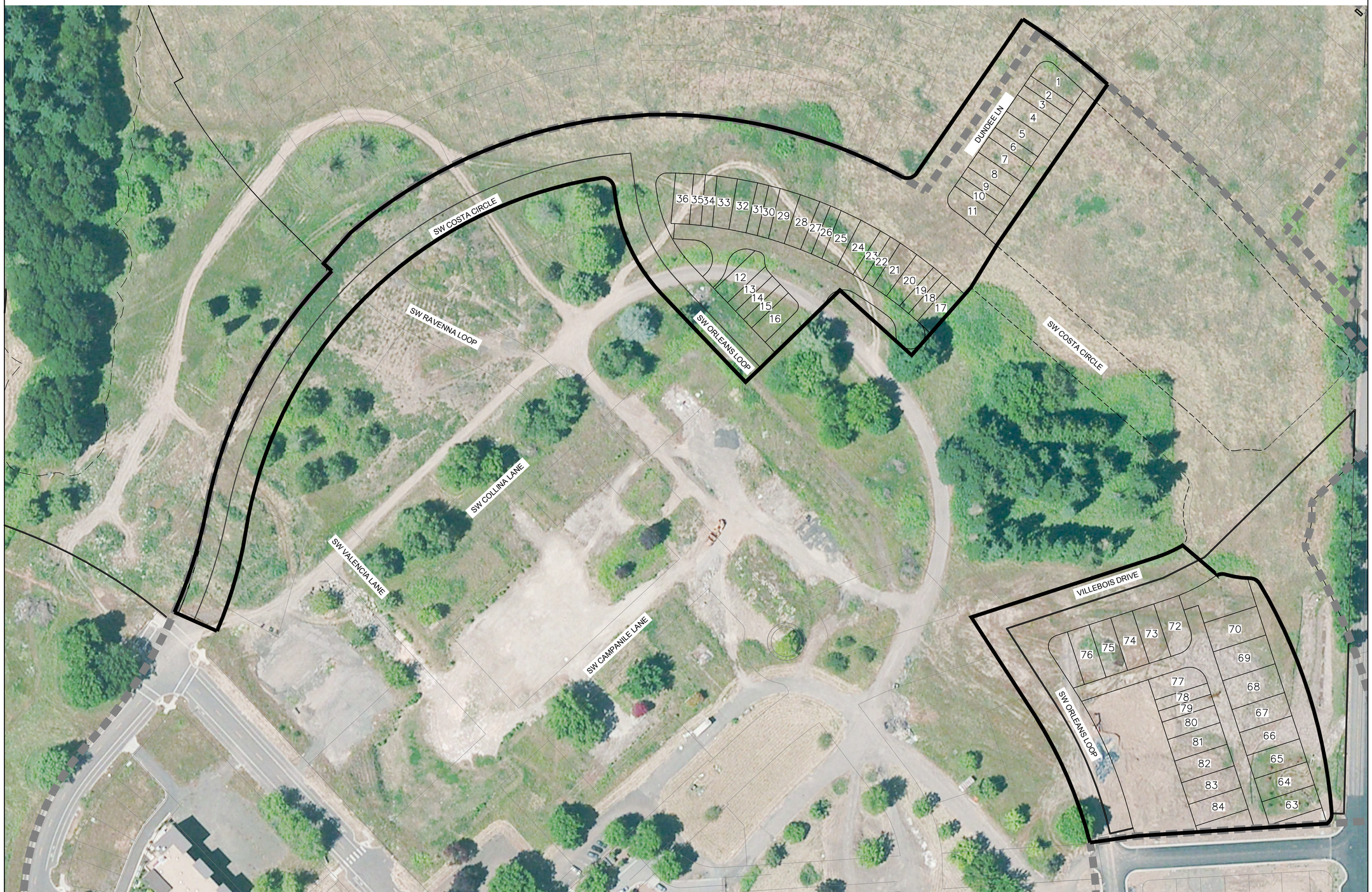
PHASE 4
CENTRAL
VILLEBOIS

Preliminary
Development Plan

Existing
Conditions

DATE 04/15/2013

2



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1 INCH = 60 FEET

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PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Aerial Photograph

DATE 04/15/2013

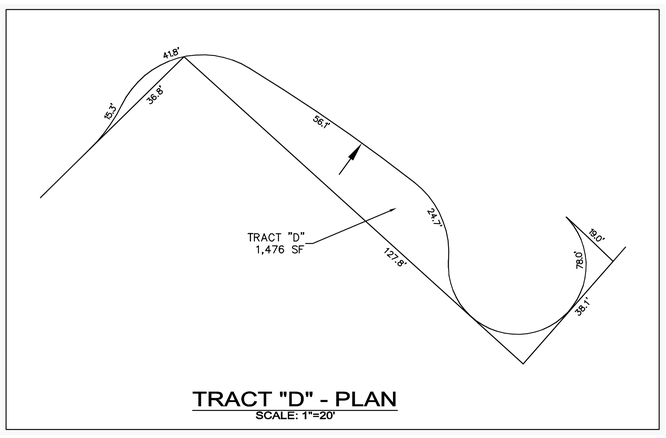
3

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
S	SMALL LOTS
SC	COTTAGES
RH	ROW HOMES

GROSS AREA = 6.83 AC



TRACT "D" - PLAN
SCALE: 1"=20'

SCALE
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1 INCH = 30 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.1

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
S	SMALL LOTS
SC	COTTAGES
RH	ROW HOMES

GROSS AREA = 6.83 AC

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.2

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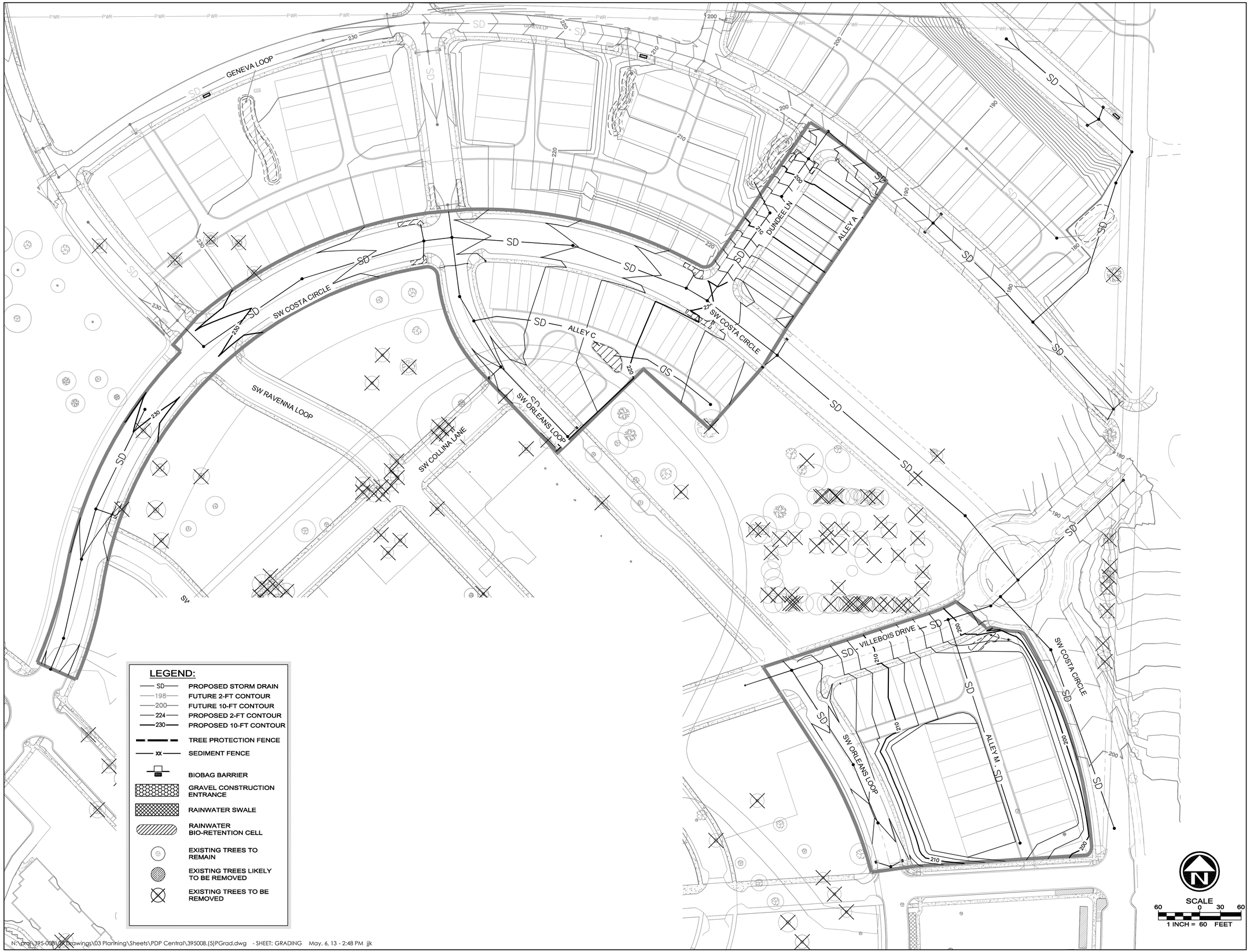

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

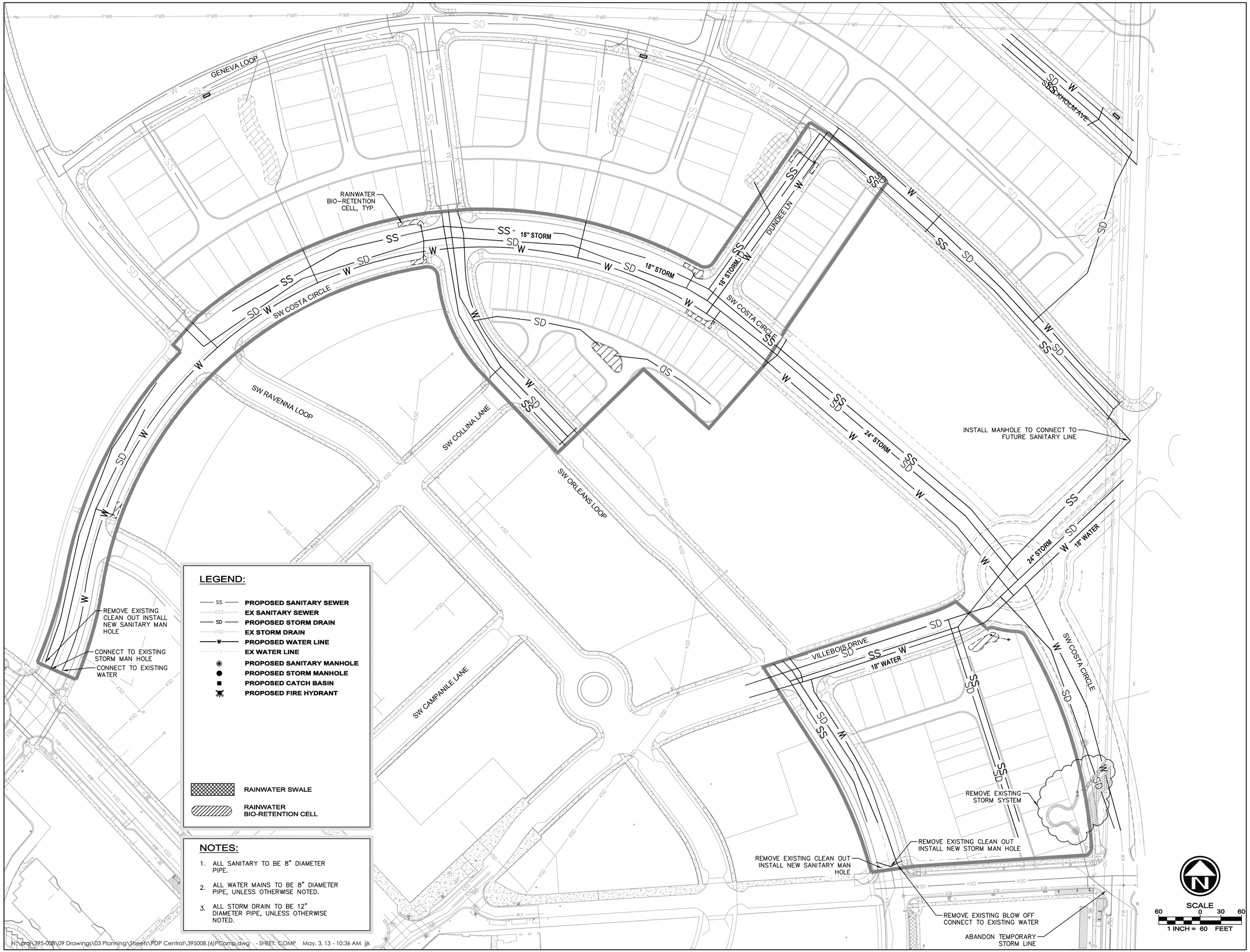
PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Grading & Erosion Control Plan

DATE 04/15/2013

5



Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

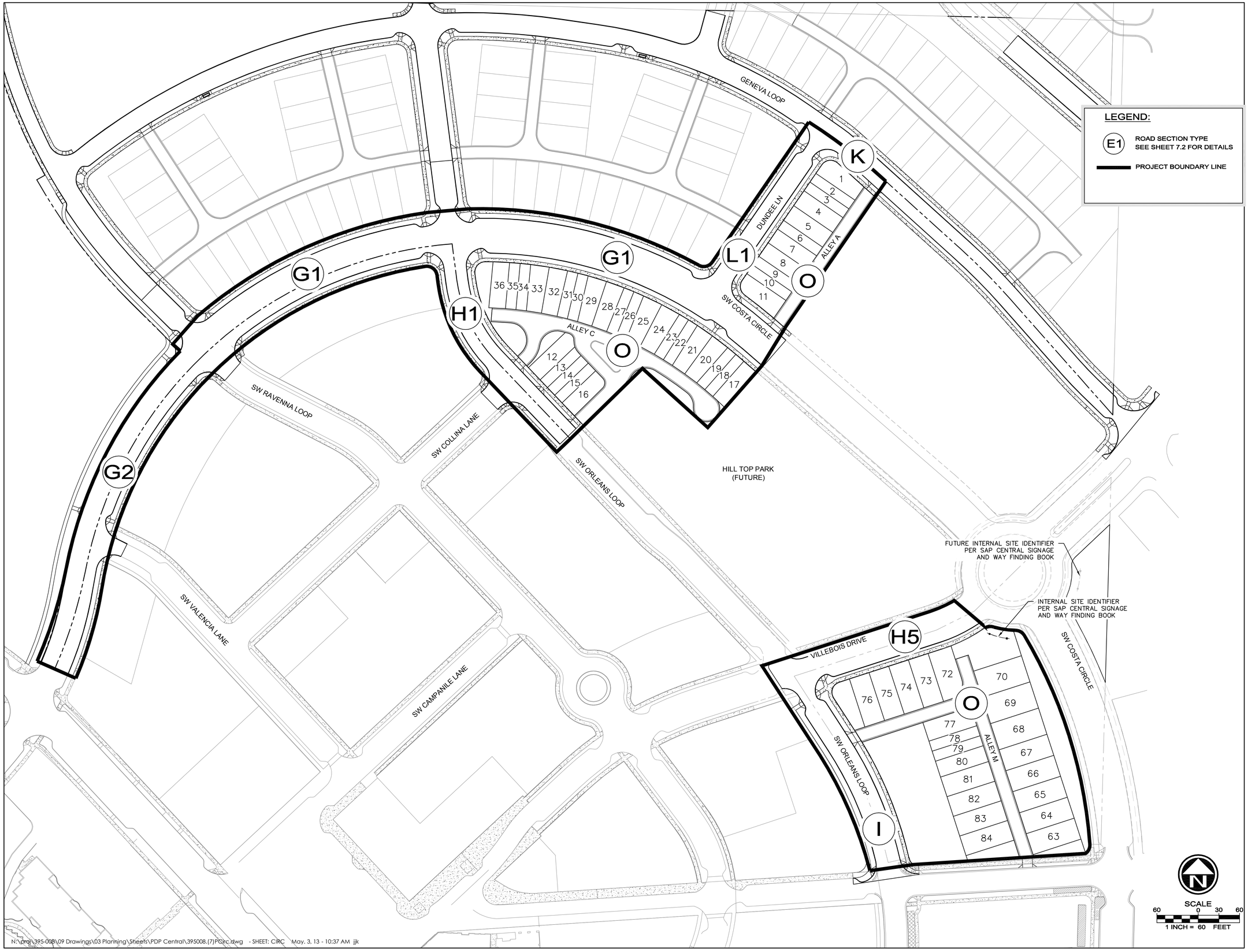
PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Composite Utility Plan

DATE 04/15/2013

6



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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

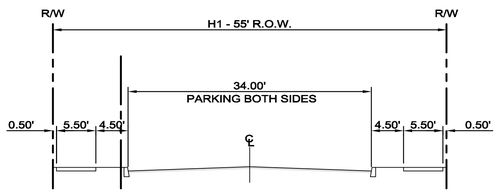
Preliminary Development Plan

Circulation Plan

DATE 04/15/2013

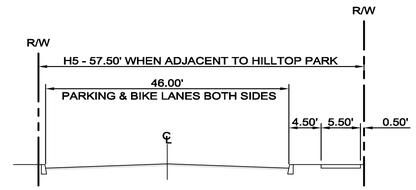
7.1

H1



RESIDENTIAL
VILLAGE CENTER
SCALE: 1"=10'

H5



RESIDENTIAL
VILLAGE CENTER
SCALE: 1"=10'

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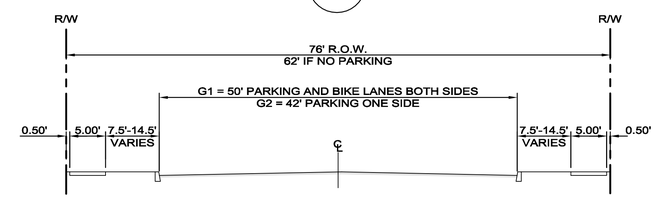
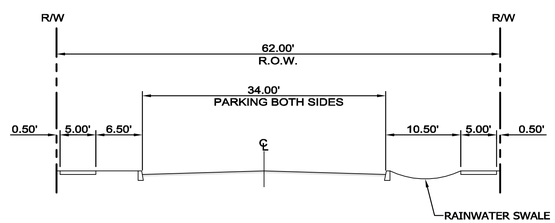


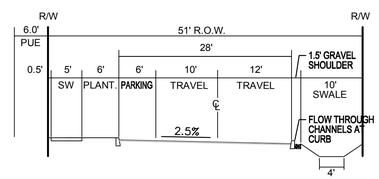
RESIDENTIAL - VILLAGE LOOP
SCALE: 1"=10'

I



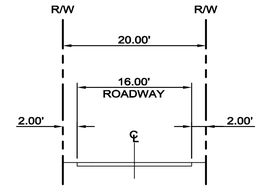
RESIDENTIAL VILLAGE CENTER
WITH SWALE
SCALE: 1"=10'

L1



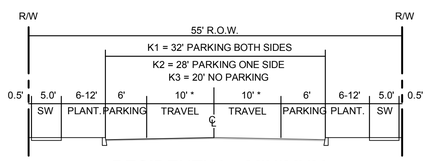
RESIDENTIAL - PARKING ONE SIDE
SCALE: 1"=10'

O



PRIVATE LANE
SCALE: 1"=10'

K



RESIDENTIAL - MINIMUM
N.T.S.

RESIDENTIAL - MINIMUM
SCALE: 1"=10'

* 12' TRAVEL ON OUTSIDE LANE WHEN PARKING ONE SIDE.

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GEODESIGN, INC

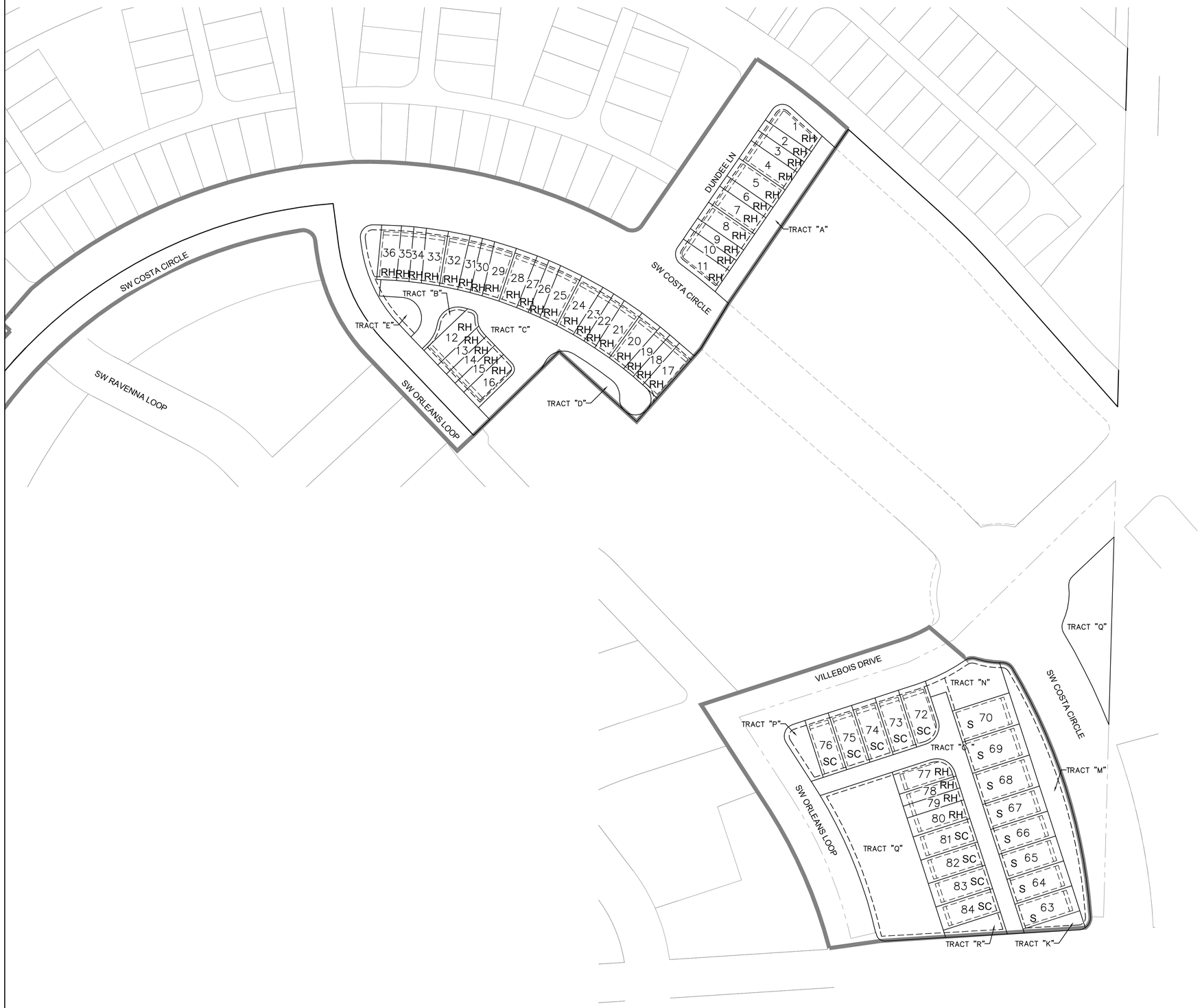
PHASE 4
CENTRAL
VILLEBOIS

Preliminary
Development Plan

Street
Sections

DATE 04/15/2013

7.2



LEGEND:

PDP BOUNDARY

S	SMALL LOTS
SC	COTTAGES
RH	ROW HOMES

LOT COUNT:

8	SMALL LOTS
9	COTTAGES
40	ROW HOMES
57	TOTAL

LAND AREA TABLE:

TOTAL AREA:	6.83 AC
PUBLIC STREETS:	3.14 AC
OPEN SPACE / PARK AREAS:	0.84 AC
LOTS & ALLEYS:	2.85 AC
AVG. DENSITY PER NET ACRE:	
57 / 2.85 =	20.00 UNITS / AC

NOTE:
FOR TYPICAL LOT PLAN SEE SHEET 8.2

SCALE
60 0 30 60
1 INCH = 60 FEET

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OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Site / Land Use Plan

DATE 04/15/2013

8.1

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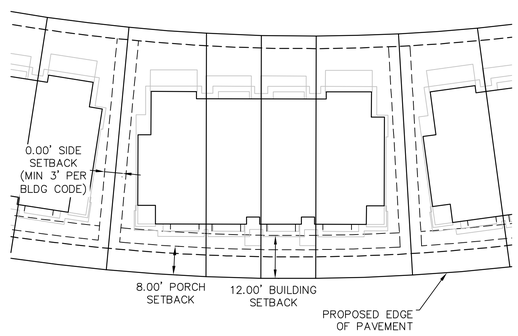
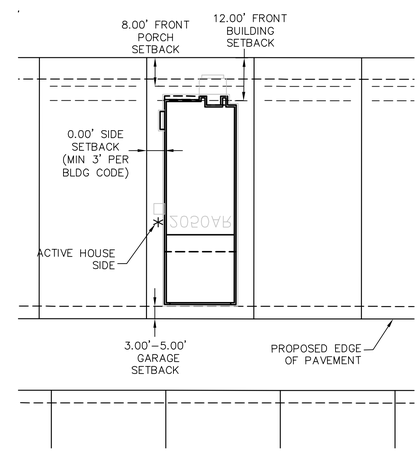


TYPICAL LOT PLAN - REAR LOADED ROWHOME

SCALE: 1" = 20'



TYPICAL LOT PLAN - REAR LOADED SMALL & COTTAGE

SCALE: 1" = 20'

Villebois

POLYGON NW COMPANY

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OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

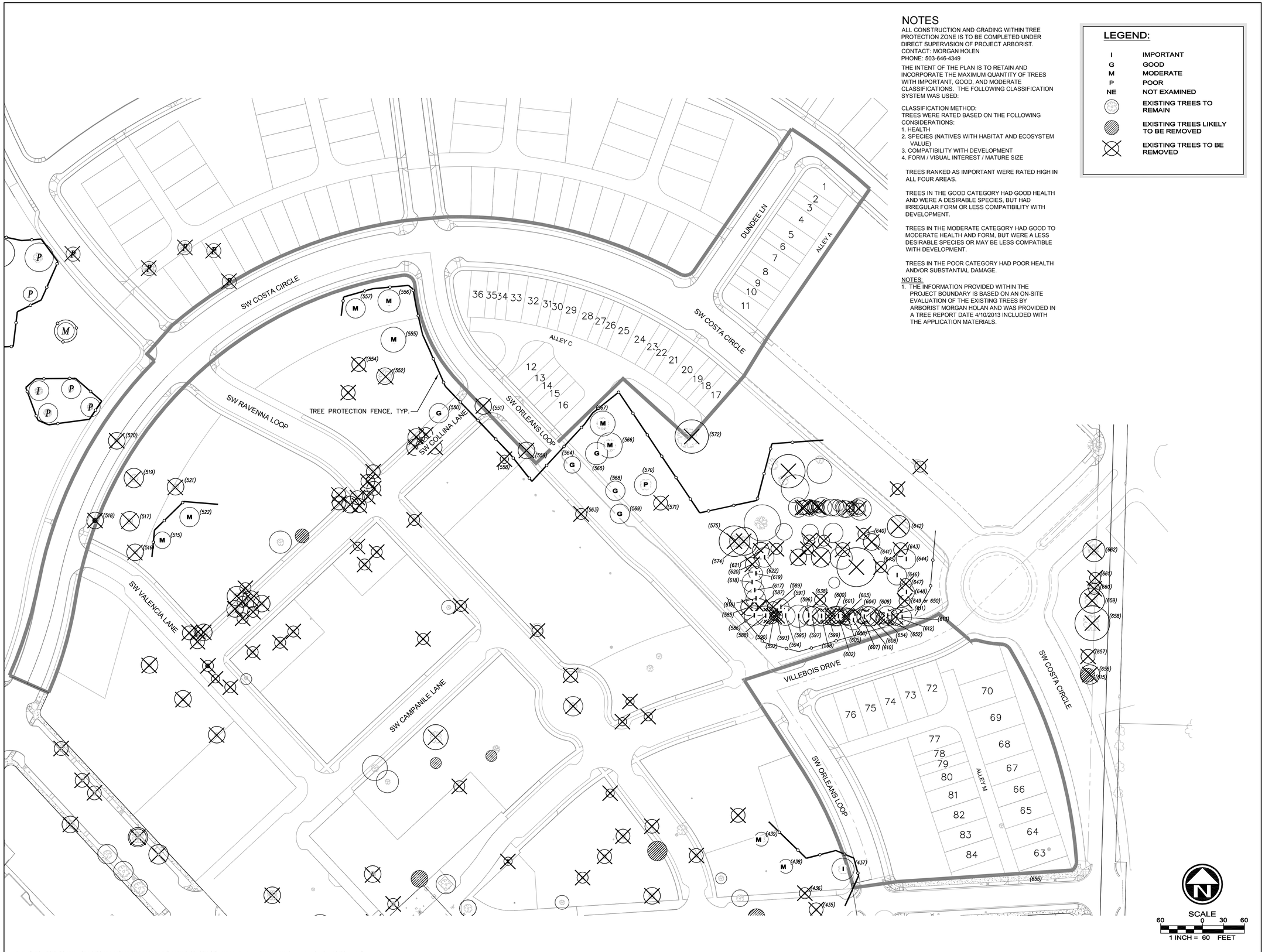
PHASE 4
CENTRAL
VILLEBOIS

Preliminary
Development Plan

Typical Lot
Plan

DATE 04/15/2013

8.2



NOTES

ALL CONSTRUCTION AND GRADING WITHIN TREE PROTECTION ZONE IS TO BE COMPLETED UNDER DIRECT SUPERVISION OF PROJECT ARBORIST.
CONTACT: MORGAN HOLEN
PHONE: 503-646-4349

THE INTENT OF THE PLAN IS TO RETAIN AND INCORPORATE THE MAXIMUM QUANTITY OF TREES WITH IMPORTANT, GOOD, AND MODERATE CLASSIFICATIONS. THE FOLLOWING CLASSIFICATION SYSTEM WAS USED:

CLASSIFICATION METHOD:
TREES WERE RATED BASED ON THE FOLLOWING CONSIDERATIONS:
1. HEALTH
2. SPECIES (NATIVES WITH HABITAT AND ECOSYSTEM VALUE)
3. COMPATIBILITY WITH DEVELOPMENT
4. FORM / VISUAL INTEREST / MATURE SIZE

TREES RANKED AS IMPORTANT WERE RATED HIGH IN ALL FOUR AREAS.

TREES IN THE GOOD CATEGORY HAD GOOD HEALTH AND WERE A DESIRABLE SPECIES, BUT HAD IRREGULAR FORM OR LESS COMPATIBILITY WITH DEVELOPMENT.

TREES IN THE MODERATE CATEGORY HAD GOOD TO MODERATE HEALTH AND FORM, BUT WERE A LESS DESIRABLE SPECIES OR MAY BE LESS COMPATIBLE WITH DEVELOPMENT.

TREES IN THE POOR CATEGORY HAD POOR HEALTH AND/OR SUBSTANTIAL DAMAGE.

NOTES:
1. THE INFORMATION PROVIDED WITHIN THE PROJECT BOUNDARY IS BASED ON AN ON-SITE EVALUATION OF THE EXISTING TREES BY ARBORIST MORGAN HOLAN AND WAS PROVIDED IN A TREE REPORT DATE 4/10/2013 INCLUDED WITH THE APPLICATION MATERIALS.

LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

Villebois

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GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Tree Preservation Plan

DATE 04/15/2013

9

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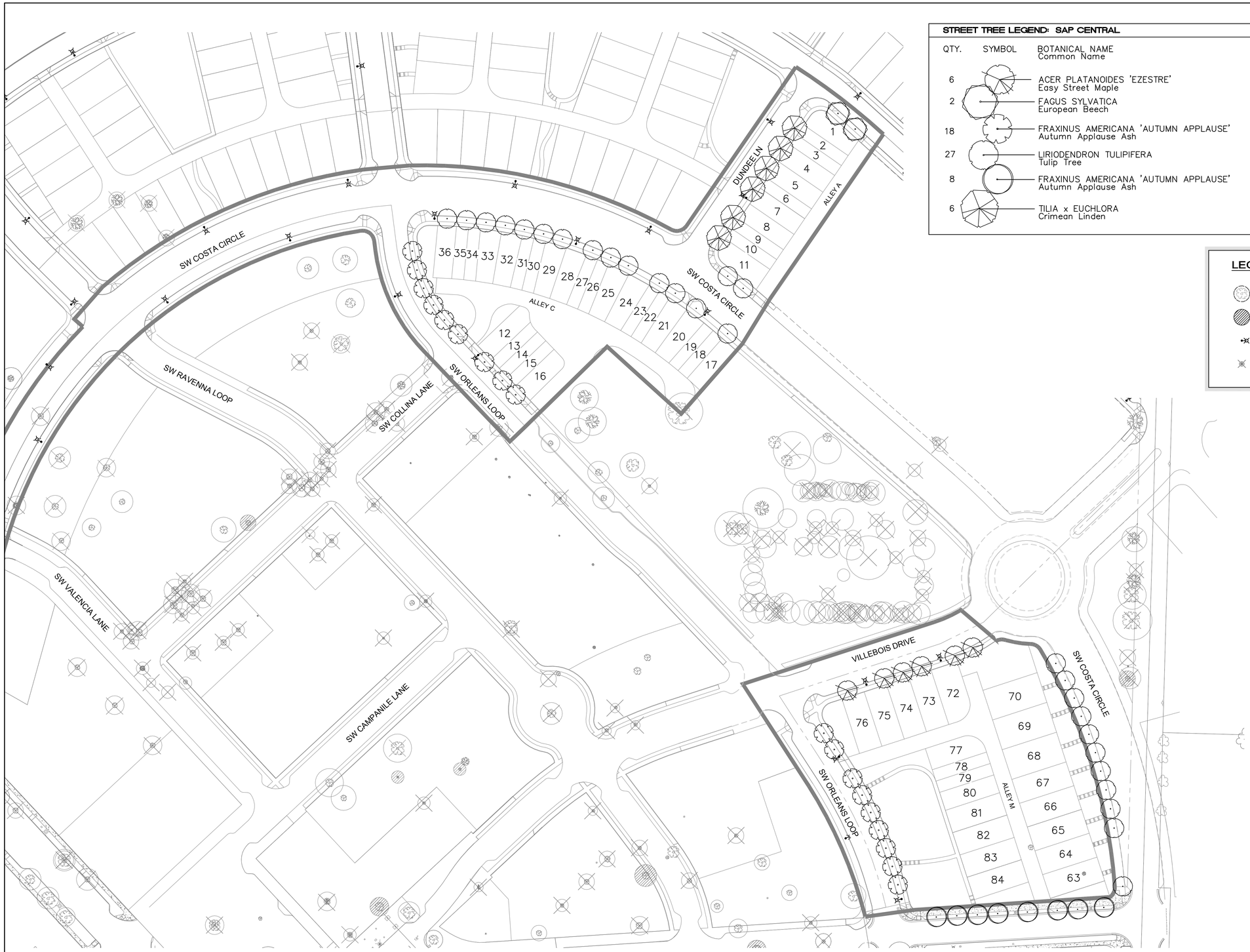

STREET TREE LEGEND: SAP CENTRAL

QTY.	SYMBOL	BOTANICAL NAME Common Name	SIZE	SPACING
6		ACER PLATANOIDES 'EZESTRE' Easy Street Maple	2 1/2" cal.	25' o.c.
2		FAGUS SYLVATICA European Beech	2" cal.	30' o.c.
18		FRAXINUS AMERICANA 'AUTUMN APPLAUSE' Autumn Applause Ash	2 1/2" cal.	25' o.c.
27		LIRIODENDRON TULIPIFERA Tulip Tree	2 1/2" cal.	25' o.c.
8		FRAXINUS AMERICANA 'AUTUMN APPLAUSE' Autumn Applause Ash	2 1/2" cal.	25' o.c.
6		TILIA x EUCHLORA Crimean Linden	2" cal.	30' o.c.

LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

N

SCALE
60 0 30 60
1 INCH = 60 FEET

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

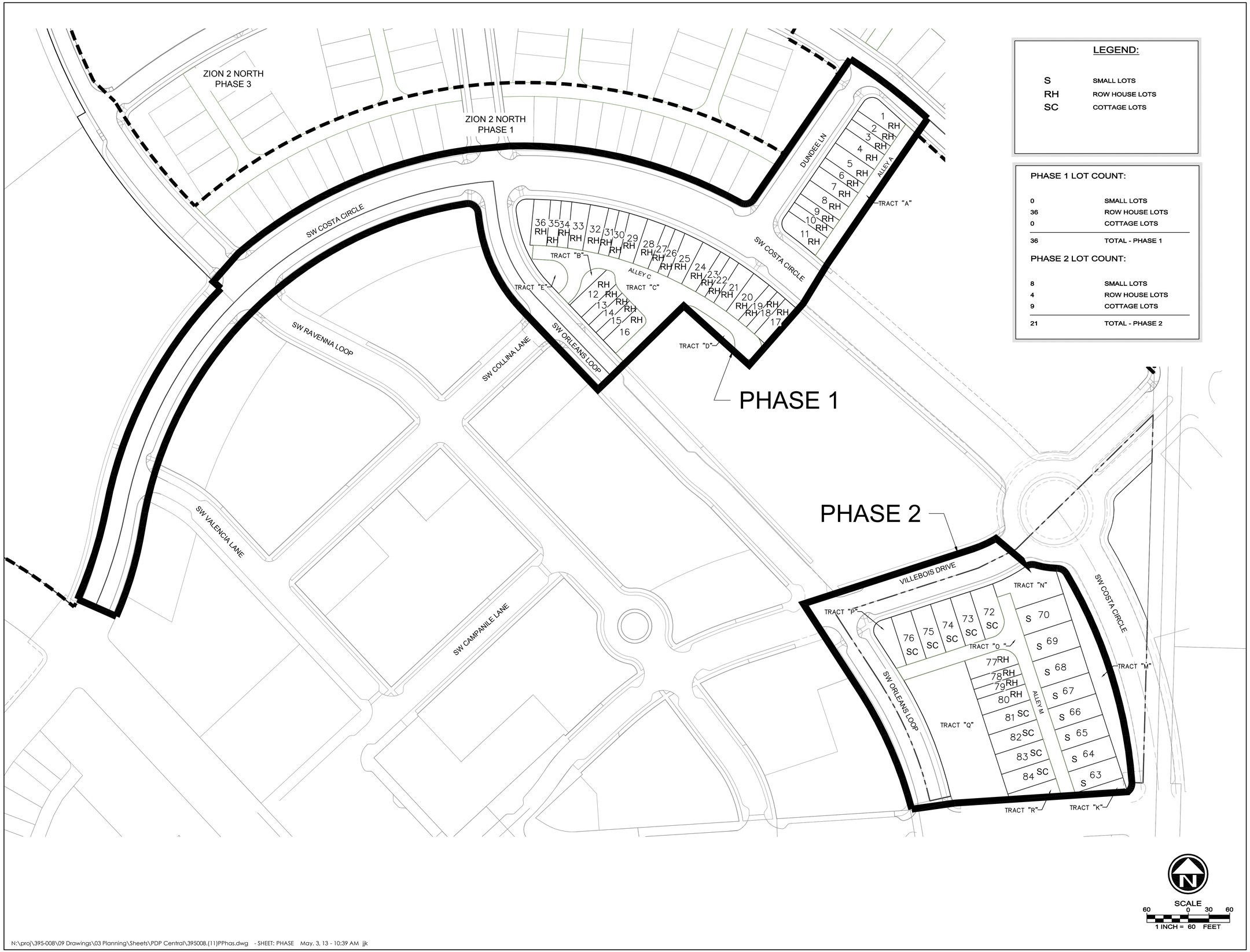
PHASE 4
CENTRAL
VILLEBOIS

Preliminary
Development Plan

Street Tree &
Lighting Plan

DATE 04/15/2013

10



LEGEND:

S	SMALL LOTS
RH	ROW HOUSE LOTS
SC	COTTAGE LOTS

PHASE 1 LOT COUNT:

0	SMALL LOTS
36	ROW HOUSE LOTS
0	COTTAGE LOTS
36	TOTAL - PHASE 1

PHASE 2 LOT COUNT:

8	SMALL LOTS
4	ROW HOUSE LOTS
9	COTTAGE LOTS
21	TOTAL - PHASE 2

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Phasing Plan

DATE 04/15/2013

11

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M E M O R A N D U M

DATE: April 11, 2013

TO: City of Wilsonville

FROM: Patrick Espinosa, PE
Pacific Community Design

RE: Villebois PDP 4C & 1B N Stormwater Detention and Water Quality Analysis
Job No. 395-008

This memorandum report is to address the available downstream stormwater capacity for PDP 4C of Villebois SAP North and PDP 1B N. The majority of each phase is located north of PDP 6S and west of SW 110th Ave and will discharge east to the Coffee Lake Drainage Basin. A small portion of PDP 1B N is located north of Tonquin Woods No. 3 (PDP 1N) development and east of Grahams Ferry Road and will discharge south to the Mill Creek Drainage Basin.

The portion of this project draining to the Coffee Lake Drainage Basin was included within the water quality analysis report, dated August 23, 2012, for the Tonquin Meadows No. 3 development (PDP 3E) completed by Pacific Community Design. The land use for PDP 4C and 1N B is consistent with this previous report. Accordingly the water quality facility design outlined in the previous report will be adequately sized to handle the additional runoff from this site. Attached is the original Tonquin Meadows No. 3 report with the portion of runoff from the project highlighted on the developed shed map exhibit (Exhibit A2).

The portion of this project draining to the Mill Creek Drainage Basin was included within the water quality and drainage analysis report, dated January 2, 2013, for the Tonquin Woods No. 3 development (PDP 1N) completed by Pacific Community Design. The land use for PDP 1N B is consistent with this previous report. Accordingly the water quality and detention facility design outlined in the previous report will be adequately sized to handle the additional runoff from this site. Attached is the original Tonquin Woods No. 3 report with the portion of runoff from the project highlighted on the developed drainage basin map exhibit (Exhibit A3).

Thank you.

Attachments

1. water quality and drainage analysis report, dated January 2, 2013, for the Tonquin Woods No. 3 development (PDP 1N) completed by Pacific Community Design
2. water quality analysis report, dated August 23, 2012, for the Tonquin Meadows No. 3 development (PDP 3E) completed by Pacific Community Design

TONQUIN WOODS NO.3
&
GRAHAMS FERRY ROAD

WATER QUALITY AND DETENTION ANALYSIS
VILLEBOIS - PDP 1 NORTH - PHASE 2

JOB # 395-002

1/3/13

REGISTERED PROFESSIONAL ENGINEER
64472PE
OREGON
DEC 31, 2007
PATRICK R. ESPINOSA

DATE: 1/2/2013
BY: PATRICK ESPINOSA, PE

EXPIRES: 12-31-13

Prepared By:
Pacific Community Design, Inc.
13500 SW Pacific Highway, PMB #519
Tigard, OR 97223
Tele: 503-941-9484

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INTRODUCTION

This report represents the analysis done for the second phase of Preliminary Development Plan 1N, hereby referred to as PDP 1 North-Phase 2 (PDP 1N-II), of Villebois for water quality and detention facilities. In addition to PDP 1N-II, this report will represent the second phase of Grahams Ferry Road improvements. The intent of this report is to demonstrate consistency between PDP 1N-II, Grahams Ferry Road, and the SAP North Analysis, and demonstrate compliance with City of Wilsonville "Public Works Standards". All calculations and supporting figures are included with this document.

PROJECT DESCRIPTION

PROJECT LOCATION

The proposed Villebois development is located on tax lot 2906 of Clackamas County Tax Map 3S1W15. This portion of Villebois will consist of 58 residential homes on property located to the north of Phase 5 South and east of Grahams Ferry Road. The area of PDP 1N-II is 8.17 ac.

The second phase of Grahams Ferry Road consists of the portion of the road running north of Surrey Street along the entirety of the PDP 1N-II parcel.

PROJECT ZONING/LAND USE

Sap North in the Villebois Village development has been assigned the land use designation of Village zone by the City of Wilsonville. The Villebois Village Master Plan designates this area further as a Residential Village. This area will be developed as an urban village including single-family units of various sizes, neighborhood row houses, and park spaces.

EXISTING CONDITIONS

EXISTING TOPOGRAPHY, LAND USE, AND ONSITE DRAINAGE

The entirety of the pre-developed site is open space, a portion of which was cultivated. This site slopes to the southwest at a gradient of 1-3%. The drainage basin falls within hydrologic group C per the Soil Survey Map for Clackamas County (Exhibit A1). The pre-developed topography for the project site is shown in Exhibit A2.

SOIL CONDITIONS

Below is a summary of the existing soil conditions for the Mill Creek portion of SAP North.

TABLE 1
PROJECT SITE SOILS

SOIL NAME	SCS SYMBOL	HYDROLOGIC GROUP
ALOHA SILT LOAM (0-3 percent slopes)	1A	C
ALOHA SILT LOAM (3-6 percent slopes)	1B	C

SCS CURVE NUMBERS

Below is a summary of the SCS curve numbers in accordance with the Conditions of Approval for SAP North of the Villebois Village.

TABLE 2
SCS CURVE NUMBERS

LAND USE	CURVE NUMBER
OPEN SPACE AND LANDSCAPING	80
COMMERCIAL AREAS	94
RIGHT-OF-WAYS (based on 80% impervious – CN of 98 And 20% pervious – CN of 80)	94.4
RESIDENTIAL DEVELOPMENT (1/8 acre of less)	90
RESIDENTIAL DEVELOPMENT (1/4 acre)	83
DENSE FOREST AREA	80

EXISTING POINTS OF DISCHARGE

PDP 1N-II and Grahams Ferry Road currently drain to the Mill Creek Basin to the southwest of this site via an existing culvert (culvert 3) crossing under Grahams Ferry Road. This culvert previously drained west to Tax Lot 1600 of Clackamas County Tax Map 3S1W15 where the overland runoff crossed a pasture before it entered another culvert under a private driveway and drained to Mill Creek (see Figure A2 for culvert location). With recent improvements to Grahams Ferry Road this runoff is now collected by a new culvert which drains onto Tax Lot 1500 directly upstream of the existing culvert located under the private driveway.

HYDROLOGY

The Santa Barbara Urban Hydrograph (SBUH) methodology was used to calculate the runoff hydrographs for all of the shed areas. The HydroCAD Stormwater Modeling System 2006 software program by HydroCAD was used to perform these calculations. The following tables summarize the input parameters for the hydrographs as well as the results of the pre-developed analysis performed by OTAK.

The storm drainage report titled "Villebois Village: SAP North: Mill Creek Basin Storm Drainage Report" updated on June 29th, 2007 and published by OTAK separated the area within Mill Creek Basin into drainage sheds based on the approved SAP North layout and the existing Grahams Ferry Road alignment. Runoff calculations were provided in the above mentioned report for the pre-developed conditions of the Mill Creek Basin. The calculations within this report will show that the detained runoff from the developed PDP 1N area will not exceed these pre-developed levels. The following tables show the pre-developed input parameters and runoff rates for Mill Creek, as determined by the previously approved storm drainage report. See Exhibit A2 for pre-developed drainage map.

TABLE 3
PRE-DEVELOPED CONDITIONS HYDROCAD INPUT PARAMETERS – SAP NORTH*

BASIN ID	AREA (acre)	TIME OF CONCENTRATION (min)	COMPOSITE CURVE NUMBER
BASIN 2NE	14.11	52.2	80
BASIN 3NE	2.91	50.0	80
BASIN 2ME	2.69	50.0	80
BASIN 5NE	2.26	20.9	94.4
BASIN 6NE	0.80	5.0	94.4
TOTAL	**22.77**		

*Refer to the report titled "Villebois Village: SAP North: Mill Creek Basin Storm Drainage Report" updated on June 29th, 2007 and published by OTAK for all supporting calculations.

TABLE 4
PRE-DEVELOPED CONDITIONS RUNOFF RATES (cfs) – SAP NORTH*

BASIN ID	2-YEAR	10-YEAR	25-YEAR	100-YEAR
BASIN 2NE	1.25	2.78	3.64	4.54
BASIN 3NE	0.26	0.57	0.75	0.94
BASIN 5NE	0.89	1.36	1.59	1.82
BASIN 6NE	0.35	0.55	0.65	0.76
CULVERT 3**	**2.63**	**5.11**	**6.46**	**7.87**

*Refer to the report titled "Villebois Village: SAP North: Mill Creek Basin Storm Drainage Report" updated on June 29th, 2007 and published by OTAK for all supporting calculations.
**Existing flows equal the sum of the hydrographs; the peaks may not coincide

DEVELOPED CONDITIONS

DEVELOPED DRAINAGE CONDITIONS

Stormwater runoff from the developed site will be collected by a series of catch basins leading to an underground piping system. This system will transport the runoff to a detention pond in PDP 1N-II (Pond 'O'). Pond 'O' will detain the runoff to pre-developed levels prior to releasing upstream of the existing culvert on Tax Lot 1600 of Clackamas County Tax Map 3S1W15, via the 18-inch culvert recently constructed under Grahams Ferry Road.

HYDROLOGY – MILL CREEK

In order to determine the required detention volume, SAP North was divided into a number of shed basins based on the proposed land use and geography. The Santa Barbara Urban Hydrograph (SBUH) methodology was used to calculate the runoff hydrographs for all of these developed shed areas. The Hydroflow Hydrographs Modeling System 2004 software program by Intelisolve was used to perform these calculations. The following tables summarize the developed shed basin input parameters and their resulting runoff rates.

TABLE 5
DEVELOPED CONDITIONS HYDROFLOW INPUT PARAMETERS – MILL CREEK

BASIN ID	AREA (acre)	COMPOSITE CURVE NUMBER	TIME OF CONCENTRATION (min)
BASIN 1ND	4.40	89.4	22.25
BASIN 2ND	2.28	91.4	10.9
BASIN 3ND	3.81	80.0	66.0
BASIN 4ND-S	1.87	80.0	46.3
BASIN 4ND-N	2.18	90.3	14.5
BASIN 5ND	2.42	94.4	20.8
BASIN 6ND	0.71	94.4	4.9
BASIN 2MD	3.35	89.4	14.76
POND BASIN	0.48	80.0	0.0
TOTAL	**21.40**		

TABLE 6
DEVELOPED CONDITIONS RUNOFF RATES (cfs)

BASIN ID	2-YEAR	10-YEAR	25-YEAR	100-YEAR
BASIN 1ND	1.24	2.09	2.52	2.95
BASIN 2ND	0.85	1.36	1.62	1.88
BASIN 3ND	0.31	0.67	0.88	1.09
BASIN 4ND-S	0.18	0.39	0.51	0.63
BASIN 4ND-N	0.75	1.24	1.49	1.74
BASIN 5ND	0.95	1.44	1.68	1.93
BASIN 6ND	0.35	0.53	0.61	0.70
BASIN 2MD	1.01	1.69	2.04	2.40
POND BASIN	0.11	0.21	0.57	0.32

WATER QUANTITY – MILL CREEK

A detention pond will be constructed with the development of PDP 1N-II to detain the developed runoff and release the stormwater into Mill Creek at or below pre-developed levels. The Hydroflow Hydrographs Modeling System 2004 software program by Intelisolve was used to determine the required detention volume for this pond, as well as design the flow control structure. The following table is a summary of the pond volume and storage levels.

TABLE 7
POND SUMMARY

STORM EVENT	STORAGE VOLUME	WATER DEPTH
2-YEAR	13,087 cu.ft.	1.7 ft
10-YEAR	22,401 cu.ft.	2.7 ft
25-YEAR	28,300 cu.ft.	3.2 ft
100-YEAR	32,917 cu.ft.	4.2 ft

The table below summarizes the results of the pond analysis. Full calculations provided by Hydraflow are shown in Appendix C.

TABLE 8
POND "O" DETENTION PERFORMANCE

RETURN PERIOD	FLOW COMPLIANCE TARGET (cfs)*	DESIGN RELEASE RATE (cfs)	SURFACE ELEVATION	MAXIMUM STORAGE (cu.ft.)
2-YEAR	2.63	2.48	218.19	13,087
10-YEAR	5.11	5.10	219.16	22,401
25-YEAR	6.46	6.03	219.68	28,300
100-YEAR	7.87	8.07	220.07	32,917

*Flow compliance target is based on existing condition analysis completed as part of the following report: "Villebois Village: SAP North: Mill Creek Basin Storm Drainage Report" updated on June 29th, 2007 and published by OTAK.

The pond runoff will be conveyed to an existing ditch on the west side of Grahams Ferry Road via an 18-inch pipe. The capacity of this pipe is 8.68 cfs which will be sufficient to convey the 100-year storm event runoff rate of 8.07 cfs.

In addition to the detention pond analysis, conveyance calculations were completed for the storm drain mains designed for PDP 1N-II to insure that pipes were sized sufficiently to convey the 25-year storm event. These calculations are shown in Appendix E along with a conveyance map showing the individual drainage areas for each pipe run.

WATER QUALITY – MILL CREEK

The City of Wilsonville requires that 65% removal of phosphorous be provided for stormwater runoff if any new impervious surfaces are created during site development. A permanent water quality facility must be constructed or funded to reduce contaminants that enter the storm and surface water system. Impervious surfaces shall include pavement, gravel roads, buildings, public and private roadways, and other surfaces that contribute runoff to the surface water system.

Water quality requirements for Mill Creek Basin will be addressed with pollution control manholes and water quality swales located within Pond O. Shed Area 3MD will be treated by a water quality swale located within the southern portion of Pond O. This swale will be 2-feet wide and 100-feet long.

The remaining portion of Mill Creek (PDP 1N and SAP North) will be treated by a water quality swale within the northern portion of Pond O. This swale will be 5-feet wide and 120-feet long.

CONCLUSION

Detention and water quality facilities within the Mill Creek portion of SAP North are consistent with the design requirements of the City of Wilsonville as well as the report completed by OTAK. Development of the site will maintain flows from the site tributary to Mill Creek Basin at the existing levels. The pond within the PDP 1N-II development demonstrate that adequate storage will be provided, and the sizing of the water quality swales demonstrates adequate water quality will be provided. Additionally, the sizing of the storm drain mains demonstrates adequate capacity to convey the 25-year storm event.

APPENDIX A

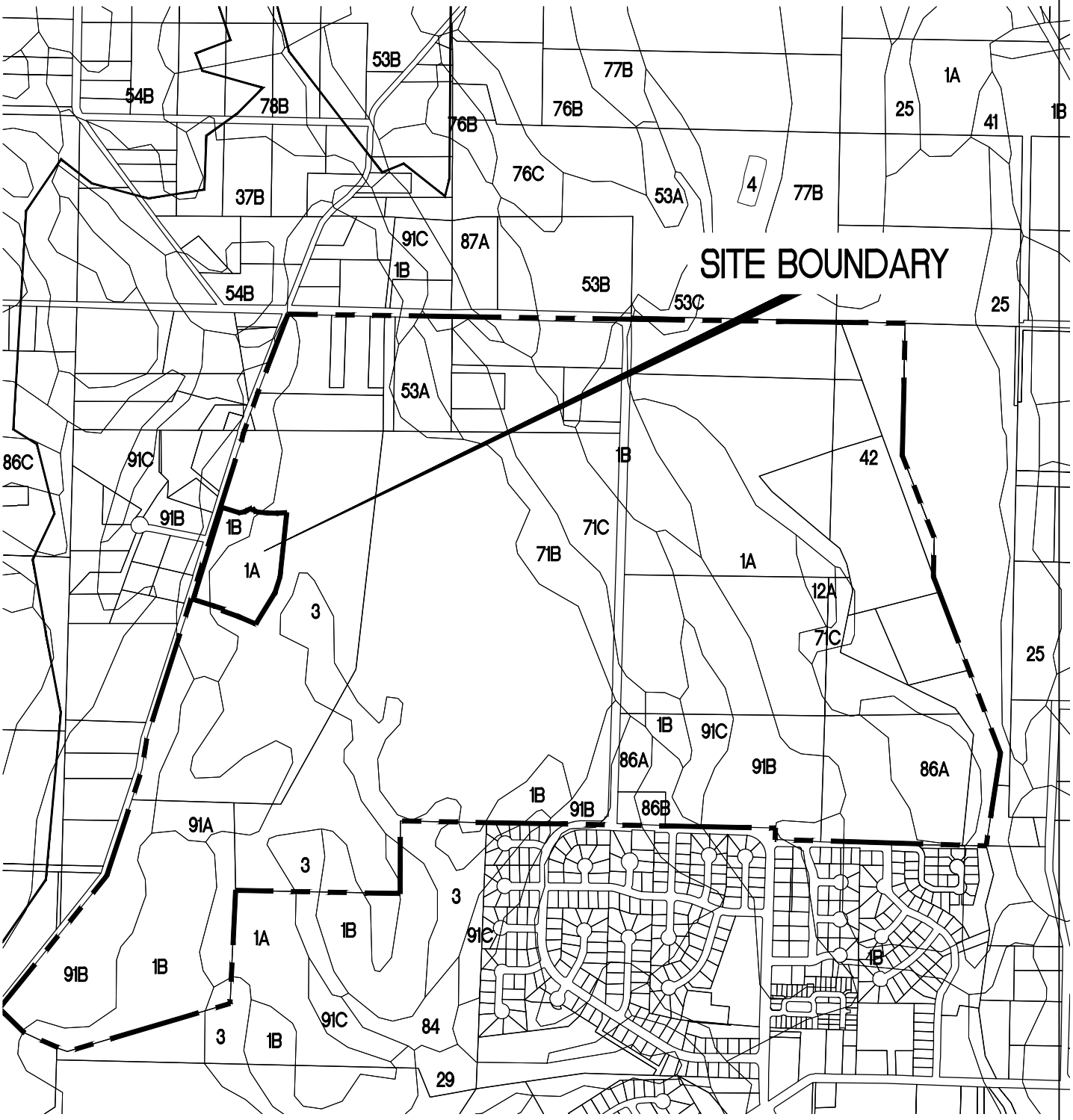


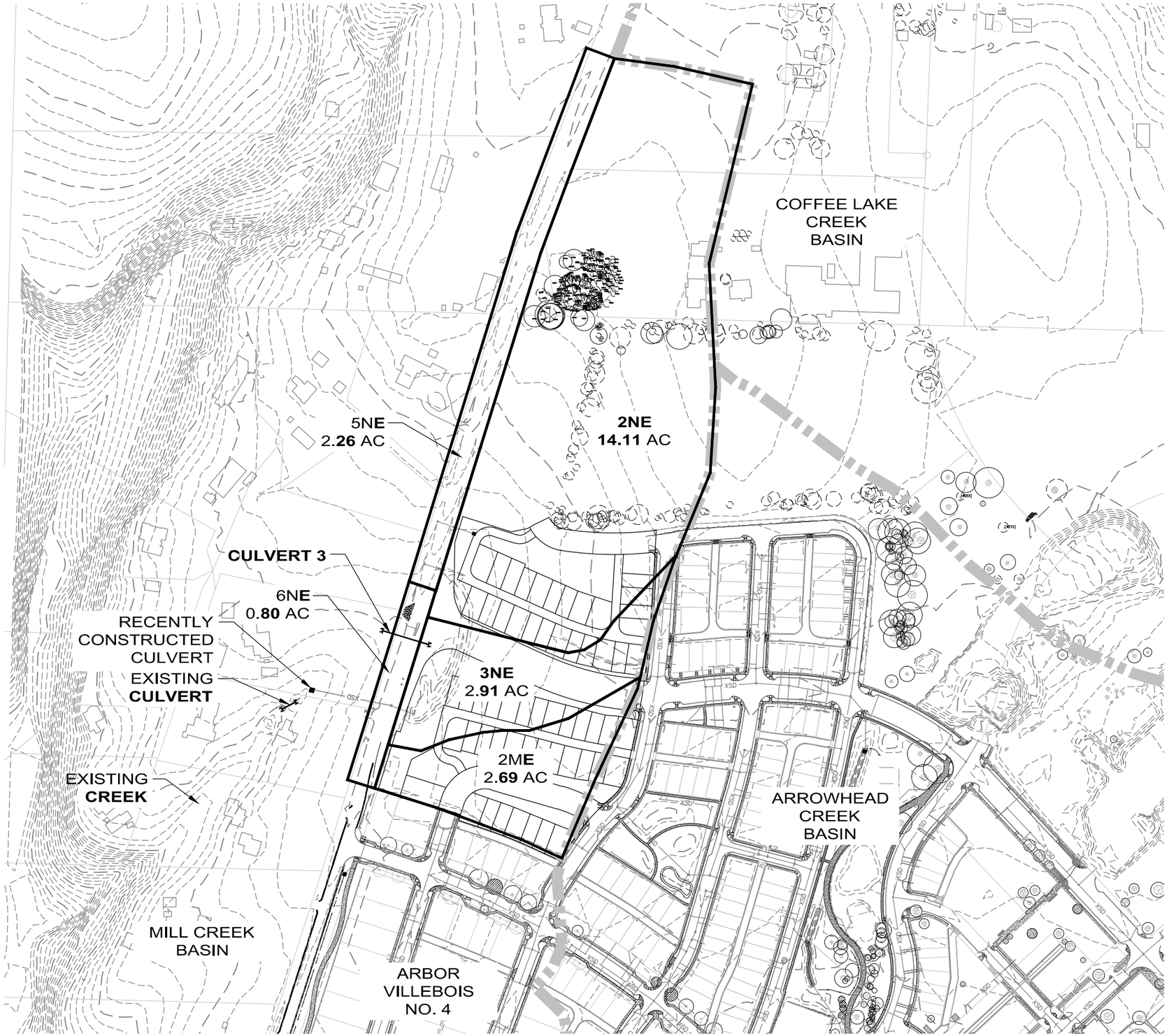
EXHIBIT A1: SOIL SURVEY MAP

DRAWN BY: PRE DATE: 12/26/12
REVIEWED BY: PRE DATE: 12/26/12
PROJECT NO.: 395-002
SCALE: 1"=1000'

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

N:\proj\395-002A\09 Drawings\04 Civil\Exhibits-Hydrology\395002.PSOIL.dwg - SHEET: 8x11 Dec. 27, 12 - 5:32 PM pre



LEGEND:

- EXISTING SHED BOUNDARY
- EX BASIN BOUNDARY
- XSD — EX STORM DRAIN

SCALE
0 125 250
1 INCH = 250 FEET

N:\proj\395-002A\09 Drawings\04 Civil\Exhibits-Hydrology\395002.EXST.dwg - SHEET: 11x17 Jan. 3, 13 - 9:21 AM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

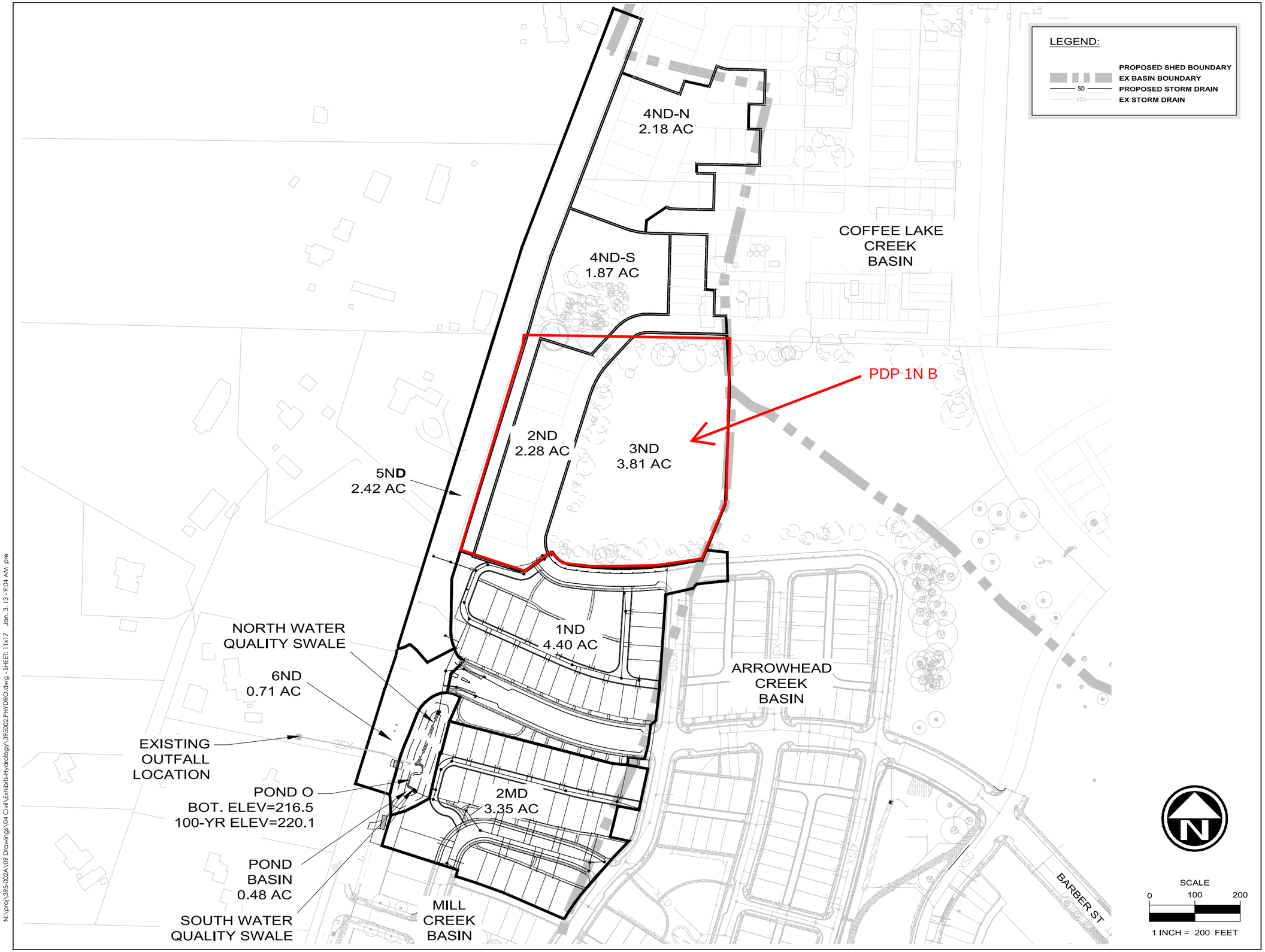
TONQUIN WOODS No. 3

Villebois
PDP 1N - Phase 2
Hydrology

Pre-Developed
Drainage Basin Map

DATE: 12/27/2012

A2



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

TONQUIN
WOODS
No. 3

Villebois
PDP 1N - Phase 2
Hydrology

Developed Drainage
Basin Map

DATE: 12/26/2012

A3

APPENDIX B

SCS CURVE NUMBERS
FIGURE B1

LAND USE DESCRIPTION		CURVE NUMBERS BY HYDROLOGIC SOIL GROUP			
		A	B	C	D
Cultivated land (1):	winter condition	86	91	94	95
Mountain open areas:	low growing brush & grasslands	74	82	89	92
Meadow or pasture:		65	78	85	89
Wood or forest land:	undisturbed	42	64	76	81
Wood or forest land:	young second growth or brush	55	72	81	86
Orchard:	with crop cover	81	88	92	94
Open spaces, lawns, parks, golf courses, cemeteries, landscaping					
Good condition:	grass cover on ≥ 75% of the area	68	80	86	90
Fair condition:	grass cover on 50-75% of the area	77	85	90	92
Gravel roads and parking lots:		76	85	89	91
Dirt roads and parking lots:		72	82	87	89
Impervious surfaces, pavement, roofs etc.		98	98	98	98
Open water bodies:	lakes, wetlands, ponds, etc.	100	100	100	100
Single family residential (2):	(per C.O.A)				
Lot Size (Acres)					
1/8	or less	90	90	90	90
1/4	or less	83	83	83	83
Commercial Development		94	94	94	94
PUD's, condos, apartments, commercial businesses & industrial areas	%impervious must be computed				

(1) For a more detailed description of agricultural land use curve numbers refer to National Engineering Handbook, Sec. 4, Hydrology, Chapter 9, August 1972.

(2) Assumes roof and driveway runoff is directed into street/storm system.

(3) The remaining pervious areas (lawn) are considered to be in good condition for these curve numbers.

MANNING'S "n" VALUES
FIGURE B2

SHEET FLOW EQUATION MANNING'S VALUES	n_s
Smooth Surfaces (concrete, asphault, gravel, or bare hand packed soil)	0.011
Fallow Fields or loose soil surface (no residue)	0.05
Cultivated soil with residue cover £ 20%	0.06
Cultivated soil with residue cover > 20%	0.17
Short prairie grass and lawns	0.15
Dense grasses	0.24
Bermuda grasses	0.41
Range (natural)	0.13
Woods or forrest with light underbrush	0.40
Woods or forrest with dense underbrush	0.80

SHALLOW CONCENTRATED FLOW (after initial 300 ft of sheet flow, R = 0.1)	k_s
Forrest with heavy ground litter and meadows (n = 0.010)	3
Brushy ground with some trees (n = 0.060)	5
Fallow or minimum tillage cultivation (n = 0.040)	8
High grass (n = 0.035)	9
Short grass, pasture and lawns (n = 0.030)	11
Nearly bare ground (n = 0.25)	13
Paved and gravel areas (n = 0.012)	27

CHANNEL FLOW (Intermittent) (At the beginning of all visible channels, R = 0.2)	k_c
Forested swale with heavy ground cover (n = 0.10)	5
Forested drainage course/ravine with defined channel bed (n = 0.050)	10
Rock-lined waterway (n = 0.035)	15
Grassed waterway (n = 0.030)	17
Earth-lined waterway (n = 0.025)	20
CMP pipe (n = 0.024)	21
Concrete pipe (n = 0.012)	42
Other waterways and pipe 0.508/n	

CHANNEL FLOW (continuous stream, R = 0.4)	k_c
Meandering stream (n = 0.040)	20
Rock-lined stream (n = 0.035)	23
Grass-lined stream (n = 0.030)	27
Other streams, man-made channels and pipe (n = 0.807/n)	

COMPOSITE CURVE NUMBER
SHED 2MD (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	2.01	90	60.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.78	94.4	23.3%
Open Space Area	0.56	80	16.7%
TOTAL	3.35		

Composite Curve Number per COA = 89.4

FIGURE B3

COMPOSITE CURVE NUMBER
SHED 1ND (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	1.65	90	37.5%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	1.73	94.4	39.3%
Open Space Area	1.02	80	23.2%
TOTAL	4.40		

Composite Curve Number per COA = 89.4

FIGURE B4

COMPOSITE CURVE NUMBER
SHED 2ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	1.53	90	67.1%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.75	94.4	32.9%
Open Space Area	0.00	80	0.0%
TOTAL	2.28		

Composite Curve Number per COA = 91.4

FIGURE B5

COMPOSITE CURVE NUMBER
SHED 3ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	0.00	90	0.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.00	94.4	0.0%
Open Space Area	3.81	80	100.0%
TOTAL	3.81		

Composite Curve Number per COA = 80.0

FIGURE B6

COMPOSITE CURVE NUMBER
SHED 4ND-S (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	0.00	90	0.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.00	94.4	0.0%
Open Space Area	1.87	80	100.0%
TOTAL	1.87		

Composite Curve Number per COA = 80.0

FIGURE B7

COMPOSITE CURVE NUMBER
SHED 4ND-N (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	1.17	90	53.7%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.75	94.4	34.4%
Open Space Area	0.26	80	11.9%
TOTAL	2.18		

Composite Curve Number per COA = 90.3

FIGURE B8

COMPOSITE CURVE NUMBER
SHED 5ND-N (GFR)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	0.00	90	0.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	2.42	94.4	100.0%
Open Space Area	0.00	80	0.0%
TOTAL	2.42		

Composite Curve Number per COA = 94.4

FIGURE B9

COMPOSITE CURVE NUMBER
SHED 6ND (GFR)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	0.00	90	0.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.71	94.4	100.0%
Open Space Area	0.00	80	0.0%
TOTAL	0.71		

Composite Curve Number per COA = 94.4

FIGURE B10

PERCENT IMPERVIOUS
SHED 2MD (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	3.35	acres	145,926	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	52,533
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	27,181
Total	79,715
% Impervious =	55%

FIGURE B11

PERCENT IMPERVIOUS
SHED 1ND (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	4.40	acres	191,664	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	43,124
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	60,287
Total	103,411
% Impervious =	54%

FIGURE B12

PERCENT IMPERVIOUS
SHED 2ND (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	2.28	acres	99,317	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	39,988
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	26,136
Total	66,124
% Impervious =	67%

FIGURE B13

PERCENT IMPERVIOUS
SHED 3ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	3.81	acres	165,964	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	0
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	0
Total	0
% Impervious =	0%

FIGURE B14

PERCENT IMPERVIOUS
SHED 4ND-S (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	1.87	acres	81,457	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	0
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	0
Total	0
% Impervious =	0%

FIGURE B15

PERCENT IMPERVIOUS
SHED 4ND-N (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	2.18	acres	94,961	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	30,579
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	26,136
Total	56,715
% Impervious =	60%

FIGURE B16

PERCENT IMPERVIOUS
SHED 5ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	2.42	acres	105,415	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	0
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	84,332
Total	84,332
% Impervious =	80%

FIGURE B17

PERCENT IMPERVIOUS
SHED 6ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	0.71	acres	30,928	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	0
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	24,742
Total	24,742
% Impervious =	80%

FIGURE B18

DEVELOPED TIME OF CONCENTRATION
MILL CREEK (SAP AREAS)

JOB NUMBER: 395-002
PROJECT: TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE: N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

$$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$$

SHED 2ND (SAP NORTH)

		Accum.
PIPE FLOW (FIRST 680 FEET)		
Catchment Time	5.00 min.	
Longest Run of Pipe	1068 ft	
Velocity of Flow	3 ft/s	
Time in Pipe = (1068 ft)/(3 ft/s) =	356 s	10.93 min.

TOTAL DEVELOPED TIME OF CONCENTRATION = 10.93 min.

SHED 3ND (SAP NORTH)

				Accum. Tc
LAG ONE: SHEET FLOW (FIRST 300 FEET)				
Tt = Travel time				
Manning's "n " =	0.400			
Flow Length, L =	300	ft	(300 ft. max.)	
P = 2-year, 24hr storm =	2.5	in		
Slope, S_0 =	0.017	ft/ft		
$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$	62.88	min.		62.88 min.
LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 150 FEET)				
Tc Velocity factor, k=	5			
Slope, S_0 =	0.026	ft/ft		
$V = k\sqrt{S_0}$	0.81	ft/s		
Flow Length, L =	150	ft		
$T = \frac{L}{(60)(V)}$	3.10	min.		65.98 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =				**65.98 min.**

SHED 4ND-S (SAP NORTH)

				Accum. Tc
LAG ONE: SHEET FLOW (FIRST 300 FEET)				
Tt = Travel time				
Manning's "n " =	0.150			
Flow Length, L =	300	ft	(300 ft. max.)	
P = 2-year, 24hr storm =	2.5	in		
Slope, S_0 =	0.007	ft/ft		
$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$	40.63	min.		40.63 min.
LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 519 FEET)				
Tc Velocity factor, k=	11			
Slope, S_0 =	0.019	ft/ft		
$V = k\sqrt{S_0}$	1.52	ft/s		
Flow Length, L =	519	ft		
$T = \frac{L}{(60)(V)}$	5.70	min.		46.33 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =				**46.33 min.**

SHED 4ND-N (SAP NORTH)

			Accum.
PIPE FLOW (FIRST 680 FEET)			
Catchment Time	5.00 min.		
Longest Run of Pipe	1715 ft		
Velocity of Flow	3 ft/s		
Time in Pipe = (1715 ft)/(3 ft/s) =	572 s		14.53 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =			**14.53 min.**

SHED 5ND (GRAHAMS FERRY ROAD)

			Accum. Tc
LAG ONE: SHEET FLOW (FIRST 100 FEET)			
Tt = Travel time			
Manning's "n " =	0.011		
Flow Length, L =	100 ft	(300 ft. max.)	
P = 2-year, 24hr storm =	2.5 in		
Slope, S_0 =	0.020 ft/ft		
$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$	1.37 min.		1.37 min.
LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 1316 FEET)			
Tc Velocity factor, k=	10		
Slope, S_0 =	0.013 ft/ft		
$V = k\sqrt{S_0}$	1.13 ft/s		
Flow Length, L =	1316 ft		
$T = \frac{L}{(60)(V)}$	19.46 min.		20.83 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =			**20.83 min.**

SHED 6ND (GRAHAMS FERRY ROAD PER OTAK)

			Accum. Tc
LAG ONE: SHEET FLOW (FIRST 400 FEET)			
Tt = Travel time			
Manning's "n " =	0.011		
Flow Length, L =	400 ft	(300 ft. max.)	
P = 2-year, 24hr storm =	2.5 in		
Slope, S_0 =	0.013 ft/ft		
$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$	4.94 min.		4.94 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =			**4.94 min.**

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Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow Hyd(s)	Peak Outflow (cfs)								Hydrograph description
			1-Yr	2-Yr	3-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	
1	SBUH Runoff	-------	-------	1.24	-------	-------	2.09	2.52	-------	2.95	Shed 1N - Developed
2	SBUH Runoff	-------	-------	0.85	-------	-------	1.36	1.62	-------	1.88	Shed 2N - Developed
3	SBUH Runoff	-------	-------	0.31	-------	-------	0.67	0.88	-------	1.09	Shed 3N - Developed
4	SBUH Runoff	-------	-------	0.18	-------	-------	0.39	0.51	-------	0.63	Shed 4N-S - Developed
5	SBUH Runoff	-------	-------	0.75	-------	-------	1.24	1.49	-------	1.74	SHED 4N-N (Developed)
6	SBUH Runoff	-------	-------	0.95	-------	-------	1.44	1.68	-------	1.93	Shed 5N - Developed
7	SBUH Runoff	-------	-------	0.35	-------	-------	0.53	0.61	-------	0.70	Shed 6N - Developed
8	SBUH Runoff	-------	-------	1.01	-------	-------	1.69	2.04	-------	2.40	Shed 2M - Developed
9	SBUH Runoff	-------	-------	0.11	-------	-------	0.21	0.27	-------	0.32	Pond
11	Combine	1, 2, 3, 4, 5, 6,	-------	4.17	-------	-------	7.04	8.52	-------	10.04	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	7, 8, 9,	-------	1.47	-------	-------	2.43	2.92	-------	3.42	SHEDS 6N, 2M, POND
13	Combine	11, 12	-------	5.61	-------	-------	9.46	11.44	-------	13.46	COMBINED POND IN
14	Reservoir	13	-------	2.48	-------	-------	5.10	6.03	-------	8.07	COMBINED OUT

Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SBUH Runoff	1.24	6	486	23,716	----	------	------	Shed 1N - Developed
2	SBUH Runoff	0.85	6	480	13,599	----	------	------	Shed 2N - Developed
3	SBUH Runoff	0.31	6	528	12,294	----	------	------	Shed 3N - Developed
4	SBUH Runoff	0.18	6	498	6,034	----	------	------	Shed 4N-S - Developed
5	SBUH Runoff	0.75	6	480	12,301	----	------	------	SHED 4N-N (Developed)
6	SBUH Runoff	0.95	6	486	16,747	----	------	------	Shed 5N - Developed
7	SBUH Runoff	0.35	6	474	4,913	----	------	------	Shed 6N - Developed
8	SBUH Runoff	1.01	6	480	17,697	----	------	------	Shed 2M - Developed
9	SBUH Runoff	0.11	6	480	1,840	----	------	------	Pond
11	Combine	4.17	6	486	84,690	1, 2, 3, 4, 5, 6,	------	------	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	1.47	6	480	24,451	7, 8, 9,	------	------	SHEDS 6N, 2M, POND
13	Combine	5.61	6	480	109,141	11, 12	------	------	COMBINED POND IN
14	Reservoir	2.48	6	564	109,141	13	218.19	13,087	COMBINED OUT

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

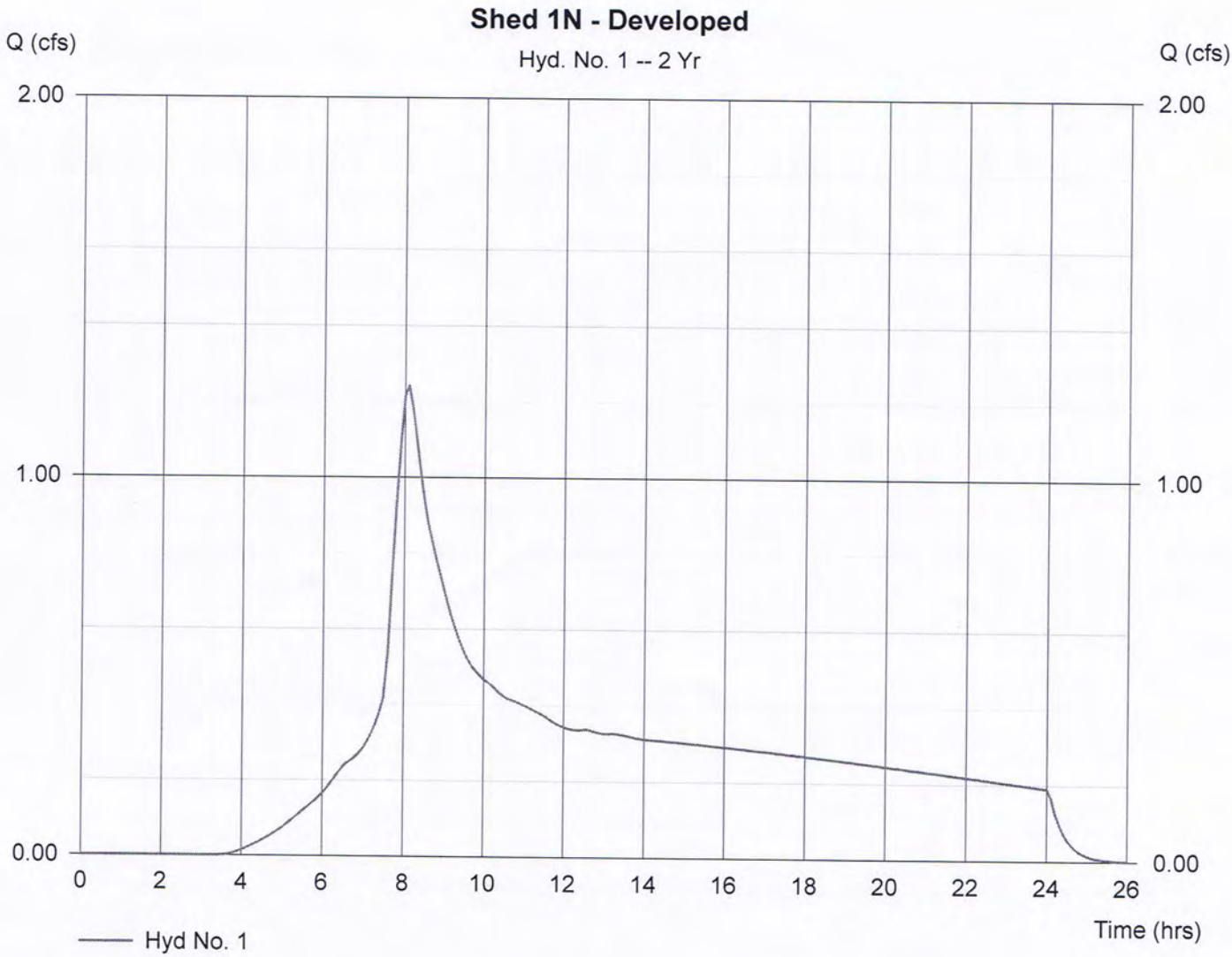
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 1

Shed 1N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.24 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 4.40 ac	Curve number	= 89.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 22.25 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 23,716 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 2

Shed 2N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.85 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 2.28 ac	Curve number	= 91.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 13,599 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

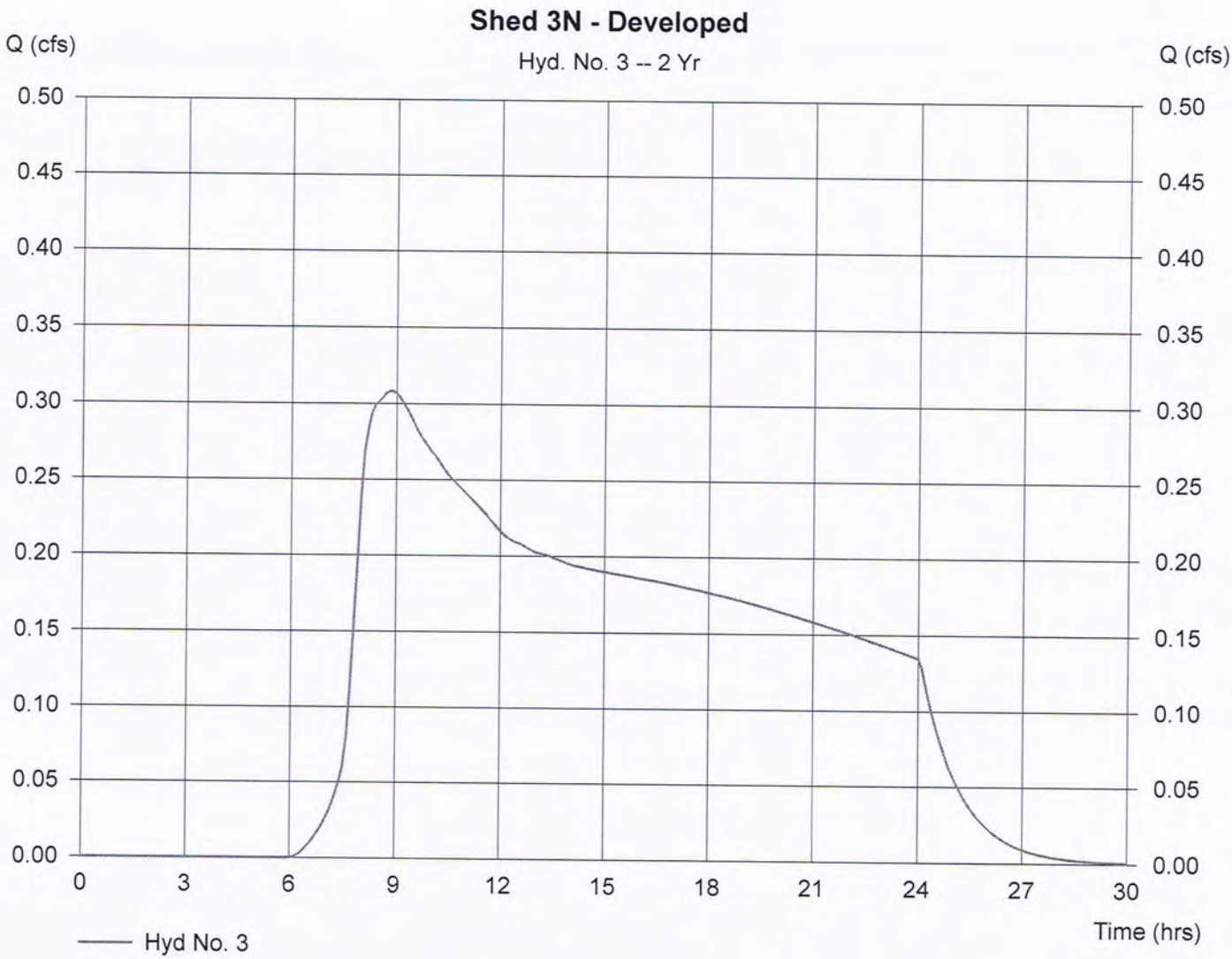
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 3

Shed 3N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.31 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 3.81 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 66 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 12,294 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 4

Shed 4N-S - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.18 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 1.87 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 46.3 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 6,034 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

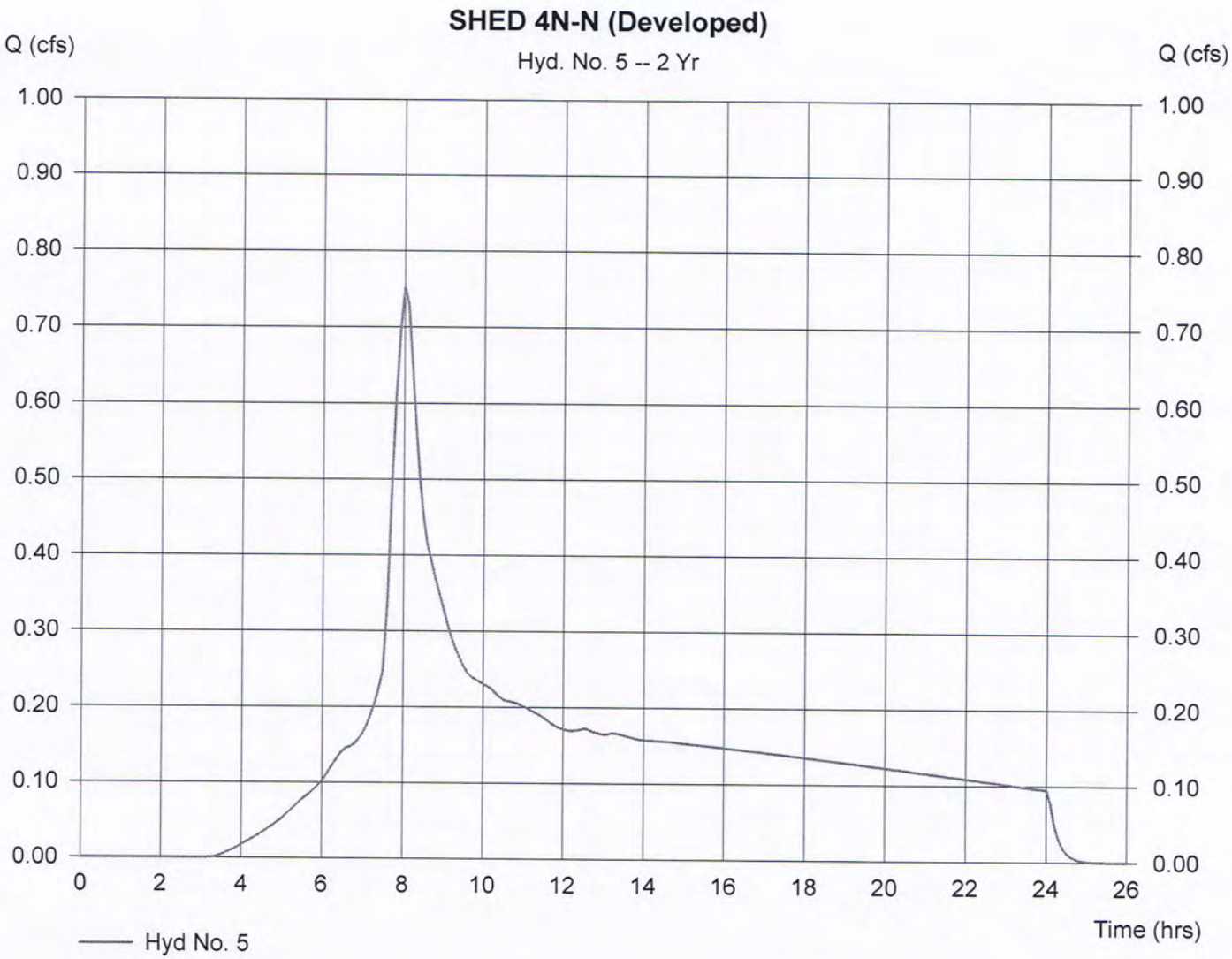
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 5

SHED 4N-N (Developed)

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.75 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 2.18 ac	Curve number	= 90.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 12,301 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 6

Shed 5N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.95 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 2.42 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20.8 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 16,747 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

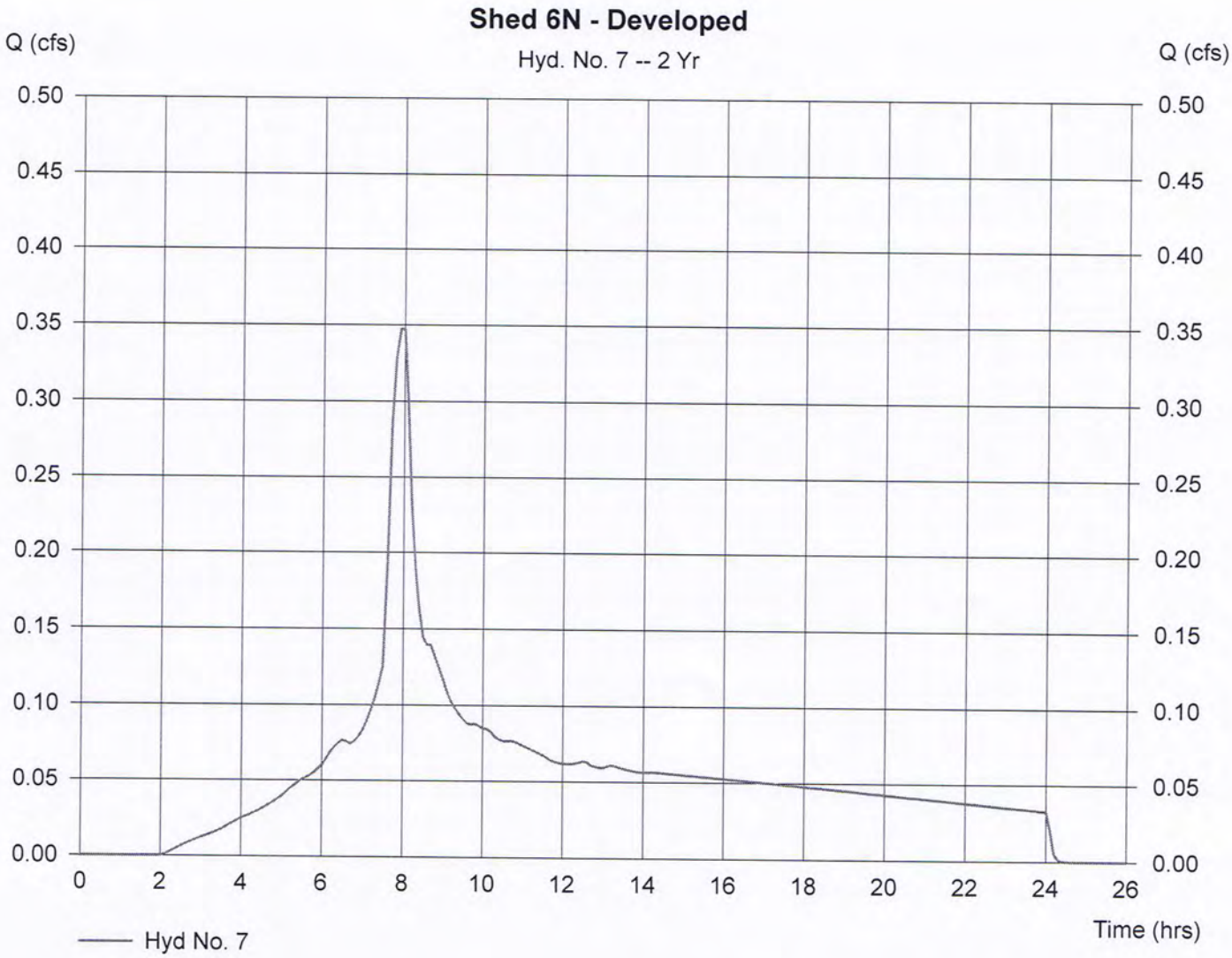
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 7

Shed 6N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.35 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 0.71 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 4,913 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 8

Shed 2M - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.01 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 3.25 ac	Curve number	= 89.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 16.4 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 17,697 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

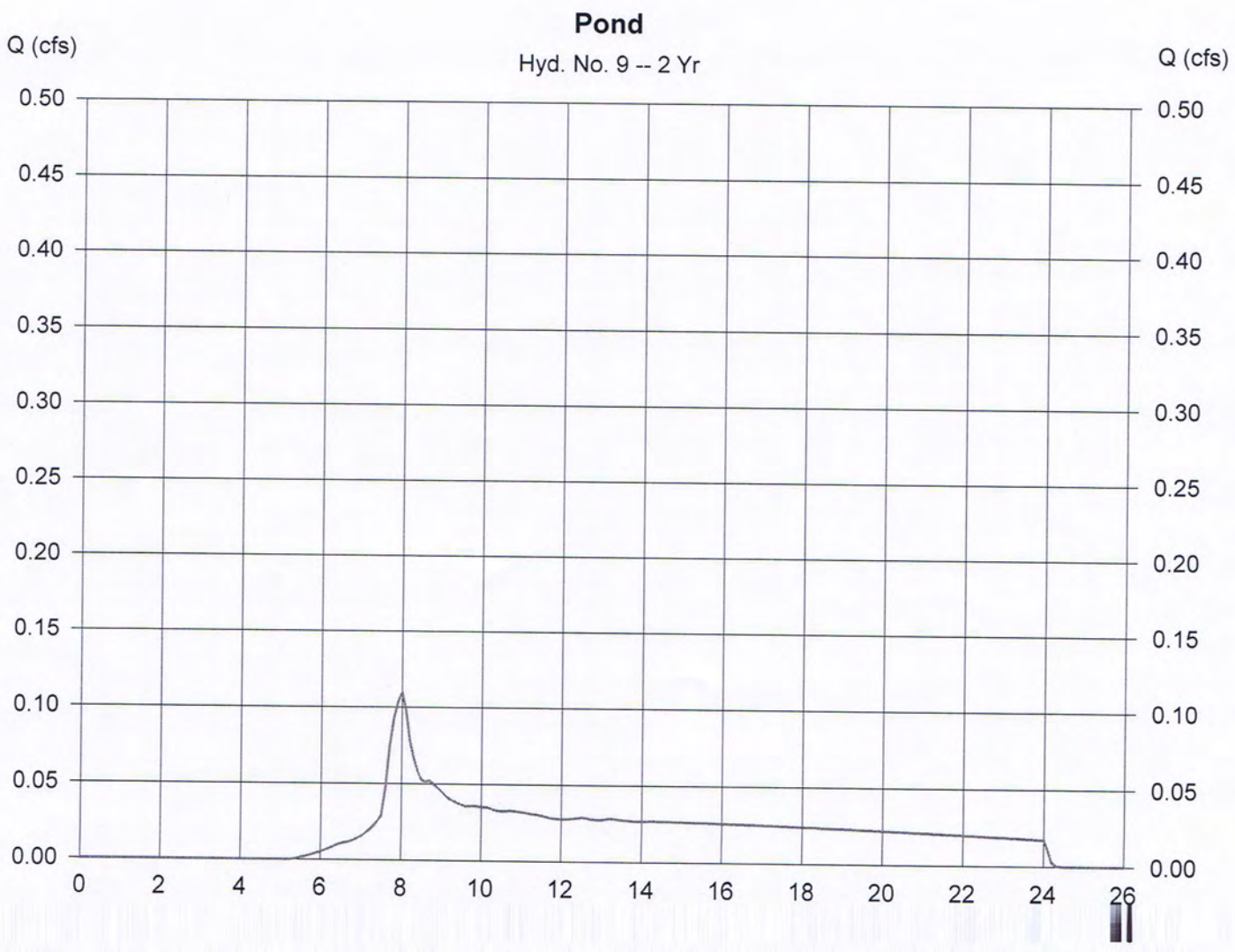
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 9

Pond

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.11 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 0.48 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 1,840 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

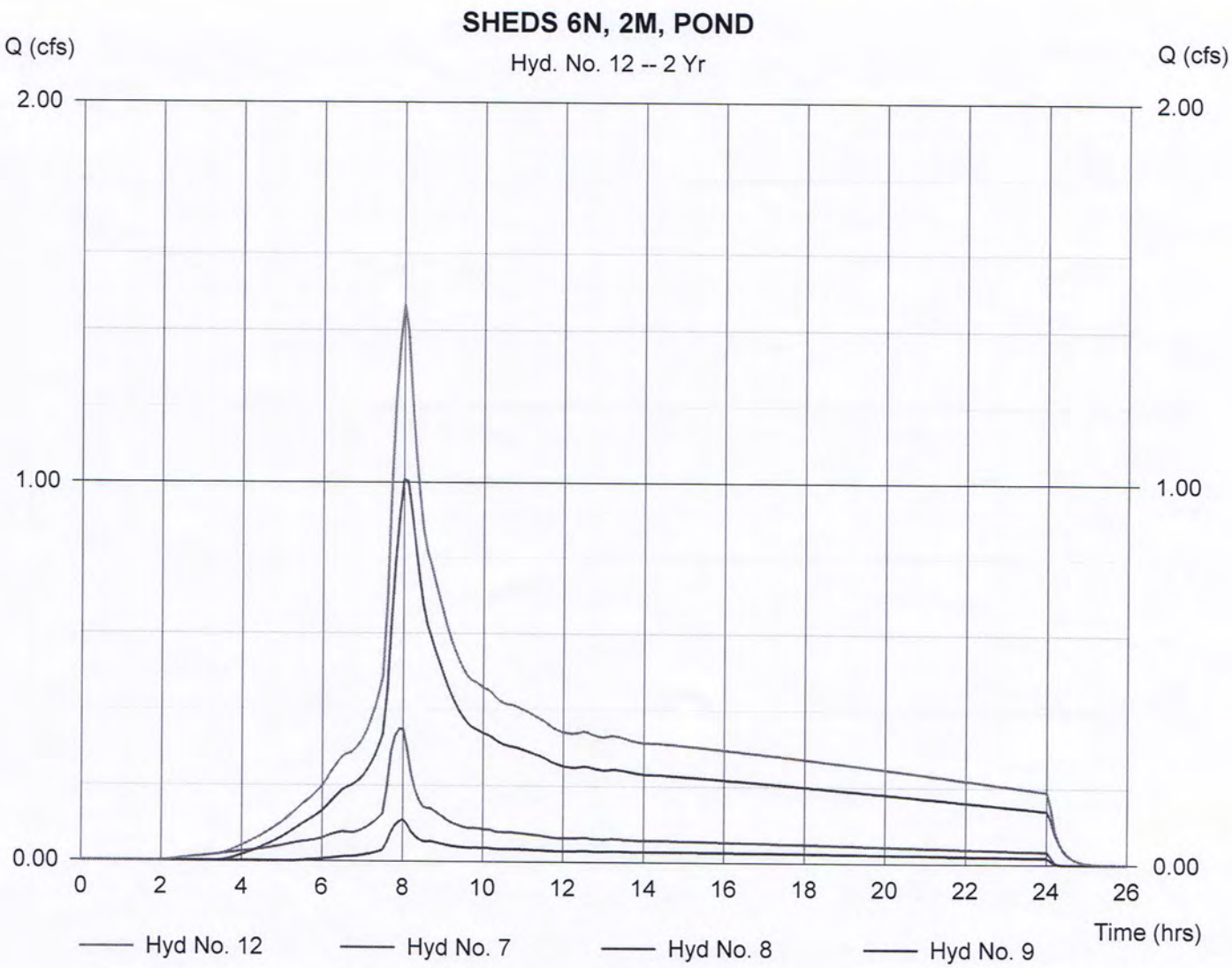
Hyd. No. 12

SHEDS 6N, 2M, POND

Hydrograph type = Combine
Storm frequency = 2 yrs
Inflow hyds. = 7, 8, 9

Peak discharge = 1.47 cfs
Time interval = 6 min

Hydrograph Volume = 24,451 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

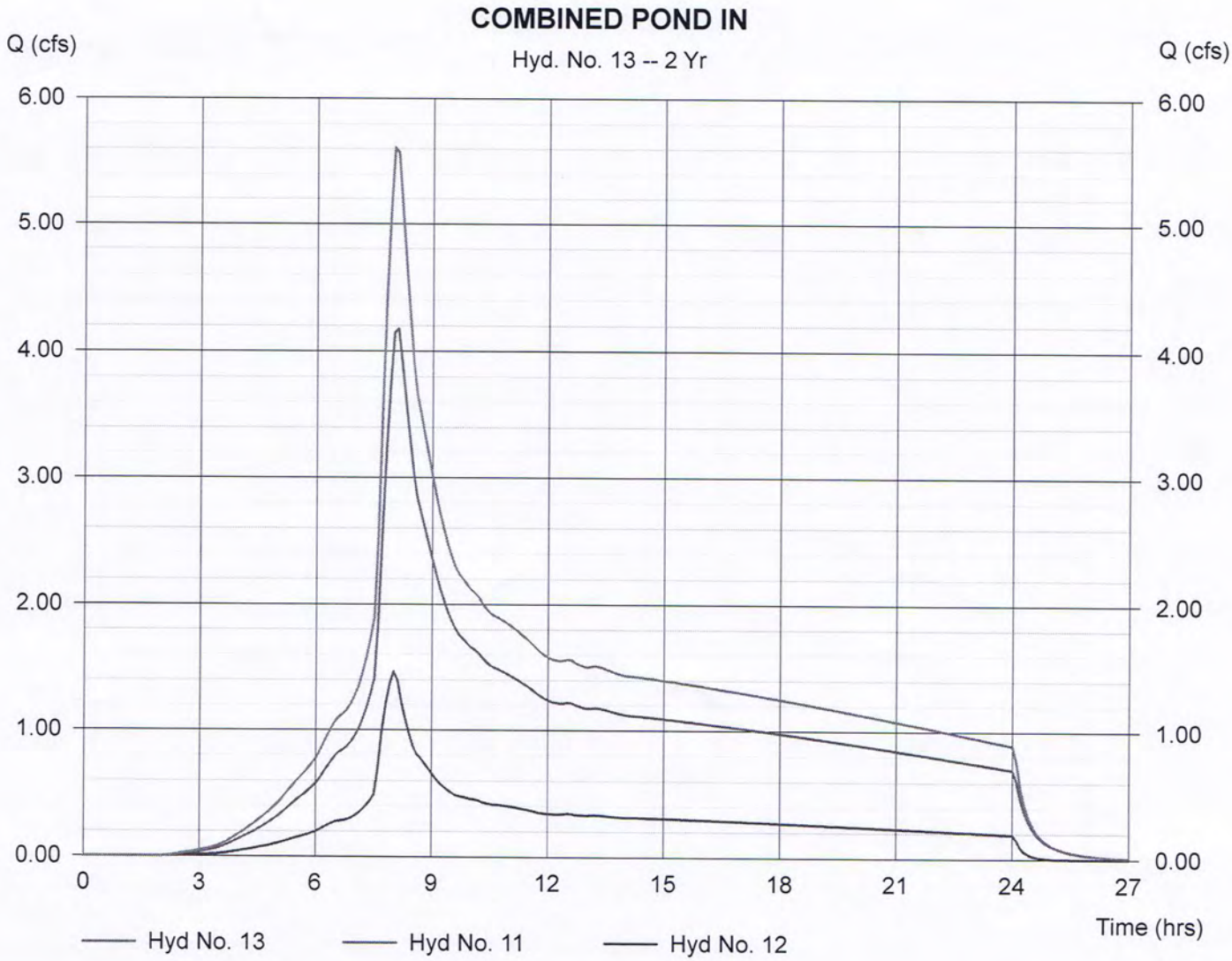
Hyd. No. 13

COMBINED POND IN

Hydrograph type = Combine
Storm frequency = 2 yrs
Inflow hyds. = 11, 12

Peak discharge = 5.61 cfs
Time interval = 6 min

Hydrograph Volume = 109,141 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

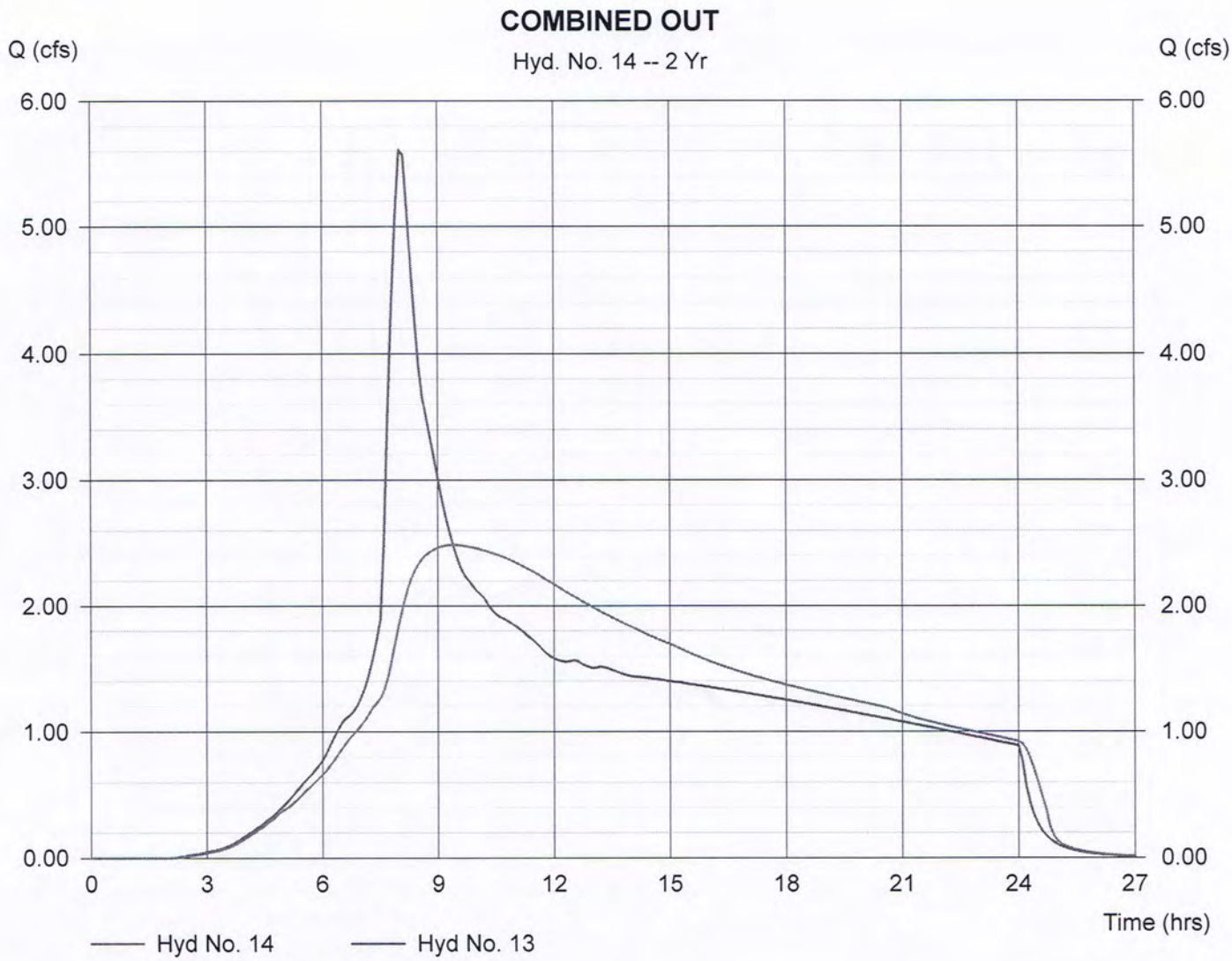
Hyd. No. 14

COMBINED OUT

Hydrograph type	= Reservoir	Peak discharge	= 2.48 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Inflow hyd. No.	= 13	Max. Elevation	= 218.19 ft
Reservoir name	= POND O	Max. Storage	= 13,087 cuft

Storage Indication method used.

Hydrograph Volume = 109,141 cuft



Pond Report

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Pond No. 3 - POND O

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	216.00	231	0	0
0.50	216.50	5,259	1,373	1,373
1.00	217.00	6,171	2,858	4,230
2.00	218.00	8,126	7,149	11,379
3.00	219.00	10,218	9,172	20,551
4.00	220.00	12,470	11,344	31,895
5.00	221.00	16,044	14,257	46,152

Culvert / Orifice Structures

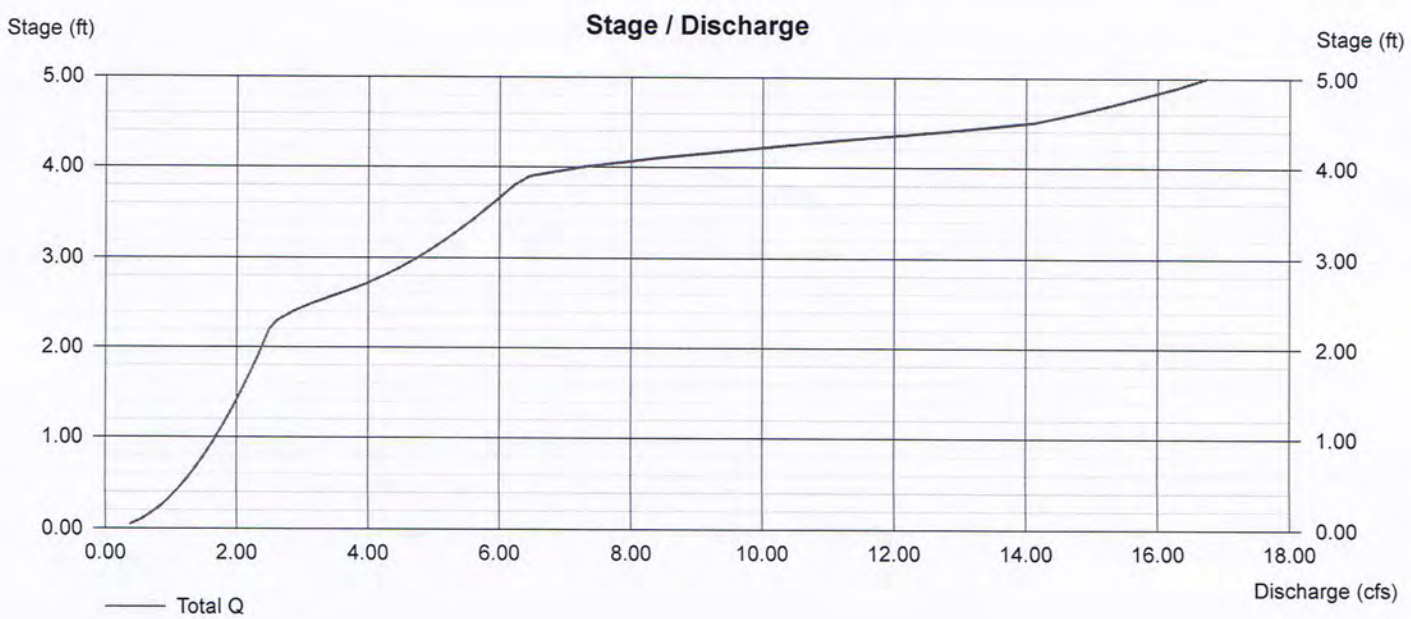
	[A]	[B]	[C]	[D]
Rise (in)	= 18.00	8.00	7.00	0.00
Span (in)	= 18.00	8.00	7.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 213.74	213.72	218.20	0.00
Length (ft)	= 72.00	0.00	0.00	0.00
Slope (%)	= 0.80	0.00	0.00	0.00
N-Value	= .013	.013	.013	.013
Orif. Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	0.00	0.00	0.00
Crest El. (ft)	= 219.87	0.00	0.00	0.00
Weir Coeff.	= 3.33	0.00	0.00	0.00
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration = 0.000 in/hr (Contour) Tailwater Elev. = 0.00 ft

Note: Culvert/Orifice outflows have been analyzed under inlet and outlet control. Weir riser checked for orifice conditions.



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SBUH Runoff	2.09	6	486	38,224	----	------	------	Shed 1N - Developed
2	SBUH Runoff	1.36	6	480	21,345	----	------	------	Shed 2N - Developed
3	SBUH Runoff	0.67	6	504	22,631	----	------	------	Shed 3N - Developed
4	SBUH Runoff	0.39	6	492	11,108	----	------	------	Shed 4N-S - Developed
5	SBUH Runoff	1.24	6	480	19,591	----	------	------	SHED 4N-N (Developed)
6	SBUH Runoff	1.44	6	480	25,270	----	------	------	Shed 5N - Developed
7	SBUH Runoff	0.53	6	474	7,414	----	------	------	Shed 6N - Developed
8	SBUH Runoff	1.69	6	480	28,448	----	------	------	Shed 2M - Developed
9	SBUH Runoff	0.21	6	480	3,238	----	------	------	Pond
11	Combine	7.04	6	486	138,170	1, 2, 3, 4, 5, 6,	------	------	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	2.43	6	480	39,100	7, 8, 9,	------	------	SHEDS 6N, 2M, POND
13	Combine	9.46	6	480	177,271	11, 12	------	------	COMBINED POND IN
14	Reservoir	5.10	6	534	177,270	13	219.16	22,401	COMBINED OUT

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 1

Shed 1N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.09 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 4.40 ac	Curve number	= 89.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 22.25 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 38,224 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

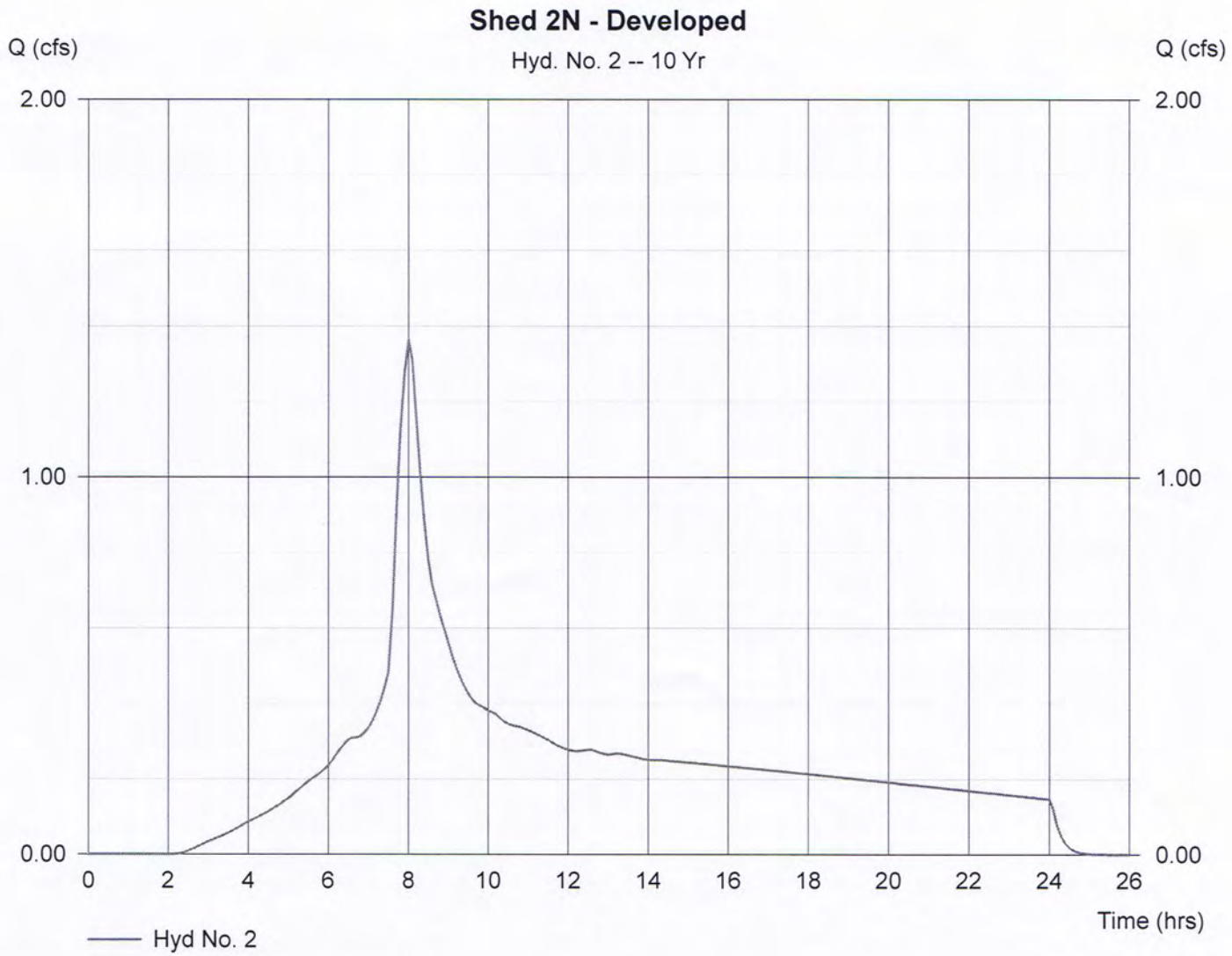
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 2

Shed 2N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.36 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 2.28 ac	Curve number	= 91.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 21,345 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 3

Shed 3N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.67 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 3.81 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 66 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 22,631 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 4

Shed 4N-S - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.39 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 1.87 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 46.3 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 11,108 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

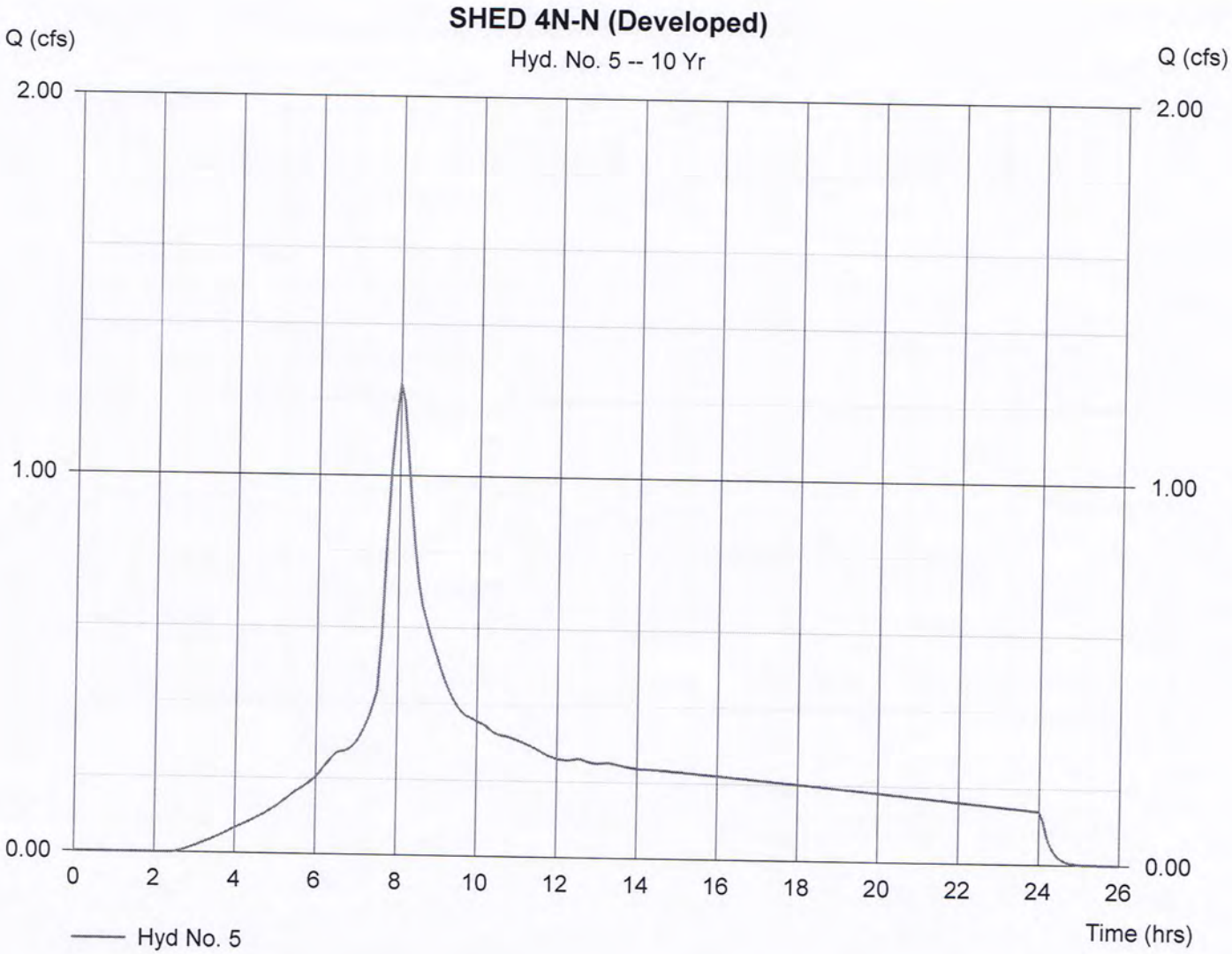
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 5

SHED 4N-N (Developed)

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.24 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 2.18 ac	Curve number	= 90.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 19,591 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

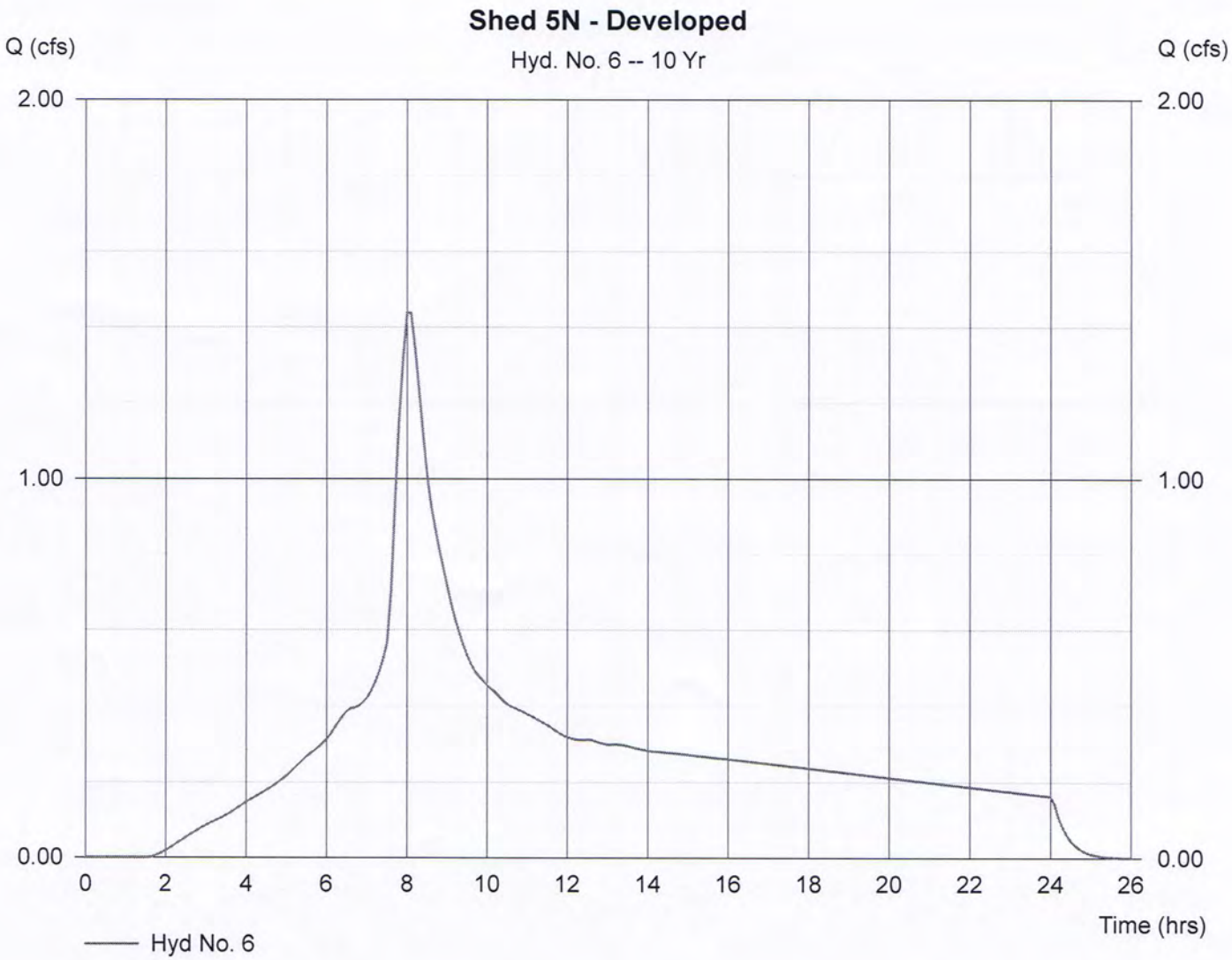
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 6

Shed 5N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.44 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 2.42 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20.8 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 25,270 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

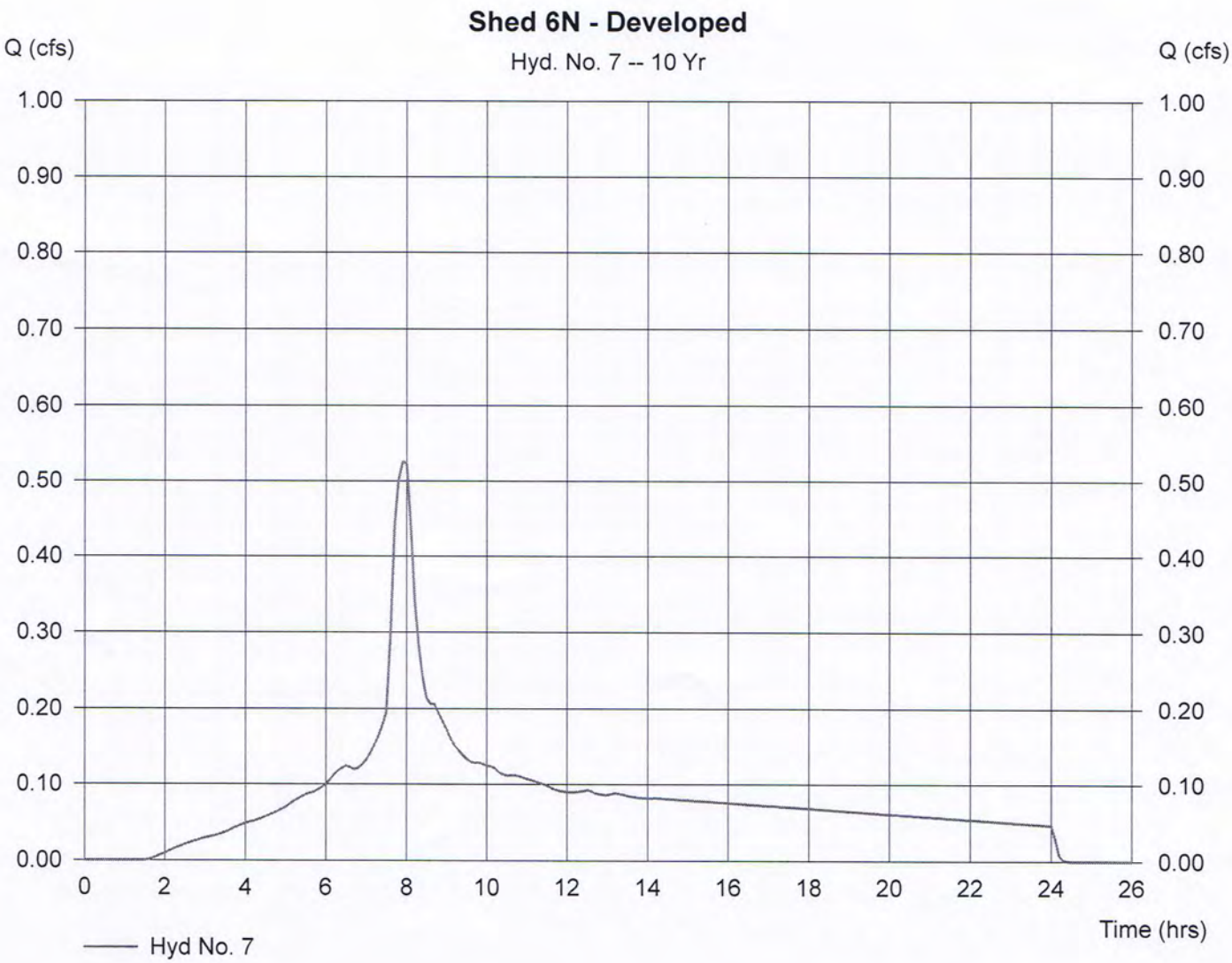
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 7

Shed 6N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.53 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 0.71 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 7,414 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

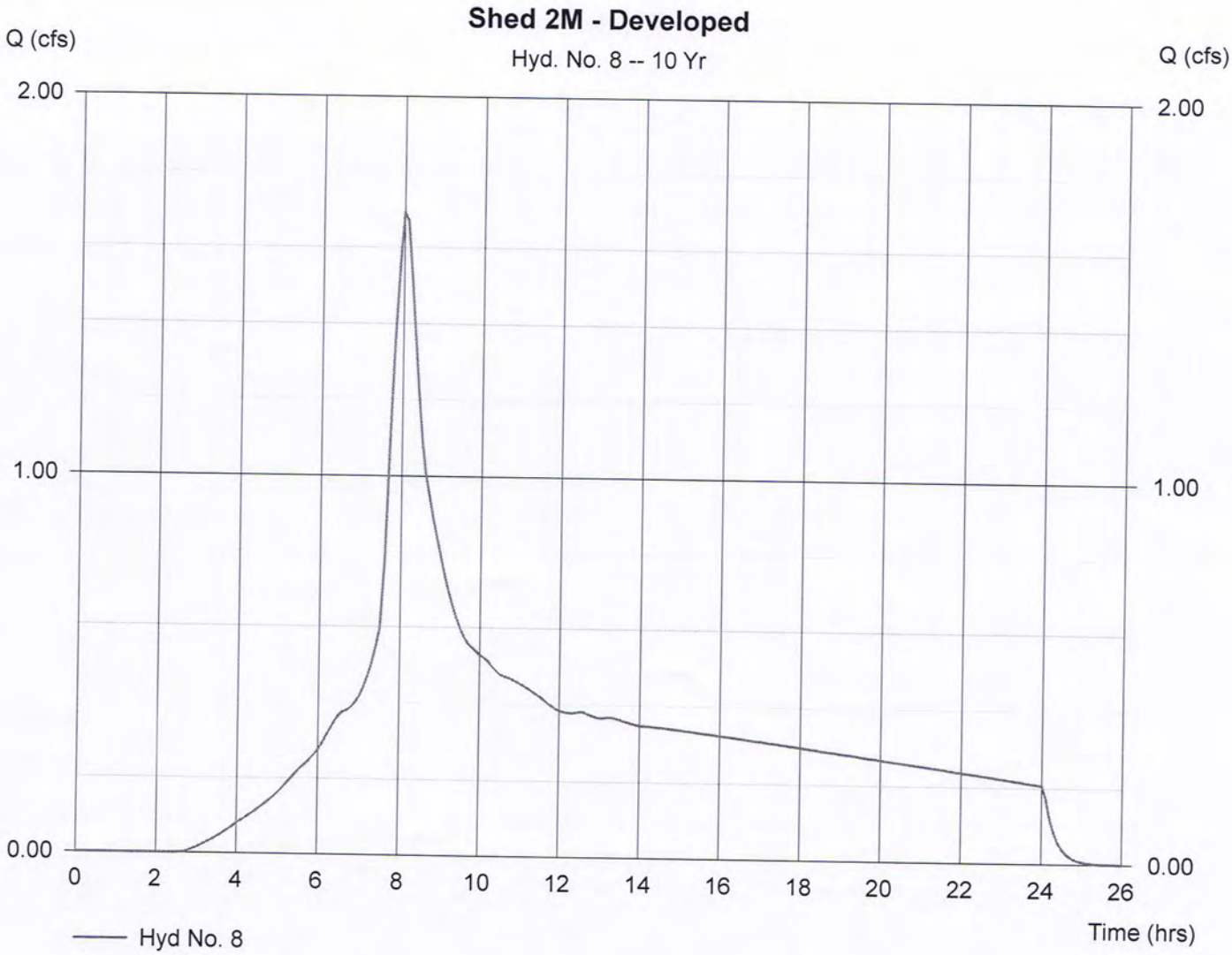
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 8

Shed 2M - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.69 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 3.25 ac	Curve number	= 89.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 16.4 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 28,448 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

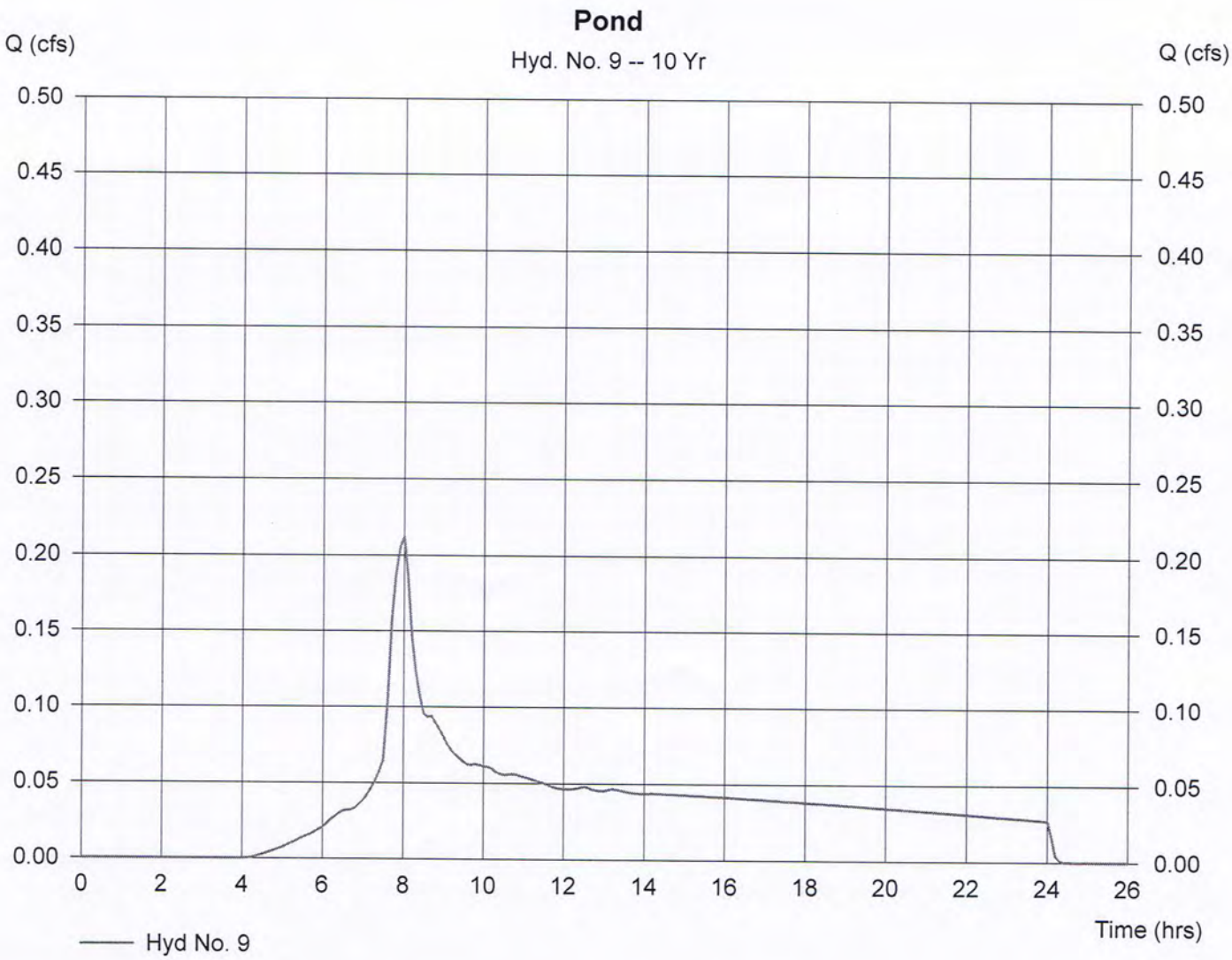
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 9

Pond

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.21 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 0.48 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 3,238 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

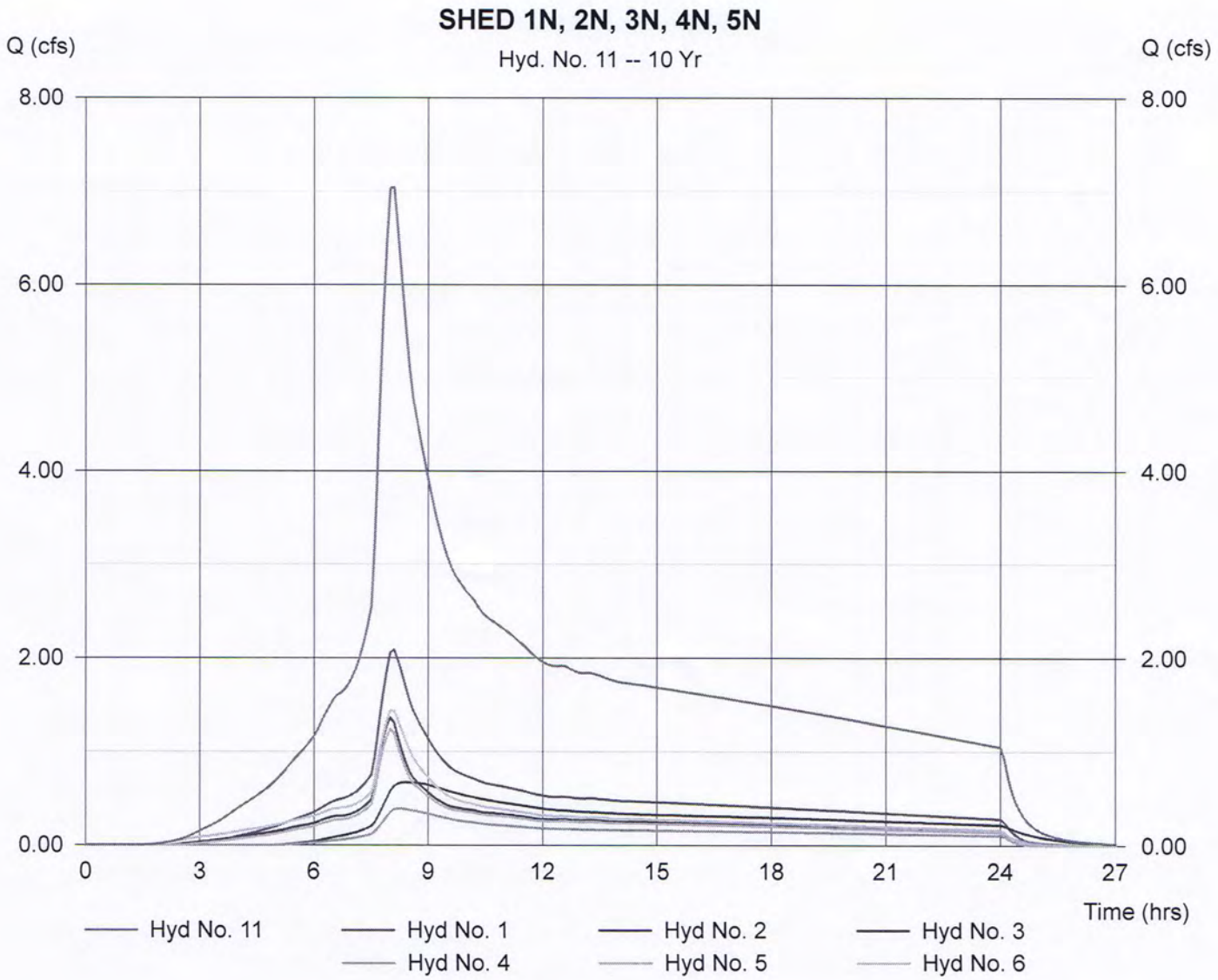
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 11

SHED 1N, 2N, 3N, 4N, 5N

Hydrograph type	= Combine	Peak discharge	= 7.04 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Inflow hyds.	= 1, 2, 3, 4, 5, 6		

Hydrograph Volume = 138,170 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

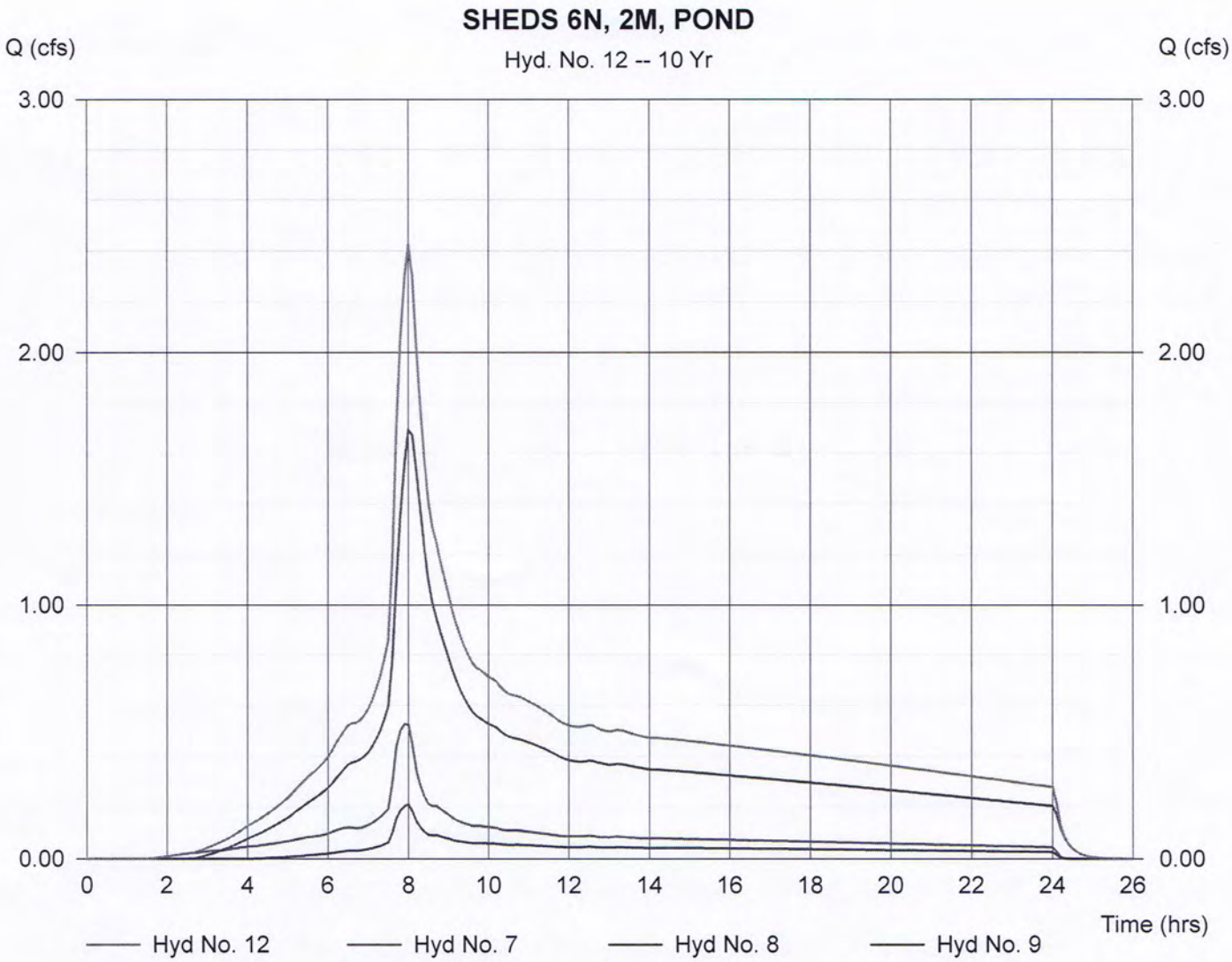
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 12

SHEDS 6N, 2M, POND

Hydrograph type	= Combine	Peak discharge	= 2.43 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Inflow hyds.	= 7, 8, 9		

Hydrograph Volume = 39,100 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

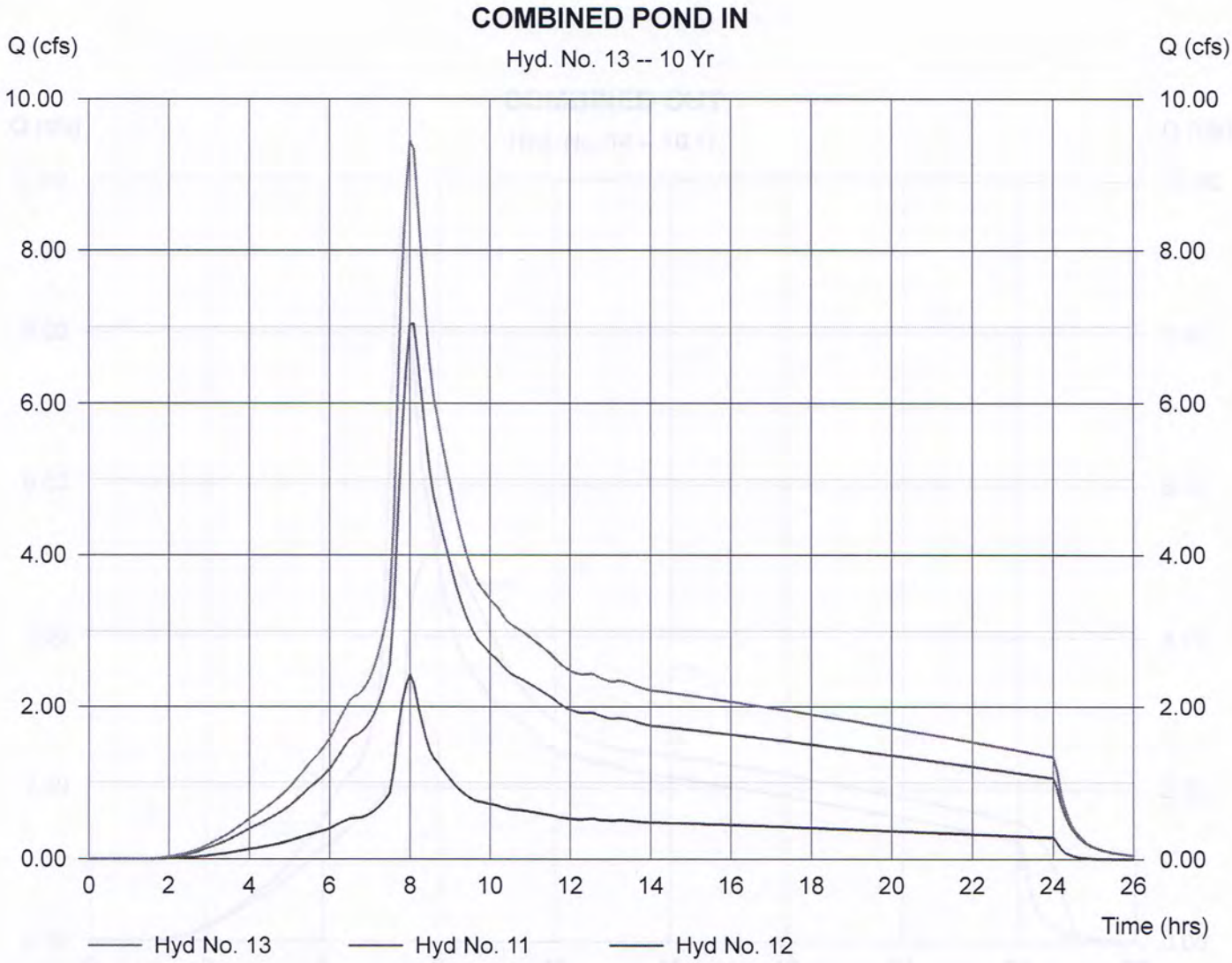
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 13

COMBINED POND IN

Hydrograph type	= Combine	Peak discharge	= 9.46 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Inflow hyds.	= 11, 12		

Hydrograph Volume = 177,271 cuft



Pond Report

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Pond No. 3 - POND O

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	216.00	231	0	0
0.50	216.50	5,259	1,373	1,373
1.00	217.00	6,171	2,858	4,230
2.00	218.00	8,126	7,149	11,379
3.00	219.00	10,218	9,172	20,551
4.00	220.00	12,470	11,344	31,895
5.00	221.00	16,044	14,257	46,152

Culvert / Orifice Structures

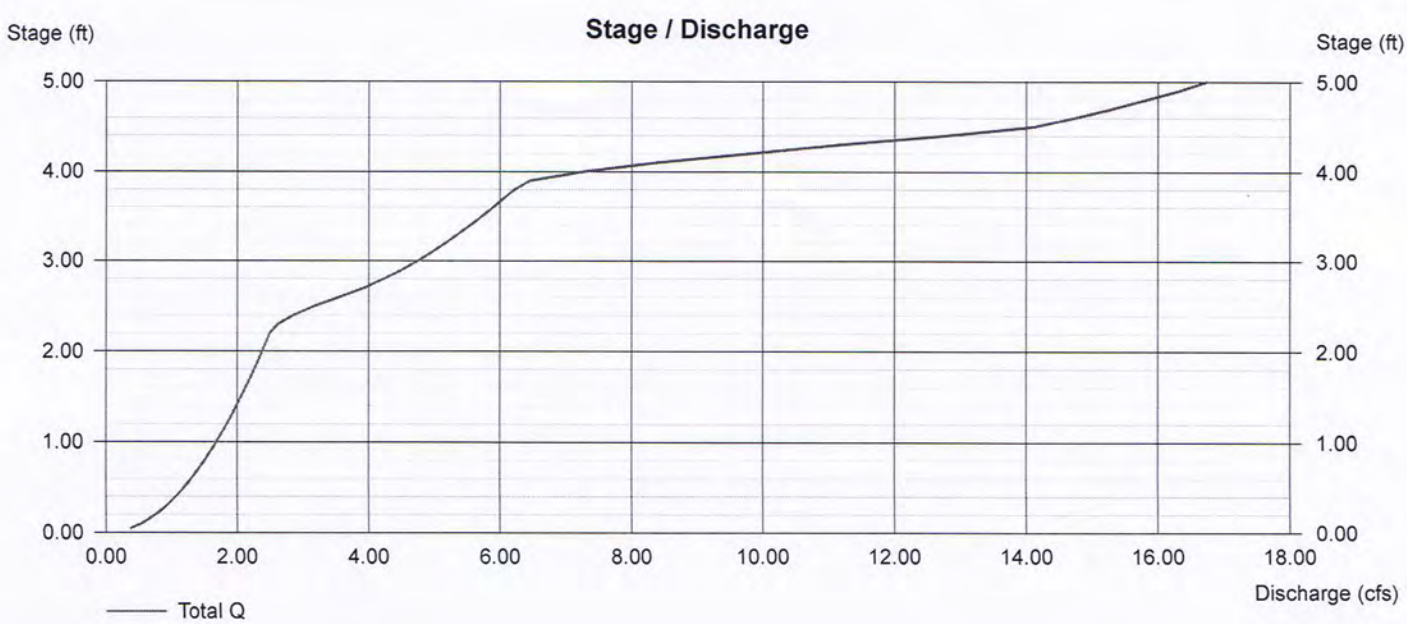
	[A]	[B]	[C]	[D]
Rise (in)	= 18.00	8.00	7.00	0.00
Span (in)	= 18.00	8.00	7.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 213.74	213.72	218.20	0.00
Length (ft)	= 72.00	0.00	0.00	0.00
Slope (%)	= 0.80	0.00	0.00	0.00
N-Value	= .013	.013	.013	.013
Orif. Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	0.00	0.00	0.00
Crest El. (ft)	= 219.87	0.00	0.00	0.00
Weir Coeff.	= 3.33	0.00	0.00	0.00
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration = 0.000 in/hr (Contour) Tailwater Elev. = 0.00 ft

Note: Culvert/Orifice outflows have been analyzed under inlet and outlet control. Weir riser checked for orifice conditions.



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SBUH Runoff	2.52	6	486	45,700	----	------	------	Shed 1N - Developed
2	SBUH Runoff	1.62	6	480	25,302	----	------	------	Shed 2N - Developed
3	SBUH Runoff	0.88	6	504	28,237	----	------	------	Shed 3N - Developed
4	SBUH Runoff	0.51	6	492	13,859	----	------	------	Shed 4N-S - Developed
5	SBUH Runoff	1.49	6	480	23,332	----	------	------	SHED 4N-N (Developed)
6	SBUH Runoff	1.68	6	480	29,576	----	------	------	Shed 5N - Developed
7	SBUH Runoff	0.61	6	474	8,677	----	------	------	Shed 6N - Developed
8	SBUH Runoff	2.04	6	480	33,983	----	------	------	Shed 2M - Developed
9	SBUH Runoff	0.27	6	480	3,983	----	------	------	Pond
11	Combine	8.52	6	480	166,006	1, 2, 3, 4, 5, 6,	------	------	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	2.92	6	480	46,643	7, 8, 9,	------	------	SHEDS 6N, 2M, POND
13	Combine	11.44	6	480	212,650	11, 12	------	------	COMBINED POND IN
14	Reservoir	6.03	6	540	212,650	13	219.68	28,300	COMBINED OUT

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

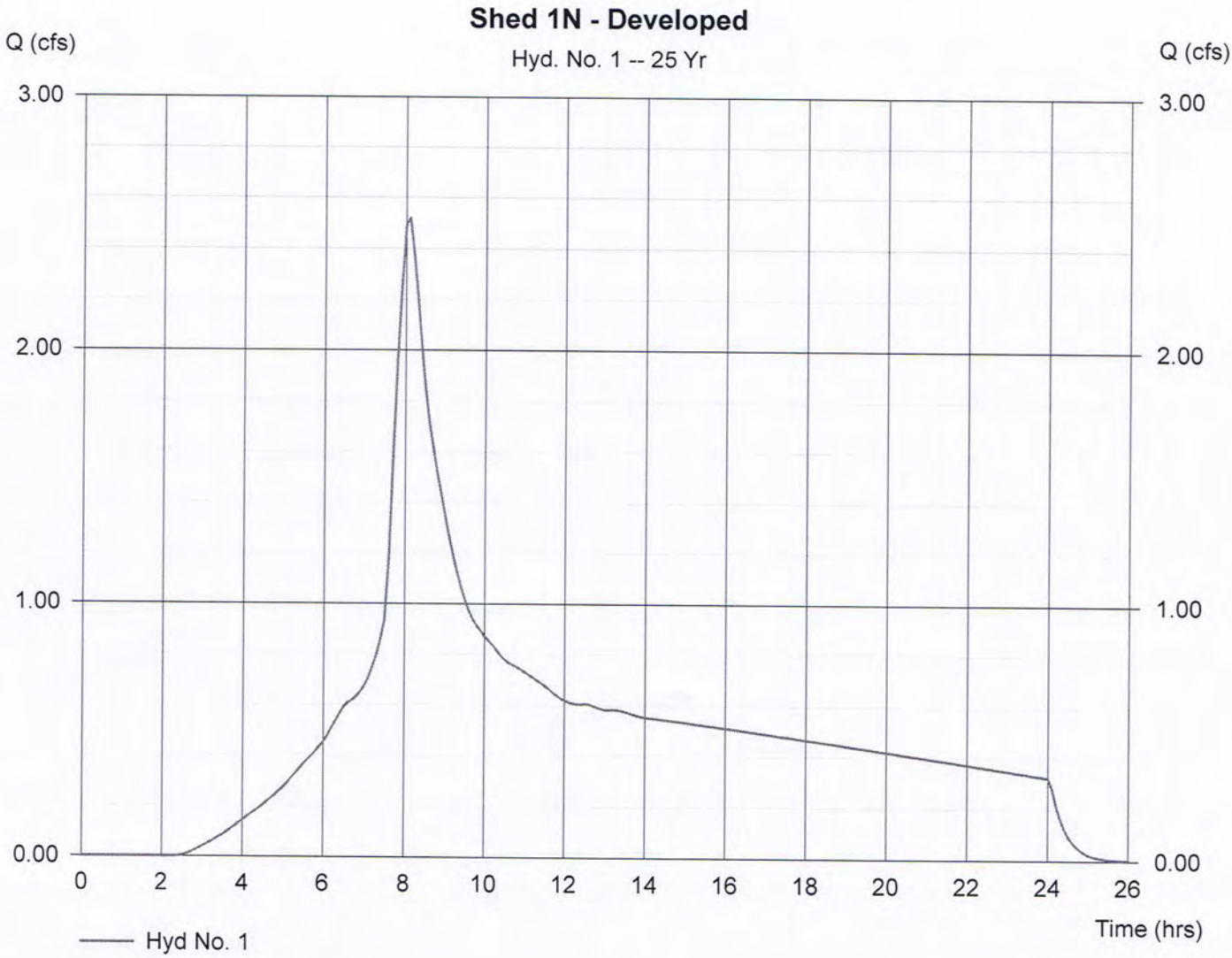
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 1

Shed 1N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.52 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 4.40 ac	Curve number	= 89.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 22.25 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 45,700 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

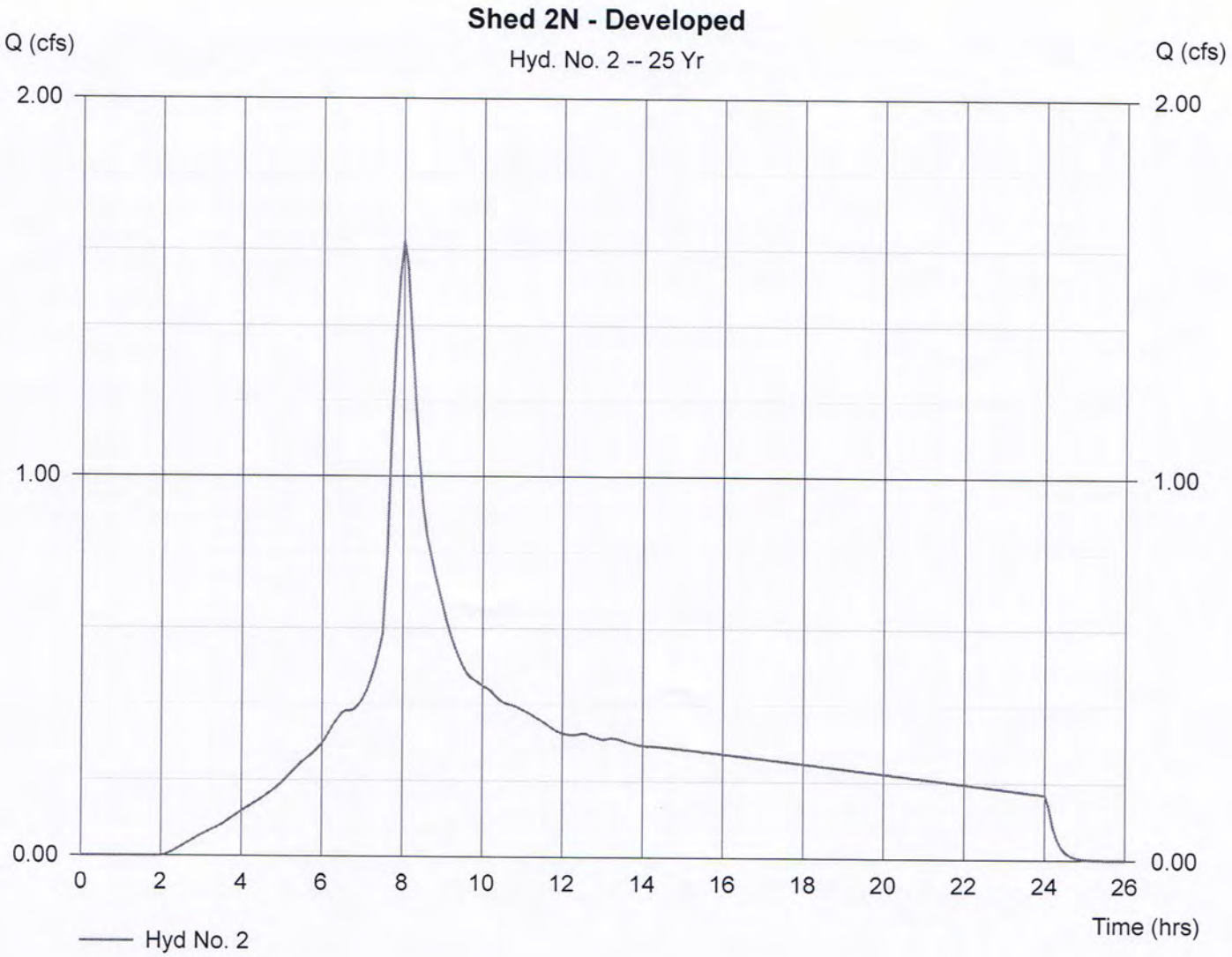
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 2

Shed 2N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.62 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 2.28 ac	Curve number	= 91.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 25,302 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 3

Shed 3N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.88 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 3.81 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 66 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 28,237 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 4

Shed 4N-S - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.51 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 1.87 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 46.3 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 13,859 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

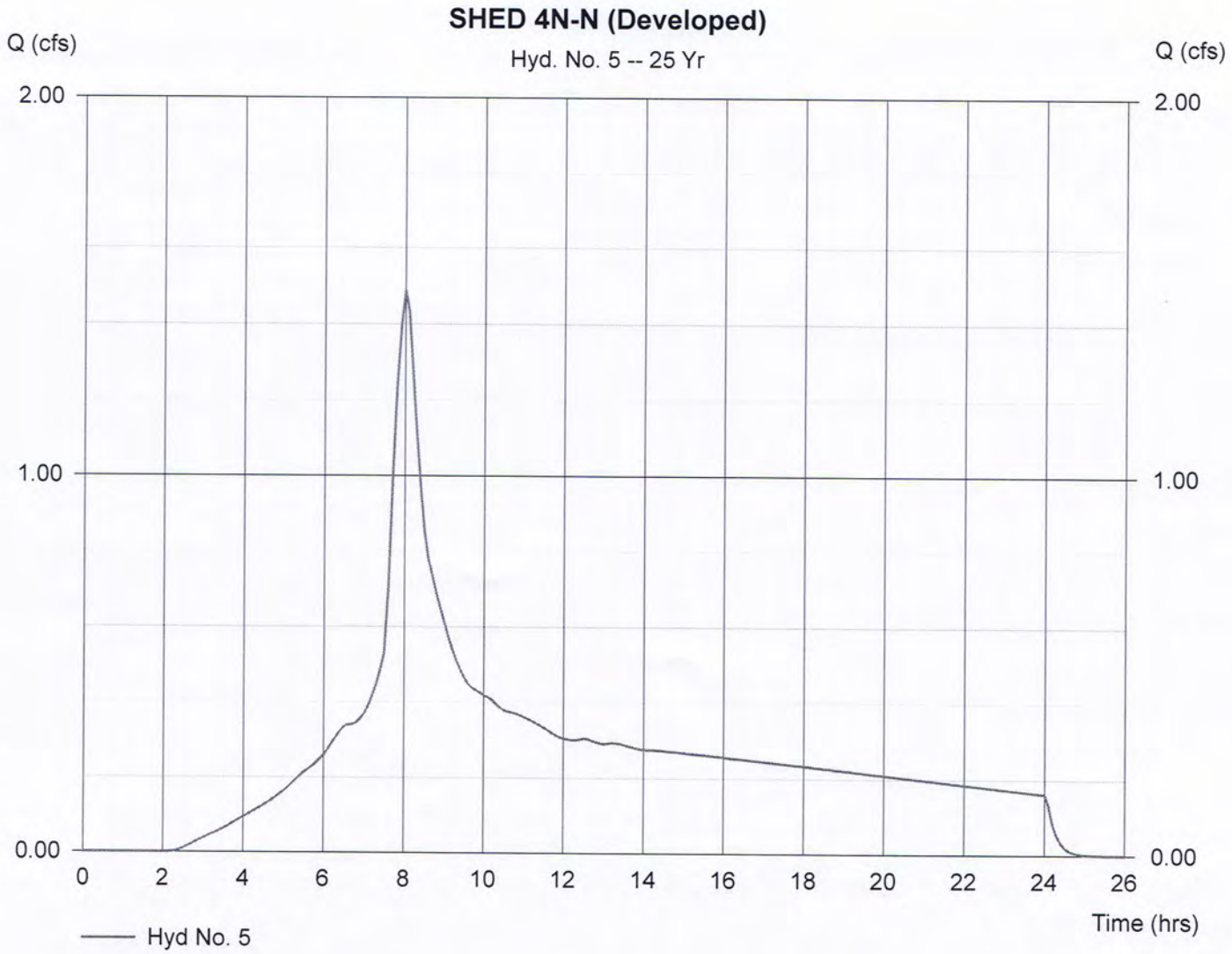
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 5

SHED 4N-N (Developed)

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.49 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 2.18 ac	Curve number	= 90.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 23,332 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

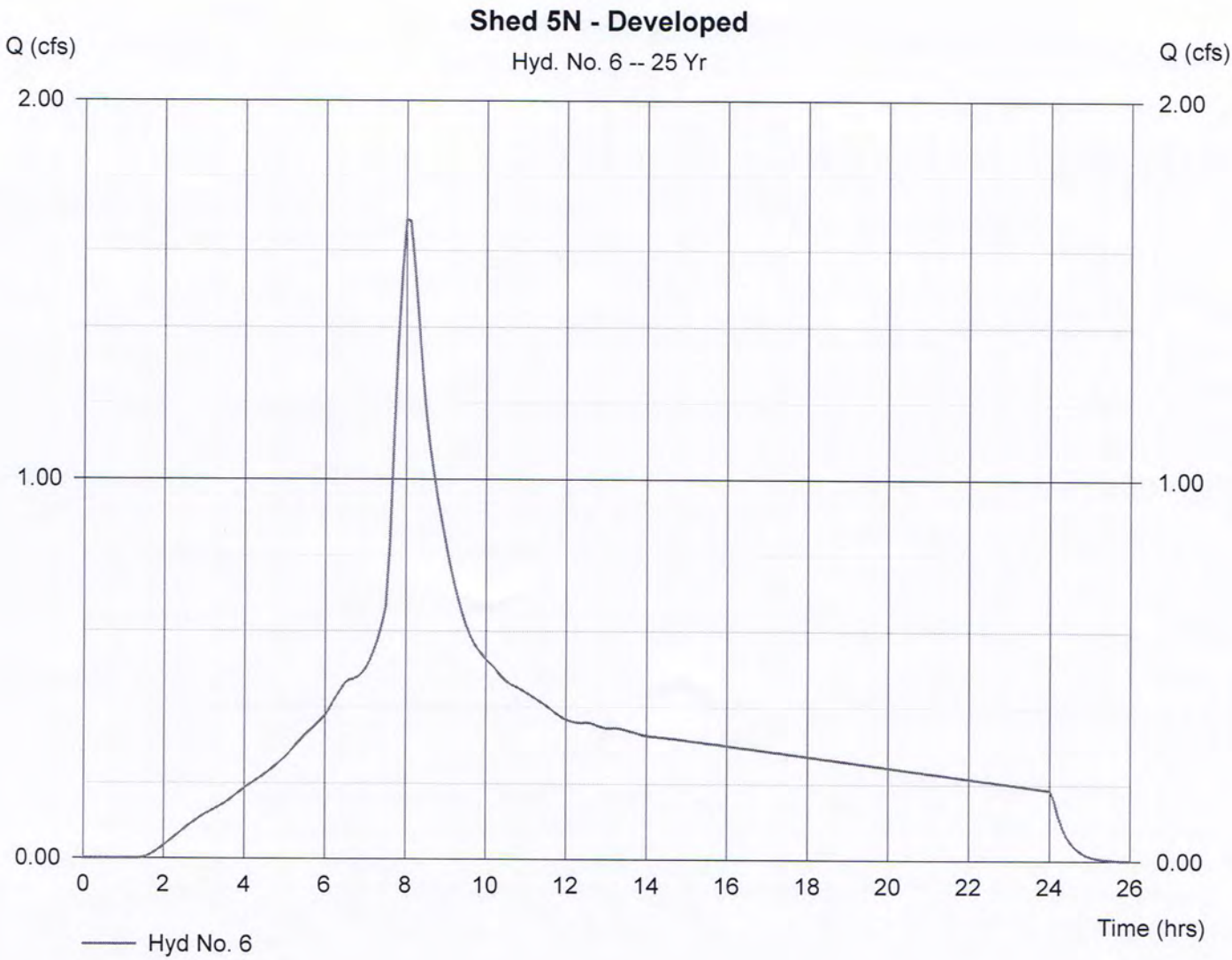
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 6

Shed 5N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.68 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 2.42 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20.8 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 29,576 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

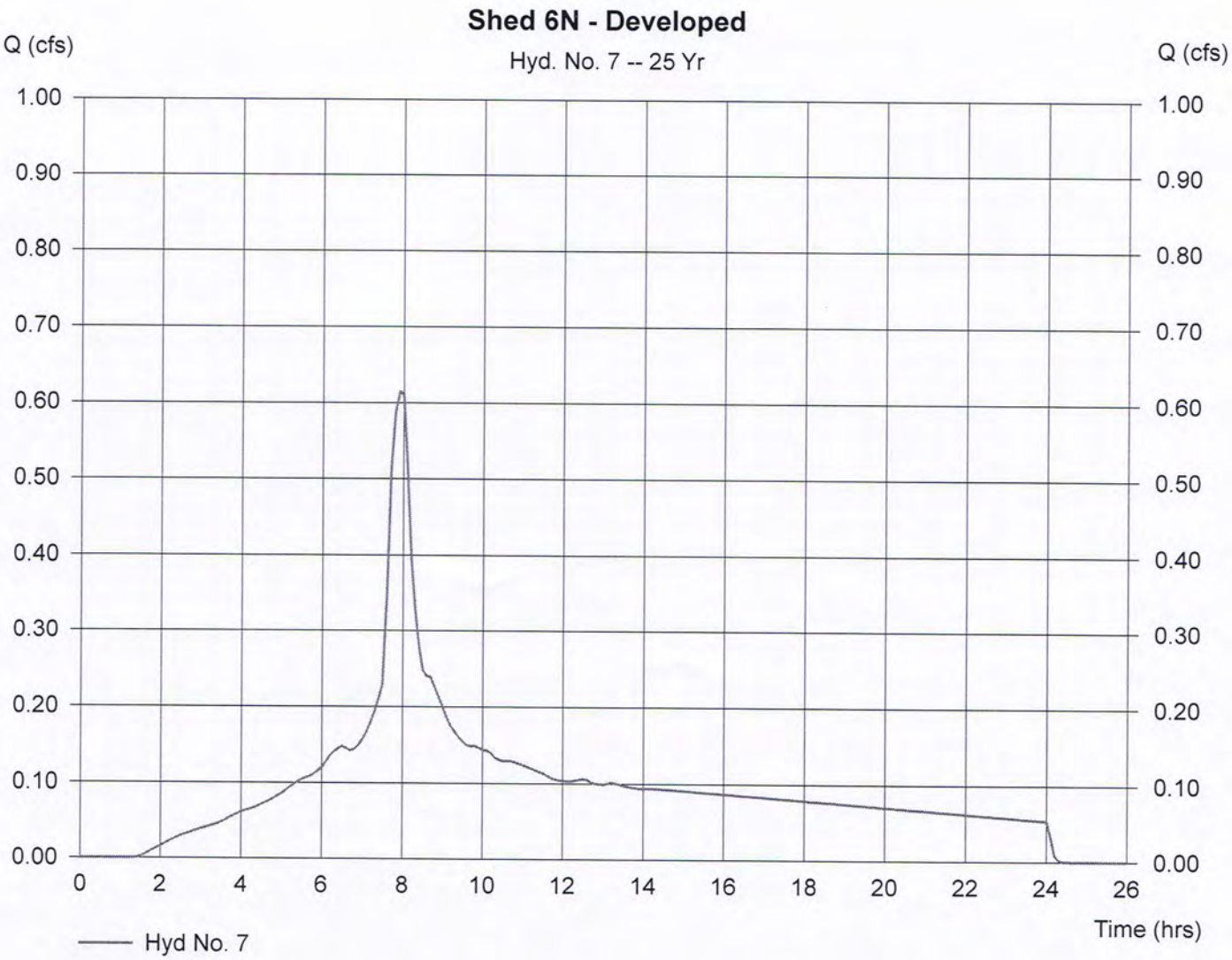
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 7

Shed 6N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.61 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 0.71 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 8,677 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

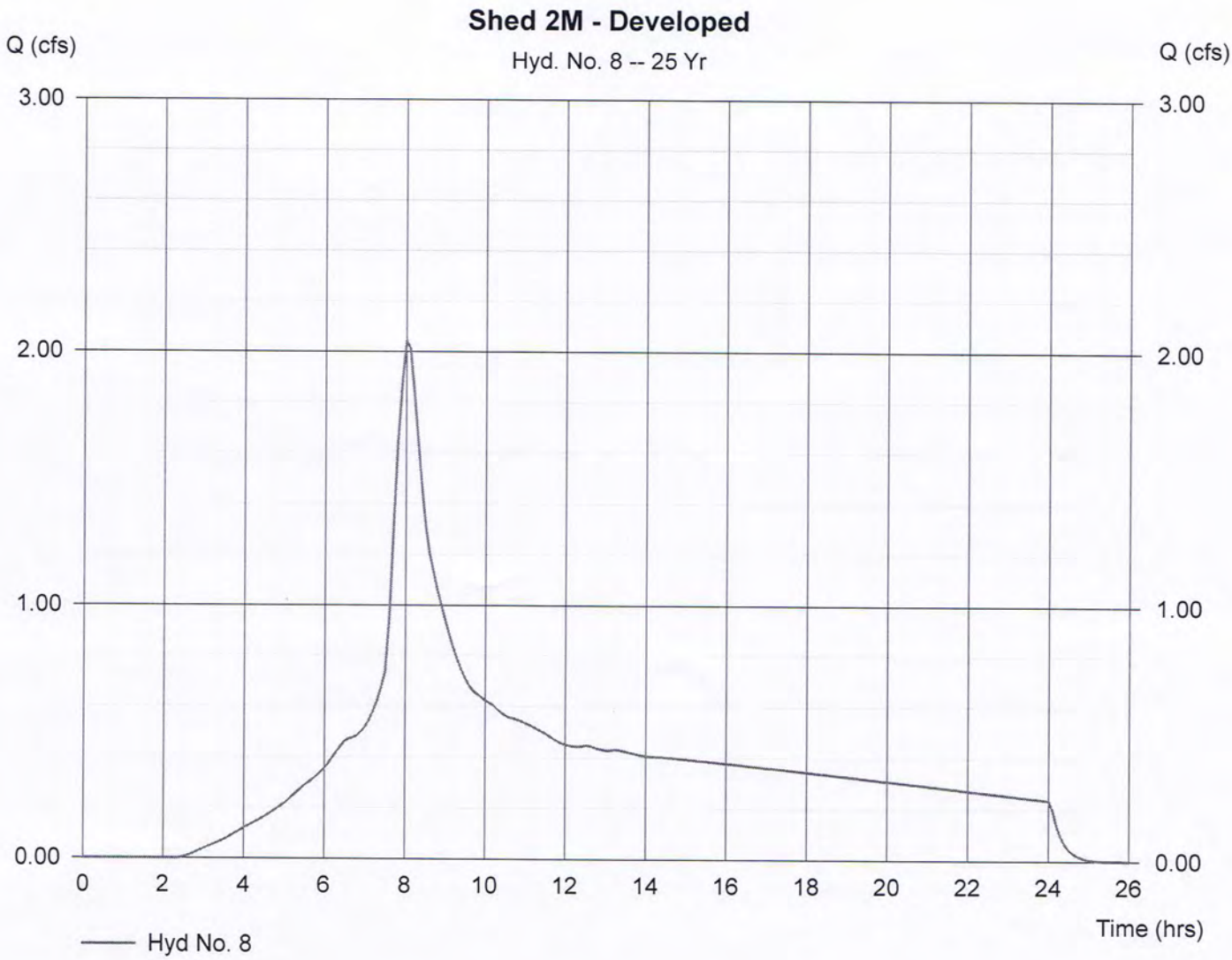
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 8

Shed 2M - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.04 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 3.25 ac	Curve number	= 89.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 16.4 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 33,983 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

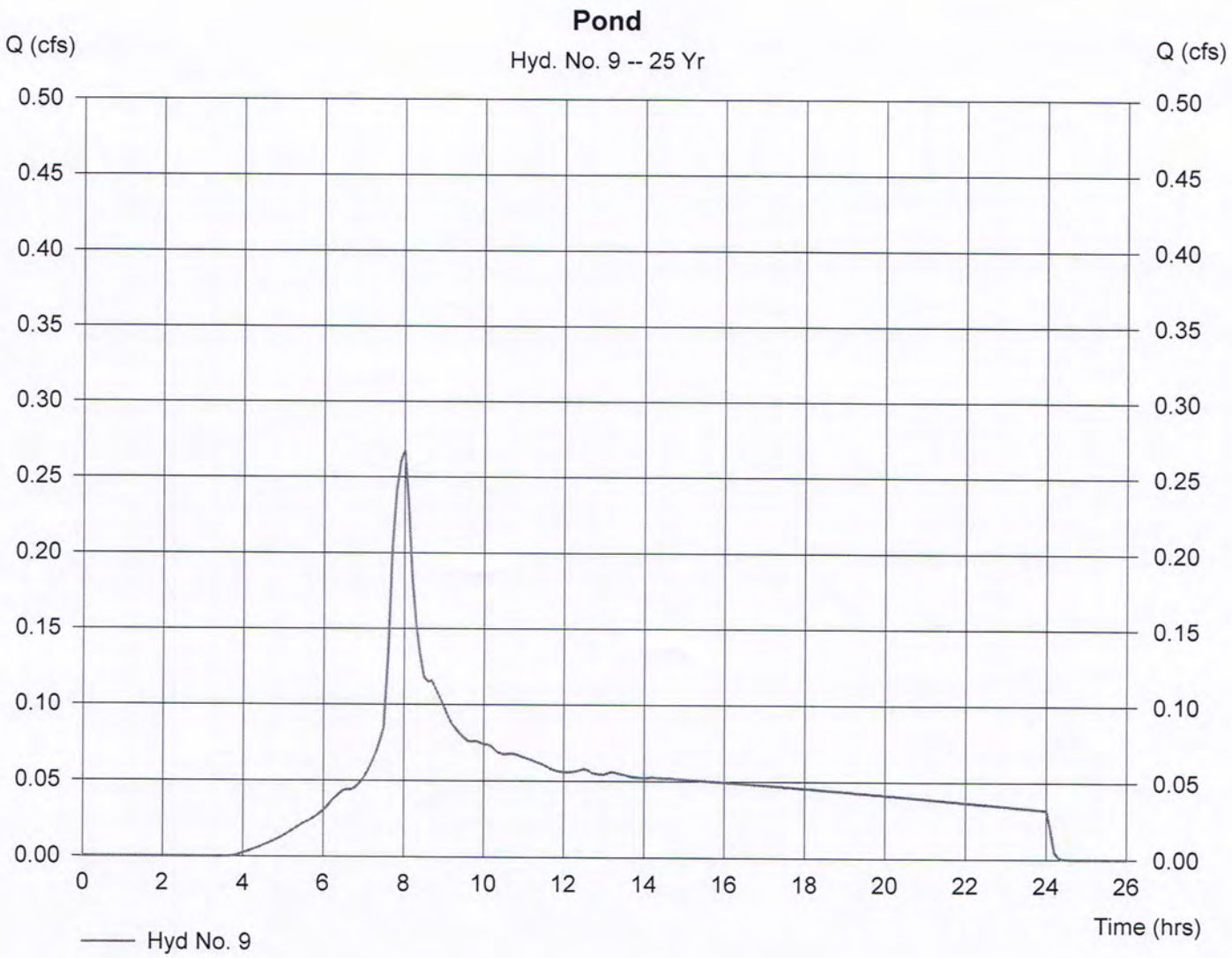
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 9

Pond

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.27 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 0.48 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 3,983 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

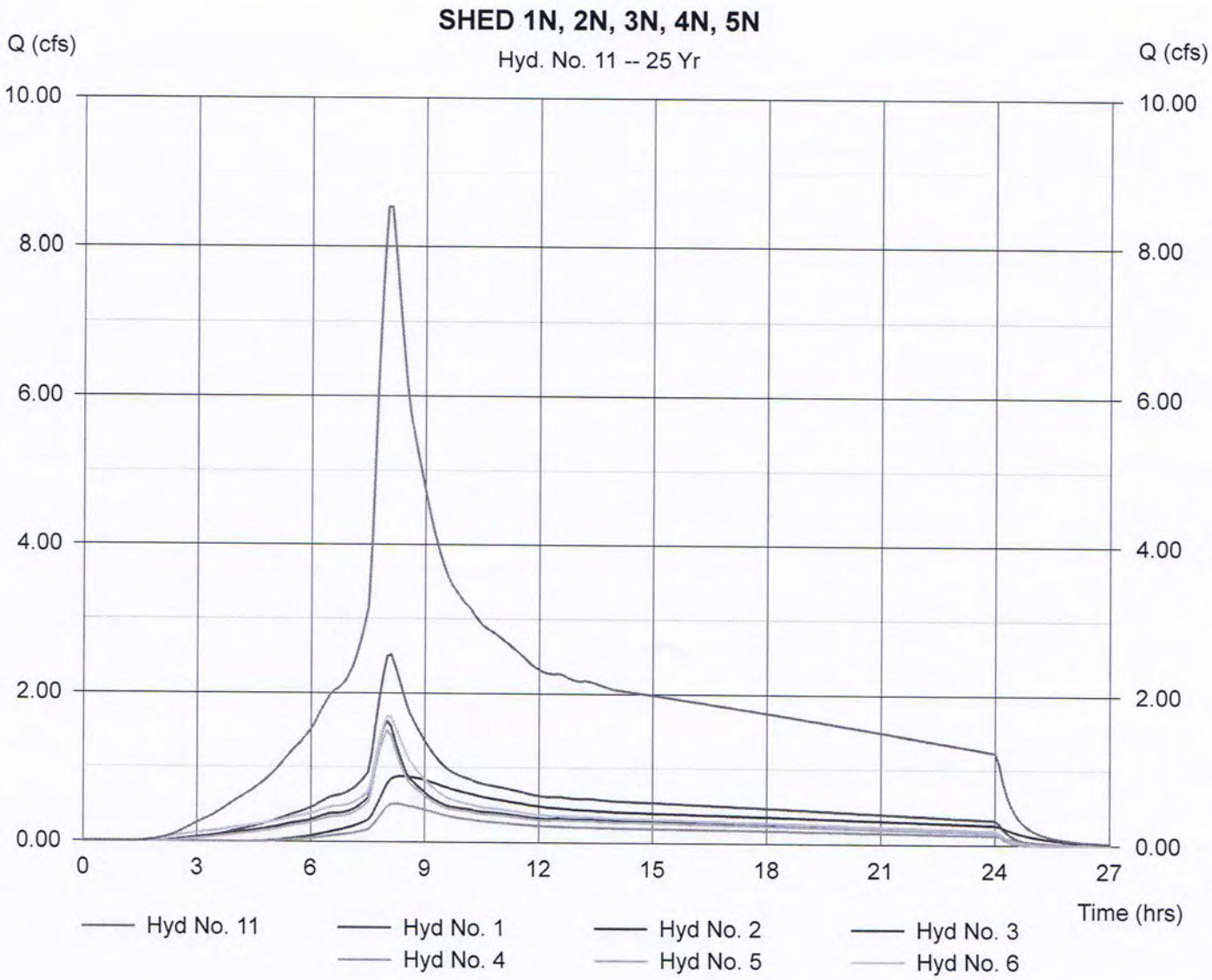
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 11

SHED 1N, 2N, 3N, 4N, 5N

Hydrograph type	= Combine	Peak discharge	= 8.52 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Inflow hyds.	= 1, 2, 3, 4, 5, 6		

Hydrograph Volume = 166,006 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

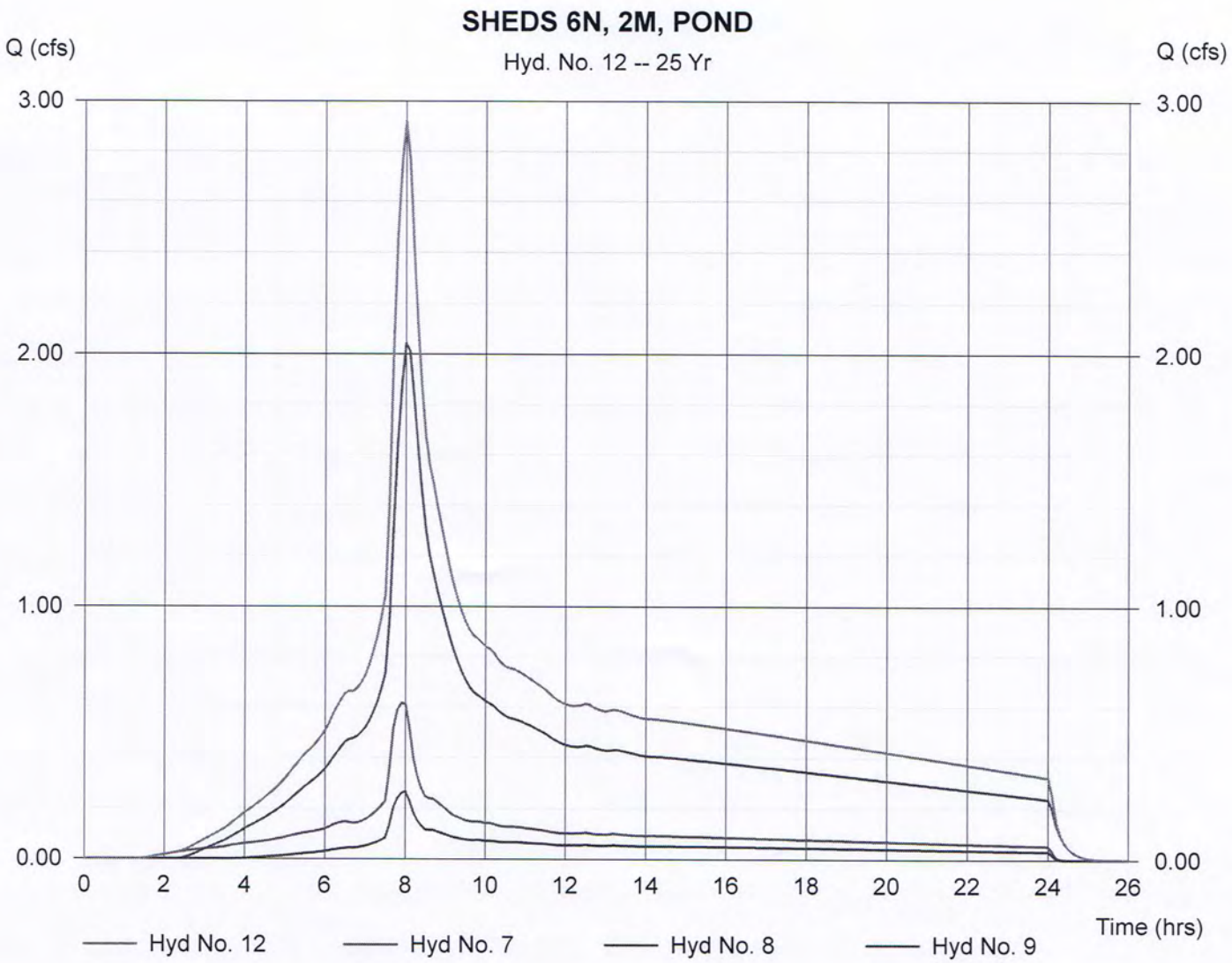
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 12

SHEDS 6N, 2M, POND

Hydrograph type	= Combine	Peak discharge	= 2.92 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Inflow hyds.	= 7, 8, 9		

Hydrograph Volume = 46,643 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

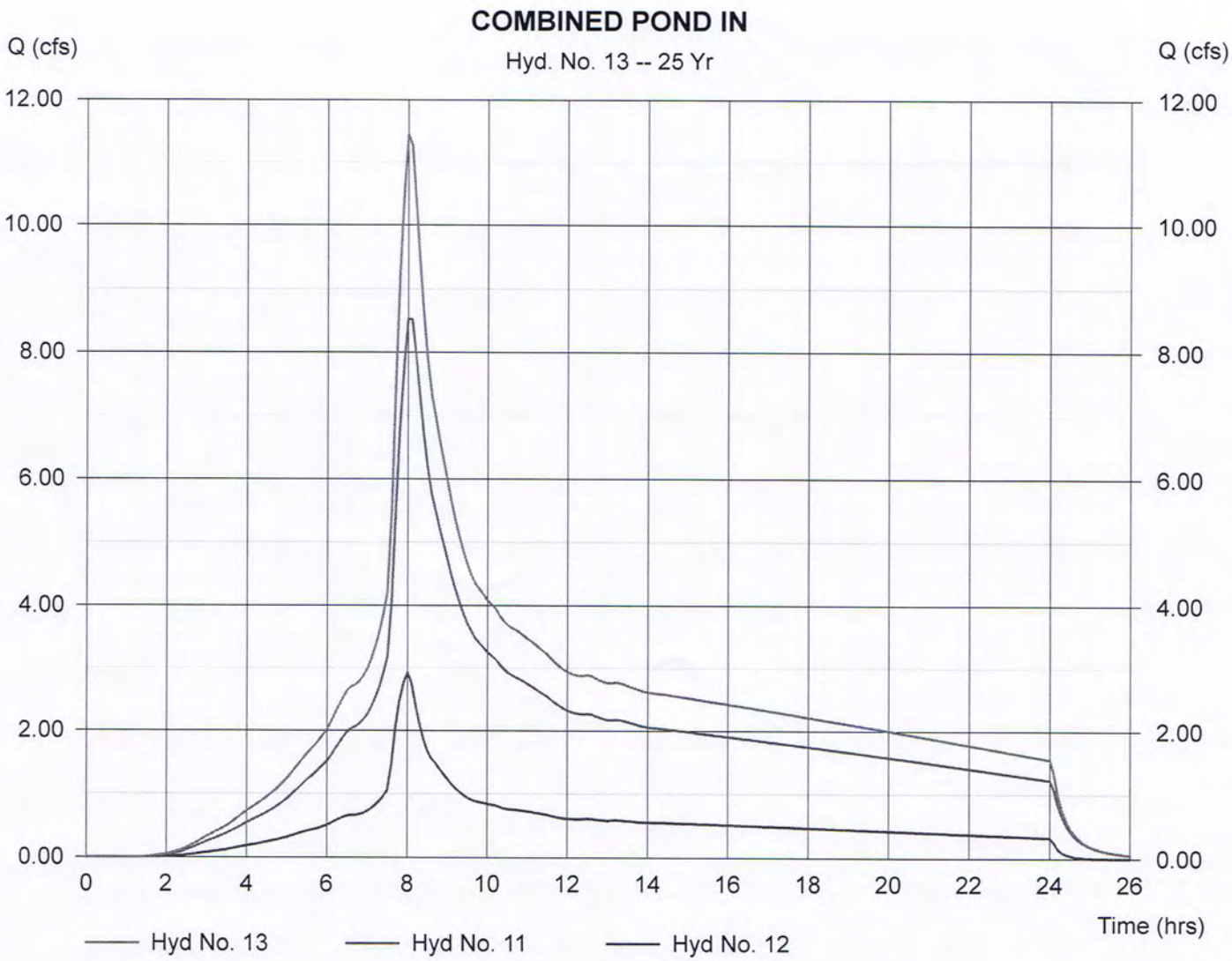
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 13

COMBINED POND IN

Hydrograph type	= Combine	Peak discharge	= 11.44 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Inflow hyds.	= 11, 12		

Hydrograph Volume = 212,650 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

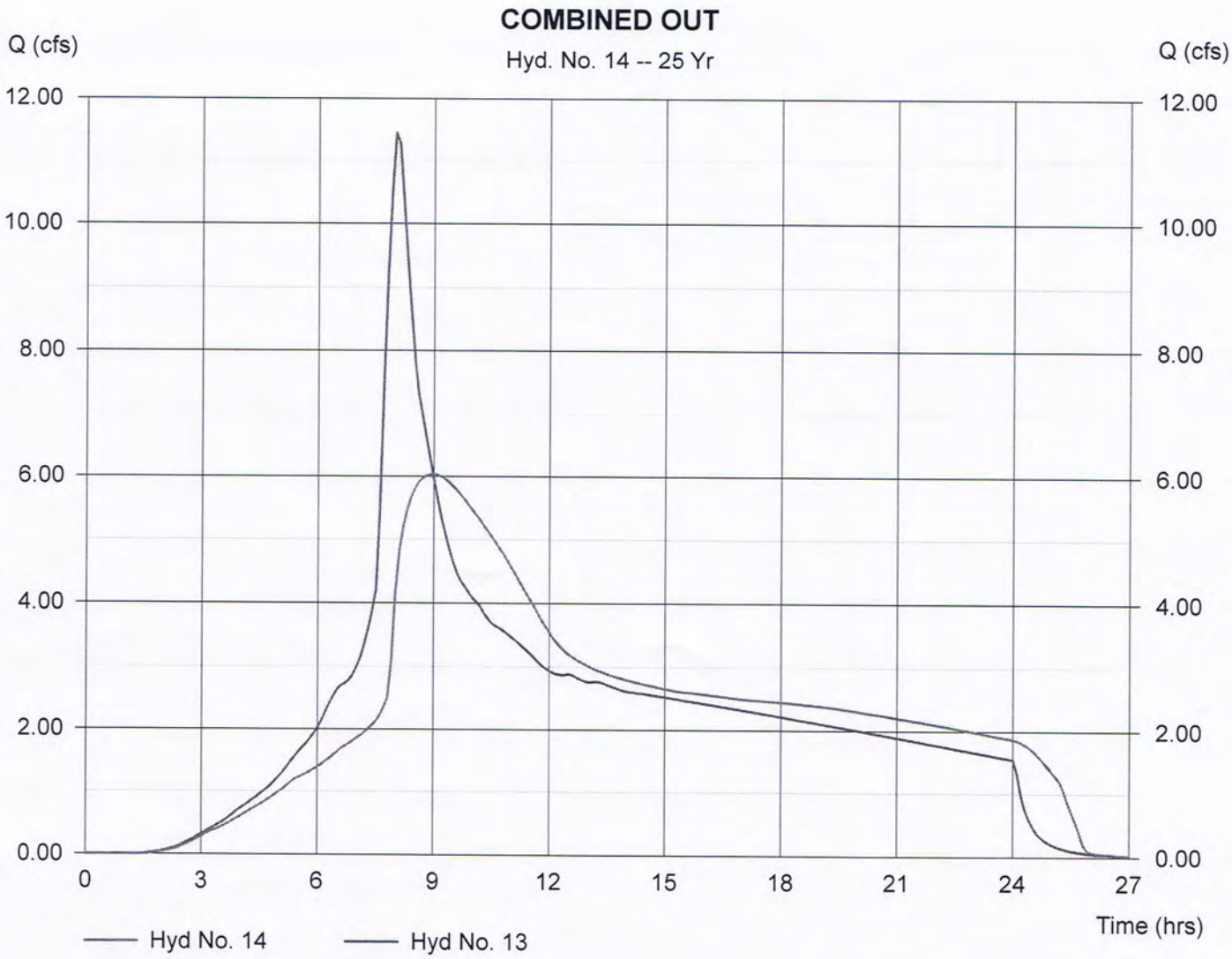
Hyd. No. 14

COMBINED OUT

Hydrograph type	= Reservoir	Peak discharge	= 6.03 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Inflow hyd. No.	= 13	Max. Elevation	= 219.68 ft
Reservoir name	= POND O	Max. Storage	= 28,300 cuft

Storage Indication method used.

Hydrograph Volume = 212,650 cuft



Pond Report

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Pond No. 3 - POND O

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	216.00	231	0	0
0.50	216.50	5,259	1,373	1,373
1.00	217.00	6,171	2,858	4,230
2.00	218.00	8,126	7,149	11,379
3.00	219.00	10,218	9,172	20,551
4.00	220.00	12,470	11,344	31,895
5.00	221.00	16,044	14,257	46,152

Culvert / Orifice Structures

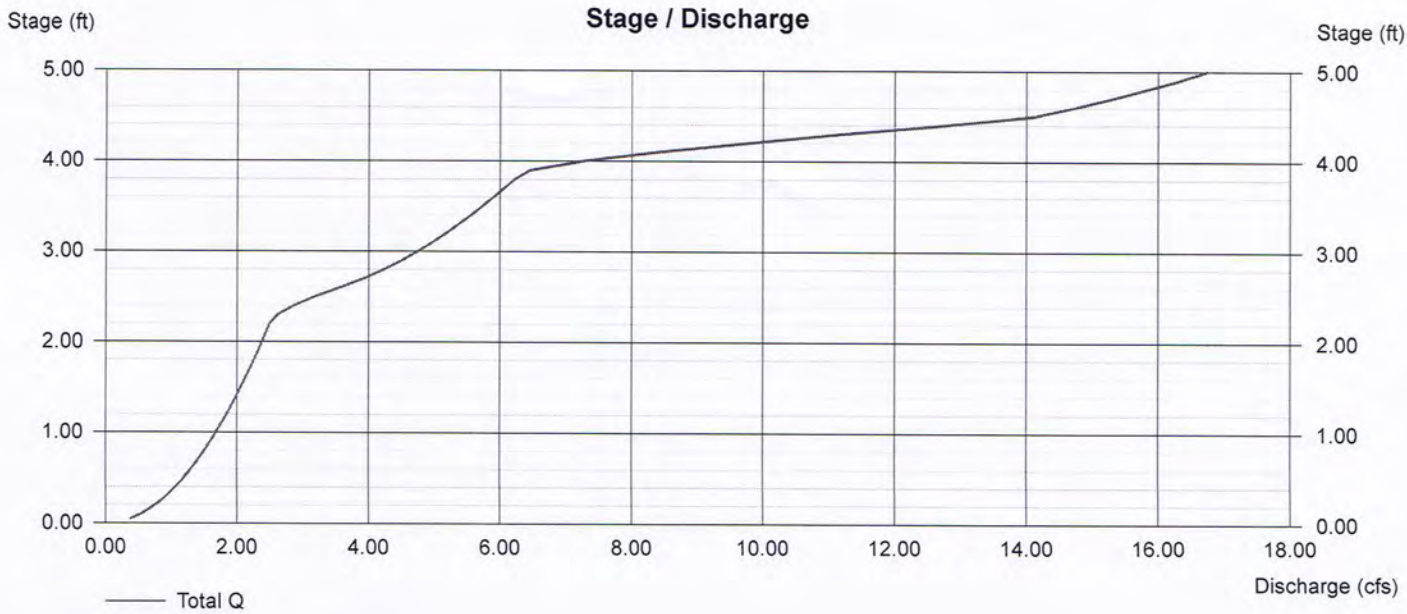
	[A]	[B]	[C]	[D]
Rise (in)	= 18.00	8.00	7.00	0.00
Span (in)	= 18.00	8.00	7.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 213.74	213.72	218.20	0.00
Length (ft)	= 72.00	0.00	0.00	0.00
Slope (%)	= 0.80	0.00	0.00	0.00
N-Value	= .013	.013	.013	.013
Orif. Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	0.00	0.00	0.00
Crest El. (ft)	= 219.87	0.00	0.00	0.00
Weir Coeff.	= 3.33	0.00	0.00	0.00
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration = 0.000 in/hr (Contour) Tailwater Elev. = 0.00 ft

Note: Culvert/Orifice outflows have been analyzed under inlet and outlet control. Weir riser checked for orifice conditions.



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SBUH Runoff	2.95	6	486	53,270	----	------	------	Shed 1N - Developed
2	SBUH Runoff	1.88	6	480	29,294	----	------	------	Shed 2N - Developed
3	SBUH Runoff	1.09	6	498	34,044	----	------	------	Shed 3N - Developed
4	SBUH Runoff	0.63	6	492	16,709	----	------	------	Shed 4N-S - Developed
5	SBUH Runoff	1.74	6	480	27,113	----	------	------	SHED 4N-N (Developed)
6	SBUH Runoff	1.93	6	480	33,899	----	------	------	Shed 5N - Developed
7	SBUH Runoff	0.70	6	474	9,945	----	------	------	Shed 6N - Developed
8	SBUH Runoff	2.40	6	480	39,584	----	------	------	Shed 2M - Developed
9	SBUH Runoff	0.32	6	480	4,749	----	------	------	Pond
11	Combine	10.04	6	480	194,329	1, 2, 3, 4, 5, 6,	------	------	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	3.42	6	480	54,279	7, 8, 9,	------	------	SHEDS 6N, 2M, POND
13	Combine	13.46	6	480	248,608	11, 12	------	------	COMBINED POND IN
14	Reservoir	8.07	6	522	248,607	13	220.07	32,917	COMBINED OUT

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 1

Shed 1N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.95 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 4.40 ac	Curve number	= 89.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 22.25 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 53,270 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

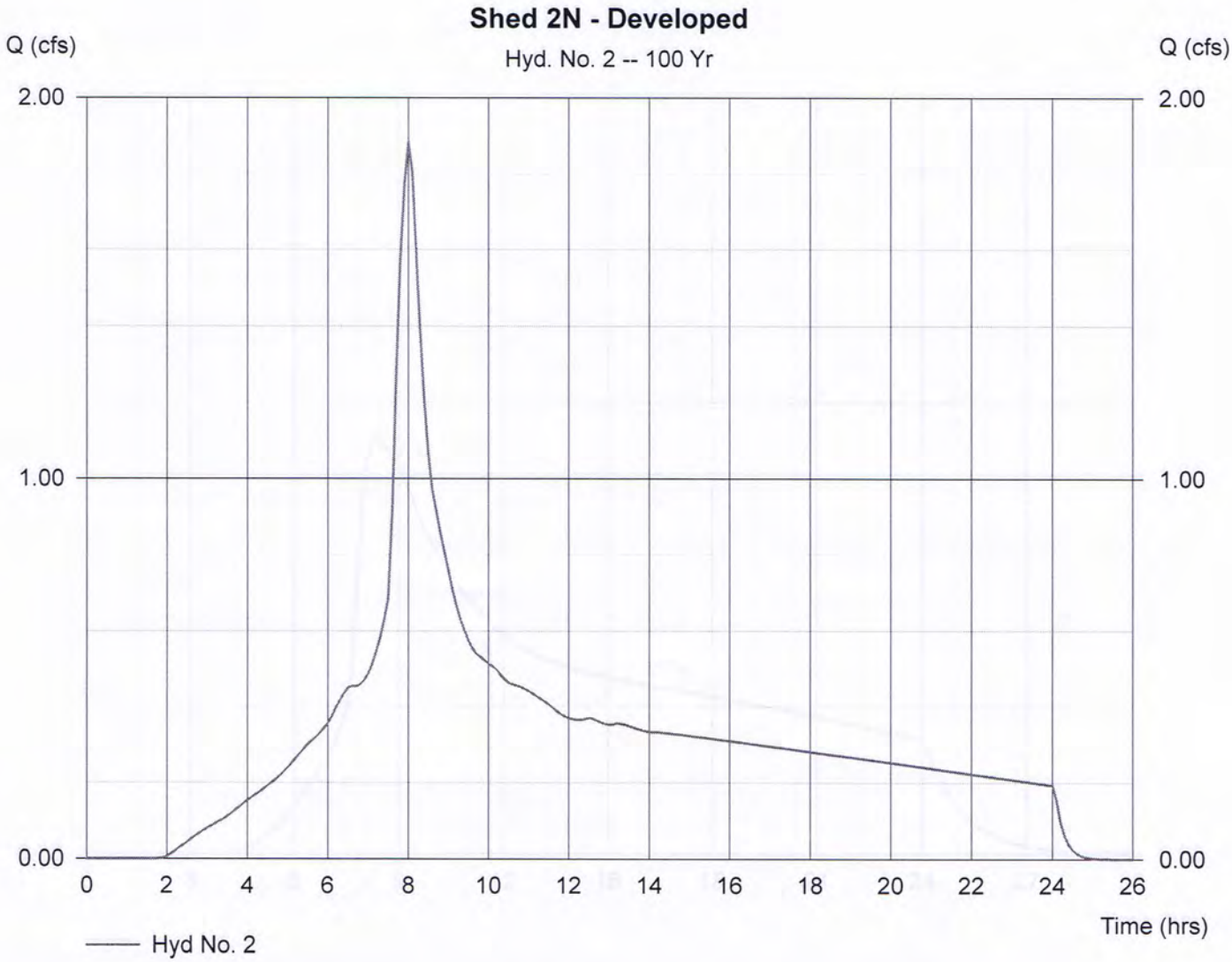
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 2

Shed 2N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.88 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 2.28 ac	Curve number	= 91.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 29,294 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

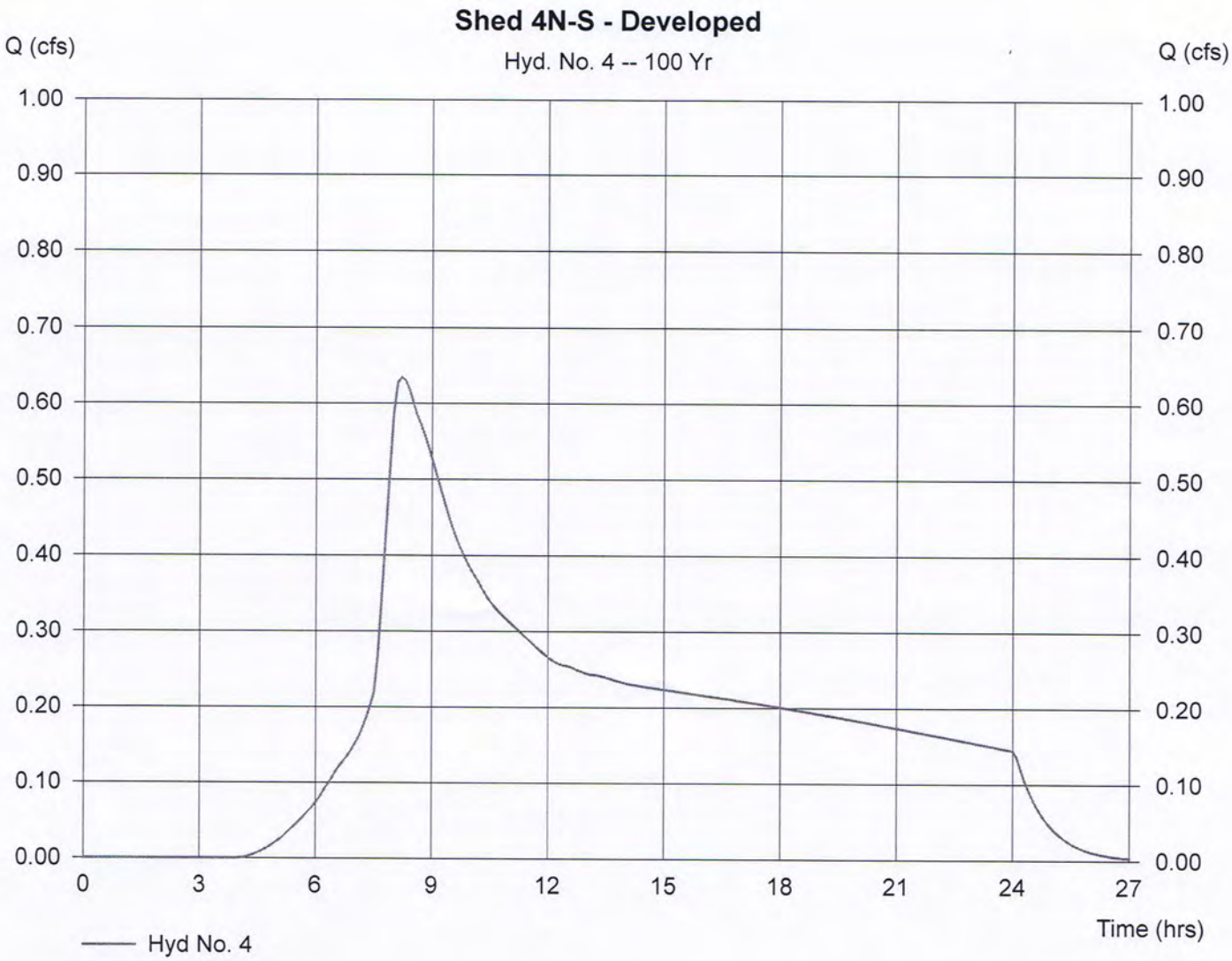
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 4

Shed 4N-S - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.63 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 1.87 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 46.3 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 16,709 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

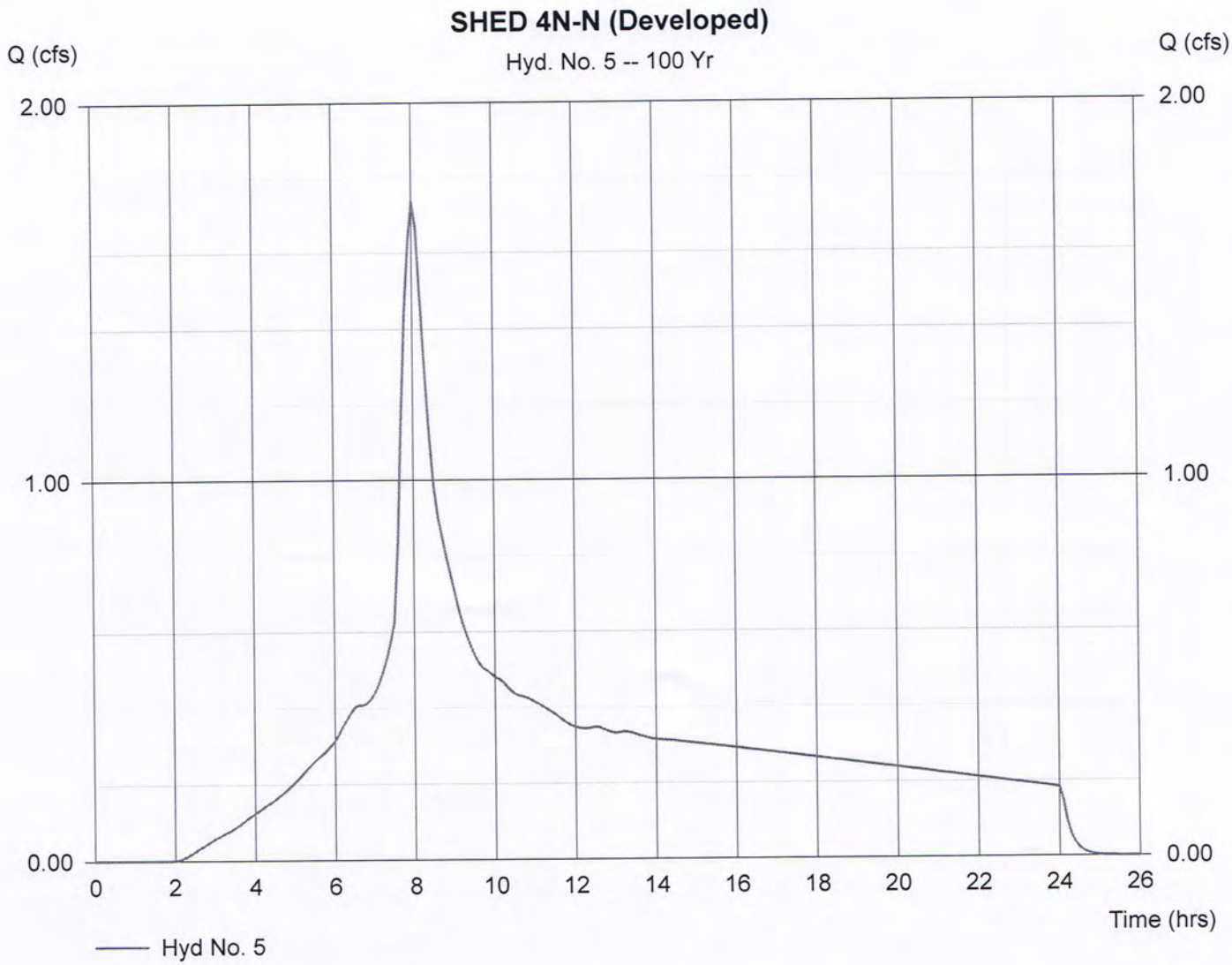
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 5

SHED 4N-N (Developed)

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.74 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 2.18 ac	Curve number	= 90.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 27,113 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

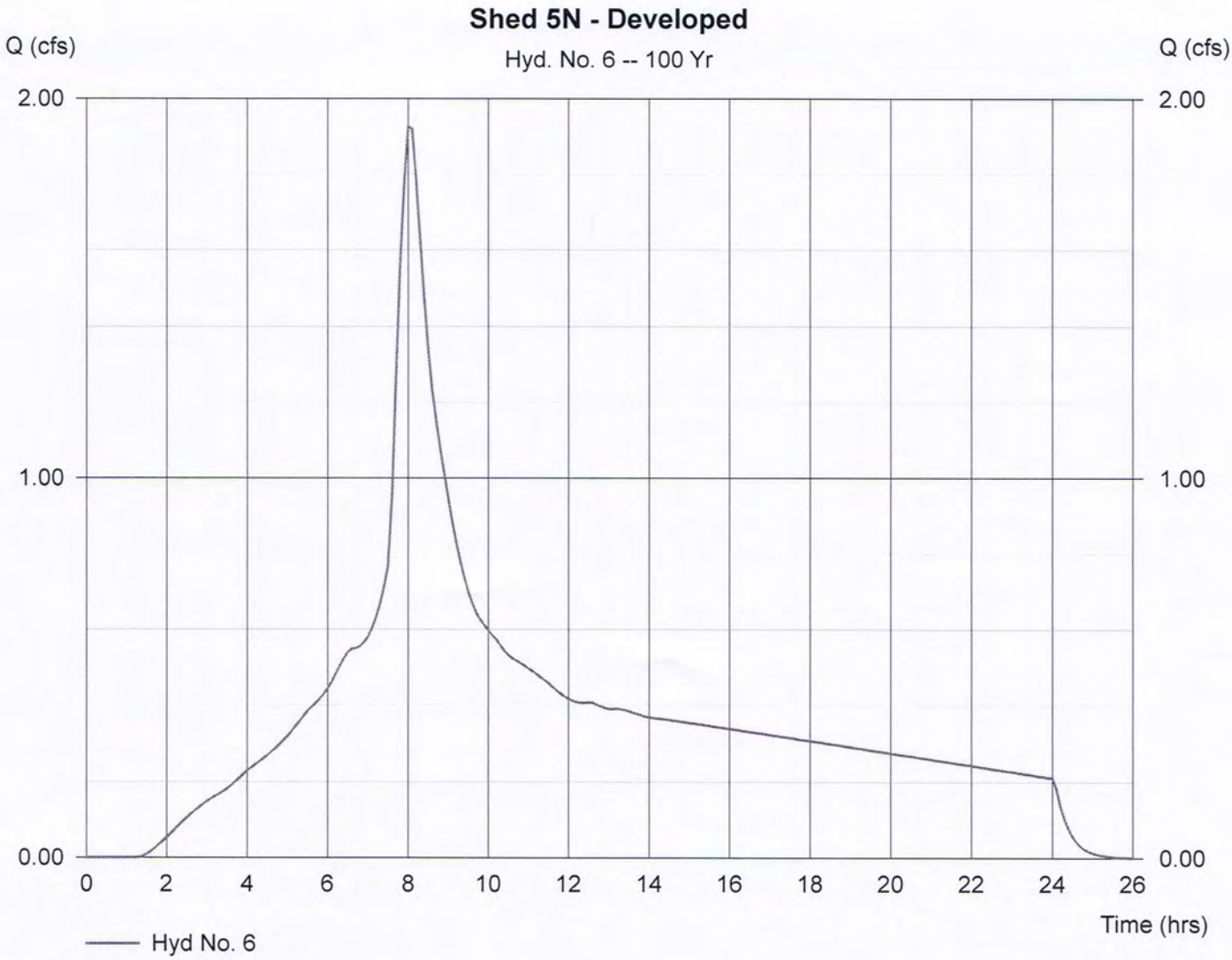
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 6

Shed 5N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.93 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 2.42 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20.8 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 33,899 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

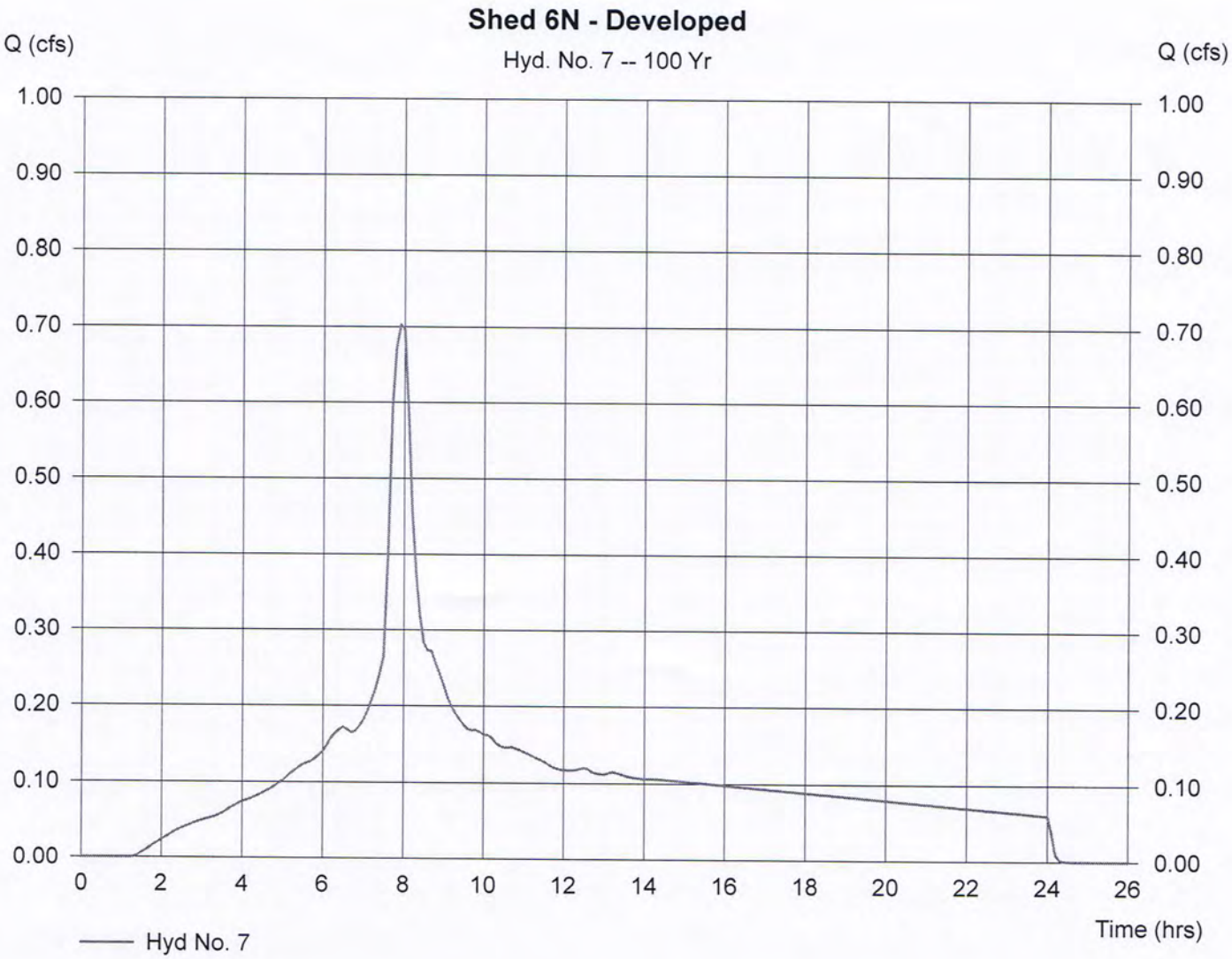
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 7

Shed 6N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.70 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 0.71 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 9,945 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 8

Shed 2M - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.40 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 3.25 ac	Curve number	= 89.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 16.4 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 39,584 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

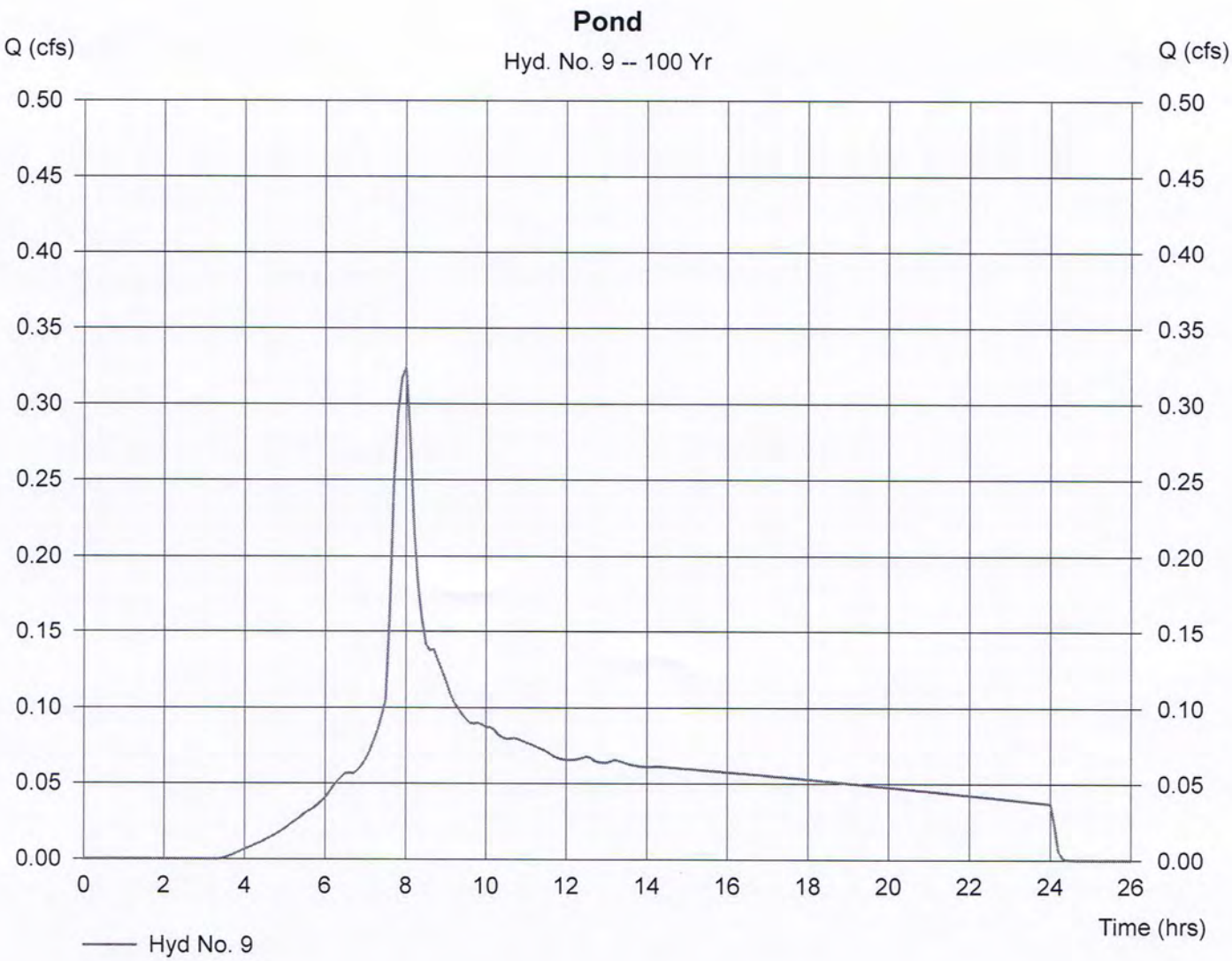
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 9

Pond

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.32 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 0.48 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 4,749 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

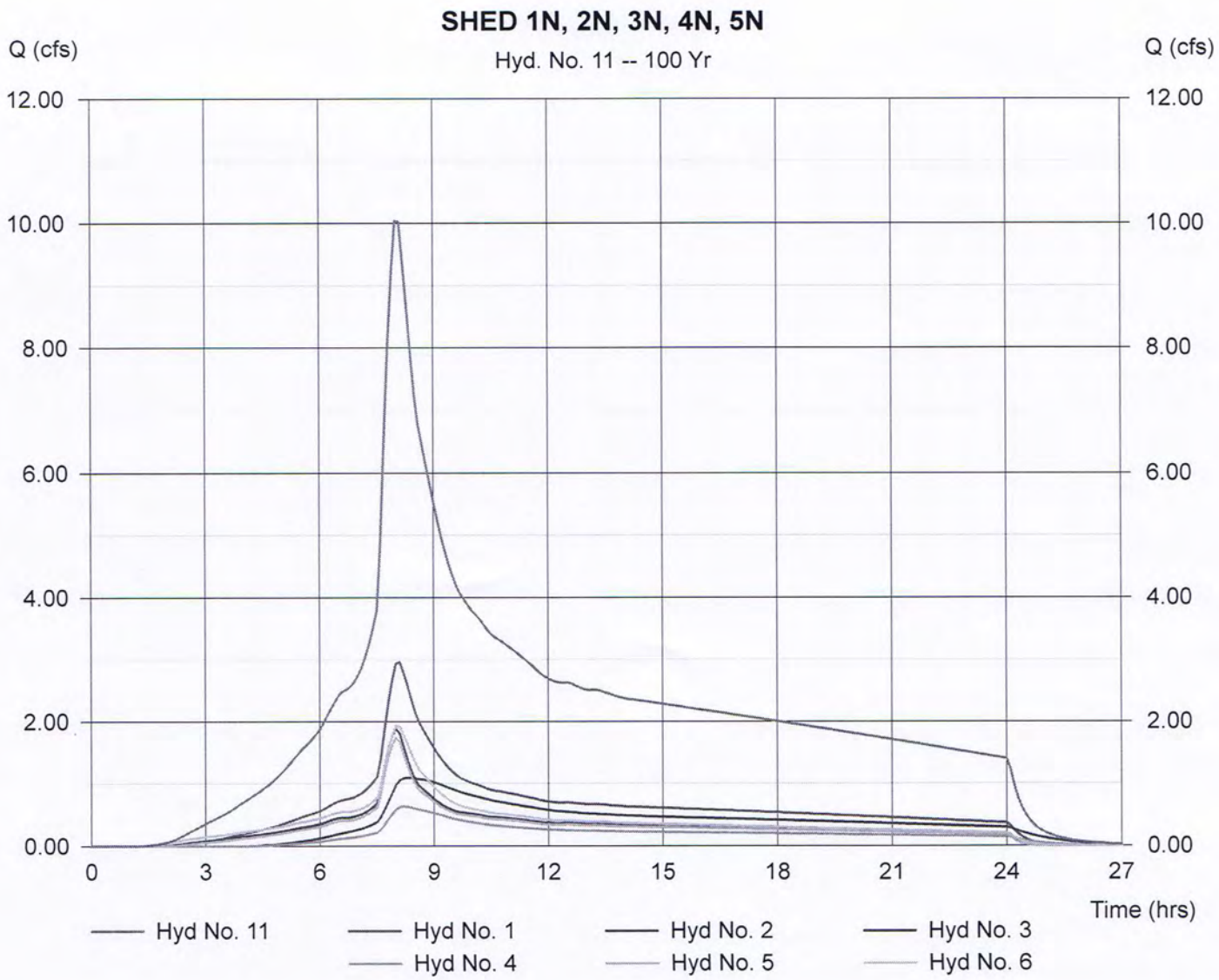
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 11

SHED 1N, 2N, 3N, 4N, 5N

Hydrograph type	= Combine	Peak discharge	= 10.04 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Inflow hyds.	= 1, 2, 3, 4, 5, 6		

Hydrograph Volume = 194,329 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

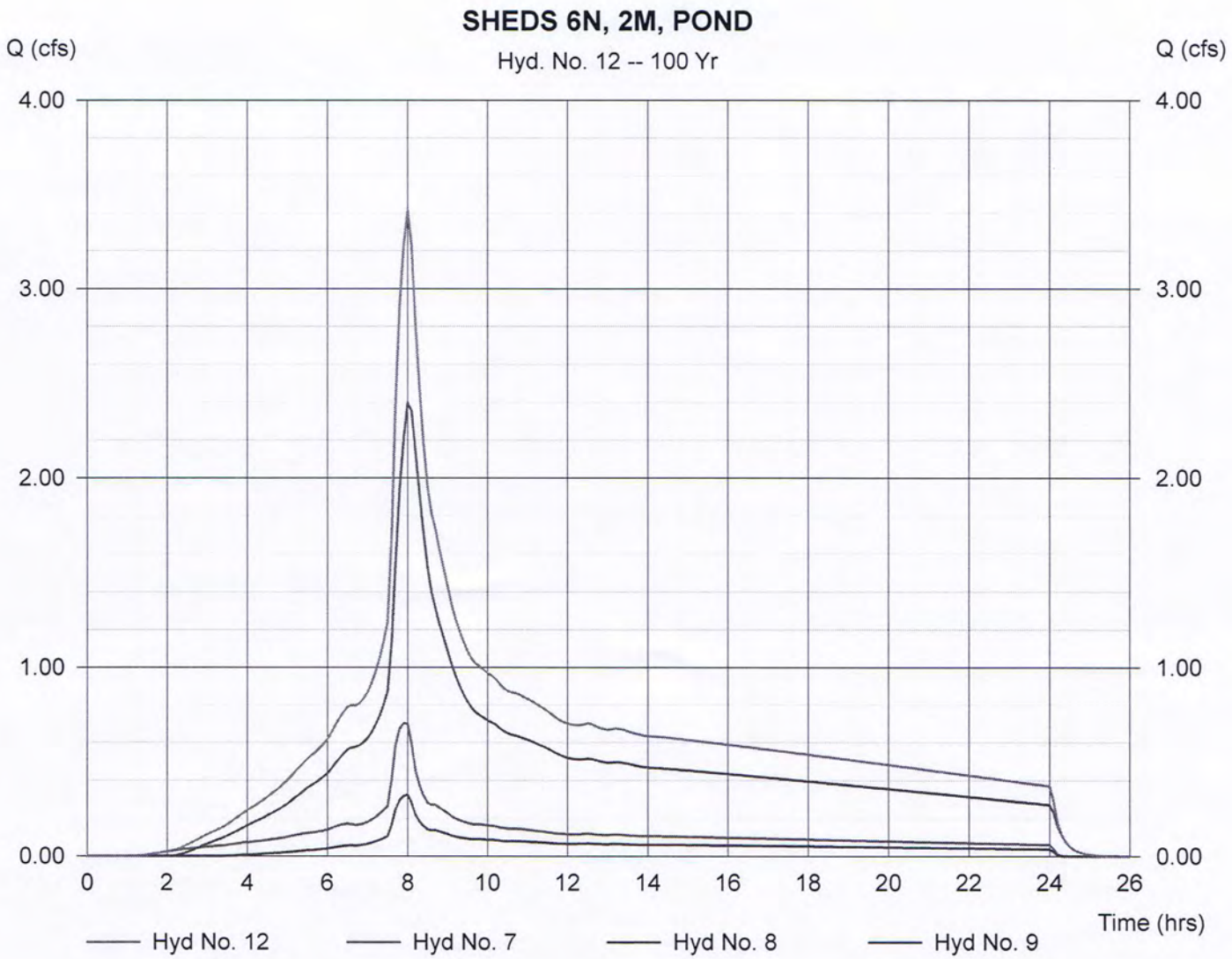
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 12

SHEDS 6N, 2M, POND

Hydrograph type	= Combine	Peak discharge	= 3.42 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Inflow hyds.	= 7, 8, 9		

Hydrograph Volume = 54,279 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

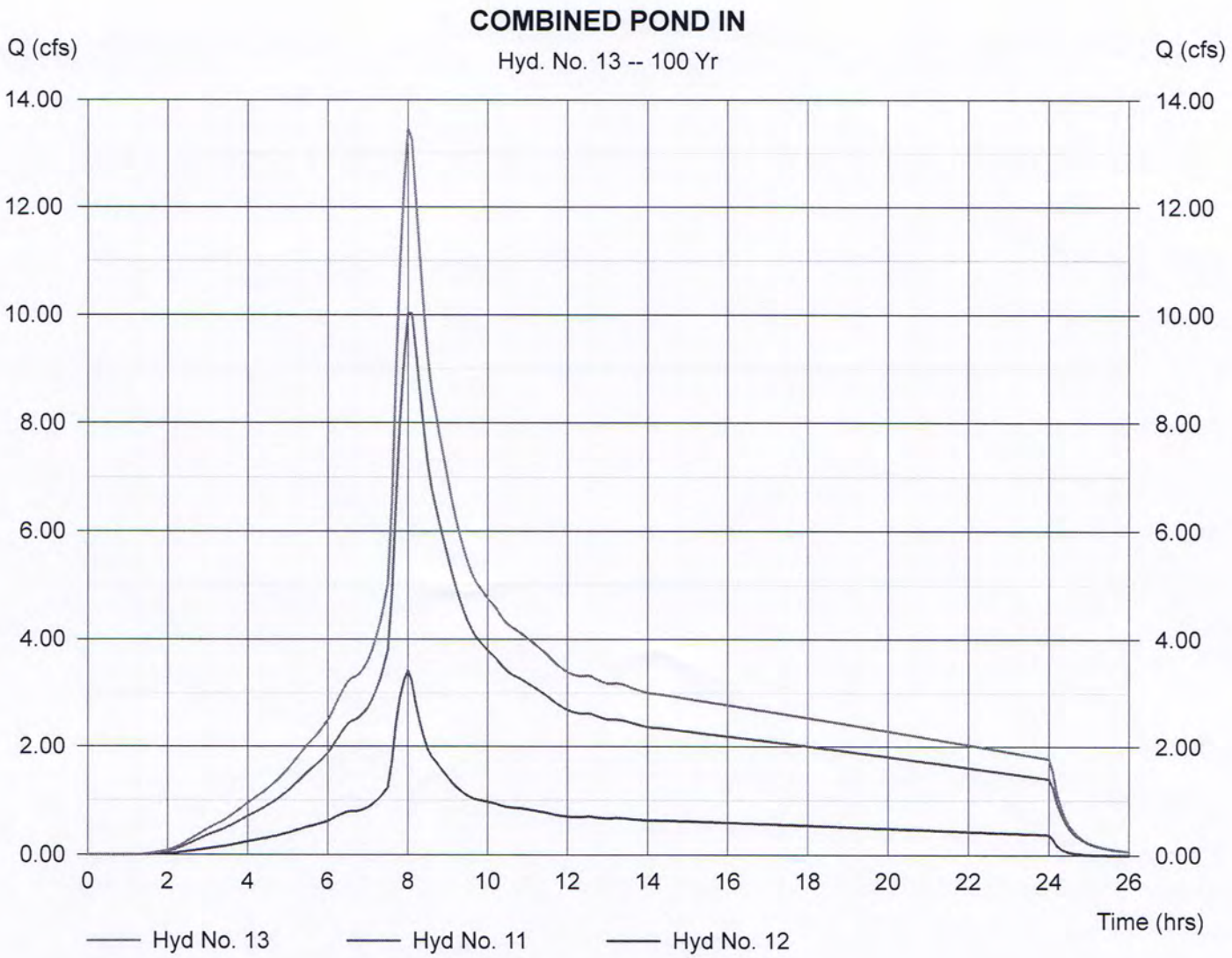
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 13

COMBINED POND IN

Hydrograph type	= Combine	Peak discharge	= 13.46 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Inflow hyds.	= 11, 12		

Hydrograph Volume = 248,608 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

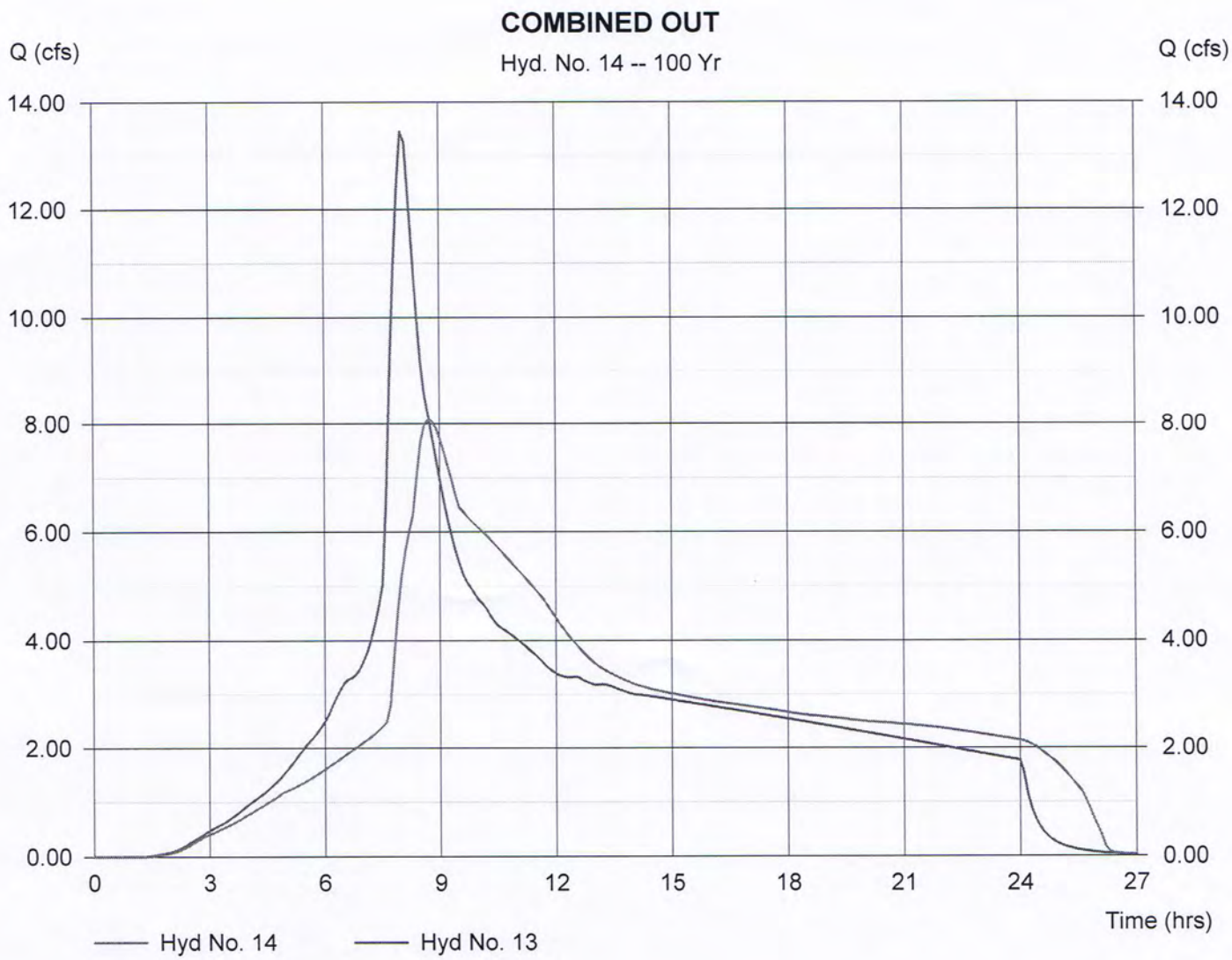
Hyd. No. 14

COMBINED OUT

Hydrograph type	= Reservoir	Peak discharge	= 8.07 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Inflow hyd. No.	= 13	Max. Elevation	= 220.07 ft
Reservoir name	= POND O	Max. Storage	= 32,917 cuft

Storage Indication method used.

Hydrograph Volume = 248,607 cuft



Pond Report

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Pond No. 3 - POND O

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	216.00	231	0	0
0.50	216.50	5,259	1,373	1,373
1.00	217.00	6,171	2,858	4,230
2.00	218.00	8,126	7,149	11,379
3.00	219.00	10,218	9,172	20,551
4.00	220.00	12,470	11,344	31,895
5.00	221.00	16,044	14,257	46,152

Culvert / Orifice Structures

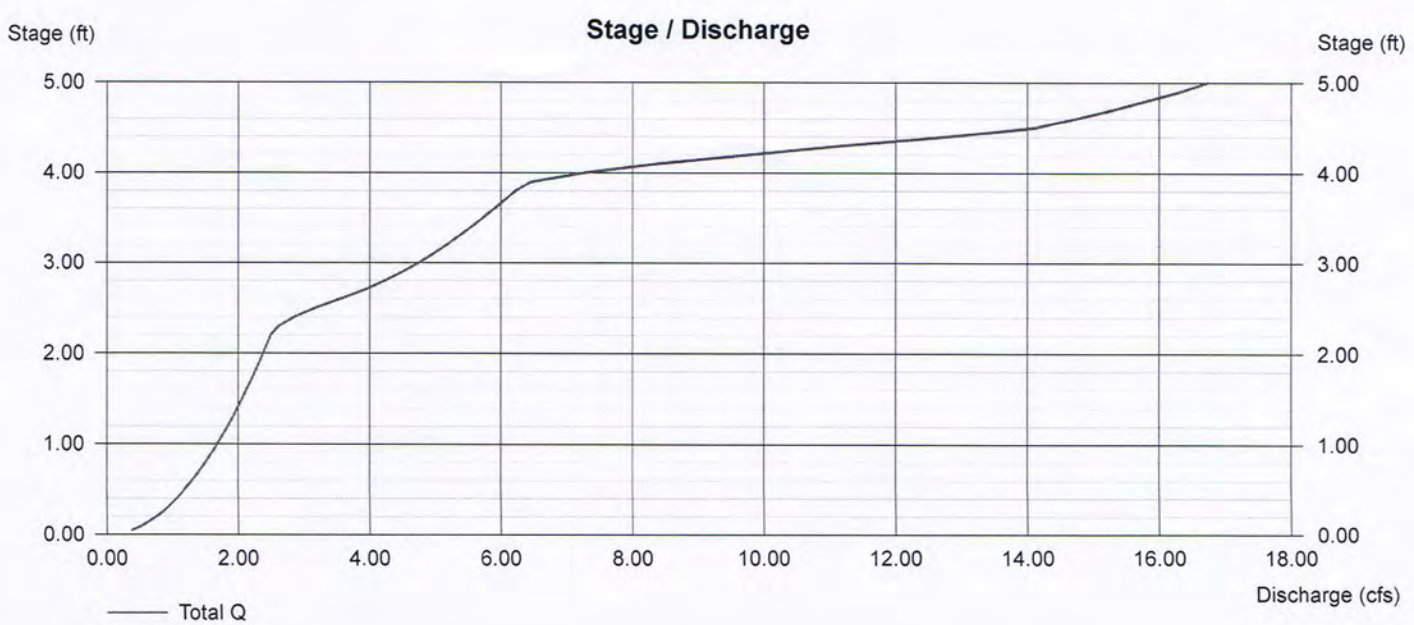
	[A]	[B]	[C]	[D]
Rise (in)	= 18.00	8.00	7.00	0.00
Span (in)	= 18.00	8.00	7.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 213.74	213.72	218.20	0.00
Length (ft)	= 72.00	0.00	0.00	0.00
Slope (%)	= 0.80	0.00	0.00	0.00
N-Value	= .013	.013	.013	.013
Orif. Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	0.00	0.00	0.00
Crest El. (ft)	= 219.87	0.00	0.00	0.00
Weir Coeff.	= 3.33	0.00	0.00	0.00
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration = 0.000 in/hr (Contour) Tailwater Elev. = 0.00 ft

Note: Culvert/Orifice outflows have been analyzed under inlet and outlet control. Weir riser checked for orifice conditions.



APPENDIX D

WATER QUALITY SWALE CALCULATIONS
SOUTH SWALE
(SHED BASIN 2MD)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

REFERENCES:

1. City of Wilsonville Public Works Standards - 2006 Edition

REQUIRED WATER QUALITY TREATMENT: 70% Total Suspended Solids (TSS) Removal

PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins		15%
2. Bio-Filtration Swale		55%
	total	70%

DESIGN STORM:

Precipitation:	0.36	inches
Storm Duration:	4	hours
Storm Return Period:	96	hours
Storm Window:	2	weeks

IMPERVIOUS AREA:

Watershed Area:	3.35 acres
Percent imp:	55%
Impervious Area:	1.83 acres

Design Inflow = (1.83 ac)*(43560 ft^2/ac)*(0.36 in / 4.0 hrs) = **0.17 cfs**

BIOFILTRATION SWALE DESIGN CRITERIA:

Max Velocity:	0.9	ft/s
Side Slopes:	4	:1 (treatment area)
Base:	2	feet (2' min)
n Factor:	0.24	(plantings)

SWALE CHARACTERISTICS:

Q=	0.17	Design Storm Discharge (determined above)
N=	0.24	Plantings
B=	2 ft	Base width of channel
Z=	4	:1 Side slopes
SLOPE=	0.005 ft/ft	Slope of channel (0.005 minimum)
ASS. Y=	0.5 ft	Assumed depth to begin analysis (0.5 ft maximum)

ITERATIVE SOLUTION OF MANNING'S EQUATION FOR NORMAL DEPTH:

ITERATION	Y (FT)	P (FT)	A(FT^2)	R	Q (CFS)	% ERROR	V (FPS)
1	0.50	6.12	2.00	0.33	0.42	144.95	0.21
2	0.28	4.27	0.85	0.20	0.13	-24.69	0.15
3	0.33	4.74	1.11	0.23	0.18	8.37	0.17
4	0.32	4.60	1.03	0.22	0.17	-2.33	0.16
5	0.32	4.64	1.05	0.23	0.17	0.69	0.16
6	0.32	4.63	1.04	0.23	0.17	-0.20	0.16
7	0.32	4.63	1.05	0.23	0.17	0.06	0.16
8	0.32	4.63	1.04	0.23	0.17	-0.02	0.16
9	0.32	4.63	1.04	0.23	0.17	0.00	0.16
10	0.32	4.63	1.04	0.23	0.17	0.00	0.16
11	0.32	4.63	1.04	0.23	0.17	0.00	0.16
12	0.32	4.63	1.04	0.23	0.17	0.00	0.16
13	0.32	4.63	1.04	0.23	0.17	0.00	0.16
14	0.32	4.63	1.04	0.23	0.17	0.00	0.16
15	0.32	4.63	1.04	0.23	0.17	0.00	0.16

NORMAL DEPTH =	0.32 ft
FLOW WIDTH =	4.55 ft
VELOCITY =	0.16 ft/s
TREATMENT TIME =	9.00 min
TREATMENT LENGTH =	**87.86 ft**

WATER QUALITY SWALE CALCULATIONS
NORTH SWALE
(SHED BASINS 1ND-6ND)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

REFERENCES:

1. City of Wilsonville Public Works Standards - 2006 Edition

REQUIRED WATER QUALITY TREATMENT: 70% Total Suspended Solids (TSS) Removal

PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins		15%
2. Bio-Filtration Swale		55%
	total	70%

DESIGN STORM:

Precipitation:	0.36	inches
Storm Duration:	4	hours
Storm Return Period:	96	hours
Storm Window:	2	weeks

IMPERVIOUS AREA:

Watershed Area:	17.67 acres
Percent imp:	44%
Impervious Area:	7.70 acres

Design Inflow = (7.698 ac)*(43560 ft^2/ac)*(0.36 in / 4.0 hrs) = **0.70 cfs**

BIOFILTRATION SWALE DESIGN CRITERIA:

Max Velocity:	0.9	ft/s
Side Slopes:	4	:1 (treatment area)
Base:	5	feet (2' min)
n Factor:	0.24	(plantings)

SWALE CHARACTERISTICS:

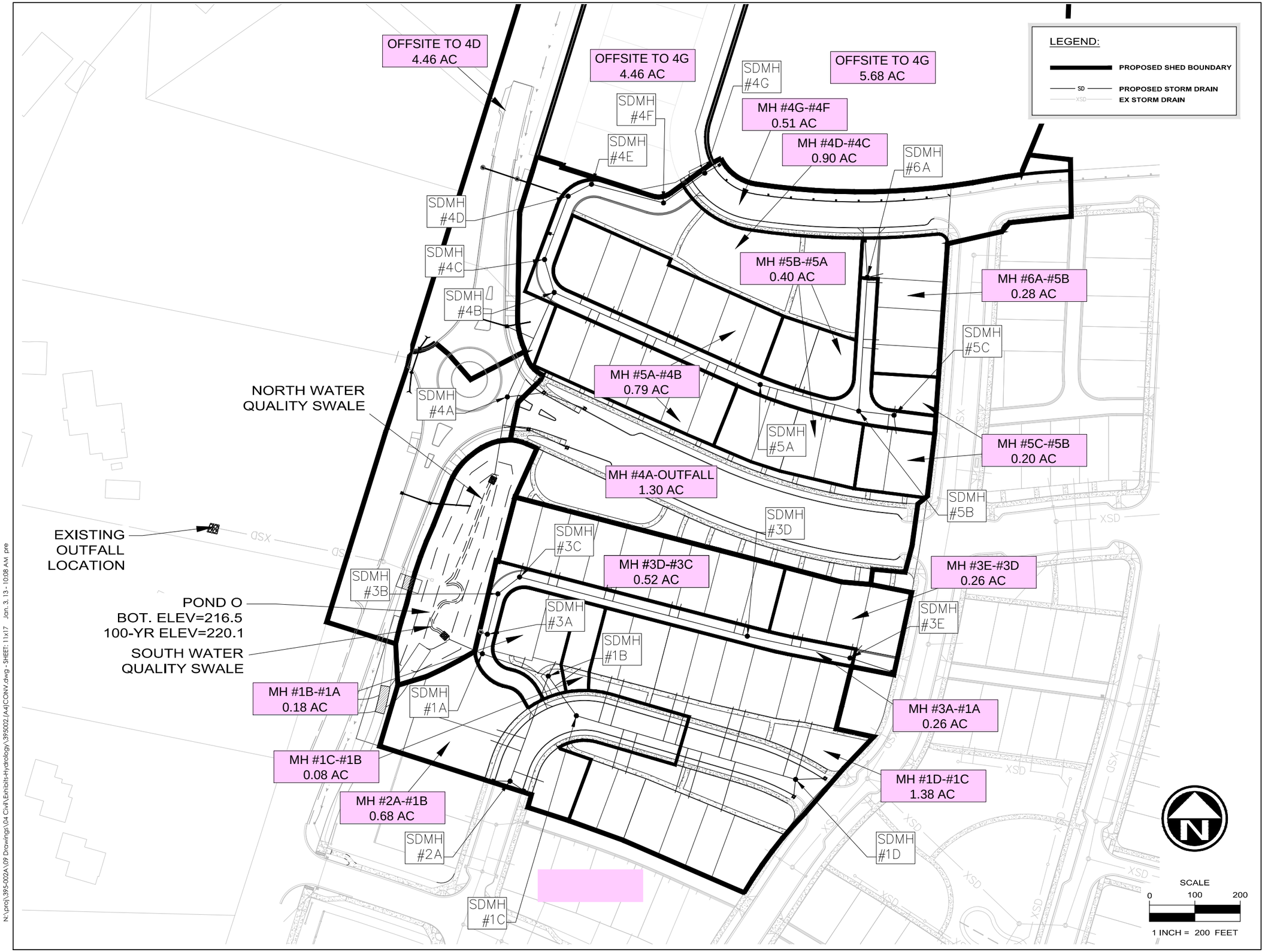
Q=	0.70	Design Storm Discharge (determined above)
N=	0.24	Plantings
B=	5 ft	Base width of channel
Z=	4 :1	Side slopes
SLOPE=	0.005 ft/ft	Slope of channel (0.005 minimum)
ASS. Y=	0.5 ft	Assumed depth to begin analysis (0.5 ft maximum)

ITERATIVE SOLUTION OF MANNING'S EQUATION FOR NORMAL DEPTH:

ITERATION	Y (FT)	P (FT)	A(FT^2)	R	Q (CFS)	% ERROR	V (FPS)
1	0.50	9.12	3.50	0.38	0.81	15.89	0.23
2	0.45	8.74	3.09	0.35	0.68	-3.22	0.22
3	0.46	8.82	3.17	0.36	0.71	0.72	0.22
4	0.46	8.80	3.15	0.36	0.70	-0.16	0.22
5	0.46	8.81	3.16	0.36	0.70	0.03	0.22
6	0.46	8.80	3.16	0.36	0.70	-0.01	0.22
7	0.46	8.80	3.16	0.36	0.70	0.00	0.22
8	0.46	8.80	3.16	0.36	0.70	0.00	0.22
9	0.46	8.80	3.16	0.36	0.70	0.00	0.22
10	0.46	8.80	3.16	0.36	0.70	0.00	0.22
11	0.46	8.80	3.16	0.36	0.70	0.00	0.22
12	0.46	8.80	3.16	0.36	0.70	0.00	0.22
13	0.46	8.80	3.16	0.36	0.70	0.00	0.22
14	0.46	8.80	3.16	0.36	0.70	0.00	0.22
15	0.46	8.80	3.16	0.36	0.70	0.00	0.22

NORMAL DEPTH =	0.46 ft
FLOW WIDTH =	8.69 ft
VELOCITY =	0.22 ft/s
TREATMENT TIME =	9.00 min
TREATMENT LENGTH =	**119.68 ft**

APPENDIX E



N:\proj\395-002A\09 Drawings\04 Civil\Exhibits-Hydrology\395002 (A4)CGNV.dwg - SHEET: 11x17 Jan. 3, 13 - 10:08 AM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

TONQUIN WOODS No. 3

Villebois
PDP 1N - Phase 2
Hydrology

Proposed
Conveyance Map

DATE: 12/26/2012

E1

STORMWATER CONVEYANCE CALCULATIONS
EXHIBIT E2

JOB: 395-002
PROJECT: VILLEBOIS PDP 1N-II
FILE: N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.CONV.2012-12-26.XLS

Design Storm: 25 YR
Storm Duration: 24 HRS
Precipitation: 4 IN
Manning's "n" 0.013

STORM CONVEYANCE - STORM LINES 5 & 6 (ALLEY 8 & 9)

LINE	INC. AREA (AC)	AREA TOTAL (AC)	% IMP.	AREA PERV. (AC)	TOTAL AREA PERV. (AC)	CN PER.	AREA IMP. (AC)	TOTAL AREA IMP. (AC)	CN IMP.	TIME (MIN)	Q (CFS)	PIPE SIZE (IN)	SLOPE (FT/FT)	Qf (CFS)	Q/Qf (%)	Vf (FPS)	V/Vf (%)	ACTUAL V (FPS)	LENGTH (FT)	INC. TIME (MIN)
6A - 5B	0.02	0.02	80	0.00	0.00	80	0.02	0.02	98	10.00	0.02	12	0.0187	4.89	0.00	6.22	0.20	1.27	147.74	1.95
	0.26	0.28	60	0.10	0.11	80	0.16	0.17	98	10.00	0.21	12	0.0187	4.89	0.04	6.22	0.24	1.52	147.74	1.62
5C - 5B	0.20	0.20	60	0.08	0.08	80	0.12	0.12	98	10.00	0.15	12	0.0060	2.77	0.05	3.52	0.25	0.90	39.17	0.73
5B - 5A[1]	0.40	0.88	60	0.16	0.35	80	0.24	0.53	98	11.62	0.65	12	0.0060	2.77	0.24	3.52	0.44	1.53	112.38	1.22
5A - 4B	0.79	1.67	60	0.32	0.66	80	0.47	1.01	98	12.35	1.22	12	0.0255	5.70	0.21	7.26	0.41	3.01	248.65	1.38

[1] Pipe segment includes flow from line ' 6'

STORM CONVEYANCE - STORM LINE 4 (ALLEY 8 TO NORTH OUTFALL)

OFFSITE TO 4G (SAP NORTH) - SHED AREAS 2ND, 4ND-N	4.46	4.46	63	1.65	1.65	80	2.81	2.81	98	10.00	3.43	18	0.0050	7.45	0.46	4.21	0.66	3.00	560.00	3.11
OFFSITE TO 4G (OPEN SPACES) - SHED AREAS 3ND, 4ND-S	5.68	5.68	0	5.68	5.68	80	0.00	0.00	98	62.88	1.36	18	0.0050	7.45	0.18	4.21	0.38	3.00	0.00	0.00
4G - 4F	0.51	10.65	80	0.10	7.43	80	0.41	3.22	98	13.11	6.27	18	0.0050	7.45	0.84	4.21	1.04	4.39	56.02	0.21
4F - 4E	0.00	10.65	60	0.00	7.43	80	0.00	3.22	98	13.32	6.25	18	0.0060	8.16	0.77	4.62	0.97	4.46	81.98	0.31
4E - 4D	0.00	10.65	60	0.00	7.43	80	0.00	3.22	98	13.63	6.22	18	0.0060	8.16	0.76	4.62	0.96	4.44	28.93	0.11
OFFSITE TO 4D (GRAHAMS FERRY ROAD) - SHED AREA 5ND	2.42	2.42	80	0.48	0.48	80	1.94	1.94	98	20.83	1.73	12	0.0050	2.53	0.69	3.22	0.89	3.00	59.26	0.33
4D - 4C	0.50	13.57	10	0.45	8.37	80	0.05	5.20	98	21.16	7.40	21	0.0040	10.05	0.74	4.18	0.94	3.91	74.46	0.32
	0.40	13.97	80	0.08	8.45	80	0.32	5.52	98	21.16	7.69	21	0.0040	10.05	0.76	4.18	0.96	4.03	74.46	0.31
4C - 4B	0.00	13.97	60	0.00	8.45	80	0.00	5.52	98	21.47	7.65	24	0.0030	12.42	0.62	3.95	0.82	3.23	37.83	0.20
4B - 4A[2]	0.00	15.64	60	0.00	9.11	80	0.00	6.53	98	21.66	8.67	24	0.0030	12.42	0.70	3.95	0.90	3.55	126.14	0.59
4A - OUTFALL (NORTH SWALE)	0.50	16.14	10	0.45	9.56	80	0.05	6.58	98	22.25	8.81	24	0.0030	12.42	0.71	3.95	0.91	3.59	89.20	0.41
	0.80	**16.94**	**80**	**0.16**	**9.72**	**80**	**0.64**	**7.22**	**98**	**22.25**	**9.37**	**24**	**0.0030**	**12.42**	**0.75**	**3.95**	**0.95**	**3.77**	**89.20**	**0.39**

[2] Pipe segment includes flow from line ' 5'

STORM CONVEYANCE - STORM LINE 3 (ALLEY 7)

3E - 3D	0.03	0.03	80	0.01	0.01	80	0.02	0.02	98	10.00	0.03	12	0.0090	3.39	0.01	4.31	0.21	0.90	115.71	2.15
	0.23	0.26	60	0.09	0.10	80	0.14	0.16	98	10.00	0.20	12	0.0090	3.39	0.06	4.31	0.26	1.12	115.71	1.73
3D - 3C	0.52	0.78	60	0.21	0.31	80	0.31	0.47	98	11.73	0.58	12	0.0104	3.64	0.16	4.64	0.36	1.66	259.26	2.60
3C - 3B	0.00	0.78	60	0.00	0.31	80	0.00	0.47	98	14.33	0.55	12	0.0176	4.74	0.12	6.03	0.32	1.91	30.24	0.26
3B - 3A	0.00	0.78	60	0.00	0.31	80	0.00	0.47	98	14.59	0.55	12	0.0177	4.75	0.12	6.05	0.32	1.91	46.01	0.40
3A - 1A	0.26	1.04	80	0.05	0.36	80	0.21	0.68	98	14.59	0.76	12	0.0180	4.79	0.16	6.10	0.36	2.18	22.24	0.17

STORM CONVEYANCE - STORM LINE 2 (SAN REMO)

2A - 1B	0.30	0.30	80	0.06	0.06	80	0.24	0.24	98	10.00	0.25	12	0.0050	2.53	0.10	3.22	0.30	0.97	123.27	2.12
	0.38	0.68	60	0.15	0.21	80	0.23	0.47	98	10.00	0.54	12	0.0050	2.53	0.21	3.22	0.41	1.33	123.27	1.54

STORM CONVEYANCE - STORM LINE 1 (SAN REMO TO SOUTH OUTFALL)

1D - 1C	0.20	0.20	80	0.04	0.04	80	0.16	0.16	98	10.00	0.17	12	0.0058	2.72	0.06	3.46	0.26	0.91	251.53	4.61
	0.83	1.03	60	0.33	0.37	80	0.50	0.66	98	10.00	0.80	12	0.0058	2.72	0.29	3.46	0.49	1.71	251.53	2.45
	0.35	1.38	10	0.32	0.69	80	0.04	0.69	98	10.00	0.98	12	0.0058	2.72	0.36	3.46	0.56	1.94	251.53	2.16
1C - 1B	0.08	1.46	60	0.03	0.72	80	0.05	0.74	98	12.16	1.01	12	0.0050	2.53	0.40	3.22	0.60	1.93	53.54	0.46
1B - 1A[3]	0.18	2.32	60	0.07	1.00	80	0.11	1.32	98	12.62	1.65	12	0.0050	2.53	0.65	3.22	0.85	2.75	76.64	0.47
1A - SOUTH OUTFALL[4]	**0.00**	**3.36**	**60**	**0.00**	**1.36**	**80**	**0.00**	**2.00**	**98**	**14.76**	**2.35**	**18**	**0.0050**	**7.45**	**0.32**	**4.21**	**0.52**	**2.17**	**42.29**	**0.32**

[3] Pipe segment includes flow from line ' 2'

[4] Pipe segment includes flow from line ' 3'

TONQUIN MEADOWS
VILLEBOIS PDP 3E

WATER QUALITY ANALYSIS
COFFEE LAKE CREEK BASIN

JOB #395-007

DATE: 8/23/12
BY: PATRICK ESPINOSA

Prepared By:
Pacific Community Design, Inc.
13500 SW Pacific Highway, PMB #519
Tigard, OR 97223
Tele: 503-941-9484

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Methodology 4
Water Quality 4
Conclusion 5

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Exhibit A2: Developed Shed Map
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Appendix B: Shed Area Calculations
Figure B1-B6: Percent Impervious

Appendix C: Water Quality Facility Sizing Calculations
Figures C1-C2: Water Quality Dry Pond Calculations

INTRODUCTION

This report represents the analysis done for a portion of the Villebois development known as Tonquin Meadows (PDP 3E), located within the Coffee Lake Creek Basin. The intent of this report is to demonstrate that the proposed water quality facilities comply with City of Wilsonville "Public Works Standards". It delineates areas and sizes for on-site water quality facilities. All calculations and supporting figures are included with this document.

This report will identify the Runoff rates for the water quality storm event that produces 0.36 inches of rainfall in a 4-hr period as part of the Villebois Rainwater Management Program.

SITE DESCRIPTION AND LOCATION

The proposed Villebois development is located on tax lots 100, 102, 180, and 192 of Clackamas County Tax Map 3S1W15. The proposal is to develop a residential on property located east SW 110th Avenue and south of SW Beockman Road. The total area of the development site is 30.8 acres.

This portion of the Villebois development drains east to the Coffee Lake Basin.
During the construction of the Dammasch State Hospital, the area identified as Shed A1 on Exhibit B1 was re-routed to Mill Creek. This study corrects this basin transfer and returns flows to the Coffee Lake Creek basin.

The Coffee Lake Creek Basin is primarily cultivated open space with a scattering of houses and barns that make up approximately 0.5% impervious area within the site. The site, which slopes to the east at an average gradient of 3.5% falls within hydrologic groups A, B, and C per the Soil Survey Map for Clackamas County (Figure A3). The existing topography for the project site is shown in Appendix A.

METHODOLOGY

The site was first divided into drainage sheds as shown on the Existing Shed map and the Developed Shed Map (Figures A1 & A2). The locations of these divisions were based on the existing and proposed drainage patterns. The percentage of impervious area for each shed area was then calculated based on the approved land use. The following Table summarizes the impervious area information from Figures B1 through B6:

Shed	Area (acres)	Percent Impervious
P-2.3C	2.26	63%
P-2.6S	3.60	64%
P-2.3E	15.38	60%
P-2.4E	15.44	53%
P-1	4.51	0%
Q-1	3.13	0%
Q-2C	29.68	36%
Q-2E	10.14	63%

WATER QUANTITY:

The City of Wilsonville Master Stormwater Plan currently does not require any detention within this portion of the Coffee Lake Basin.

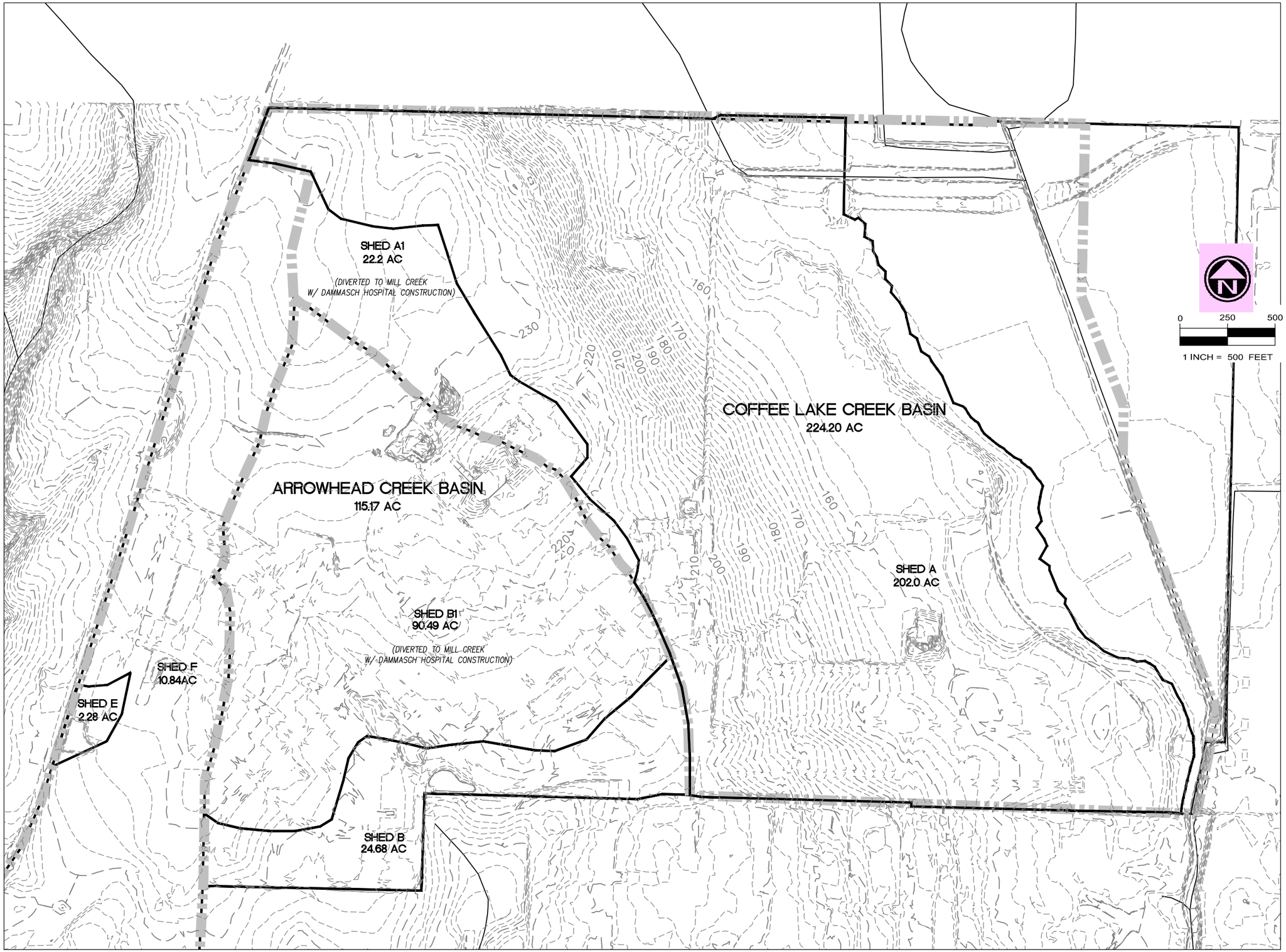
WATER QUALITY:

The City of Wilsonville requires that 65% removal of phosphorous be provided for stormwater runoff if any new impervious surfaces are created during site development. A permanent water quality facility must be constructed or funded to reduce contaminants that enter the storm and surface water system. Impervious surfaces shall include pavement, gravel roads, buildings, public and private roadways, and other surfaces that contribute runoff to the surface water system. Water quality requirements for Tonquin Meadows will be addressed with pollution control manholes and water quality dry ponds located at each of two located at the east side of the site. These dry ponds will be sized to temporarily retain the runoff from the water quality storm event of 0.36-inches over a 4-hour period. An energy dissipation device will be constructed at the outfall to prevent erosive velocities entering the facilities and to distribute the runoff across the width of the pond. A flow spreader will be constructed at the east edge of the facilities to allow larger storm events to drain to the Coffee Lake wetlands as overland sheet flow. Additionally, these dry ponds will contain a thicker media section and additional plantings to provide rainwater management during storm events smaller than the water quality storm event. See Appendix C for water quality dry pond sizing calculations and phosphorus removal calculations.

CONCLUSION:

Water quality facilities for Tonquin Meadows are consistent with the design requirements of the City of Wilsonville. The dry pond system has been designed to reduce post-development phosphorous levels by 65 percent for the portions of SAP North, SAP Central, and SAP East construction within the Coffee Lake Basin, which will maintain an acceptable level of water quality as the site discharges to the Coffee Lake Creek outlet.

APPENDIX A



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

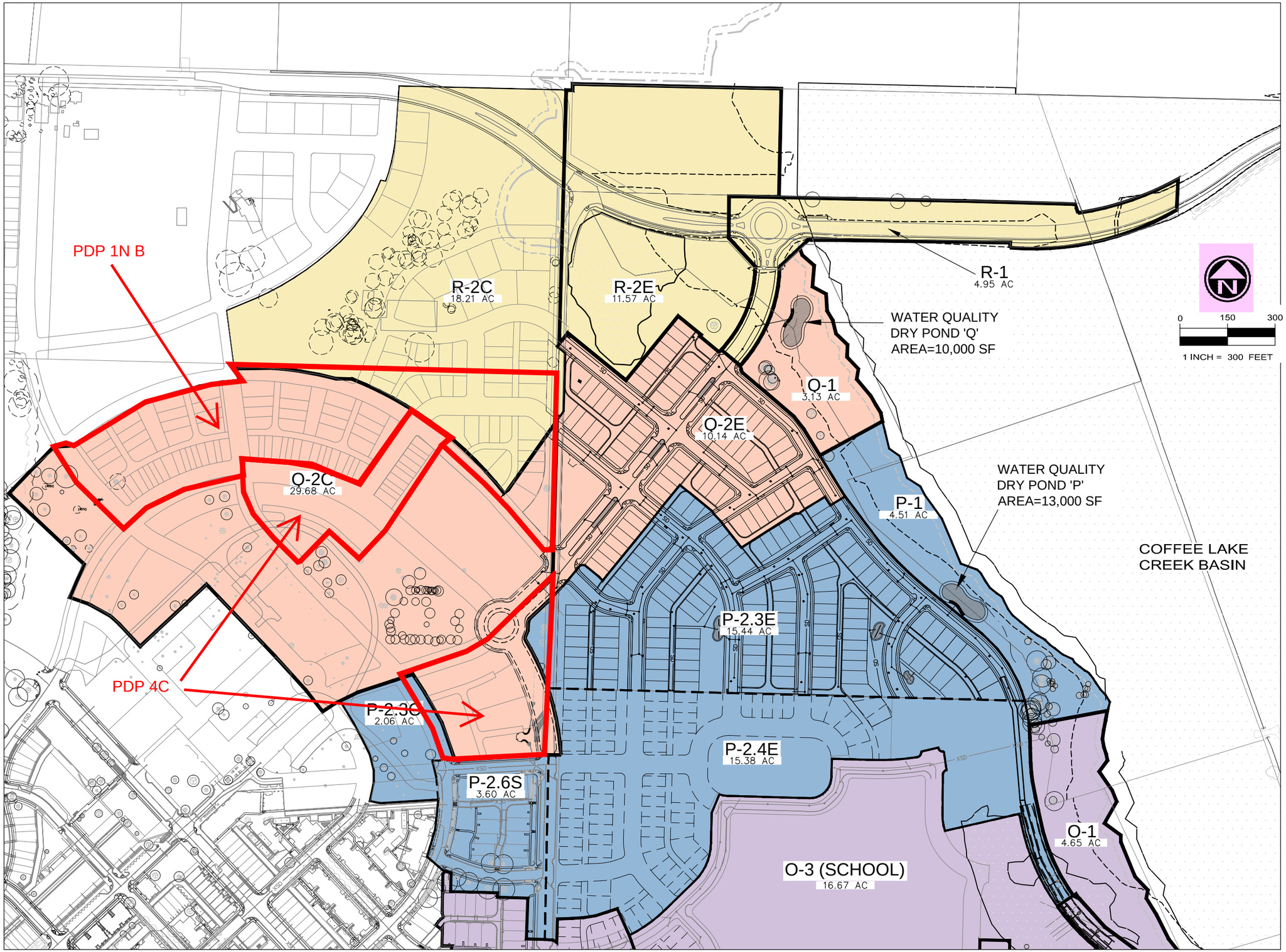
TONQUIN MEADOWS

Villebois
Phase 3 East
Hydrology

Pre-Developed Drainage Map

DATE: 8/24/2012

A1



N:\proj\395-007\09 Drawings\03 Planning\Exhibits-Hydrology\395007.Developed Shed Map.DWG - SHEET: DVLP Aug. 23, 12 - 3:48 PM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

TONQUIN MEADOWS

Villebois
Phase 3 East
Hydrology

Developed Drainage Map

DATE: 8/24/2012

A2

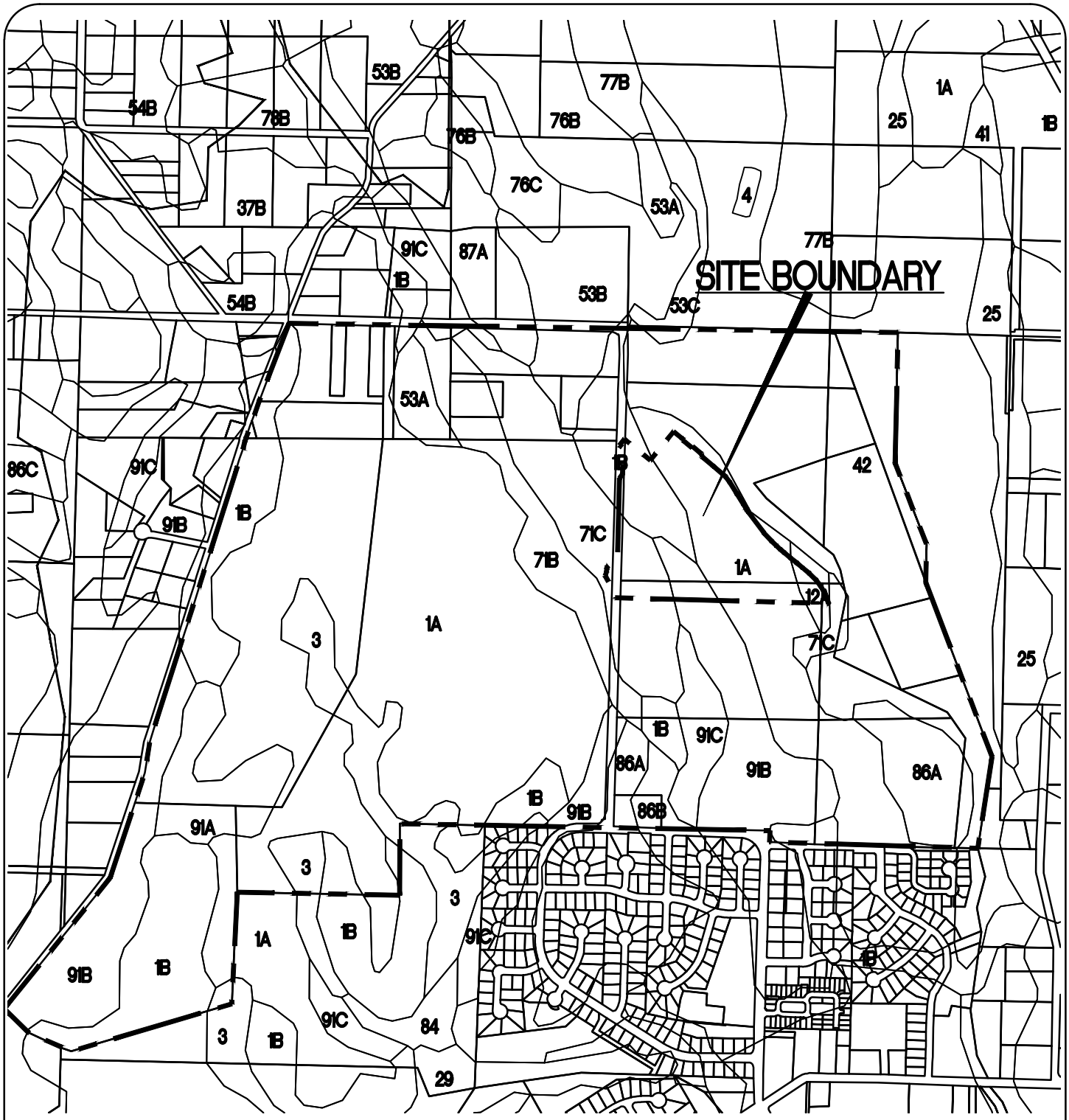


FIGURE A3: SOIL SURVEY MAP

DRAWN BY: PRE DATE: 8/23/12
REVIEWED BY: PRE DATE: 8/23/12
PROJECT NO.: 395-007
SCALE: N/A

Pacific Community Design
[T] 503-941-9484 [F] 503-941-9485

N:\proj\395-007\09 Drawings\03 Planning\Exhibits-Hydrology\395007.SOIL.dwg - SHEET: 8x11 Aug. 23, 12 - 4:10 PM pre

APPENDIX B

PERCENT IMPERVIOUS
SHEDP-2.3C (SAP CENTRAL)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	2.26	acres	98,446	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	36,068
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	26,136
Total	62,204
% Impervious =	63%

FIGURE B1

PERCENT IMPERVIOUS
SHED P-2.6S (PDP 6 SOUTH)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	3.60	acres	156,816	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	39,727
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	61,332
Total	101,059
% Impervious =	64%

FIGURE B2

PERCENT IMPERVIOUS
SHED P-2.3E
(PDP 3 EAST)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	15.44	acres	672,566	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	188,441
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	217,800
Total	406,241
% Impervious =	60%

FIGURE B3

PERCENT IMPERVIOUS
SHED P-2.4E
(PDP 4 EAST)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	15.38	acres	669,953	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	148,714
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	205,255
Total	353,969
% Impervious =	53%

FIGURE B4

PERCENT IMPERVIOUS
SHED Q-2C
(SAP CENTRAL & SAP NORTH)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	29.68	acres	1,292,861	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	101,930
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	365,904
Total	467,834
% Impervious =	36%

FIGURE B5

PERCENT IMPERVIOUS
SHED Q-2E
(PDP 3 EAST)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	10.14	acres	441,698	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	105,851
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	172,149
Total	278,000
% Impervious =	63%

FIGURE B6

APPENDIX C

WATER QUALITY DRY POND 'P' CALCULATIONS
(SAP CENTRAL, PDP 6S, PDP 3E & 4E)
FIGURE C1

JOB NUMBER: 395-007
PROJECT: TONQUIN MEADOWS
FILE: N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

REFERENCES:
1. City of Wilsonville Public Works Standards 2006

REQUIRED WATER QUALITY TREATMENT: 65% Phosphorus Removal.

PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins		15%
2. Extended Dry Pond		50%
	total	65%

DESIGN STORM:

Precipitation:	0.36	inches
Storm Duration:	4	hours
Storm Return Period:	96	hours
Storm Window:	2	weeks

IMPERVIOUS AREA: SAP CENTRAL, PDP 6S, PDP 3E & 4E (SHED AREAS P-2.3C, P-2.6S, P-2.3E, P-2.4E)

Watershed Area:	36.68	acres
Percent imp:	57.8%	
Impervious Area:	21.20	acres

Water Quality Volume = (21.2 ac)*(43560 ft^2/ac)*(0.36 in / 12 in/ft) = **27,704 cf**

DRY POND DESIGN CRITERIA:

Min Depth:	0.4	ft
Side Slopes:	4	:1 (treatment area)

DRY POND CHARACTERISTICS:

WQV=	27,704		Design Storm Volume (determined above)
Facility Area(A)=	13,200	sq. ft.	
depth (d)=	2.1	ft	Depth of Dry Pond
Z=	4	:1	Side slopes
SLOPE=	0.005	ft/ft	Slope of pond bottom (0.005 minimum)

WATER QUALITY DRY POND 'P' CALCULATIONS
(SAP CENTRAL, SAP NORTH, PDP 3E)
FIGURE C2

JOB NUMBER: 395-007
PROJECT: TONQUIN MEADOWS
FILE: N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

REFERENCES:
1. City of Wilsonville Public Works Standards 2006

REQUIRED WATER QUALITY TREATMENT: 65% Phosphorus Removal.

PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins		15%
2. Extended Dry Pond		50%
	total	65%

DESIGN STORM:

Precipitation:	0.36	inches
Storm Duration:	4	hours
Storm Return Period:	96	hours
Storm Window:	2	weeks

IMPERVIOUS AREA: SAP CENTRAL, SAP NORTH, PDP 3E (SHED AREAS Q-2C & Q-2E)

Watershed Area:	39.82	acres
Percent imp:	43.0%	
Impervious Area:	17.12	acres

Water Quality Volume = (17.122 ac)*(43560 ft^2/ac)*(0.36 in / 12 in/ft) = **22,375 cf**

DRY POND DESIGN CRITERIA:

Min Depth:	0.4	ft
Side Slopes:	4	:1 (treatment area)

DRY POND CHARACTERISTICS:

WQV=	22,375		Design Storm Volume (determined above)
Facility Area(A)=	10,000	sq. ft.	
depth (d)=	2.2	ft	Depth of Dry Pond
Z=	4	:1	Side slopes
SLOPE=	0.005	ft/ft	Slope of pond bottom (0.005 minimum)

M E M O R A N D U M

DATE: April 11, 2013

TO: City of Wilsonville

FROM: Patrick Espinosa, PE
Pacific Community Design

RE: Villebois PDP 4C & 1B N
Sanitary Sewer Capacity
Job No. 395-008

This memorandum report is to address the available downstream sanitary sewer capacity and the anticipated discharge locations for sanitary sewer flow from PDP 4C of Villebois SAP North and PDP 1B N. Both phases are located north of PDP 6S and west of SW 110th Ave and will discharge to the Tooze main. A small portion of PDP 1B N is located north of Tonquin Woods No. 3 and east of Grahams Ferry Road and will discharge south to the Barber Main. These sewer mains will then discharge to the Kinsman main via the connection installed in 2007 and the sewer extension installed in 2011.

The Sewer Capacity Analysis report, dated February 28, 2006, for the Villebois Master Plan was completed by Alpha Community Development. The boundaries for the proposed phases are included in, and are consistent with, the Sanitary Sewer Master Plan. PDP 4C and PDP 1B N is located within Area 5 as shown in the Sanitary Sewer Master Plan; see attached Figure B. The small portion draining to the Barber Main is located with Area 3A.

Phase 1B N consists of 28.91 acres with 90 single-family homes while Phase 4C consists of 6.83 acres with 57 single-family homes.

The development within both phases is made up of open spaces, roadways, and single-family residential lots. The attached spreadsheet provides the calculations for the total peak flow from each phase, which is as follows:

1. Phase 1N B (Area 3A) – 7.73 gpm
2. Phase 1N B (Area 5) - 42.24 gpm
3. Phase 4C (Area 5) – 29.09 gpm

The unit flow factors, determined by HDR Engineering during the Wilsonville Wastewater Collection System Master Plan Update, are as follows:

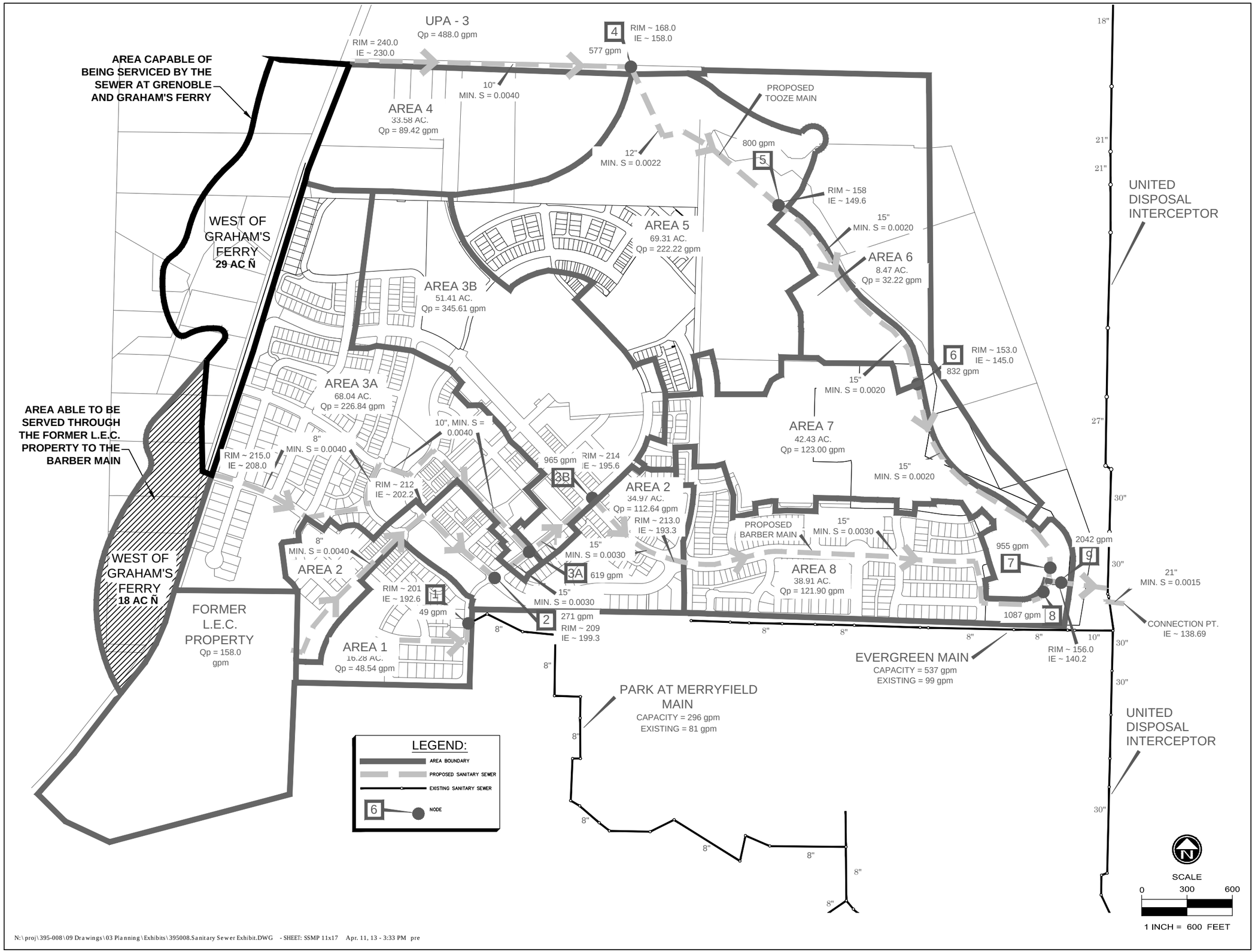
	Unit Flow Factors
Residential	213 gal/day/unit
Infiltration (I/T)	800 gal/day/acre
Peaking Factor	3

The proposed phase is located near the middle of the Tooze main sanitary sewer collection system and therefore, based on the calculated peak flows, the sanitary sewer lines within this phase are proposed to be eight inches. The Tooze main, as illustrated in the Sewer Capacity Analysis Report, has been designed as a 15-inch trunk line to provide the necessary capacity for this phase.

Thank you.

Attachments *(from the* Villebois *Village Sewer Capacity Analysis* Report)

1. Figure B — Sanitary Sewer Master Plan, Dated August 23, 2012, Prepared by Pacific Community Design
2. Sanitary Conveyance Calculations, Prepared by Pacific Community Design



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

VILLEBOIS

Villebois
Phase 4 Central
&
Phase 1 B North
Preliminary
Sewer Plan

Sanitary Sewer
United Disposal

DATE: 4/11/2013

SS1

JOB: 395-008

PROJECT: Villebois SAP North PDP 1 B & SAP Central PDP 4

FILE: N:/PROJ/395-008/05 Reports/Sanitary Sewer/3950082.Sanitary Conveyance.2013-04-11.xls

SAP NORTH PDP 1N B - SANITARY PEAK FLOW CALCULATIONS

AREA 3A

UNIT FLOW FACTORS

Residential:	213	gal/day/unit
Commercial:	1500	gal/day/acre
Infiltration (I/I):	800	gal/day/acre
Peaking Factor:	3, or Fig. 3-11	

Residential (R): 10 units

Qr = R x 213 gal/day/unit = 2,130 gal/day

Qr = 1.48 gal/min

Commercial (C): 0 acres

Qc = C x 1500 gal/day/acre = 0.00 gal/day

Qc = 0.00 gal/min

Developed Flow (Qf):

Qf = Qr + Qc = 1.48 gal/min 2130 gal/day

0.00213 MGD

Peak Flow (Qp):

Peaking Factor = -0.284ln(Q)+2.33

3.00

Qp = Qf x Peak F = 4.44 gal/min

Total Area (A): 5.93 acres

Qi = A x 800 gal/day/acre = 4,744 gal/day

Qi = 3.29 gal/min

Qt = Qp + Qi = 7.73 gal/min

AREA 5

UNIT FLOW FACTORS

Residential:	213	gal/day/unit
Commercial:	1500	gal/day/acre
Infiltration (I/I):	800	gal/day/acre
Peaking Factor:	3, or Fig. 3-11	

Residential (R): 80 units

Qr = R x 213 gal/day/unit = 17,040 gal/day

Qr = 11.83 gal/min

Commercial (C): 0 acres

Qc = C x 1500 gal/day/acre = 0.00 gal/day

Qc = 0.00 gal/min

Developed Flow (Qf):

Qf = Qr + Qc = 11.83 gal/min 17040 gal/day
0.01704 MGD

Peak Flow (Qp):

Peaking Factor = -0.284ln(Q)+2.33
3.00

Qp = Qf x Peak F = 35.50 gal/min

Total Area (A): 12.13 acres

Qi = A x 800 gal/day/acre = 9,704 gal/day

Qi = 6.74 gal/min

Qt = Qp + Qi = 42.24 gal/min

SAP CENTRAL PDP 4C - SANITARY PEAK FLOW CALCULATIONS

AREA 5

UNIT FLOW FACTORS

Residential:	213	gal/day/unit
Commercial:	1500	gal/day/acre
Infiltration (I/I):	800	gal/day/acre
Peaking Factor:	3, or Fig. 3-11	

Residential (R): 57 units

Qr = R x 213 gal/day/unit = 12,141 gal/day

Qr = 8.43 gal/min

Commercial (C): 0 acres

Qc = C x 1500 gal/day/acre = 0.00 gal/day

Qc = 0.00 gal/min

Developed Flow (Qf):

Qf = Qr + Qc = 8.43 gal/min 12141 gal/day
0.01214 MGD

Peak Flow (Qp):

Peaking Factor = -0.284ln(Q)+2.33
3.00

Qp = Qf x Peak F = 25.29 gal/min

Total Area (A): 6.83 acres

Qi = A x 800 gal/day/acre = 5,464 gal/day

Qi = 3.79 gal/min

Qt = Qp + Qi = 29.09 gal/min

VILLEBOIS PDP 1N B & PDP 4C

RAINWATER MANAGEMENT PLAN
FOR COFFEE LAKE CREEK BASIN

BY: Patrick Espinosa
DATE: 4/11/2013

Prepared By:
Pacific Community Design, Inc.
13500 SW Pacific Highway, PMB #519
Tigard, OR 97223
Tele: 503-941-9484

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I. INTRODUCTION

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III. PROCEDURE

IV. CONCLUSION

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FIGURE A: RAINWATER MANAGEMENT PLAN

VI. APPENDIX B: IMPERVIOUS AREA CALCULATIONS

VII. APPENDIX C: RAINWATER MANAGEMENT CALCULATIONS

I: INTRODUCTION

The purpose of this Rainwater Management Plan is to demonstrate how the Rainwater Management Program will be applied to the Villebois PDP 1N B & 4C developments. The Rainwater Management Program is a valuable and significant component of sustainability for Villebois. It is important with each phase of development to continue to search for and create opportunities for rainwater management for the benefit of the community of Villebois and its neighbors.

II: PROPOSED SYSTEM

The rainwater management system described in this report is a compilation of several of the components from the Rainwater Management Program approved with SAP Central and SAP North. In an effort to provide diversity, there are 3 types of components utilized including bio-retention cells, vegetated swales, and street trees.

This report reflects those components that are envisioned for the PDP 1N B & 4C development. While conceptual only, these components are intended to be implemented in concert with parks planning and infrastructure to provide a benefit to the watershed, and be complimentary to park and open space uses.

III: PROCEDURE

The PDP 1N B & 4C will create new impervious areas. The Water Quality Analysis Report for Tonquin Meadows, August 23, 2012, quantified the anticipated impervious area created for future land uses of SAP Central, and SAP North. The Villebois Master Plan was used as a guide to determine future development patterns including street infrastructure and land use. These area calculations are copied into this report and included in Appendix B.

The second step was to determine the total area of proposed Rainwater Management Components. The total area for each component type was tabulated, and then divided by its sizing factor to determine the amount of impervious area mitigated. In order to determine the percent of created impervious area mitigated with rainwater components, this area was divided by the total impervious area for the entire basin.

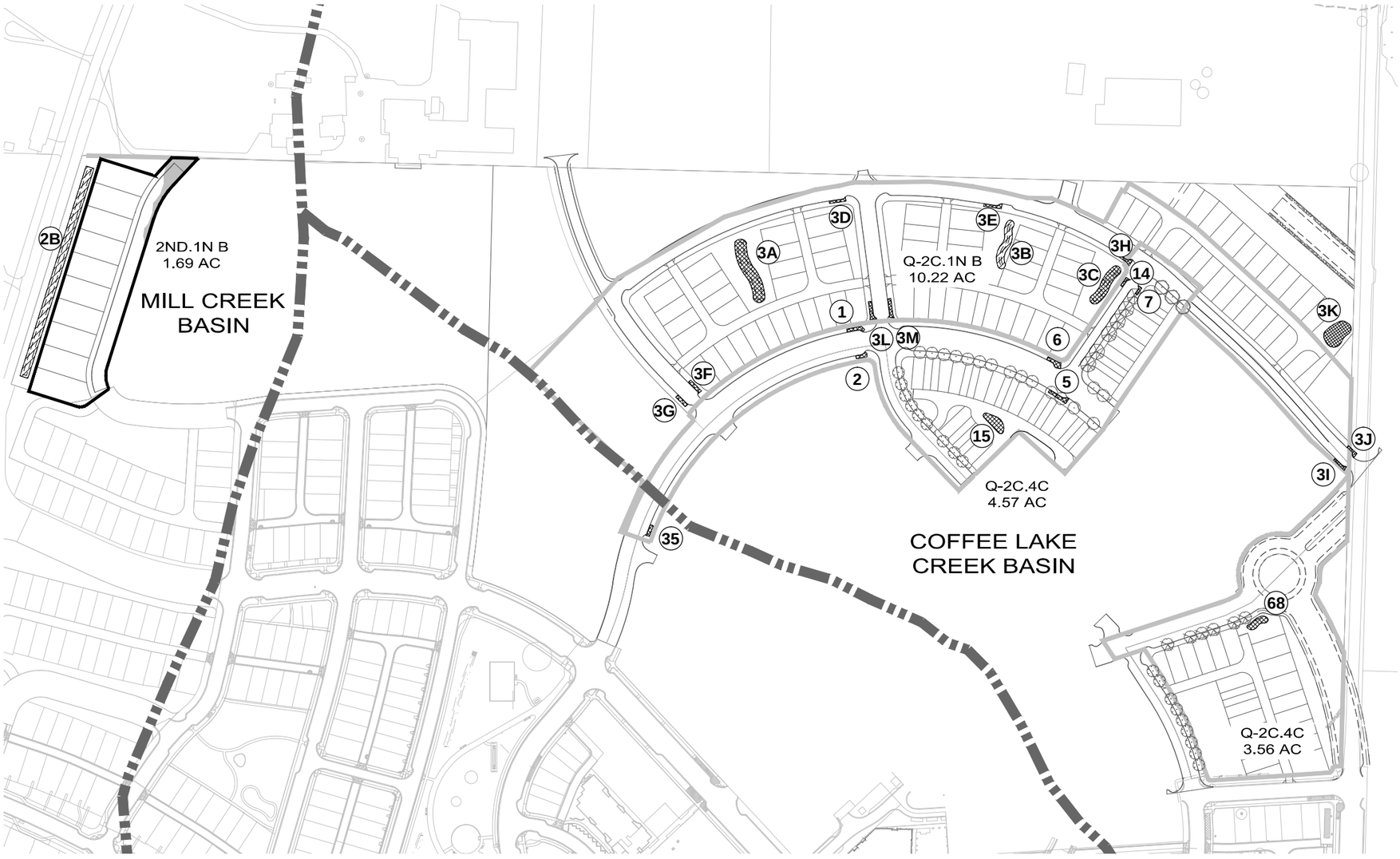
IV: CONCLUSION

The Rainwater Management Plan for PDP 1N B, as presented with this report, will achieve 72% mitigation of created impervious area. PDP 4C will achieve 55% mitigation of created impervious area.

With the current rainwater management facilities and those planned for future development SAP North will achieve 71% mitigation, while SAP Central will achieve 72%.

Additional opportunities exist within the Coffee Lake Creek Basin to provide rainwater management. Developers and builders are encouraged to continue efforts to exceed this plan and should drive to achieve the maximum mitigation practicable.

APPENDIX A: MAP FIGURES



LEGEND:

- SD — PROPOSED STORM DRAIN
- RAINWATER BIO-RETENTION CELL
- RAINWATER SWALE
- PROPOSED STREET TREE

N

SCALE

0 125 250

1 INCH = 250 FEET

N:\proj\395-008\09 Drawings\03 Planning\Exhibits-Hydrology\395008.Rainwater Map.DWG - SHEET: RAIN Apr. 12, 13 - 12:00 PM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

VILLEBOIS

Villebois
Phase 4 Central
&
Phase 1 B North
Hydrology

Rainwater Management Map

DATE: 4/11/2013

A1

APPENDIX B: IMPERVIOUS AREA CALCULATION

PERCENT IMPERVIOUS
SHED Q-2C.1N B (PDP 1N B)
PDP LAYOUT

JOB NUMBER:	395-008
PROJECT:	VILLEBOIS PDP 1N B & 4C
FILE:	N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

Total Site Area	10.22	acres	445,183	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	106,130
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	116,287
Total	222,418
% Impervious =	50%

FIGURE B1

PERCENT IMPERVIOUS
SHED C-2C.4C (PDP 4C)
PDP LAYOUT

JOB NUMBER:	395-008
PROJECT:	VILLEBOIS PDP 1N B & 4C
FILE:	N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

Total Site Area	8.13	acres	354,143	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	47,366
Single Family Lot Impervious Area (60%)	27,274
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	176,721
Total	251,361
% Impervious =	71%

FIGURE B2

PERCENT IMPERVIOUS
SHED 2ND (PDP 1N B)
PDP LAYOUT

JOB NUMBER:	395-008
PROJECT:	VILLEBOIS PDP 1N B & 4C
FILE:	N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

Total Site Area	1.69	acres	73,616	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	30,831
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	17,785
Total	48,616
% Impervious =	66%

FIGURE B3

APPENDIX C: RAINWATER MANAGEMENT CALCULATIONS

Pacific Community Design

JOB NUMBER: 395-008
PROJECT: VILLEBOIS PDP 1N B & 4C
FILE: N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

EXHIBIT C:
RAINWATER COMPLIANCE SUMMARY - SAP NORTH

PHASE	DRAINAGE BASIN	BASIN ID	AREA (SF)	% IMPERVIOUS	IMPERVIOUS AREA (SF)	RAINWATER COMPONENT NO.	RAINWATER COMPONENT TYPE	RAINWATER COMPONENT AREA/ NO. OF TREES	SIZING FACTOR	IMPERVIOUS AREA TREATED			% IMPERVIOUS AREA TREATED
										ARROWHEAD CREEK	MILL CREEK	COFFEE LAKE CREEK	
1	ARROWHEAD CREEK	E1-5A	445,183	50%	222,418	-	-	-	-	257,924	-	-	-
							TREES	164	0.01	16,400			
						2	VEGETATED SWALE[1]	7,818	0.06	26,447			
						3	VEGETATED SWALE[1]	9,533	0.06	121,077			
						4	BIORETENTION CELL	2,820	0.03	94,000			
2	MILL CREEK	2MD	354,143	71%	251,361	-	-	-	-	-	8,950	-	-
							TREES	18	0.01		1,800		
						1A	VEGETATED SWALE	429	0.06		7,150		
2	MILL CREEK	1ND	73,616	66%	48,616	-	-	-	-	-	38,288	-	-
							TREES	29	0.01		2,900		
						1	VEGETATED SWALE[1]	4,414	0.06		14,821		
						2E	VEGETATED SWALE	1,234	0.06		20,567		
1 B	MILL CREEK	2ND	73,616	66%	48,616	-	-	-	-	-	32,431	-	-
							TREES	16	0.01		1,600		
						2B	VEGETATED SWALE	1,850	0.06		30,831		
1 B	MILL CREEK	Q-2C.1N B	445,183	50%	222,418	-	-	-	-	-	-	162,678	-
							TREES	106	0.01			10,600	
						3A	BIORETENTION CELL	375	0.03			12,516	
						3B	VEGETATED SWALE	1,018	0.06			16,962	
						3C	BIORETENTION CELL	900	0.03			30,000	
						3D	BIORETENTION CELL	228	0.03			7,600	
						3E	BIORETENTION CELL	210	0.03			7,000	
						3F	BIORETENTION CELL	110	0.03			3,667	
						3G	BIORETENTION CELL	110	0.03			3,667	
						3H	BIORETENTION CELL	240	0.03			8,000	
						3I	BIORETENTION CELL	200	0.03			6,667	
						3J	BIORETENTION CELL	200	0.03			6,667	
						3K	BIORETENTION CELL	1,200	0.03			40,000	
						3L	BIORETENTION CELL	140	0.03			4,667	
						3M	BIORETENTION CELL	140	0.03			4,667	
TOTAL PHASE 1-PHASE 1			445,183		222,418					257,924			**116%**
TOTAL PHASE 1-PHASE 2			427,759		299,976						47,238		**16%**
TOTAL PHASE 1 B			518,800		271,033						32,431	162,678	**72%**
FUTURE SAP NORTH PHASES[2]			2,482,283		821,383					0	47,547	595,684	**78%**
SAP NORTH TOTAL			3,874,025		1,614,810					257,924	127,216	758,362	**71%**

[1]COMPONENT IMPERVIOUS AREA TREATED REFLECTS ACTUAL COMPONENT CATCHMENT AREA AND MAY NOT REFLECT SIZING FACTOR

[2]FUTURE SAP NORTH PHASE TOTALS PER APPROVED SAP NORTH AND PDP 1N RAINWATER MANAGEMENT PLAN

JOB NUMBER: 395-008

PROJECT: VILLEBOIS PDP 1N B & 4C

FILE : N:/PROJ/395-008/05-REPORTS/RAINWATERMANAGEMENT/395002.PRAIN.20130411.XLS

EXHIBIT C:

RAINWATER COMPLIANCE SUMMARY - SAP CENTRAL

PHASE	DRAINAGE BASIN	BASIN ID	AREA (SF)	% IMPERVIOUS	IMPERVIOUS AREA (SF)	RAINWATER COMPONENT NO.	RAINWATER COMPONENT TYPE	RAINWATER COMPONENT AREA / NO. OF TREES	SIZING FACTOR	IMPERVIOUS AREA TREATED			% IMPERVIOUS AREA TREATED
										ARROWHEAD CREEK	MILL CREEK	COFFEE LAKE CREEK	
4C	COFFEE LAKE CREEK	Q-2C.4C	354,143	71%	251,361	-	-	-	-	-	-	137867	-
							TREES	52	0.01			5200	
						1	BIO-RETENTION CELL	240	0.03			8000	
						2	BIO-RETENTION CELL	240	0.03			8000	
						3C[3]	BIORETENTION CELL	900	0.03			30,000	
						5	BIO-RETENTION CELL	495	0.03			16500	
						6	BIO-RETENTION CELL	495	0.03			16500	
						7	BIO-RETENTION CELL	120	0.03			4000	
						14	BIO-RETENTION CELL	120	0.03			4000	
						15	BIO-RETENTION CELL	590	0.03			19667	
						35	BIO-RETENTION CELL	180	0.03			6000	
						68	BIO-RETENTION CELL	600	0.03			20000	
TOTAL PDP 1C			717,433		556,610					369,104			**66%**
TOTAL PDP 2C			230,432		189,922					90,499			**48%**
TOTAL PIAZZA VILLEBOIS			38,768		38,768					26,042			**67%**
TOTAL PHASE 4C			354,143		251,361							137,867	**55%**
FUTURE SAP CENTRAL PHASES[2]			1,035,442		770,207					0	47,547	626,045	**87%**
SAP CENTRAL TOTAL			2,336,123		1,806,868					485,645	47,547	763,912	**72%**

[1]COMPONENT IMPERVIOUS AREA TREATED REFLECTS ACTUAL COMPONENT CATCHMENT AREA AND MAY NOT REFLECT SIZING FACTOR

[2]FUTURE SAP CENTRAL PHASE TOTALS PER APPROVED SAP CENTRAL RAINWATER MANAGEMENT PLAN

[3]DENOTES A FACILITY THAT PROVIDES MITIGATION FOR BOTH SAP NORTH AND SAP CENTRAL AREAS

DKS

117 Commercial Street NE
Suite 310
Salem, OR 97301
503.391.8773
www.dksassociates.com

MEMORANDUM

REGISTERED PROFESSIONAL ENGINEER
56267
OREGON
July 9, 2002
SCOTT M. MANSUR
EXPIRES: 12/31/2014

DATE: May 17, 2012

TO: Steve Adams, P.E., City of Wilsonville

FROM: Scott Mansur, P.E., PTOE
Brad Coy, P.E.
Derek Moore, E.I.T

SUBJECT: **Villebois SAP Central 4C Transportation Review** P13003-007

This memorandum evaluates trip generation for the updated Villebois Specific Area Plan (SAP) Central with emphasis on Planned Development Phase (PDP) 4C. The review is based on a revised site plan provided by the project sponsor.[1] Since the Master Plan approval of SAP Central, the land use within this SAP has been modified, and residential units associated with PDP 1C and PDP 2C have already been approved and constructed.

The following sections of this memorandum document the SAP Central land use and trip generation (general area), PDP 4C trip generation (current phase), and the site plan impacts for PDP 4C.

SAP Central Land Use/Trip Generation

The *Villebois Master Plan* initially approved SAP Central for 9 single family units, 500 condo/townhouse units, and 501 apartments for a total of 1,010 residential units, along with 20,000 square feet of commercial space. As shown in Table 1, SAP Central was initially estimated to generate 616 (399 in, 217 out) p.m. peak hour trips.

Table 1: Initially Approved SAP Central Trip Generation (based on assumed ITE trip generation rate)

Land Use (ITE Code)	Size	Average Trip Generation Rate	Number of New Trips		
			In	Out	Total
Single Family Units (210)	9 units	1.01 trips/unit	6	3	9
Condo/Townhome (230)	500 units	0.52 trips/unit	174	86	260
Apartments (220)	501 units	0.62 trips/unit	202	109	311
Shopping Center (820)	20 KSF	3.75 trips/KSF	36	39	75
		Total Trips	**418**	**237**	**655**
		Internal Trips	*-8*	*-8*	*-16*
		Pass-By Trips	*-11*	*-12*	*-23*
		Net New Trips	**399**	**217**	**616**

[1] *Villebois Zion Site Map*, Polygon Northwest Company, March 19, 2013.

Currently, SAP Central is proposed to include 49 single family units, 459 condo/townhouse units, and 501 apartment units for a total of 1,009 residential units, along with 33,000 sq. ft. of commercial space. As shown in Table 2, the proposed land uses would generate 659 (421 in, 238 out) p.m. peak hour trips. This is 43 p.m. peak hour trips above what was initially approved for SAP Central.

Table 2: Proposed SAP Central Trip Generation

Land Use (ITE Code)	Size	Average Trip Generation Rate	Number of New Trips		
			In	Out	Total
Single Family Units (210)	49 units	1.01 trips/unit	31	18	49
Condo/Townhome (230)	459 units	0.52 trips/unit	160	79	239
Apartments (220)	501 units	0.62 trips/unit	202	109	311
Shopping Center (820)	33 KSF	3.75 trips/KSF	60	64	124
		Total Trips	**453**	**270**	**723**
		Internal Trips[a]	*-13*	*-13*	*-26*
		Pass-By Trips[b]	*-19*	*-19*	*-38*
		Net New Trips	**421**	**238**	**659**

[a] Internal trip rates based on percentage obtained from ITE's *Trip Generation Manual*, 9th Edition, 2012
[b] 34% of external shopping center trips

SAP Central PDP 4C Trip Generation

SAP Central is broken into approximately 13 Planned Development Phases (PDPs), with the current phase being PDP 4C (i.e. the 4th phase). Table 2 shows the estimated trip generation for PDP 4C based on the unit counts provided by the project sponsor. As shown, the 57 proposed residential units planned for PDP 4C would generate approximately 38 (25 in, 13 out) p.m. peak hour trips.

Table 3: PDP 4C P.M. Peak Hour Trip Generation

Land Use (ITE Code)	Number of Units	Average Trip Generation Rate	Number of New Trips		
			In	Out	Total
Single Family Units (210)	17	1.01 trips/unit	11	6	17
Condo/Townhome (230)	40	0.52 trips/unit	14	7	21
TOTAL	**57**	-	**25**	**13**	**38**

Site Plan Evaluation

DKS reviewed the current site plan provided by the project sponsor, and the site plan comments are summarized below. Corresponding callouts have been placed on the attached copy of the site plan.

A. **Bus Stops**- Bus stop locations have been previously identified along SW Costa Circle East at its intersection with SW Mont Blanc Lane.[2] The necessary transit facilities should be coordinated with SMART and constructed with the development.

B. **Pedestrian Links**- Pedestrian connections should be provided between alleys and roadways where alleys do not intersect with the local road network. City of Wilsonville guidelines recommend that the distance between pedestrian access points along a roadway not exceed 300 feet.

C. **Curb Extensions**- The current site plan shows curb extensions at numerous intersections. The applicant should submit AutoTurn templates to verify that emergency vehicles have adequate room to make turning maneuvers.

Summary

A summary of key findings relating to the SAP Central PDP 4C review include the following:

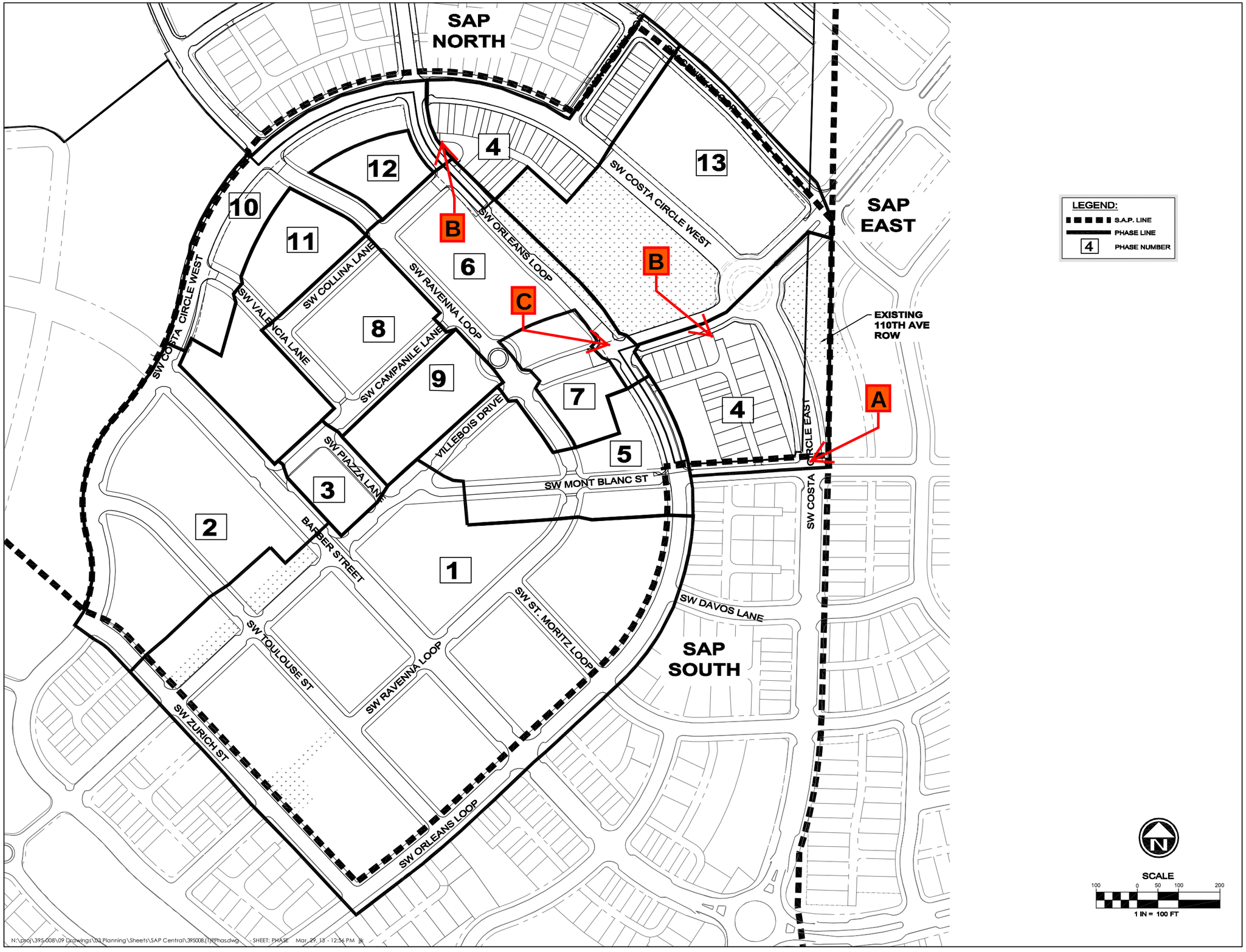
- The initial approval of SAP Central consisted of 9 single family units, 500 townhome/condo units, and 501 apartment units for a total of 1,010 residential units, along with 20,000 sq. ft. of commercial space. Based on assumed trip generation rates, these land uses were estimated to generate 616 (399 in, 217 out) p.m. peak hour trips.

- The currently proposed land use includes 49 single family units, 459 townhome/condo units, and 501 apartment units for a total of 1,009 residential units, along with 33,000 of commercial space. Based on these counts, it is estimated that SAP Central will generate 659 (421 in, 238 out) p.m. peak hour trips. This is 43 p.m. peak hour trips above what was initially approved for SAP Central.

- The proposed current phase for SAP Central (PDP 4C) consists of 17 single family detached units and 40 cottage/townhome units, which are expected to generate 38 (25 in, 13 out) p.m. peak hour trips.

Please let us know if you have any questions or comments.

[2] Villebois SAP Central Site Plan Review, DKS Associates, August 29, 2005



Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

SAP CENTRAL

Villebois Central Specific Area Plan

Phasing Plan Update

DATE 03/18/2013

1

Walter H. Knapp & Associates, LLC
Consultants in Arboriculture, Silviculture, and Forest Ecology

April 10, 2013

VILLEBOIS SAP CENTRAL – ZION
TREE MAINTENANCE AND PROTECTION PLAN

1315

Purpose

This Tree Maintenance and Protection Plan for Villebois SAP Central – Zion in Wilsonville, Oregon, is provided pursuant to the City of Wilsonville Development Code, Section 4.610.40. This report describes the existing trees located on the project site, as well as recommendations for tree removal, retention, protection, and mitigation.

General Description

The Zion Property in SAP Central at Villebois spans two small areas west of SW 110th Avenue. We visited the site on April 5, 2013 in order to verify existing tree inventory data and to evaluate trees in terms of potential construction impacts. A complete description of individual trees is provided in the enclosed tree inventory data.

Eleven trees are located within the project boundaries in SAP Central and are planned for removal for the purposes of construction, but also because of poor and hazardous condition. This includes seven fast-growing and short-lived black cottonwoods (*Populus trichocarpa*), one non-native, invasive sweet cherry (*Prunus avium*), and one dying Douglas-fir (*Pseudotsuga menziesii*). In addition, one Norway spruce (*Picea abies*) in fair condition and one red maple (*Acer rubrum*) in poor condition must be removed for street construction.

An additional six trees are located just beyond the project boundary, within the Village Center in SAP Central. Five of these neighboring trees may be retained with tree protection during construction, but the sixth tree is hazardous and recommended for removal with the proposed construction on the Zion property. The hazardous tree on adjacent property is a bigleaf maple (*Acer macrophyllum*) with codominant stems and included bark; this tree is already failing at the codominant juncture and has an open cavity with decay (photo 1, tree 572).

No Oregon white oak (*Quercus garryana*), native yews (*Taxus* spp.), or any species listed by either the state or federal government as rare or endangered were found on the site.

Table 1 provides a summary of the count of trees by species and treatment recommendation.

7615 SW Dunsmuir Lane, Beaverton, OR 97007
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Photo 1. Tree 572, hazardous bigleaf maple in the process of failing.

Table 1. Count of Trees by Species and Treatment Recommendation.

Common Name	Species Name	Remove	Retain	Total
Atlas cedar	*Cedrus atlantica*		2*	2 (12%)
bigleaf maple	*Acer macrophyllum*	1*		1 (6%)
black cottonwood	*Populus trichocarpa*	7		7 (41%)
Douglas-fir	*Pseudotsuga menziesii*	1		1 (6%)
Norway spruce	*Picea abies*	1		1 (6%)
pin oak	*Quercus palustris*		1*	1 (6%)
red maple	*Acer rubrum*	1	2*	3 (18%)
sweet cherry	*Prunus avium*	1		1 (6%)
Grand Total		**12** (71%)	**5** (29%)	**17 trees**

*identifies trees located off-site, on adjacent properties

Tree Plan Recommendations

All 11 of the inventoried trees located within the SAP Central Zion project boundaries are proposed for removal for development. One tree located on neighboring property is hazardous to the project site and removal is recommended at the time of construction because of condition. The five non-hazardous trees located on adjacent properties can be adequately protected with tree protection fencing established at the property boundary or as otherwise directed by the project arborist. The project arborist can monitor the adjacent trees during building and provide additional tree protection recommendations if necessary.

Mitigation Requirements

The 12 trees recommended for removal all measured larger than 6-inches in diameter and require mitigation per Section 4.620.00; removed trees shall be replaced on a basis of one tree planted for each tree removed. Therefore, 12 trees measuring at least 2-inch in diameter will be planted as mitigation for tree removal.

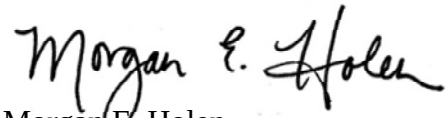
Tree Protection Standards

Trees located on adjacent properties will need special consideration to assure their protection during construction. We recommend a preconstruction meeting with the owner, contractors and project arborist to review tree protection measures and address questions or concerns on site. Tree protection measures include:

- **Fencing.** Trees to remain will be protected by installation of tree protection fencing to prevent injury to tree trunks or roots, or soil compaction within the root protection area, which generally coincides with the tree dripline. Fences will be 6-foot high steel on concrete blocks. The project arborist will determine the exact location of tree protection fencing. Trees located more than 30-feet from construction activity will not require fencing. Without authorization from the Project Arborist, none of the following will occur within root protection zones:
    1. New buildings;
    2. Grade change or cut and fill, during or after construction;
    3. New impervious surfaces;
    4. Utility or drainage field placement;
    5. Staging or storage of materials and equipment during construction;
    6. Vehicle maneuvering during construction.

  Root protection zones may be entered for tasks like surveying, measuring and sampling. Fences must be closed upon completion of these tasks.
- **Soil protection.** The stripping of topsoil around retained trees will be restricted, except under the guidance of the project arborist. No fill (including temporary storage of spoils) will be placed within the root protection area, except as otherwise directed by the project arborist.
- **Quality Assurance.** The project arborist will supervise proper execution of this plan during construction activities that could encroach on retained trees. Tree protection site inspection monitoring reports will be provided to the Client and City on a regular basis throughout construction.

Please contact us if you have questions or need any additional information.



Morgan E. Holen
Morgan Holen & Associates, LLC
ISA Certified Arborist, PN-6145A
ISA Tree Risk Assessment Qualified
Forest Biologist

Enclosure: Villebois SAP Central Zion - Tree Data 4-5-13

1315 Villebois SAP Central Zion
Tree Inventory 4-5-13

No.	Tree Tag	Common Name	Species Name	DBH (in.)	Crad (ft.)	Condition	Rating	Recommendation
4432	437	pin oak	*Quercus palustris*	22	22	needs pruning	I	Protect adjacent tree
3830	551	Norway spruce	*Picea abies*	20	18	viable	F	Remove - construction
3858	559	red maple	*Acer rubrum*	20	12	extensive decay, needs pruning	P	Remove - construction, condition
3859	564	red maple	*Acer rubrum*	16	20	viable, prune for clearance	G	Protect adjacent tree
3860	565	red maple	*Acer rubrum*	26	16	viable, major limb failure	F	Protect adjacent tree
3861	566	Atlas cedar	*Cedrus atlantica*	43	22	viable	F	Protect adjacent tree
3862	567	Atlas cedar	*Cedrus atlantica*	37	26	viable	F	Protect adjacent tree
	572	bigleaf maple	*Acer macrophyllum*	65		failing, open cavity, extensive decay; hazard	P	Remove adjacent tree - condition
4637	615	black cottonwood	*Populus trichocarpa*	8,6		codom stems, included bark, inherent species limitations	P	Remove - condition
	615.1	black cottonwood	*Populus trichocarpa*	14,10		small, poor structure, inherent species limitations	P	Remove - condition
	656	black cottonwood	*Populus trichocarpa*	24		poor structure, basal swelling	P	Remove - condition
	657	black cottonwood	*Populus trichocarpa*	20		poor structure, broken top, inherent species limitations	P	Remove - condition
	658	black cottonwood	*Populus trichocarpa*	50		already a snag, advanced decay; hazard	P	Remove - condition
	659	black cottonwood	*Populus trichocarpa*	50		dead top, stem decay; hazard	P	Remove - condition
	660	sweet cherry	*Prunus avium*	12		invasive species, poor structure	P	Remove - condition
	661	black cottonwood	*Populus trichocarpa*	10,8		poor structure and condition	P	Remove - condition
	662	Douglas-fir	*Pseudotsuga menziesii*	40		codom stems at 20', dead branches, one dead leader	P	Remove - condition

*DBH: Diameter at Breast Height (measured 4.5-feet above ground level in inches)
^C-Rad: Crown Radius, the distance from the center of the tree to the edge of the dripline (measured in feet)
#Condition Codes:
I: Special Importance
G: Good
F: Fair
P: Poor

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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Townhomes (English Revival)
Front Elevation

Scale	Drawn by	Date	Date Plotted
NTS	APT	11-07-12	11-07-12

Sheet No. 1

Job No.: 1119

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Wilsonville, Oregon

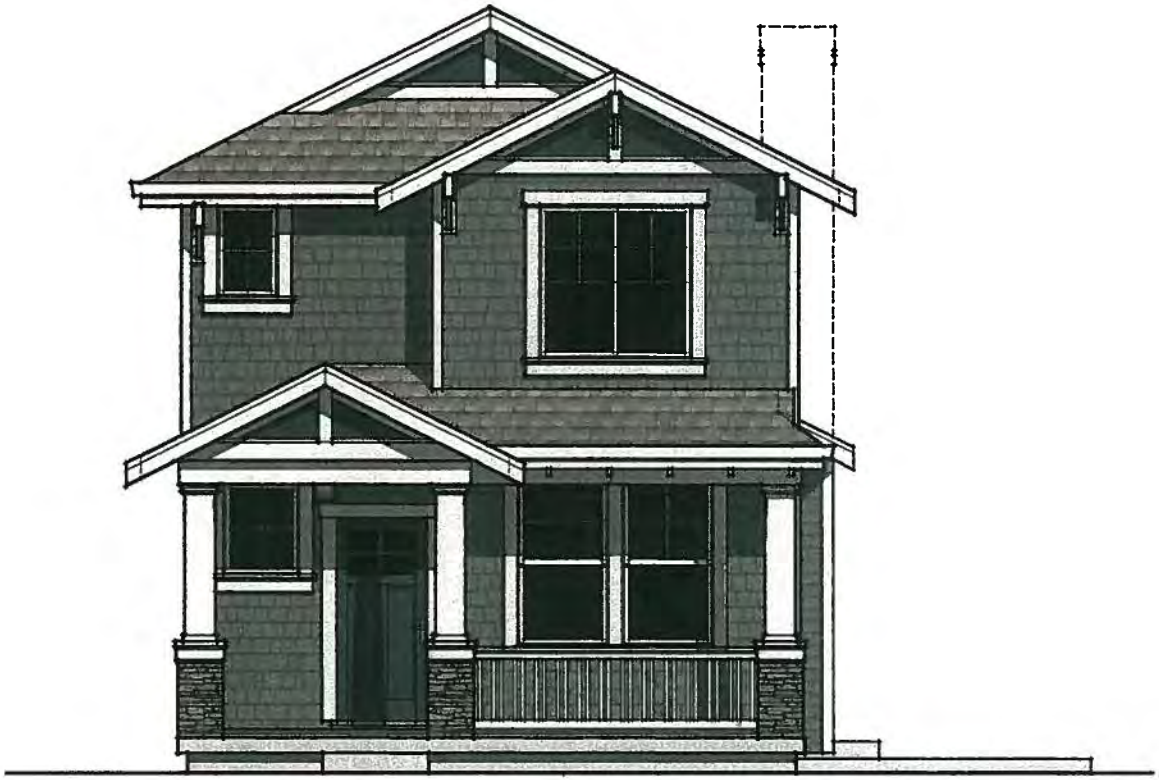
Polygon Northwest Company

Townhomes (French Revival)
Front Elevation

Scale:	Drawn by:	Date:	Date Plotted:
NTS	APT	11-07-12	11-07-12

Sheet No.: 2

Job No.: 1119



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- (B) ACCENT 2 — 5" LAP SIDING SIDING
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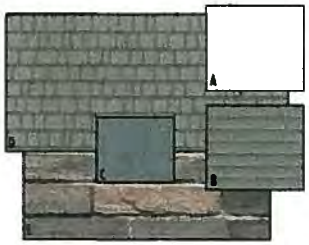

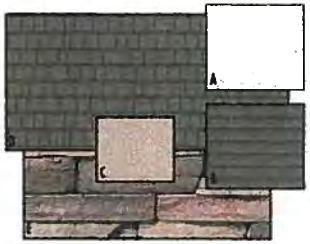

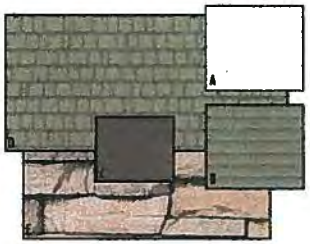

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Wilsonville, Oregon

Polygon Northwest Company

Cottage (American Modern) Front Elevation

Scale	Drawn by	Date	Date Revised	Sheet No.
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12	3

Job No. 1119

Color Option Legend

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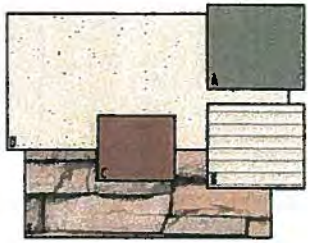
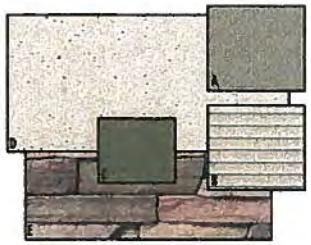
- (B) ACCENT 2 — 5" LAP SIDING SIDING
- (C) ACCENT 3 — DOOR & SHUTTERS
- (D) BODY — STUCCO SIDING
- (E) BASE — STONE VENEER





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Polygon at Villebois
Wilsonville, Oregon

Polygon Northwest Company

Cottage (French Revival)
Front Elevation

Scale	Drawn By	Date	Date Plotted
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No.: 4

Job No.: 1119

Color Option Legend

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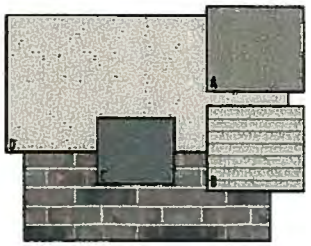
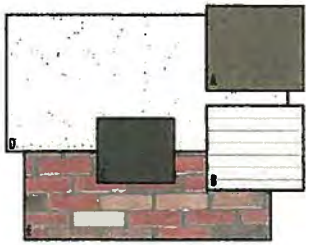
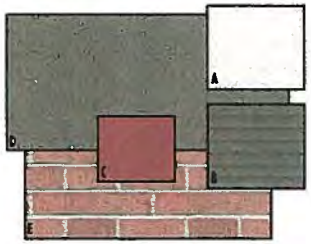
- (D) BODY — STUCCO SIDING
- (E) BASE — BRICK VENEER







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Polygon at Villebois

Wilsonville, Oregon

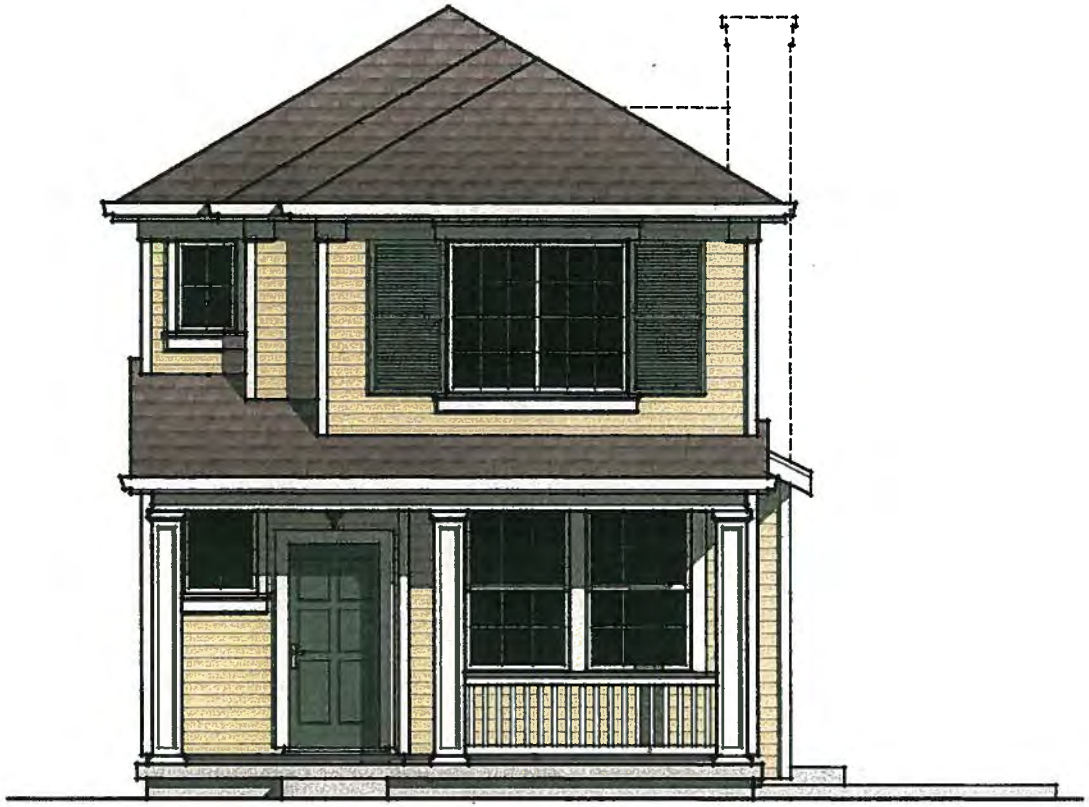
Polygon Northwest Company

Cottage (English Revival) Front Elevation

Scale	Drawn By	Date	Date Revised
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No. 5

Job No. 1119



Color Option Legend

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- (B) ACCENT 2
  5" LAP SIDING SIDING
- (C) ACCENT 3
  DOOR & SHUTTERS

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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Cottage (American Classic)
Front Elevation

Scale	Drawn by	Date	Date Plotted
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No. 6

Job No. 1119

Color Option Legend

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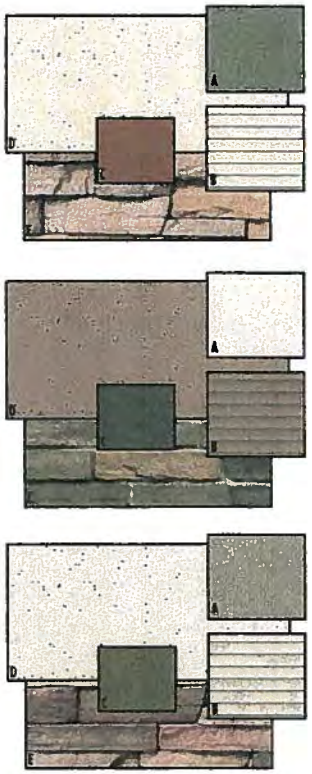
- (B) ACCENT 2 — 5" LAP SIDING SIDING
- (C) ACCENT 3 — DOOR & SHUTTERS
- (D) BODY — STUCCO SIDING
- (E) BASE — STONE VENEER



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Polygon at Villebois

Wilsonville, Oregon

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Small Detached (French Revival)
Front Elevation

Scale	Drawn By	Date	Date Revised
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No.: 7

Job No.: 1119

Color Option Legend

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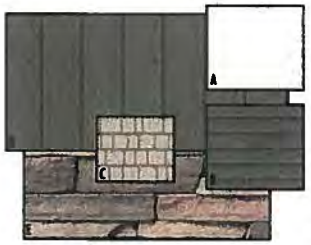
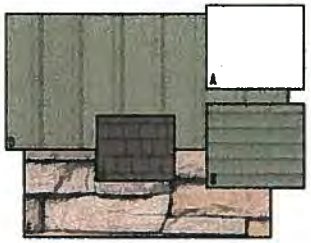
- (D) BODY — BOARD & BATTEN
- (E) BASE — STONE VENEER





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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Small Detached (American Modern)
Front Elevation

Scale	Drawn By	Date	Date Plotted
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No. 8

Job No. 1119

Color Option Legend

- (A) ACCENT 1
  WINDOW, TRIM & COLLUMNS
- (B) BODY
  5" LAP SIDING SIDING
- (C) ACCENT 2
  DOOR & SHUTTERS

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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Small Detached (American Classic) Front Elevation

Scale	Drawn By	Date	Date Revised
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No.: 9

Job No.: 1119

SUPPORTING COMPLIANCE REPORT

TENTATIVE PLAT

PDP 4 CENTRAL

SECTION IIIA

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II. CONCLUSION 20

I. WILSONVILLE PLANNING & LAND DEVELOPMENT ORDINANCE

SECTION 4.125. VILLAGE (V) ZONE

(.02) PERMITTED USES

Examples of principle uses that are typically permitted:

A. Single Family Detached Dwellings

D. Row Houses

H. Non-commercial parks, plazas, playgrounds, recreational facilities, community buildings and grounds, tennis courts, and other similar recreational and community uses owned and operated either publicly or by an owners association.

Response: The proposed Tentative Plat will create lots for development of single family detached dwellings, row houses, and tracts for linear greens. All proposed uses within the subject area are permitted pursuant to this section.

(.05) DEVELOPMENT STANDARDS APPLYING TO ALL DEVELOPMENTS IN THE VILLAGE ZONE

All development in this zone shall be subject to the V Zone and the applicable provisions of the Wilsonville Planning and Land Development Ordinance. If there is a conflict, then the standards of this section shall apply. The following standards shall apply to all development in the V zone:

A. Block, Alley, Pedestrian and Bicycle Standards:

1. Maximums Block Perimeter: 1,800 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent a block perimeter from meeting this standard.

Response: These standards are addressed within the PDP Compliance Report (see Section IIA).

2. Maximum spacing between streets for local access: 530 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent street extensions from meeting this standard.

Response: These standards are addressed within the PDP Compliance Report (see Section IIA).

3. If the maximum spacing for streets for local access exceeds 530 feet, intervening pedestrian and bicycle access shall be provided, with a maximum spacing of 330 feet from those local streets, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions from meeting this standard.

Response: These standards are addressed within the PDP Compliance Report (see Section IIA).

B. Access: All lots with access to a public street, and an alley, shall take vehicular access from the alley to a garage or parking area, except as determined by the City Engineer.

Response: All of the lots within the proposed PDP that have frontage on a public street and an alley will take vehicular access from an alley to a garage or parking area.

Table V-1 Development Standards

Response: The *Tentative Plat* (see Section IIB in this Notebook) depicts proposed lot sizes and dimensions. All of the lots will be developed with single family detached dwelling units or row houses. All of the lots meet applicable requirements, as addressed below. No buildings are proposed with this application. Final compliance with these standards will be reviewed at building permit submittal.

Single-Family Dwellings

Minimum lot size: 2,250 square feet

Minimum lot width: 35 feet

Minimum lot depth: 50 feet

Row Houses

Minimum lot size: No Requirement

Minimum lot width: 15 feet

Minimum lot depth: 50 feet

Response: All of the lots within the proposed tentative plat meet the applicable minimum lot size requirement and meet the applicable minimum lot width and depth specified for Row House, Small Cottage, or Small lots in the applicable Pattern Book, with allowed variations for road curvatures and tree preservation.

(.07) GENERAL REGULATIONS – OFF-STREET PARKING, LOADING & BICYCLE PARKING

Table V-2: Off-Street Parking Requirements

Category	Min. Vehicle Spaces	Max. Vehicle Spaces	Bicycle Short Term	Bicycle Long Term
Single Family Detached Dwelling Units	1.0 / DU	NR	NR	NR
Row Houses	1.0 / DU	NR	NR	NR

Response: Each of the homes will provide a minimum of a one-car garage in compliance with this standard.

(.08) OPEN SPACE

Open space shall be provided as follows:

A. In all residential developments and in mixed-use developments where the majority of the developed square footage is to be in residential use, at least twenty-five percent (25%) of the area shall be open space, excluding street pavement and surface parking. In multi-phased developments, individual phases are not required to meet the 25% standard as long as an approved Specific Area Plan demonstrates that the overall development shall provide a minimum of 25% open space. Required front yard areas shall not be counted towards the required open space area. Required rear yard areas and other landscaped areas that are not within required front or side yards may be counted as part of the required open space.

B. Open space area required by this Section may, at the discretion of the Development Review Board, be protected by a conservation easement or dedicated to the City, either rights in fee or easement, without altering the density or other development standards of the proposed development. Provided that, if the dedication is for public park purposes, the size and amount of the proposed dedication shall meet the criteria of the City of Wilsonville standards. The square footage of any land, whether dedicated or not, which is used for open space shall be deemed a part of the development site for the purpose of computing density or allowable lot coverage. See SROZ provisions, Section 4.139.10.

C. The Development Review Board may specify the method of assuring the long-term protection and maintenance of open space and/or recreational areas. Where such protection or maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review and approve any pertinent bylaws, covenants, or agreements prior to recordation.

Response: The Parks *Master Plan* for Villebois states that there are 57.87 acres of parks and 101.46 acres of open space for a total of 159.33 acres within Villebois, approximately 33%. SAP Central includes parks and open space areas consistent with *Master Plan*. PDP 4C includes the addition of linear greens not shown in the *Villebois Village Master Plan*, thereby increasing the amount of parks. The additional park areas are described in more detail in the PDP compliance report (see Section IIA).

(.09) STREET & ACCESS IMPROVEMENT STANDARDS

A. Except as noted below, the provisions of Section 4.177 apply within the Village zone:

1. General Provisions:

a. All street alignment and access improvements shall conform to the Villebois Village Master Plan, or as refined in the Specific

Area Plan, Preliminary Development Plan, or Final Development Plan and the following standards:

Response: The street alignments and access improvements within this PDP are generally consistent with those approved in the *Villebois Village Master Plan* and SAP Central, as refined by the PDP application (see the PDP Supporting Compliance Report for further description of refinements to the street network – Section IIA of Notebook).

i. All street improvements shall conform to the Public Works Standards and shall provide for the continuation of streets through proposed developments to adjoining properties or subdivisions, according to the Master Plan.

Response: All street improvements within this Preliminary Development Plan will comply with the applicable Public Works Standards. The street system within this Preliminary Development Plan is designed to provide for the continuation of streets within Villebois and to adjoining properties or subdivisions according to the *Master Plan*. The street system is illustrated on the *Circulation Plan* located in Section IIB of this Notebook.

ii. All streets shall be developed with curbs, landscape strips, bikeways or pedestrian pathways, according to the Master Plan.

Response: All streets within this Preliminary Development Plan will be developed with curbs, landscape strips, sidewalks, and bikeways or pedestrian pathways as depicted on the *Circulation Plan* (Section IIB of this Notebook) and in accordance with the *Master Plan*.

2. Intersections of streets

a. Angles: Streets shall intersect one another at angles not less than 90 degrees, unless existing development or topography makes it impractical.

b. Intersections: If the intersection cannot be designed to form a right angle, then the right-of-way and paving within the acute angle shall have a minimum of thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than ninety (90) degrees shall require approval by the City Engineer after consultation with the Fire District.

Response: The plan sheets located in Section IIB of this Notebook demonstrate that all proposed streets will intersect at angles consistent with the above standards (see the *Tentative Plat)*.

c. Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections shall be separated by at least:

i. 1000 ft. for major arterials

ii. 600 ft. for minor arterials

iii. 100 ft. for major collector

iv. 50 ft. for minor collector

Response: The plan sheets located in Section IIB of this Notebook demonstrate that opposing intersections on public streets are offset, as appropriate, so that no danger to the traveling public is created (see the *Tentative Plat* in Section IIIB).

d. Curb Extensions:

i. Curb extensions at intersections shall be shown on the Specific Area Plans required in subsection 4.125(.18)(C) through (F), below, and shall:

ii. Not obstruct bicycle lanes on collector streets.

iii. Provide a minimum 20 foot wide clear distance between curb extensions all local residential street intersections shall have, shall meet minimum turning radius requirements of the Public Works Standards, and shall facilitate fire truck turning movements as required by the Fire District.

Response: Curb extensions are shown on the *Circulation Plan* (see Section IIB). Curb extensions will not obstruct bicycle lanes on collector streets (Villebois Drive & Costa Circle). The attached drawings illustrate that all street intersections will have a minimum 20 foot wide clear distance between curb extensions on all local residential street intersections.

3. Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate, grades in excess of 8%, but not more than 12%, may be permitted for short distances, as approved by the City Engineer, where topographic conditions or existing improvements warrant modification of these standards.

Response: The *Grading & Erosion Control Plan* located in Section IIB, demonstrates that proposed streets can comply with this standard.

4. Centerline Radius Street Curves:

The minimum centerline radius street curves shall be as follows:

a. Arterial streets: 600 feet, but may be reduced to 400 feet in commercial areas, as approved by City Engineer.

b. Collector streets: 600 feet, but may be reduced to conform with the Public Works Standards, as approved by the City Engineer.

c. Local streets: 75 feet

Response: The *Tentative Plat* (see Section IIIB) demonstrates that all streets will comply with the above standards.

5. **Rights-of-way:**

   a. **See (.09) (A), above.**

Response: Proposed rights-of-way are shown on the plan sheets located in Section IIIB of this Notebook. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with recordation of a final plat in accordance with Section 4.177.

6. **Access drives.**

   a. **See (.09) (A), above.**

   b. **16 feet for two-way traffic.**

Response: Access drives (alleys) will be paved at least 16-feet within a 20-foot tract, as shown on the *Circulation Plan* in Section IIB of this Notebook. In accordance with Section 4.177, all access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions

7. **Clear Vision Areas**

   a. **See (.09) (A), above.**

Response: Clear vision areas will be provided and maintained in compliance with the Section 4.177.

8. **Vertical clearance:**

   a. **See (.09) (A), above.**

Response: Vertical clearance will be provided and maintained in compliance with the Section 4.177.

9. **Interim Improvement Standard:**

   a. **See (.09) (A), above.**

Response: Construction documents will include interim improvements to provide for adequate street access until the future vacation of 110th Avenue, construction of the roundabout at Villebois Drive and Costa Circle, and the corresponding street connections/extensions can be built with adjacent phases in PDP 3E.

(.18) VILLAGE ZONE DEVELOPMENT PERMIT PROCESS

G. Preliminary Development Plan Approval Process:

1. **An application for approval of a Preliminary Development Plan for a development in an approved SAP shall:**

   f) **Include a preliminary land division (concurrently) per Section 4.400, as applicable.**

Response: This application includes a request for preliminary land division approval. This request for approval of a Tentative Plat can be seen in Section III of

this Notebook. This section includes a Supporting Compliance Report, the proposed Tentative Plat, draft CC&R's, a copy of the certification of liens & assessments form, and the subdivision name approval from the County Surveyor's Office.

SECTION 4.177. STREET IMPROVEMENT STANDARDS

Response: Proposed rights-of-way are shown on the plan sheets in Section IIIB. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with the final plat.

The drawings located in Section IIB demonstrate that all proposed access drives (alleys) within the Preliminary Development Plan area will have a minimum improvement width of 16 feet and will provide two-way travel. All access drives (alleys) will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions.

Clear vision areas will be maintained in accordance with the standards of Subsection 4.177(.01)(I). Vertical clearance will be maintained over all streets and access drives in accordance with Subsection 4.177(.01)(J).

LAND DIVISIONS

SECTION 4.210. APPLICATION PROCEDURE

A. Preparation of Tentative Plat. The Planning Staff shall provide information regarding procedures and general information having a direct influence on the proposed development, such as elements of the Comprehensive Plan, existing and proposed streets, road and public utilities. The applicant shall cause to be prepared a tentative plat, together with improvement plans and other supplementary material as specified in this Section. The Tentative Plat shall be prepared by an Oregon licensed professional land surveyor or engineer. An affidavit of the services of each surveyor or engineer shall be furnished as part of the submittal.

Response: A Tentative Plat has been prepared by an Oregon licensed professional engineer as required. The Tentative Plat can be seen in Section IIIB of this Notebook. Improvement plans can be seen in Section IIB of this application Notebook. The Introductory Narrative located in Section IA includes a listing of the services provided by each design team member.

B. Tentative Plat Submission. The purpose of the Tentative Plat is to present a study of the proposed subdivision to the Planning Department and Development Review Board and to receive approval recommendations for revisions before preparation of a final Plat. The design and layout of this plan plat shall meet the guidelines and requirements set forth in this Code. The Tentative Plat shall be submitted to the Planning Department with the following information:

1. **Site development application form completed and signed by the owner of the land or a letter of authorization signed by the owner. A preliminary title report or other proof of ownership is to be included with the application form.**
2. **Application fees as established by resolution of the City Council.**

Response: Copies of the application form and the application fee are included in Sections IB and IC, respectively, of this Notebook.

3. **Ten (10) copies and one (1) sepia or suitable reproducible tracing of the Tentative Plat shall be submitted with the application. Paper size shall be eighteen inch (18") by twenty-four inch (24"), or such other size as may be specified by the City Engineer.**

Response: The balance of the 10 copies of the Tentative Plat (see Section IIIB) will be provided when the application is determined complete; three (3) of which have been provided with initial submittal.

4. **Name of the subdivision. No subdivision shall duplicate or resemble the name of any other subdivision in Clackamas or Washington County. Names may be checked through the county offices.**

Response: Due to the physical separation of the two parcels in PDP 4C, two separate subdivision plats are necessary. Proposed names are "Polygon Northwest at Villebois No. 2" and "Tonquin Woods at Villebois No. 5" (see Section IIIE for documentation of subdivision name approval from the Clackamas County Surveyor's Office).

5. **Names, address, and telephone numbers of the owners and applicants, and engineer or surveyor.**

Response: The names, addresses and telephone numbers of the owner, applicant, engineer and surveyor are listed in the Introductory Narrative, which can be seen in Section IA of this Notebook, and are listed on the *Cover Sheet* (see Section IIB of Notebook).

6. **Date, north point and scale drawing.**
7. **Location of the subject property by Section, Township, and Range.**
8. **Legal road access to subject property shall be indicated as City, County, or other public roads.**
9. **Vicinity map showing the relationship to the nearest major highway or street.**
10. **Lots: Dimensions of all lots, minimum lot size, average lot size, and proposed lot and block numbers.**
11. **Gross acreage in proposed plat.**

Response: The above information is provided on the plan sheets located in Section IIB of this Notebook. The location of the subject property by Section, Township and Range and the gross acreage of the proposed plat are also listed in the Introductory Narrative, located in Section IA of this Notebook, and are listed on the *Cover Sheet* (see Section IIB of Notebook).

12. **Proposed uses of the property, including sits, if any, for multi-family dwellings, shopping centers, churches, industries, parks, and playgrounds or other public or semi-public uses.**

Response: The proposed plat does not include any multi-family dwelling sites, shopping centers, churches, or industries. Park areas are indicated on the plan sheets located in Section IIB. Proposed uses within the subject park areas are detailed on the FDP Plans included in Section VIB of this Notebook.

13. **Improvements: Statement of the improvements to be made or installed including streets, sidewalks, lighting, tree planting, and times such improvements are to be made or completed.**

Response: Proposed improvements are shown on the plan sheets in Section IIB. The *Circulation Plan* shows proposed streets and sidewalks. The *Street Tree/Lighting Plan* shows proposed street trees and proposed street lights.

14. **Trees. Locations, types, sizes, and general conditions of all existing trees, as required in Section 4.600.**

Response: The requirements of Section 4.600 can be seen in Section V of this Notebook. The *Tree Preservation Plan* (see Section IIB) shows existing tree locations, types, sizes and general conditions, pursuant to the requirements of Section 4.600.

15. **Utilities such as electrical, gas, telephone, on and abutting the tract.**

Response: The *Composite Utility Plan* shows existing and proposed utilities. These sheets can be seen in Section IIB of this Notebook.

16. **Easements: Approximate width, location, and purpose of all existing and proposed easements on, and known easements abutting the tract.**
17. **Deed Restrictions: Outline of proposed deed restrictions, if any.**
18. **Written Statement: Information which is not practical to be shown on the maps may be shown in separate statements accompanying the Tentative Plat.**
19. **If the subdivision is to be a "Planned Development," a copy of the proposed Home Owners Association By-Laws must be submitted at the time of submission of the application. The Tentative Plat shall be considered as the Stage I Preliminary Plan. The proposed By-Laws must address the maintenance of any parks, common areas, or facilities.**

Response: The *Existing Conditions* plan, located in Section IIB, shows the approximate width, location, and purpose of all existing easements. The *Tentative Plat,* located in Section IIIB, shows proposed easements. No deed restrictions are proposed at this time. A draft of the CC&R's is included in Section IIIC of this Notebook.

20. Any plat bordering a stream or river shall indicate areas subject to flooding and shall comply with the provisions of Section 4.172.

Response: The proposed plat areas do not border a stream or river.

21. Proposed use or treatment of any property designated as open space by the City of Wilsonville.

Response: The proposed plat does not include any areas designated as open space by the City of Wilsonville.

22. A list of the names and addresses of the owners of all properties within 250 feet of the subject property, printed on self-adhesive mailing labels. The list shall be taken from the latest available property ownership records of the Assessor's Office of the affected county.

Response: The required mailing list has been submitted with this application. A copy is provided in Section ID.

23. A completed "liens and assessments" form, provided by the City Finance Department.

Response: A copy of this form is provided in Exhibit IIID.

24. Locations of all areas designated as a Significant Resource Overlay Zone by the City, as well as any wetlands shall be shown on the tentative plat.

Response: The proposed plat does not include any areas designated as SROZ by the City or any wetlands.

25. Locations of all existing and proposed utilities, including but not limited to domestic water, sanitary sewer, storm drainage, streets, and any private utilities crossing or intended to serve the site. Any plans to phase the construction or use of utilities shall be indicated.

Response: The *Existing Conditions* plan shows all existing utilities. The *Composite Utility Plan* shows all proposed utilities. The *Grading and Erosion Control Plan* show proposed streets and storm drainage facilities. These plan sheets can be seen in Section IIB of this Notebook.

26. A traffic study, prepared under contract with the City, shall be submitted as part of the tentative plat application process,

unless specifically waived by the Community Development Director.

Response: A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

C. Action on proposed tentative plat:

1. Consideration of tentative subdivision plat. The Development Review Board shall consider the tentative plat and the reports of City staff and other agencies at a regular Board meeting no more than ninety (90) days after tentative plat application has been accepted as complete by the City. Final action on the proposed tentative plat shall occur within the time limits specified in Section 4.013. The tentative plat shall be approved if the Development Review Board determines that the tentative plat conforms in all respects to the requirements of this Code.

Response: The proposed Tentative Plat located in Section IIIB, is included with this application for review by the Development Review Board.

2. Consideration of tentative partition plat. The Planning Director shall review and consider any proposed land partition plat through the procedures for Administrative Reviews specified in Section 4.030 and 4.035.

Response: This request is for a Tentative Subdivision Plat. This code section does not apply.

4. The Board shall, by resolution, adopt its decision, together with findings and a list of all Conditions of Approval or required changes to be reflected on the Final Plat

Response: Any Conditions of Approval adopted by the Board shall be reflected on the Final Plat.

4. Board may limit content of deed restrictions. In order to promote local, regional and state interests in affordable housing, the Board may limit the content that will be accepted within proposed deed restrictions or covenants. In adopting conditions of approval for a residential subdivision or condominium development, the Board may prohibit such things as mandatory minimum construction costs, minimum unit sizes, prohibitions or manufactures housing, etc.

Response: The applicant recognizes the authority of the Board to limit the content of the deed restrictions or covenants.

5. Effect of Approval. After approval of a tentative plat, the applicant may proceed with final surveying, improvement construction and preparation of the final plat. Approval shall be effective for a period of two (2) years, and if the final plat is not submitted to the Planning Department within such time, the

tentative plat shall be submitted again and the entire procedure shall be repeated for consideration of any changes conditions which may exist. Except, however, that the Development Review Board may grant a time extension as provided in Section 4.023.

Response: After approval of the Tentative Plat, a final plat will be prepared and submitted to the Planning Department within two years if an extension is not provided.

D. Land division phases to be shown. Where the applicant intends to develop the land in phases, the schedule for such phasing shall be presented for review at the time of the tentative plat. In acting on an application for tentative plat approval, the Planning Director or Development Review Board may set time limits for the completion of the phasing schedule which, if not met, shall result in an expiration of the tentative plat approval.

Response: The PDP is proposed to be executed as shown on the *PDP Phasing Plan* (see Section IIB of this Notebook).

E. Remainder tracts to be shown as lots or parcels. Tentative plats shall clearly show all effected property as part of the application for land division. All remainder tracts, regardless of size, shall be shown and counted among the parcels or lots of the division.

Response: Any remainder tracts that would be developed with subsequent phases on adjacent land.

SECTION 4.236. GENERAL REQUIREMENTS – STREETS.

(.01) Conformity to the Master Plan Map: Land divisions shall conform to and be in harmony with the Transportation Master Plan (Transportation Systems Plan), the bicycle and Pedestrian Master Plan, the Parks and Recreation Master Plan, the Official Plan or Map and especially to the Master Street Plan.

Response: The proposed land division complies with Specific Area Plan – Central and the *Villebois Village Master Plan* with the refinements described in the PDP Supporting Compliance Report (see Section IIA of this Notebook), and thereby conforms to the applicable Master Plans.

(.02) Relation to Adjoining Street System.

A. A land division shall provide for the continuation of the principal streets existing in the adjoining area, or of their proper projection when adjoining property is not developed, and shall be of a width not less than the minimum requirements for streets set forth in these regulations. Where, in the opinion of the Planning Director or Development Review Board, topographic conditions make such continuation or conformity impractical, an exception may be made. In cases where the Board or Planning Commission has adopted a

plan or plat of a neighborhood or area of which the proposed land division is a part, the subdivision shall conform to such adopted neighborhood or area plan.

B. Where the plat submitted covers only a part of the applicant's tract, a sketch of the prospective future street system of the unsubmitted part shall be furnished and the street system of the part submitted shall be considered in the light of adjustments and connections with the street system of the part not submitted.

C. At any time when an applicant proposes a land division and the Comprehensive Plan would allow for the proposed lots to be further divided, the city may require an arrangement of lots and streets such as to permit a later resubdivision in conformity to the street plans and other requirements specified in these regulations.

Response: The street system proposed in this land division generally conforms to the street system in SAP Central and the *Villebois Village Master Plan* with refinements described in the PDP Supporting Compliance Report (see Section IIA of this Notebook).

(.03) All streets shall conform to the standards set forth in Section 4.177 and the block size requirements of the zone.

Response: Previous sections of this report have demonstrated compliance with the standards of Section 4.177 and the applicable block size requirements.

(.04) Creation of Easements: The Planning Director or Development Review Board may approve an easement to be established without full compliance with these regulations, provided such an easement is the only reasonable method by which a portion of a lot large enough to allow partitioning into two (2) parcels may be provided with vehicular access and adequate utilities. If the proposed lot is large enough to divide into more than two (2) parcels, a street dedication may be required. Also, within a Planned Development, cluster settlements may have easement driveways for any number of dwelling units when approved by the Planning Director or Development Review Board.

Response: Any necessary easements will be identified on the final plat.

(.05) Topography: The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of these regulations.

Response: The *Grading and Erosion Control Plan* (see Section IIB) demonstrates that the layout of streets has given recognition to surrounding topographic conditions.

(.06) Reserve Strips: The Planning Director or Development Review Board may require the applicant to create a reserve strip controlling the access to a street. Said strip is to be placed under the jurisdiction of the City Council, when the Director or Board determine that a strip is necessary:

A. To prevent access to abutting land at the end of a street in order to assure the proper extension of the street pattern and the orderly development of land lying beyond the street; or

B. To prevent access to the side of a street on the side where additional width is required to meet the right-of-way standards established by the City; or

C. To prevent access to land abutting a street of the land division but not within the tract or parcel of land being divided; or

D. To prevent access to land unsuitable for building development.

Response: Reserve strips will be provided as appropriate.

(.07) Future Expansion of Street: When necessary to give access to, or permit a satisfactory future division of, adjoining land, streets shall be extended to the boundary of the land division and the resulting dead-end street may be approved without a turn-around. Reserve strips and street plugs shall be required to preserve the objective of street extension.

Response: Streets that will be expanded in the future will occur in compliance with this standard.

(.08) Existing Streets: Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall conform to the designated width in this Code or in the Transportation Systems Plan.

Response: Rights-of-way will be dedicated in accordance with the *Villebois Village Master Plan* and the Transportation System Plan.

(.09) Street Names: No street names will be used which will duplicate or be confused with the names of existing streets, except for extensions of existing streets. Street names and numbers shall conform to the established name system in the City, and shall be subject to the approval of the City Engineer.

Response: No street names will be used that duplicate or could be confused with the names of existing streets. Street names and numbers will conform to the established name system in the City, as approved by the City Engineer.

SECTION 4.237. GENERAL REQUIREMENTS – OTHER.

(.01) Blocks:

A. The length, width, and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control, and safety of pedestrian, bicycle, and motor vehicle traffic, and recognition of limitations and opportunities of topography.

B. Sizes: Blocks shall not exceed the sizes and length specified for the zone in which they are located unless topographical conditions or other physical constraints necessitate larger blocks. Larger

blocks shall only be approved where specific findings are made justifying the size, shape, and configuration.

Response: The PDP compliance report demonstrates compliance with the applicable block size requirements (see Section IIA). The street system proposed in this land division generally conforms to the street system in SAP Central and the *Villebois Village Master Plan* with refinements described in the PDP Supporting Compliance Report (see Section IIA of this Notebook).

(.02) Easements:

A. Utility lines. Easements for sewers, drainage, water mains, electrical lines or other public utilities shall be dedicated wherever necessary. Easements shall be provided consistent with the City's Public Works Standards, as specified by the City Engineer or Planning Director. All the utility lines within and adjacent to the site shall be installed with underground services within the street and to any structures. All utilities shall have appropriate easements for construction and maintenance purposes.

B. Water Courses. Where a land division is traversed by a water course, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the water course, and such further width as will be adequate for the purposes of conveying storm water and allowing for maintenance of the facility or channel. Streets or parkways parallel to water courses may be required.

Response: The final plat will include the appropriate easements.

(.03) Pedestrian and bicycle pathways. An improved public pathway shall be required to transverse the block near its middle if that block exceeds the length standards of the zone in which it is located.

A. Pathways shall be required to connect to cul-de-sacs to pass through unusually shaped blocks.

B. Pathways required by this subsection shall have a minimum width of ten (10) feet unless they are found to be unnecessary for bicycle traffic, in which case they are to have a minimum width of six (6) feet.

Response: Any mid-block pathways required due to block size will be provided in conformance with this standard.

(.04) Tree planting. Tree planting plans for a land division must be submitted to the Planning Director and receive the approval of the Director or Development Review Board before the planning is begun. Easements or other documents shall be provided, guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property.

Response: The *Street Tree/Lighting Plan* shows proposed street tree planting. This plan sheet can be seen in Section IIB of this Notebook.

(.05) Lot Size and shape. The lot size, width, shape and orientation shall be appropriate for the location of the land division and for the type of development and use contemplated. Lots shall meet the requirements of the zone where they are located.

A. In areas that are not served by public sewer, an on-site sewage disposal permit is required from the City. If the soil structure is adverse to on-site sewage disposal, no development shall be permitted until sewer service can be provided.

B. Where property is zoned or deeded for business or industrial use, other lot widths and areas may be permitted at the discretion of the Development Review Board. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated.

C. In approving an application for a Planned Development, the Development Review Board may waive the requirements of this section and lot size, shape, and density shall conform to the Planned Development conditions of approval.

Response: Proposed lot sizes, widths, shapes and orientations are appropriate for the proposed development and are in conformance with the Village Zone requirements as demonstrated by this report.

(.06) Access. The division of land shall be such that each lot shall have a minimum frontage on a public street, as specified in the standards of the relative zoning districts. This minimum frontage requirement shall apply with the following exceptions:

A. A lot on the outer radius of a curved street or facing the circular end of a cul-de-sac shall have frontage of not less than twenty-five (25) feet upon a street, measured on the arc.

B. The Development Review Board may waive lot frontage requirements where in its judgment the waiver of frontage requirements will not have the effect of nullifying the intent and purpose of this regulation or if the Board determines that another standard is appropriate because of the characteristics of the overall development.

Response: The proposed lots comply with the applicable access requirements of the Village Zone as demonstrated in previous sections of this report.

(.07) Through lots. Through lots shall be avoided except where essential to provide separation of residential development from major traffic arteries or adjacent non-residential activity or to overcome specific disadvantages of topography and orientation. A planting screen easement of at least ten (10) feet, across which there shall be no access, may be required along the line of lots abutting such a traffic artery or other disadvantageous use. Through lots with planting screens shall have a minimum average depth of one hundred (100) feet. The Development Review Board may require

assurance that such screened areas be maintained as specified in Section 4.176.

Response: No through lots are proposed by this application.

(.08) Lot side lines. The side lines of lots, as far as practicable for the purpose of the proposed development, shall run at right angles to the street upon which the lots face.

Response: All side lines of lots will run at right angles to the street upon which the lots face.

(.09) Large lot land divisions. In dividing tracts which at some future time are likely to be re-divided, the location of lot lines and other details of the layout shall be such that re-division may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of buildings within future street locations shall be made a matter of record if the Development Review Board considers it necessary.

Response: This request does not include any tracts which may be divided at a future time.

(.10) Building line. The Planning Director or Development Review Board may establish special building setbacks to allow for the future redivision or other development of the property or for other reasons specified in the findings supporting the decision. If special building setbacks lines are established for the land division, they shall be shown on the final plat.

Response: No building lines are proposed by this application.

(.11) Build-to line. The Planning Director or Development Review Board may establish special build-to lines for the development, as specified in the findings and conditions of approval for the decision. If special build-to lines are established for the land division, they shall be shown on the final plat.

Response: No build-to lines are proposed by this application.

(.12) Land for public purposes. The Planning Director or Development Review Board may require property to be reserved for public acquisition, or irrevocably offered for dedication, for a specified period of time.

Response: This land division does not include land to be dedicated for public purposes except for the dedication of street right-of-way.

(.13) Corner lots. Lots on street intersections shall have a corner radius of not less than ten (10) feet.

Response: All lots on street intersections will have a corner radius of not less than ten (10) feet. This is demonstrated on the *Tentative Plat*, located in Section IIIB following this Supporting Compliance Report.

SECTION 4.262. IMPROVEMENTS - REQUIREMENTS.

(.01) Streets. Streets within or partially within the development shall be graded for the entire right-of-way width, constructed and surfaced in accordance with the Transportation Systems Plan and City Public Works Standards. Existing streets which abut the development shall be graded, constructed, reconstructed, surfaced or repaired as determined by the City Engineer.

Response: The *Grading and Erosion Control Plan,* located in Section IIB of this Notebook, shows compliance with this standard.

(.02) Curbs. Curbs shall be constructed in accordance with standards adopted by the City.

Response: Curbs will be constructed in accordance with City standards.

(.03) Sidewalks. Sidewalks shall be constructed in accordance with standards adopted by the City.

Response: Sidewalks will be constructed in accordance with City standards.

(.04) Sanitary sewers. When the development is within two hundred (200) feet of an existing public sewer main, sanitary sewers shall be installed to serve each lot or parcel in accordance with standards adopted by the City. When the development is more than two hundred (200) feet from an existing public sewer main, the City Engineer may approve an alternate sewage disposal system.

Response: The *Composite Utility Plan,* located in Section IIB of this Notebook, illustrate proposed sanitary sewer lines.

(.05) Drainage. Storm drainage, including detention or retention systems, shall be provided as determined by the City Engineer.

Response: The *Grading and Erosion Control Plan,* located in Section IIIB of this Notebook, illustrate the proposed storm drainage facilities. A supporting utility report is provided (see Section IIC) that demonstrates that the proposed storm drainage facilities will meet City standards.

(.06) Underground utility and service facilities. All new utilities shall be subject to the standards of Section 4.300 (Underground Utilities). The developer shall make all necessary arrangements with the serving utility to provide the underground services in conformance with the City's Public Works Standards.

Response: Proposed utilities will be placed underground pursuant to Section 4.300 and City Public Works Standards.

(.07) Streetlight standards. Streetlight standards shall be installed in accordance with regulations adopted by the City.

Response: Proposed streetlights are shown on the *Street Tree/Lighting Plan,* located in Section IIB of this Notebook. Streetlights will be installed in accordance with City standards.

(.08) Street signs. Street name signs shall be installed at all street intersections and dead-end signs at the entrance to all dead-end streets and cul-de-sacs in accordance with standards adopted by the City. Other signs may be required by the City Engineer.

Response: Street name and dead-end signs will be installed in accordance with City standards.

(.09) Monuments. Monuments shall be placed at all lot and block corners, angle points, points of curves in streets, at intermediate points and shall be of such material, size, and length as required by State Law. Any monuments that are disturbed before all improvements are completed by the developer and accepted by the City shall be replaced to conform to the requirements of State Law.

Response: Monuments will be placed at all lot and block corners, angle points, points of curves in streets, at intermediate points and will be of such material, size, and length as required by State Law.

(.10) Water. Water mains and fire hydrants shall be installed to serve each lot in accordance with City standards.

Response: Water mains and fire hydrants will be installed to serve each lot in accordance with City standards (see the *Composite Utility Plan),* located in Section IIB of this Notebook).

II. CONCLUSION

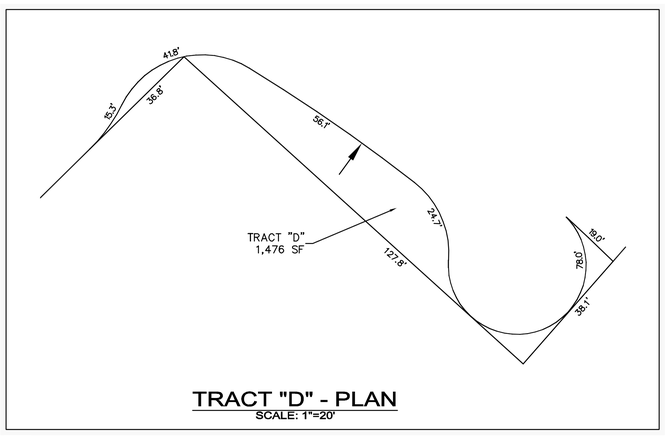
This Supporting Compliance Report demonstrates compliance with the applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for the requested Tentative Subdivision Plat. Therefore, the applicant respectfully requests approval of this application.

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
S	SMALL LOTS
SC	COTTAGES
RH	ROW HOMES

GROSS AREA = 6.83 AC



TRACT "D" - PLAN
SCALE: 1"=20'

SCALE
30 0 15 30
1 INCH = 30 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.(4)PPlat.dwg - SHEET: PLAT May. 3, 13 - 10:34 AM jjk

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.1

KEY MAP
NTS

LEGEND:

PDP BOUNDARY	
S	SMALL LOTS
SC	COTTAGES
RH	ROW HOMES

GROSS AREA = 6.83 AC

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.2

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.[4]PPlat.dwg - SHEET: PLAT (2) May. 6, 13 - 2:34 PM jjk

PRELIMINARY DRAFT
TO BE MODIFIED

After Recording Return To:
Ball Janik LLP
101 SW Main Street, Suite 1100
Portland, OR 97204-3219
Attn.: Barbara Radler

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR

_____

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR _____ is made and executed on this ___ day of _____ 20___ by _____, a _____.

Declarant is the owner of the real property located in the City of Wilsonville, Clackamas County, Oregon and legally described on the attached Exhibit A. Declarant desires to establish a planned community on the property known as "_____," which shall also be part of the master planned development known as "Villebois," which was established and is governed by the Master Plan approved by the City of Wilsonville.

NOW THEREFORE, Declarant hereby declares that the real property described on the attached Exhibit A shall be held, sold and conveyed subject to the covenants, conditions and restrictions declared below, which shall run with the real property and shall benefit and be binding upon all parties having or acquiring any right, title or interest in the real property or any part thereof.

1. DEFINITIONS

The terms specified below shall have the following meanings when used in this Declaration:

1.1 ACC. "ACC" shall mean the Architectural Control Committee of the Association formed pursuant to Section 12.

1.2 Articles. "Articles" shall mean the Articles of Incorporation of the Association filed with the Corporation Division of the Oregon Secretary of State, as amended from time to time.

1.3 Assessment. "Assessment" shall mean any assessment levied against one or more Owners by the Association for payment of expenses relating to the Property and shall include Regular Assessments, Special Assessments, Limited Assessments and Reserve Assessments as those terms are defined herein.

1.4 Association. "Association" shall mean _____ Homeowners Association, an Oregon nonprofit mutual benefit corporation, formed for the purposes set forth in this Declaration, the Bylaws and the Articles.

1.5 Association Landscaping. "Association Landscaping" shall mean all landscaping and all irrigation systems and utilities pertaining to landscaping located in the Common Areas and the front yard areas of the Lots, including all grass, sod, ground cover, flower and plant beds, planter strips, trees, shrubs, bushes and other plantings located in the front yard areas of the Lots, but excluding all sidewalks, driveways, fencing and other non-landscaping improvements located in the front yard areas of the Lots. The front yard areas of the Lots include those portions of the Lots located between the front of the Homes and any public or private street.

1.6 Board. "Board" shall mean the duly elected Board of Directors of the Association.

1.7 Bylaws. "Bylaws" shall mean the Bylaws of the Association, as amended from time to time. The Bylaws shall be adopted pursuant to ORS 94.625 and recorded in the official records of Clackamas County, Oregon.

1.8 City. "City" shall mean the City of Wilsonville, Oregon.

1.9 Common Areas. "Common Areas" shall mean those portions of the Property legally described on the attached Exhibit B which shall be owned by the Association for the common benefit of the Owners.

1.10 Common Maintenance Areas. "Common Maintenance Areas" shall mean the Common Areas and any other property that the Association is required to maintain pursuant to this Declaration or that the Board deems necessary or appropriate for the Association to maintain for the common benefit of the Owners, including without limitation, those areas described in Section 11.1.

1.11 Declarant. "Declarant" shall mean _____, a _____, and its successors and assigns who are designated as such in writing by Declarant and who consent in writing to the transfer or assumption of any rights or obligations of Declarant under this Declaration or the Bylaws. If less than all of Declarant's rights and obligations under this Declaration or the Bylaws are transferred to a successor or assign, then the successor or assign shall only be deemed a Declarant with respect to those rights or obligations that are specifically assigned or assumed by the successor or assign. One or more persons or entities may be a Declarant.

1.12 Declaration. "Declaration" shall mean this Declaration of Covenants, Conditions and Restrictions for _____, as amended from time to time in accordance with its terms.

1.13 Design Guidelines. "Design Guidelines" shall mean the design guidelines described in Section 13.

1.14 Home. "Home" shall mean a dwelling unit located on a Lot and any associated Improvements.

1.15 Improvement. "Improvement" shall mean every structure or improvement of any kind, including without limitation, buildings, sidewalks, driveways, fences, walls, works of art, trees, hedges, plantings and other landscaping, changes in exterior color or shape, site work (such as, without limitation, excavation, grading and utility improvements), and all other product of construction efforts (such as, without limitation, alterations, renovations and reconstruction) on or with respect to the Property or any portion thereof.

1.16 Limited Assessment. "Limited Assessment" shall mean an assessment levied against an Owner by the Association for costs and expenses incurred by the Association for corrective action performed pursuant to this Declaration that is required as a result of the willful or negligent actions or omissions of the Owner or the Owner's tenants, family members, guests, contractors, or invitees. "Limited Assessment" also includes assessments for a common expense or any part of a common expense that benefits fewer than all of the Lots, as determined in the sole discretion of the Board.

1.17 Lot. "Lot" shall mean each of Lots 1 through 81, inclusive, as depicted on the Plat.

1.18 Master Plan. "Master Plan" shall mean the Master Plan of Villebois approved by the City.

1.19 Member. "Member" shall mean each member of the Association and shall include every Owner of a Lot. There shall be two (2) classes of membership in the Association, Class A and Class B, as described in Section 3.3 below.

1.20 Nonprofit Corporation Act. "Nonprofit Corporation Act" shall mean the Oregon Nonprofit Corporation Act (ORS 65.001 to 65.990), as amended from time to time.

1.21 Operation and Maintenance Agreement. "Operation and Maintenance Agreement" shall mean the Villebois Operation and Maintenance Agreement between the City and Declarant executed in connection with the recordation of the Plat.

1.22 Owner. "Owner" shall mean any person or entity, including Declarant, at any time owning a Lot, including any vendee under a recorded land sale contract to whom possession has passed, but does not include a tenant or holder of a leasehold interest, a person holding only a security interest in a Lot or a vendor under a recorded land sale contract who has surrendered possession.

1.23 Pattern Book. "Pattern Book" shall mean the design requirements for each area within Villebois adopted and applied by the City and which will be a condition to the City's approving building permits.

1.24 Planned Community Act. "Planned Community Act" shall mean the Oregon Planned Community Act (ORS 94.550 to 94.783), as amended from time to time.

1.25 Plat. "Plat" shall mean the Plat of _____ recorded in the official records of Clackamas County, Oregon on _____, 20___ as Document No. _____ and any amendments thereto.

1.26 Property. "Property" shall mean the real property located in the City of Wilsonville, Clackamas County, Oregon and legally described on the attached Exhibit A.

1.27 Regular Assessment. "Regular Assessment" shall mean an assessment by the Association against all Owners to provide for the payment of all estimated normal expenses of the Association for the performance of the Association's duties as provided in this Declaration or the Bylaws.

1.28 Reserve Assessment. "Reserve Assessment" shall mean an assessment by the Association against all Owners to establish and maintain the reserve funds pursuant to Section 6.

1.29 Special Assessment. "Special Assessment" shall mean an assessment against all Owners in the event that the Regular Assessment for any particular year is or will become inadequate to meet the expenses of the Association.

1.30 Special Declarant Rights. "Special Declarant Rights" shall mean those rights reserved for Declarant in Section 15.

1.31 Turnover Meeting. "Turnover Meeting" shall mean the meeting of the Owners called pursuant to the Bylaws for the purpose of turning over control of the Association to the Class A Members.

1.32 Villebois. "Villebois" shall mean all of the property subject to the Master Plan.

2. DECLARATION

2.1 Property Covered. The property that is covered by and is hereby made subject to this Declaration is the Property.

2.2 Purpose. The purpose of this Declaration is to provide for the maintenance, restoration, repair, improvement and upkeep of the Common Maintenance Areas and to set forth other terms and conditions governing the use and enjoyment of the Property.

2.3 Declaration. The Property shall be subject to all of the conditions, covenants, restrictions, and provisions contained in this Declaration, which shall benefit and burden each Lot and all other portions of the Property. Such conditions, covenants, restrictions, and provisions shall be binding on all parties having any right, title or interest in or to the Property, or any part thereof, and each of their respective heirs, personal representatives, successors and assigns. The Property shall be a Class I planned community as defined in the Planned Community Act and shall be subject to all of the terms and provisions of the Planned Community Act. The Property shall be known as "_____."

2.4 Improvements. Declarant does not agree to build any particular Improvements on the Property, but may elect, at Declarant's option, to build any such Improvements. Declarant elects not to limit Declarant's rights to add Improvements not described in this Declaration.

3. THE ASSOCIATION

3.1 Organization. Declarant shall, concurrently with the execution and recording of this Declaration, organize the Association as a nonprofit mutual benefit corporation pursuant to the Nonprofit Corporation Act under the name "_____ Homeowners Association" The Articles shall provide for the Association's perpetual existence, but in the event the Association is at any time dissolved, whether inadvertently or deliberately, it shall automatically be succeeded by an unincorporated association of the same name. All of the property, powers and obligations of the Association existing immediately prior to its dissolution shall thereupon automatically vest in the successor unincorporated association. Such vesting shall thereafter be confirmed as evidenced by appropriate conveyances and assignments by the Association to the successor unincorporated association. To the greatest extent possible, any successor unincorporated association shall be governed by the Articles and Bylaws as if they had been drafted to constitute the governing documents of the unincorporated association.

3.2 Membership. Every Owner of a Lot shall, immediately upon creation of the Association and thereafter during the entire period of such Owner's ownership of a Lot, be a Member of the Association. Such membership shall commence, exist and continue simply by virtue of such ownership, shall expire automatically upon termination of such ownership, and need not be confirmed or evidenced by any certificate or acceptance of membership.

3.3 Voting Rights. The Association shall have the following two (2) classes of voting membership:

3.3.1 Class A Members. Class A Members shall be all Owners other than Declarant (except that beginning on the date on which the Class B membership is converted to Class A membership, and thereafter, Class A Members shall be all Owners, including Declarant). Class A Members shall be entitled to one (1) vote for each Lot owned. When more than one (1) person holds an interest in a Lot, all such persons shall be Members. However, only one (1) vote shall be exercised for the Lot. The vote for the Lot shall be exercised as the Owners of the Lot

determine among themselves. If the Owners of the Lot cannot agree upon how to exercise the vote, then the vote for that Lot shall be disregarded in determining the proportion of votes with respect to the particular matter at issue.

3.3.2 Class B Members. The Class B Member shall be Declarant. The Class B Member shall be entitled to three (3) votes for each Lot owned. The Class B membership shall cease and be converted to Class A membership on the election in writing by Declarant to terminate the Class B membership.

3.4 Powers and Obligations. The Association shall have, exercise and perform all of the following powers, duties and obligations:

3.4.1 Declaration. The powers, duties and obligations granted to the Association by this Declaration, including, without limitation, the authority to levy Assessments against the Owners for the costs of operating and managing the Association and performing the Association's responsibilities under this Declaration and the Bylaws, as well as the operating costs and expenses of the ACC.

3.4.2 Statutory Powers. The powers and obligations of a nonprofit corporation pursuant to the Nonprofit Corporation Act, and of a homeowners association pursuant to ORS 94.630, as either may be amended from time to time, except as provided otherwise by this Declaration or the Bylaws.

3.4.3 General. Any additional or different powers, duties and obligations necessary or desirable for the purpose of carrying out the functions of the Association pursuant to this Declaration and the Bylaws or otherwise promoting the general benefit of the Members. The powers and obligations of the Association may from time to time be amended, repealed, enlarged or restricted by changes to this Declaration made in accordance with the provisions herein, accompanied by changes to the Articles or Bylaws made in accordance with such instruments, as applicable, and with the Planned Community Act and Nonprofit Corporation Act.

3.5 Liability. Neither the Association, members of the Board, officers of the Association nor members of committees established under or pursuant to the Bylaws shall be liable to any Owner for any damage, loss, injury or prejudice suffered or claimed on account of any action or failure to act by the Association or any Board member, officer or committee member, provided that the Association, Board member, officer or committee member acted or failed to act, in good faith, within the scope of his or her authority, and in a manner reasonably believed to be in the best interest of the Association and its Members, with regard to the act or omission at issue.

3.6 Interim Board. Declarant shall have the right to appoint an interim Board consisting of one (1) to three (3) directors, who shall serve as the Board until replaced by Declarant or until their successors have been elected by the Owners at the Turnover Meeting.

3.7 Transitional Advisory Committee. Declarant shall form a transitional advisory committee as provided in the Bylaws to provide for the transition of administrative responsibility for the Association from Declarant to the Class A Members.

3.8 Association Rules and Regulations. The Board from time to time may adopt, modify, or revoke such rules and regulations governing the conduct of persons and the operation and use of the Lots and Common Areas as it may deem necessary or appropriate in order to assure the safe, peaceful and orderly use and enjoyment of the Property, without unduly infringing on the privacy or enjoyment of any Owner or occupant of any part of the Property. A copy of the rules and regulations, upon adoption, and a copy of each amendment, modification or revocation thereof, shall be delivered by the Board promptly to each Owner and shall be binding upon all Owners and occupants of all Lots upon the date of delivery. The method of adoption of such rules shall be as provided in the Bylaws.

4. ALLOCATION OF COMMON PROFITS AND EXPENSES

4.1 Method of Allocation. The common profits of the Association shall be distributed among, and the common expenses of the Association shall be charged to, the Lots on an equal basis, except as provided in Section 5.4 below. The common expenses of the Association may be assessed on a monthly, quarterly or annual basis as determined by the Board.

4.2 No Exception. No Owner may claim exemption from liability for contribution toward the common expenses of the Association by waiving his or her use or enjoyment of the Common Areas or by abandoning his or her Lot. No Owner may claim an offset against such liability for failure of the Association or the Board to perform its obligations.

5. ASSESSMENTS

5.1 Creation of Lien and Personal Obligation of Assessments. Declarant, for each Lot it owns, does hereby covenant, and each Owner of a Lot by acceptance of a conveyance thereof, whether or not so expressed in the conveyance, shall be deemed to covenant to pay to the Association all Assessments or other charges as may be fixed, established and collected from time to time in the manner provided in this Declaration or the Bylaws. Such Assessments and charges, together with any interest, expenses or attorneys' fees imposed pursuant to Section 7.4, shall be a charge on the land and shall be a continuing lien upon the Lot against which the Assessment or charge is made. Assessments, charges and other costs shall also be the personal obligation of the person who was the Owner of the Lot at the time when the Assessment or charge becomes due. Such liens and personal obligations shall be enforced in the manner set forth in Section 7 below.

5.2 Regular Assessments.

5.2.1 Commencement. Regular Assessments for each Lot shall commence upon the sale of the Lot to an Owner other than a Declarant. Regular Assessments shall not be levied against Declarant-owned Lots.

5.2.2 Amount of Regular Assessments. The Regular Assessments shall be based upon an annual budget prepared by the Board with respect to projected expenses of the Association, including, without limitation, the following:

(a) maintenance, repair, replacement, and upkeep of the Common Maintenance Areas;

(b) premiums for all insurance policies that the Association is required or permitted to maintain pursuant to the Bylaws;

(c) any deficits remaining from the previous fiscal year of the Association;

(d) reserves for the major maintenance, repair and replacement of the Common Maintenance Areas and the Improvements located thereon for which the Association has maintenance responsibility and such other reasonable contingency reserves as may be established from time to time at the discretion of the Board;

(e) costs related to the preparation, review and update of the reserve study and maintenance plan described in Section 6; and

(f) such other and further costs, expenses, obligations, and liabilities as the Board, in its discretion, may incur for the management, operation, and maintenance of the Property and the Association in accordance with this Declaration and the Bylaws.

5.2.3 Allocation of Regular Assessments. The Regular Assessments shall be allocated equally among all Lots subject to assessment pursuant to Section 5.2.1.

5.3 Special Assessments. In addition to the Regular Assessments, the Association shall have the authority to levy Special Assessments to satisfy any actual or projected deficiency between the expenses of the Association and the amounts realized through Regular Assessments; provided, however, that prior to the Turnover Meeting, any special assessment for capital improvements or additions shall be approved by not less than fifty percent (50%) of the total voting power of the Association, determined on the basis of one vote per Lot notwithstanding the special voting rights of Declarant under Section 3.3.2 hereof. Special Assessments shall be allocated equally among all Lots. Special Assessments are payable as the Board may from time to time determine, but no sooner than thirty (30) days after mailing notice thereof to the Owners.

5.4 Limited Assessments. The Association shall have the authority levy against any Owner a Limited Assessment equal to the costs and expenses incurred by the Association, including legal fees, for corrective action performed pursuant to this Declaration or the Bylaws that is required as a result of the willful or negligent actions or omissions of the Owner or the Owner's tenants, family members, guests, contractors, or invitees, or for a common expense or any part of a common expense that benefits a particular Lot or Lots rather than all the Lots, as determined in the sole discretion of the Board.

5.5 Reserve Assessments. The Association shall have the authority to levy Reserve Assessments necessary to fund the reserve account created under Section 6. The Reserve Assessments for each Lot shall commence upon the sale of the Lot to an Owner other than a Declarant. Reserve Assessments shall not be levied against Declarant-owned Lots. The Reserve Assessments shall be allocated equally among all Lots subject to assessment pursuant to this Section 5.5.

5.6 Statement of Account. Upon the request of an Owner or an Owner's agent, for the benefit of a prospective purchaser, the Board shall make and deliver a written statement of any unpaid Assessments against the Owner's Lot through the date specified in the statement and the purchaser in that case shall not be liable for any unpaid assessments against the Lot that are not included in the statement provided by the Board. The Association is not required to provide a statement of outstanding Assessments if the Association has commenced litigation by filing a complaint against the Owner and the litigation is pending when the statement would otherwise be due.

6. RESERVE ACCOUNT; RESERVE STUDY AND MAINTENANCE PLAN

6.1 Reserve Account. Declarant shall establish a reserve account in the name of the Association for the major maintenance, repair and replacement, in whole or in part, of the Common Maintenance Areas and any Improvements located in, on, or under the Common Maintenance Areas for which the Association has maintenance responsibility pursuant to this Declaration, including exterior painting, if the Common Maintenance Areas include any exterior painted surfaces, that will normally require major maintenance, repair or replacement in more than one (1) year and fewer than thirty (30) years. The reserve account need not include those items that could reasonably be funded from the maintenance fund or for which one or more Owners are responsible for maintenance or replacement under this Declaration or the Bylaws. The reserve account shall be funded by the Reserve Assessments. The reserve funds shall be kept separate from other funds of the Association and may be used only for maintenance, repair, and replacement of the Common Maintenance Areas for which reserves have been established as specified in this Section 6.1. However, after the Turnover Meeting, the Board may borrow funds from the reserve account to meet high seasonal demands on the regular operating funds or to meet other unexpected increases in expenses. Funds borrowed to meet unexpected increases in expenses under this Section shall be repaid from Regular or Special Assessments if the Board has adopted a resolution, which may be an annual continuing resolution, authorizing the

borrowing of funds. Not later than the adoption of the budget for the following year, the Board shall adopt by resolution a written payment plan providing for repayment of the borrowed funds within a reasonable period. The Board shall administer the reserve fund and may adjust the amount of the Reserve Assessments to reflect changes in current maintenance, repair or replacement costs over time as indicated by the reserve study or update (as discussed in Section 6.2 below), and may provide for other reserve items that the Board, in its discretion, deems appropriate. If, after reviewing the reserve study or reserve study update, the Board determines that the reserve account will be adequately funded for the following year, then the Board may vote to reduce or eliminate funding of the reserve account for that particular year. Additionally, following the Turnover Meeting, on an annual basis, the Board, with the approval of all Owners, may elect not to fund the reserve account for the following year regardless of whether or not the reserve account is fully funded. Any funds established for any of the purposes mentioned in this Section shall be deemed to be a reserve fund notwithstanding that it may not be so designated by the Board. The amount of the reserve fund shall constitute an asset of the Association and shall not be refunded or distributed to any Owner. An Owner may treat his or her outstanding share of the reserve fund as a separate item in a sales contract.

6.2 Reserve Study. The Board shall annually conduct a reserve study, or review and update an existing study, of the Common Maintenance Areas and other reserve items set forth in Section 6.1 to determine the requirements of the reserve fund described in Section 6.1. The reserve study shall: (a) identify all items for which reserves are or will be established; (b) include the estimated remaining useful life of each item as of the date of the reserve study; and (c) include for each item, as applicable, an estimated cost of maintenance, repair and replacement at the end of the item's useful life.

6.3 Maintenance Plan. The Board shall prepare a maintenance plan for the maintenance, repair and replacement of all property for which the Association has maintenance, repair or replacement responsibility under this Declaration, the Bylaws or the Planned Community Act. The maintenance plan shall: (a) describe the maintenance, repair and replacement to be conducted; (b) include a schedule for the maintenance, repair and replacement; (c) be appropriate for the size and complexity of the maintenance, repair and replacement responsibility of the Association; and (d) address issues that include, but are not limited to, warranties and the useful life of the items for which the Association has maintenance, repair and replacement responsibility. The Board shall review and update the maintenance plan as necessary.

7. ENFORCEMENT

7.1 Default in Payment of Assessments; Enforcement of Lien. If an Assessment or any other charge levied under this Declaration or the Bylaws is not paid within ten (10) days after its due date, such Assessment or charge shall become delinquent and shall bear interest from the due date until paid at the rate set forth in Section 7.4 below and, in addition, the

Association may exercise any or all of the following remedies as allowed under the Planned Community Act:

7.1.1 Lien. The Association shall have a lien against each Lot for any Assessment levied against the Lot and any fines or other charges imposed under this Declaration or the Bylaws against the Owner of the Lot from the date on which the Assessment, fine or charge is due. The provisions regarding the attachment, notice, recordation and duration of liens established on real property under ORS 94.709 shall apply to the Association's lien. The lien shall be foreclosed in accordance with the provisions regarding the foreclosure of liens under ORS 94.709 through 94.719. The Association, through its duly authorized agents, may bid on the Lot at a foreclosure sale, and may acquire and hold, lease, mortgage and convey the Lot.

7.1.2 Suit or Action. The Association may bring an action to recover a money judgment for unpaid Assessments, fines and charges under this Declaration without foreclosing or waiving the lien described in Section 7.1.1. Recovery on any such action, however, shall operate to satisfy the lien, or the portion thereof, for which recovery is made.

7.1.3 Fines. In addition to any other remedies available to the Association hereunder and subject to the requirements of ORS 94.630(1)(n), the Association shall have the right to impose reasonable fines upon an Owner who violates the Declaration, Bylaws or any rules and regulations of the Association, in the manner and amount the Board deems appropriate in relation to the violation.

7.1.4 Other Remedies. The Association shall have any other remedy available to it by law or in equity.

7.2 Notification of First Mortgagee. Upon the advance written request of the first mortgagee of any Lot, the Board shall notify the first mortgagee of any default in the performance of the terms of this Declaration by the Lot's Owner that is not cured within sixty (60) days.

7.3 Subordination of Lien to First Mortgages. The Association's lien for the Assessments and other charges provided for in this Declaration shall be subordinate to the lien of any first mortgage or deed of trust of record. The sale or transfer of any Lot shall not affect the Association's lien. However, the sale or transfer of a Lot pursuant to the foreclosure of a first mortgage lien or the execution of a deed in lieu of foreclosure of a first mortgage lien shall extinguish the Association's lien with respect to Assessments and other charges that became due prior to such sale or transfer. No sale, foreclosure or transfer of a Lot shall extinguish the personal obligation of the Owner who owned the Lot at the time the Assessment or other charge became due.

7.4 Interest, Expenses and Attorneys' Fees. Any amount not paid to the Association when due in accordance with this Declaration shall bear interest from the due date until paid at a

rate of twelve percent (12%) per annum, or at such other rate as may be established by the Board, but not to exceed the lawful rate of interest under the laws of the State of Oregon. A late charge may be charged for each delinquent Assessment in an amount established from time to time by resolution of the Board. If the Association files a notice of lien, the lien amount shall also include the recording fees associated with filing the notice, and a fee for preparing the notice of lien established from time to time by resolution of the Board. If the Association brings any suit or action to enforce this Declaration, or to collect any money due hereunder or to foreclose a lien, the defaulting Owner shall pay to the Association all costs and expenses incurred by the Association in connection with such suit or action, including a foreclosure title report, and the prevailing party in such suit or action shall recover such amount as the court may determine to be reasonable as attorneys' fees at trial and upon any appeal or petition for review thereof.

7.5 Nonexclusiveness and Accumulation of Remedies. An election by the Association to pursue any remedy provided in this Section 7 for a violation of this Declaration shall not prevent the concurrent or subsequent exercise of any other remedy permitted hereunder. The remedies provided in this Declaration are not exclusive, but shall be in addition to all other remedies, including actions for damages and suits for injunctions and specific performance, that are available under applicable law to the Association. In addition, any aggrieved Owner may bring an action against another Owner or the Association to recover damages or to enjoin, abate, or remedy any violation of this Declaration by appropriate legal proceedings.

8. PROPERTY RIGHTS AND EASEMENTS

8.1 Owners' Use and Occupancy. Except as otherwise expressly provided in this Declaration, the Bylaws, the Plat or any easement, covenant or any other instrument of record, the Owner of a Lot shall be entitled to the exclusive use and benefit of his or her Lot. Declarant and any representative of the Association authorized by the Association may at any reasonable time, upon reasonable notice to the Owner, enter upon any Lot for the purpose of determining whether or not the use of and/or the Improvements on the Lot are then in compliance with this Declaration, the Bylaws, the Design Guidelines or the rules and regulations of the Association. No such entry shall be deemed to constitute a trespass or otherwise create any right of action in the Owner of the Lot. Declarant or the Association may grant or assign easements over or with respect to any Lot to municipalities or other utilities performing utility services and to communications companies.

8.2 Owners' Easements of Enjoyment. Subject to any restrictions contained in this Declaration, the Bylaws, the Plat, the Operation and Maintenance Agreement or any easement, covenant or other instrument of record, every Owner and the Owner's family members, tenants, guests, and invitees shall have a right and easement of enjoyment in and to the Common Areas, which easement shall be appurtenant to and shall pass with the title to every Lot. Use of the Common Areas shall not result in unreasonable disturbance of the Owners and occupants of the

other Lots and shall be subject to the rules and regulations as may be adopted by the Board from time to time pursuant to Section 3.8.

8.3 Title to Common Areas. Declarant shall convey fee title to the Common Areas to the Association free and clear of liens and encumbrances no later than the Turnover Meeting.

8.4 Extent of Owners' Rights. The rights and use of enjoyment in the Property shall be subject to the following easements and all other provisions of this Declaration:

8.4.1 Association's and Owners' Easements. Declarant reserves for itself and grants to the Association and the Board and their duly authorized agents and representatives for the benefit of the Association and all Owners of Lots within the Property the following easements:

(a) An easement under and upon the Common Areas, for installation and maintenance of power, gas, electric, sewer, water and other utility and communication lines and other utility and communication lines and services installed by Declarant or with the approval of the Board;

(b) An easement under and upon the Common Areas, for construction, maintenance, repair, and use of the Common Areas and any Improvements thereon;

(c) The right to have access to the Common Areas and to all Lots as may be necessary for the installation, maintenance, repair, upkeep or replacement of the Common Maintenance Areas, for determining whether or not the use of and/or the Improvements on a Lot are then in compliance with this Declaration, the Bylaws, the Design Guidelines or the rules and regulations of the Association, or to make emergency repairs thereon necessary for the public safety or to prevent damage to the Common Maintenance Areas or to another Lot or Home. In case of an emergency originating in or threatening any Lot or Home or the Common Maintenance Areas, each Owner hereby grants the right of entry to any person authorized by the Board or the Association, whether or not the Owner is present at the time;

(d) Such easements as are necessary to perform the duties and obligations of the Association set forth in this Declaration, the Bylaws and Articles, as the same may be amended or supplemented;

(e) Each Lot shall have an easement over any adjoining Lot as may be required to perform maintenance, repair or reconstruction of the Home located on the benefited Lot. The Owner of the benefited Lot shall be responsible for restoring any damage to the burdened Lot resulting from such use and shall indemnify and hold harmless the owner of the burdened Lot for, from and against any damage, claim, loss or liability resulting from such use; and

(f) Pursuant to ORS 94.733(3), each Lot, Home and all Common Areas shall have an easement over all adjoining Lots, Homes and the Common Areas for the purpose of accommodating any present or future encroachment as a result of engineering errors, construction, reconstruction, repairs, settlement, shifting, or movement of any portion of the Property, or any other similar cause, and any encroachment due to building overhang or projection. There shall be valid easements for the maintenance of the encroaching Lots, Homes and the Common Areas so long as the encroachments shall exist, and except as otherwise provided, the rights and obligations of Owners shall not be altered in any way by the encroachment, nor shall the encroachment be construed to be encumbrances affecting the marketability of title to any Lot, Home or Common Areas.

8.4.2 Declarant's Easements. So long as Declarant owns any Lot, and in addition to any other easements to which Declarant may be entitled, Declarant reserves an easement over, under and across the Common Areas in order to carry out development, construction, sales and rental activities necessary or convenient for the development of the Property or the sale or rental of Lots and for such other purposes as may be necessary or convenient for discharging Declarant's obligations or for exercising any of Declarant's rights hereunder.

8.4.3 Utility and Other Municipal Easements. Declarant or the Association may (and, to the extent required by law, shall) grant or assign easements to municipalities or other utilities performing utility services and to communications companies, and the Association may grant free access thereon to police, fire, and other public officials and to employees of utility companies and communications companies serving the Property.

8.4.4 Villebois Easements. All Common Area parks and trail systems with the Property may be used and enjoyed by the owners and occupants of other portions of Villebois on the same basis as the Owners. Such use shall be subject to all conditions and restrictions set forth in this Declaration, which may be enforced as provided in this Declaration. Such owners and occupants shall pay, indemnify and hold harmless the Association and all Owners for, from and against any damage, loss, claim or liability arising out of such use.

8.4.5 Transfer of the Common Areas. The Association may not sell, transfer or grant a security interest in any portion of the Common Areas unless the Owners holding at least eighty percent (80%) of the total voting power of the Association, including eighty percent (80%) of the votes not held by Declarant, and the Class B Member, if any, approve the sale, transfer or grant of security interest. A sale, transfer or grant of security interest in any portion of the Common Areas in accordance with this Section 8.4.5 may provide that the Common Areas so conveyed shall be released from any restrictions imposed on such Common Areas by this Declaration or the Bylaws. No such sale, transfer, or grant of security interest may, however, deprive any Lot of such Lot's right of access or support without the written consent of the Owner of such Lot.

8.4.6 Authority to Grant Easements and Other Property Interests in Common Areas. The Association may execute, acknowledge and deliver leases, easements, rights of way, licenses, and other similar interests affecting the Common Areas and consent to vacation of roadways within and adjacent to the Common Areas. Except for those matters described in ORS 94.665(4)(b), which the Board may approve without Owner consent, the granting of any interest pursuant to this Section 8.4.6 must be approved by at least seventy-five percent (75%) of the Owners present at a meeting of the Association or with the consent of at least seventy-five percent (75%) of all Owners solicited by any means the Board determines is reasonable. If a meeting is held to conduct the vote, the meeting notice shall include a statement that the approval of the granting of an interest in the Common Areas will be an item of business on the agenda of the meeting.

8.5 Maintenance and Reconstruction Easements. An easement is hereby reserved in favor of the Association and its successors, assigns, contractors, agents, and employees over and across each Lot, for purposes of accomplishing the repair and restoration of the Common Maintenance Areas pursuant to Section 14.

9. GENERAL PROVISIONS FOR AND RESTRICTIONS ON USE OF LOTS

9.1 Each Lot, including the Home and all other Improvements located thereon, shall be maintained in a clean and attractive condition, in good repair, and in such a manner as not to create a fire hazard.

9.2 No Lot shall be used except for residential purposes. No building shall be erected, altered, placed, or permitted to remain on any Lot other than one detached single-family dwelling and a private garage or carport. The Home and any other Improvements on a Lot shall comply with all applicable City height restrictions.

9.3 A greenhouse of noncommercial type, or a garden tool shed or other residential accessory buildings or improvements, may be erected, provided that these types of Improvements are of an acceptable architectural design (as determined by the ACC in accordance with Section 12), shall have the exterior painted and, if such structure is separate from the Home, shall be located within the fenced-in patio or courtyard. Such accessory buildings or improvements shall comply with applicable requirements of the City. All Homes shall provide a garage or carport sufficient to accommodate a minimum of two (2) vehicles.

9.4 All garbage, trash, cuttings, refuse, garbage and refuse containers, oil tanks, clothes lines or other service facilities, stored trailers, and recreational vehicles ("RV's") shall be screened from the view of neighboring Homes and from the Common Areas in a manner approved by the ACC. No RV's shall be visibly parked on a Lot for more than five (5) continuous days in a calendar month. The intent of this provision is to minimize the negative visual impact caused by the visible parking or storage of RV's.

9.5 No noxious or offensive activity shall take place on any Lot, nor shall anything be done or placed on any Lot that interferes with or jeopardizes enjoyment of other Lots or within the Property.

9.6 If any tree, shrub, or other vegetation blocks or substantially obscures the view from any Home, the Owner of the Home may petition the ACC for the trimming, topping, or removal of such tree, shrub, or other vegetation. Upon receipt of such petition, the ACC shall investigate the matter and make a determination in writing whether such view is actually blocked or substantially obscured. If the ACC makes such a determination, the Owner of the offending tree, shrub, or other vegetation shall have ten (10) days from the date the ACC made such determination to elect whether the offending tree, shrub, or other vegetation should be trimmed, topped, or entirely removed. If the offending tree, shrub, or other vegetation is not part of the Association Landscaping, then the Owner of the Lot on which the offending tree, shrub, or other vegetation is located shall bear sole responsibility for the entire cost of such trimming, topping, or removal and shall be solely responsible for obtaining any approvals from the City prior to proceeding with topping or removal.

9.7 The maintenance and replacement (if removed) of trees planted in the rear and side yards of all Lots shall be the responsibility of each Owner; provided, that no tree may be removed without the prior approval of the ACC and any required governmental approvals. Customary trimming and pruning in accordance with professional arboriculture industry standards of trees shall be permitted in the rear and side yards of the Lots without prior approval.

9.8 All fences, walls, hedges, landscaping and other Improvements installed on any Lot shall comply with the City vision clearance requirements and height restrictions. Owners who desire a fence are encouraged to use the same or similar material in style as fencing in the areas near the Property. Prior to construction, design of all fences, hedges or walls must be approved in writing by the ACC.

10. GENERAL RESTRICTIONS ON USE OF PROPERTY

10.1 Common Areas. No person shall construct or reconstruct any Improvements, or alter or refinish any Improvements, make any excavation or fill, make any change in the natural or existing surface drainage, or install a utility line in the Common Areas without the prior written approval of the Board or a duly appointed committee to which the Board has delegated such responsibility and, if required, the City.

10.2 Association Landscaping. No person shall remove, alter, modify or replace any Association Landscaping without the prior written approval of the Board or a duly appointed committee to which the Board has delegated such responsibility and, if required, the City.

11. MAINTENANCE OBLIGATIONS

11.1 Association Maintenance Obligations. The Association shall be responsible for the maintenance, repair, upkeep and replacement of the following Common Maintenance Areas:

(a) Tracts A, C, D, E, G, J and L, as shown on the Plat, including all paved street surfaces, mountable curbs, street signs, lighting, landscaping, irrigation systems and other Improvements located thereon, to be maintained as private streets and/or alleys;

(b) Tracts B, F, H, I, K, M and N, as shown on the Plat, including all landscaping, irrigation systems, sidewalks, lighting and other Improvements located thereon, to be maintained as a recreational areas, parks, open space tracts and/or linear/buffer tracts;

(c) The Association Landscaping;

(d) [Include City-owned park tract to be maintained by Association??];

(e) All entry monument signage for the Property, including any landscaping, lighting and irrigation systems related thereto;

(f) All cluster mailboxes serving the Lots; and

(g) Any other area determined by the Board to be in the interest of the Association to maintain.

The Association shall regularly inspect, maintain, repair and keep the Common Maintenance Areas in good condition and provide for all necessary services and cause all acts to be done which may be necessary or proper to assure the maintenance of the Common Maintenance Areas. The Association shall perform all maintenance obligations set forth in this Declaration or the Bylaws, any maintenance manual provided by Declarant or the maintenance plan described Section 6 above and shall employ all other commonly accepted maintenance practices intended to prolong the life of the materials and construction of Improvements within the Common Maintenance Areas. Additionally, the Association shall be responsible for performing all maintenance required of the "Obligor" under the Operation and Maintenance Agreement.

11.2 Owner's Maintenance Obligations. Except to the extent Association Landscaping is maintained by the Association, each Owner shall maintain his or her Lot and the Improvements located thereon in a clean and attractive condition, in good repair and in such a fashion as not to create a hazard of any kind. Such maintenance shall include, without limitation, painting or staining, repair, replacement and care of roofs, gutters, downspouts, surface water drainage, walks, driveways, landscaping and other exterior Improvements. In addition, each Owner shall keep his or her Lot free of trash and other unsightly materials. The provisions of the preceding sentence include the areas between the property line of any Lot and

the nearest curb, including sidewalks and street trees unless otherwise included in the Association Landscaping.

11.3 Damage or Destruction By Owner. If damage to the Common Maintenance Areas, including any Improvements located thereon, beyond ordinary wear and tear is directly attributable to an Owner or the family members, invitees, licensee, or guest of an Owner, then that Owner shall be responsible for the cost of repairing the damage and the Association may levy a Limited Assessment against the Owner for the repair cost.

12. ARCHITECTURAL CONTROL COMMITTEE

12.1 Creation of Committee. The ACC with the powers and authority described in this Section 12 shall be created as a committee of the Association. The ACC shall have three (3) members, who shall be appointed by Declarant until the Turnover Meeting, after which the ACC members shall be appointed by the Board and shall serve at the pleasure of the Board. Members of the ACC must be Owners. Board members may also serve as ACC members. Appointed members of the ACC shall remain in office until new members are appointed by the Board unless they sooner resign or are disqualified.

12.2 Operations. The members of the ACC shall elect a chairperson, who shall conduct all meetings and shall provide for reasonable notice to each member of the ACC prior to any meeting. The notice shall set forth the time and place of the meeting. Notice may be waived by any member.

12.3 Majority Action. The affirmative vote of a majority of the members of the ACC shall govern its actions and constitute the act of the ACC. A quorum of the ACC shall consist of a majority of the ACC members. The ACC may render its decision only by written instrument setting forth the action taken by the members consenting thereto.

12.4 Review Procedures. If the ACC fails to provide written approval or disapproval of plans and specifications within thirty (30) days after such complete plans and specifications have been submitted, approval of the ACC shall not be required and the related covenants shall be deemed to have been satisfied, unless within twenty (20) days of receipt of the complete plans and specifications, the ACC notifies the Owner of the ACC's intention to extend the approval period by an additional fifteen (15) days to a total of forty-five (45) days after receipt of complete plans and specifications. The ACC shall, from time to time, adopt application forms and rules specifying those requirements necessary to constitute a complete application.

12.5 Approval of Plans by ACC. No Home, building, garage, structure, or other Improvement of any kind or nature, including, without limitation, landscaping, shall be commenced, erected, placed, or altered on any Lot until the construction plans and specifications, and a plan showing the nature, shape, height, materials, and colors, together with detailed plans showing the proposed location of the same on the particular building site and

proposed landscaping has been submitted to and approved in writing by the ACC. All such Improvements and alterations shall be in conformance with the Design Guidelines, the Pattern Book adopted by the City for each area within Villebois and all other applicable governmental laws, ordinances, conditions of approval, rules and regulations. To the extent that the requirements contained in the Pattern Book or in any applicable governmental laws, ordinances, rules and regulations may be in conflict with the Design Guidelines, the more restrictive standard shall apply. Complete plans and specifications for approval by the ACC must include all material required by the rules of the ACC as provided in Section 12.4 above. In no case shall any plans and specifications be accepted for approval that are inconsistent with the requirements of Section 9.2. The ACC may approve or disapprove plans and specifications as submitted or may approve such plans and specifications with specific conditions to such approval.

12.6 Damages Inadequate. Damages are hereby declared to be inadequate compensation for any breach of the covenants, conditions, and restrictions imposed by this Declaration. Declarant, the ACC, or any Owner may, by appropriate proceedings, enjoin, abate, and remedy any such breach and the continuance

12.7 Nuisance. The result of every act of omission or commission or the violation thereof, whether such covenants, conditions, and restrictions are violated in whole or in part, shall constitute a nuisance, and every remedy allowed by law or equity against such nuisance, either public or private, shall be applicable against every such result and may be exercised by Declarant, the ACC, or by any Owner, and may be prohibited or enjoined.

12.8 Non-Waiver. The provisions contained in this Declaration shall inure to the benefit of and be enforceable by Declarant, the ACC, or any Owner, and each of their legal representatives, heirs, successors, and assigns. Failure by Declarant, the ACC or any Owner or their legal representatives, heirs, successors, and assigns to enforce any of the provisions contained herein shall in no event be deemed a waiver of the right to do so thereafter.

12.9 Estoppel Certificate. Within fifteen (15) business days after an Owner delivers a written request to the ACC, the ACC shall provide the Owner with an estoppel certificate executed by a member of the ACC. The estoppel certificate shall state whether or not the Improvements located on the Lot owned by the requesting Owner comply with the provisions of this Declaration. If the estoppel certificate indicates that the Improvements are not in compliance, then it shall identify the specific non-conforming Improvements and set forth with particularity the nature of the noncompliance. Any purchaser in due course from the Owner, and any mortgagee, beneficiary, or secured party having any interest in the Lot and any associated Improvements, may rely on the estoppel certificate with respect to the matters set forth therein, and the estoppel certificate shall be conclusive as between the ACC, all Owners, and such purchaser, mortgagee, beneficiary, or secured party.

12.10 Defenses. The issuance of an estoppel certificate as described in Section 12.9 shall constitute an absolute defense to claims brought against an Owner pursuant to this Section

12 with respect to matters within the purview of the ACC, where the Improvement at issue was in existence at the time of the issuance of the estoppel certificate.

12.11 Liability. The ACC shall use reasonable judgment in accepting or disapproving all plans and specifications submitted to it. Neither the ACC nor any individual ACC member shall be liable to any person for any official act of the ACC in connection with submitted plans and specifications, except to the extent the ACC or any individual ACC member acted with malice or wrongful intent. Approval by the ACC does not necessarily assure approval by any governmental authority. Notwithstanding that the ACC has approved plans and specifications, neither the ACC nor any of its members shall be responsible or liable to any Owner, occupant, builder, developer, or contractor with respect to any loss, liability, claim, or expense which may arise by reason of such approval. Review or analysis of structural, geophysical, engineering, or other similar considerations shall be outside the scope of the ACC's review. Neither the Board, the ACC, or any agent thereof, nor Declarant or any of its members, managers, employees, agents, or consultants, shall be responsible in any way for any defects in any plans or specifications submitted, revised, or approved in accordance with the provisions of this Declaration, nor for any structural or other defects in any work done according to such plans and specifications. The Association shall indemnify, hold harmless, and defend the ACC and its members in any suit or proceeding which may arise by reason of any of the ACC's decisions, provided that the ACC members acted in good faith, within the scope of their authority, and in a manner reasonably believed to be in the best interest of the Association and its Members. The Association shall use reasonable efforts to procure errors and omissions insurance coverage with respect to the ACC members, in accordance with the provisions of the Bylaws.

12.12 Activities of Declarant. This Section 12 shall not apply to the activities of Declarant or its affiliates.

13. DESIGN GUIDELINES

13.1 Paint Requirement. The exterior of any Home erected on a Lot shall be fully completed and painted within one (1) year after construction of the Home has commenced.

13.2 Designs, Materials, and Construction Quality. The external designs and materials of all Homes shall harmonize with each other and shall be reasonably harmonious with those employed on the Homes on other Lots. All auxiliary buildings on a Lot shall be of the same general design and materials as the Home on the Lot. The primary exterior color tone of all buildings shall blend with the natural environment. Bright, unnatural exterior colors are prohibited, except for limited use as trim and accent panels. All Homes, auxiliary buildings, fences, retaining walls, and other Improvements shall comply with the requirements of the Pattern Book and shall be constructed in a good, quality manner in accordance with locally accepted professional building practices.

13.3 Home Size. The ground floor area of each Home, exclusive of one story open porches, garages, and carports, shall not be less than that required by the City Building Code.

13.4 Foundations. All structures erected shall have full, concrete masonry or concrete or wooden piers and piling foundations as approved by the City and designed to accommodate the surrounding terrain. Foundations and exterior walls of all buildings shall be finished in a suitable and customary manner for each such type of building.

13.5 Height Restrictions. All Homes and other Improvements constructed on the Lots shall comply with the applicable City height restrictions. Any height adjustment granted by the City shall be approved by the ACC, unless the ACC determines that the building will unreasonably restrict the view of neighboring Lots.

13.6 Environmental Conditions. Owners shall insure that design and construction of structures in the Property shall properly withstand environmental conditions, including the protection of the flora on the Property.

13.7 Factory Built Homes. All Homes shall be constructed on the Lots. Mobile homes, factory built homes, or manufactured homes shall not be permitted. Notwithstanding the foregoing, panels constructed off-site but assembled on the Lot shall be permitted.

13.8 Additional Design Guidelines. The ACC shall have the authority, but not the obligation, to promulgate and issue, and thereafter to amend from time to time, additional design guidelines supplementing and/or interpreting, but not contradicting, the design guidelines set forth in this Section 13 or elsewhere in this Declaration. Such guidelines shall be supplied in writing to all Owners and shall be fully binding upon all parties as if set forth in this Declaration and shall be applied by the ACC in reviewing and approving or denying proposed improvements or modifications. The ACC shall take into account any proposed building site envelope in order to minimize any impact on neighboring Lots and shall have authority to establish and modify guidelines as necessary or convenient to further this purpose.

13.9 Activities of Declarant. This Section 13 shall not apply to the activities of Declarant or its affiliates.

14. CASUALTY AND CONDEMNATION

14.1 Casualty. The Owner of each Home shall repair, reconstruct, and rebuild the damaged or destroyed portions of his or her Home to substantially the same condition that existed prior to the damage or destruction. In the event of damage to or destruction of the Common Areas or Association Landscaping, the Association shall repair and restore the damaged portion of the Common Areas, unless the holders of at least 75% of the Class A Member voting power of the Association and the Class B Member, if any, agree that the damaged or destroyed portions shall not be repaired or restored. All repair, reconstruction,

rebuilding, or restoration shall begin within six (6) months following the damage or destruction and shall be diligently pursued to completion within twelve (12) months following the damage or destruction, unless work is delayed by causes beyond the reasonable control of the Owner or the Association, as the case may be. If the proceeds of the insurance policies held by the Association are insufficient to fund the full cost of repair and/or restoration of the Common Areas or Association Landscaping, the difference between the amount of such proceeds and such cost shall be charged to all Owners by means of a Special Assessment.

14.2 Condemnation. If any part of the Common Areas are taken by any authority having the power of condemnation or eminent domain (or shall be sold under threat of condemnation), each Owner shall be entitled to notice of such event. The Association shall represent the Owners in negotiations with the condemning authority. The condemnation award shall be applied first to restoration of the Common Areas not taken (unless holders of at least 75% of the Class A Member voting power of the Association and the Class B Member, if any, agree that the remaining Common Areas shall not be restored) and then to such other purposes as the Board may determine in its discretion (including payment to the Owners).

15. SPECIAL DECLARANT RIGHTS

15.1 Declarant shall have the following Special Declarant Rights:

15.1.1 Responsibility and control of the ACC and the Association until the Turnover Meeting, including the right to appoint, remove and replace members of the Board and the ACC.

15.1.2 The right to maintain a sales and management office on the Property.

15.1.3 The right to reserve easement and access rights across the Common Areas for use of future development.

15.1.4 The right to construct Improvements in the Common Areas, whether or not such Improvements are described in this Declaration.

15.1.5 The right to approve amendments to this Declaration and the Bylaws prior to the Turnover Meeting and for a period of ten (10) years thereafter regardless of whether Declarant still owns a Lot.

15.1.6 The right to approve Special Assessments for capital improvements or additions for so long as Declarant owns a Lot.

15.1.7 The right to receive notice of and to attend all Owner meetings and Board meetings for a period of ten (10) years following the Turnover Meeting regardless of whether Declarant still owns a Lot. Meeting notices to Declarant shall be given in the same manner as notices to the Owners; provided, however, that any notice of a Board meeting that is posted at

the Property pursuant to the Bylaws must also be given to Declarant by mail or any other delivery method described in Section 17.4 within the time period prescribed in the Bylaws.

15.1.8 The right to review and make copies of all inspection, maintenance and other records of the Association regardless of whether the Turnover Meeting has occurred or Declarant still owns a Lot.

15.1.9 The rights of Declarant under the Planned Community Act, including but not limited to those under ORS 94.550(21), and all other rights reserved for Declarant elsewhere in this Declaration or in the Bylaws.

16. DISPUTE RESOLUTION.

16.1 Required Procedure. To the fullest extent allowed by law, all claims, controversies, or disputes, whether they are statutory, contractual, tort claims, and/or counterclaims between or among Declarant, Declarant's successors and assigns, the Association, and/or Owner(s) (collectively, the "Parties" and individually, a "Party") which arise out of or are related to the Property, the Lots, the Homes, the Planned Community Act, this Declaration, the Bylaws, the Articles, the Design Guidelines or the rules and regulations of the Association, or which relate to the interpretation or breach of the Planned Community Act, this Declaration or the Bylaws, the Articles, the Design Guidelines or the rules and regulations of the Association (collectively referred to as "Claims") shall be resolved in accordance with the procedures specified herein. Except as otherwise required by the Planned Community Act, the following matters are excluded from this dispute resolution clause and do not constitute Claims: (i) judicial or non-judicial foreclosure or any other action or proceeding to enforce assessments, fines, interest or a trust deed, mortgage, Association lien, or land sale contract; (ii) a forcible entry and detainer action; (iii) actions by the Association or any Owner related to removal of a structure or other condition that violates this Declaration, the Bylaws, the Design Guidelines or any rules and regulations of the Association; (iv) actions for the appointment of a receiver; (v) provisional remedies such as injunctions or the filing of a lis pendens; or (vi) the filing or enforcement of a mechanic's lien. The filing of a notice of pending action (lis pendens) or the application to any court having jurisdiction thereof for the issuance of any provisional process remedy described in Rules 79 through 85 of the Oregon Rules of Civil Procedure (or corresponding federal statutory remedies), including a restraining order, attachment, or appointment of receiver, shall not constitute a waiver of the right to mediate or arbitrate under this Section, nor shall it constitute a breach of the duty to mediate or arbitrate. The proceeds resulting from the exercise of any such remedy shall be held by the Party obtaining such proceeds for disposition as may be determined by an agreement of the Parties pursuant to a mediation or by the arbitration award.

16.2 Negotiated Resolution. The Parties will seek a fair and prompt negotiated resolution of Claims and shall meet at least once to discuss and seek to resolve such Claims, but if this is not successful, all Claims shall be resolved by mediation, in small claims court, or by binding arbitration as set forth in Sections 16.3, 16.4 or 16.5, as applicable.

16.3 Mediation. Prior to mediation of any Claim, the Parties shall endeavor to resolve disputes through the process set forth in Section 16.2 above. All Claims that are not resolved by such process shall be subject to mediation as a condition precedent to arbitration or the filing of a small claims complaint. The request for mediation may be made concurrently with the filing of a demand for arbitration as set forth in Section 16.5 below, but, in such event, mediation shall proceed in advance of arbitration, which shall be stayed pending mediation for a period of sixty (60) days from the date of filing, unless stayed for a longer period by agreement of the parties. All mediation shall be in Clackamas County, Oregon with any dispute resolution program available that is in substantial compliance with the standards and guidelines adopted under ORS 36.175, as it may be amended. The foregoing requirement does not apply to circumstances in which irreparable harm to a Party will occur due to delay or litigation or an administrative proceeding initiated to collect assessments, other than assessments attributable to fines.

16.4 Small Claims. All Claims that have not been resolved by mediation and which are within the jurisdiction of the Small Claims Department of the Circuit Court of the State of Oregon shall be brought and determined there, and all Parties shall be deemed to have waived their right to a jury trial with respect to such Claims.

16.5 Arbitration. Prior to arbitration of any Claim, the Parties shall endeavor to resolve disputes through the processes set forth in Section 16.2, 16.3 and 16.4 above, as applicable. All Claims that have not been resolved by such processes shall be resolved by binding arbitration. Such arbitration shall be conducted by and pursuant to the then effective arbitration rules of Construction Arbitration Services, Inc., or another reputable arbitration service selected by Declarant. If Declarant is not a Party to such dispute, the arbitration service shall be selected by the Board. Any judgment upon the award rendered pursuant to such arbitration may be entered in any court having jurisdiction thereof.

16.6 No Attorneys' Fees. Unless otherwise specifically provided for in this Declaration, the Bylaws or the Planned Community Act, no party in the arbitration, mediation or other proceeding shall be entitled to recover costs or attorneys' fees in connection therewith. To the fullest extent allowed by law and except for Claims in an amount less than or equal to $7,500, no Claim shall be initiated by the Association without approval from the Owners holding seventy-five percent (75%) of the total voting power of the Association. The foregoing vote requirement shall not be required to institute or respond to the following: (i) actions to collect delinquent Assessments, fines or other charges under the Declaration, these Bylaws or any rules and regulations adopted by the Association; (ii) actions initiated by the Association prior to the Turnover Meeting; (iii) actions challenging ad valorem taxation or condemnation proceedings; (iv) actions initiated against any contractor or vendor hired by the Association or supplier of goods and services to the Association; (v) the defense of claims filed against the Association or the assertion of counterclaims in proceedings instituted against it (except for non-mandatory counterclaims); (vi) actions by the Association to appoint a receiver; or (vi) actions to summarily abate, enjoin and remove a structure or condition that violates this Declaration, the Bylaws, the Design Guidelines or any rules and regulations of the Association.

16.7 Confidentiality. The Parties shall keep all discussions of disputes, all settlements and arbitration awards and decisions confidential and shall not disclose any such information, whether directly or indirectly, to any third parties unless compelled to do so by an order of a court of competent jurisdiction. The Parties agree that if a Party breaches its confidentiality obligation then the other Party or Parties to the dispute shall be entitled to seek and obtain any and all equitable remedies, including injunctive relief and specific performance and each Party hereby waives any claim or defense that the other Party has an adequate remedy at law for any such breach and the Parties agree that the aggrieved Party shall not be required to post any bond or other security in connection with any such equitable relief.

17. MISCELLANEOUS

17.1 Term. The covenants, conditions and restrictions of this Declaration shall run for a term of thirty (30) years from the date this Declaration is recorded, after which time they shall be automatically extended for successive periods of ten (10) years each, unless amended, modified or terminated by a vote of the Owners holding at least seventy-five percent (75%) of the total voting power of the Association.

17.2 Amendment and Repeal.

17.2.1 This Declaration, or any provision thereof, as from time to time in effect with respect to all or any part of the Property, may be amended or repealed by the vote or written consent of Owners holding at least seventy-five percent (75%) of the total voting power of the Association and the written consent of Declarant prior to the Turnover Meeting and for a period of ten (10) years thereafter. To the extent any amendment relates to the preservation or maintenance of the Common Areas, such amendment shall also be approved by the zoning administrator of the City.

17.2.2 Upon approval of an amendment as provided herein, the president and secretary of the Association shall execute an instrument amending this Declaration and certifying that the amendment was adopted in accordance with this Declaration and ORS 94.590, which certification shall be properly acknowledged in the manner of acknowledgment of deeds, and the Board, or other duly appointed and authorized persons, shall record the instrument amending this Declaration.

17.2.3 In no event shall an amendment to this Declaration create, limit or diminish any Special Declarant Rights without Declarant's written consent. Additionally, no amendment to this Declaration shall change the boundaries of a Lot, any uses to which a Lot is restricted, the method for determining liability for common expenses, the method for determining the right to common profits or the method of determining voting rights unless the Owners of the affected Lots unanimously consent to the amendment.

17.3 Regulatory Amendments. Notwithstanding the provisions of Section 17.2, until the Turnover Meeting, Declarant shall have the right to amend this Declaration or the Bylaws without any other Owner approval in order to comply with the requirements of any applicable statute, ordinance, regulation or guideline of the Federal Housing Administration, the Veterans Administration, the Farmers Home Administration of the United States, the Federal National Mortgage Association, the Government National Mortgage Association, the Federal Home Loan Mortgage Corporation, any department, bureau, board, commission or agency of the United States or the State of Oregon, or any corporation wholly owned, directly or indirectly, by the United States or the State of Oregon that insures, guarantees or provides financing for a planned community or lots in a planned community.

17.4 Notices. Any notices permitted or required to be delivered as provided herein shall be in writing and may be delivered by: (i) messenger service (or hand delivery); (ii) overnight courier service; (iii) regular U.S. Mail; or (iv) electronic mail, facsimile transmission or any other form of electronic communication acceptable to the Board and permissible under the Planned Community Act. Notices delivered by messenger service (or hand delivery), overnight courier service or regular U.S. Mail shall be sent to each Member's mailing address last appearing on the books of the Association. Notices delivered by facsimile or email shall be sent to the Member's email address or facsimile number last appearing on the books of the Association. Notwithstanding the foregoing, electronic mail, facsimile or other form of electronic communication may not be used to give notice of: (i) failure to pay an assessment; (ii) foreclosure of an Association lien under ORS 94.709; or (iii) an action the Association may take against a Member. Additionally, a Member may decline to receive notice by electronic mail, facsimile or other form of electronic communication by giving written notice thereof to the Board. Notices shall be deemed given on the date the notices are sent in accordance with the procedures outlined herein.

17.5 Right of Enforcement. Except as otherwise provided herein, each Owner of a Lot shall have the right to enforce any or all of the provisions of this Declaration. Additionally, the provisions of this Declaration relating to the preservation and maintenance of the Common Areas shall be deemed to be for the benefit of the City as well as the Association and Owners and the City may enforce such provisions by appropriate proceedings at law or in equity, or may cause such maintenance to be performed, the costs of which shall be a lien upon the Property.

17.6 Remedies Cumulative. Each remedy provided herein is cumulative and not exclusive.

17.7 Joint Owners. If two or more persons share the ownership of any Lot, regardless of the form of ownership, the responsibility of such persons to comply with this Declaration shall be a joint and several responsibility and the act or consent of any one or more of the co-Owners shall constitute the act or consent of the entire ownership interest; provided, however, that if the co-Owners disagree among themselves as to the manner in which any vote or right of consent held by them shall be exercised with respect to a pending matter, any co-Owner may deliver

written notice of such disagreement to the Association, and the vote or right of consent involved shall then be disregarded completely in determining the proportion of votes or consents given with respect to such matter.

17.8 Lessees and Other Invitees. Lessees, invitees, contractors, family members and other persons entering the Property under rights derived from an Owner shall comply with all of the provisions of this Declaration restricting or regulating the Owner's use, improvement or enjoyment of such Owner's Lot and other areas within the Property. The Owner shall be responsible for ensuring such compliance and shall be liable for any failure of compliance by such persons in the same manner and to the same extent as if the failure had been committed by the Owner.

17.9 Non-Waiver. The failure to enforce any of the provisions of this Declaration at any time shall not constitute a waiver of the right to subsequently enforce such provision.

17.10 Restrictions Construed Together. All of the provisions of this Declaration shall be liberally construed together to promote and effectuate the general plan and scheme of the Property.

17.11 Restrictions Severable. Each of the provisions of this Declaration shall be deemed independent and severable, and the invalidity or partial invalidity of any provision or portion thereof shall not affect the validity or enforceability of any other provision.

17.12 Singular Includes Plural. Unless the context requires a contrary construction, the singular shall include the plural and the plural the singular; and the masculine, feminine or neuter shall each include the masculine, feminine and neuter.

17.13 Captions. All captions and titles used in this Declaration are intended solely for convenience of reference and shall not affect that which is set forth in any of the provisions hereof.

(Remainder of Page Intentionally Left Blank;
Signature Page Follows)

PRELIMINARY DRAFT
TO BE MODIFIED

IN WITNESS WHEREOF, the undersigned has executed this Declaration as of the date first written above.

DECLARANT: _____, a
_____

By:_____
Name:_____
Title:_____

STATE OF _____)
) ss.
County of_____)

The foregoing instrument was acknowledged before me on this ____ day of _____ 20___, by _____, who is the _____ of _____, a _____, on behalf of said_____.

_____
Notary Public for_____
My Commission Expires:_____

PRELIMINARY DRAFT
TO BE MODIFIED

EXHIBIT A

Legal Description of Property

Lots 1 through 81, inclusive, and Tracts A through N, inclusive, of _____, Clackamas County, Oregon, the plat of which was recorded in the official records of Clackamas County, Oregon on _____, 20___ as Document No. _____.

PRELIMINARY DRAFT
TO BE MODIFIED

EXHIBIT B

Legal Description of Common Areas

Tracts A through N, inclusive, _____, Clackamas County, Oregon, the plat of which was recorded in the official records of Clackamas County, Oregon on _____, 20___ as Document No. _____.

City of
WILSONVILLE
in OREGON

29799 SW Town Center Loop E
Wilsonville, Oregon 97070
(503) 682-1011
(503) 682-1015 Fax

CERTIFICATION OF ASSESSMENTS AND LIENS

"It is the policy of the City of Wilsonville that no permits of any kind shall either be issued or application processed for any applicant who owes or for any property for which there is any payment which is past due owing to the City of Wilsonville until such time as said sums owed are paid." (Resolution #796)

Project/Property Address: N/A - Grahams Ferry Road / 110th Avenue

Aka Tax Lot(s) 2915, 2916, 2919, 2922, 2991, 2992, 2995 & 2996 on Map(s) 3S 1W 15

Applicant: Pacific Community Design, Inc. (Stacy Connery)

Address: PMB # 519, 13500 SW Pacific Hwy, Ste. 58
Tigard, OR 97223

Property Owner: Polygon Northwest Company

Address: 109 E. 13th Street
Vancouver, WA 98660

In reference to the above, the City of Wilsonville records show that the following amount is due to the City:

Principal Amnt Due $ Ø ☐Current ☐Non-Current

Comments:

Dated: 3/21/13

Finance Department: Karen M Allen

(This certification shall be null and void 120 days following the Finance Department date of signature)

Stacy Connery

395-008

From: Fuller, Debbie [DebbieFul@co.clackamas.or.us]
Sent: Wednesday, March 27, 2013 8:45 AM
To: Stacy Connery
Cc: Travis Jansen
Subject: RE: Three (3) requests for plat name reservations

Hi Stacy,
The request for "Polygon Northwest at Villebois No. 2" has been **approved**.

The other two are **denied** due to the fact that there is no "Tonquin Woods No. 3" and all these subdivision names must be contiguous.

Thank you.

Debbie

SAP Central
PDP 4C
Tent. Plat - T.L. 2919

Debbie Fuller
Office Manager - Engineering/Surveyor
Development Services Building
150 Beavercreek Rd.
Oregon City, OR 97045

ph: 503.742.4492 | fax: 503.742.4481

Our office hours are 7:00 a.m. to 6:00 p.m. ~ We are closed on Fridays

---

From: Stacy Connery [mailto:stacy@pacific-community.com]
Sent: Tuesday, March 26, 2013 3:23 PM
To: Fuller, Debbie
Cc: Travis Jansen
Subject: Three (3) requests for plat name reservations

Hi Debbie,

Please see the three (3) separate requests for plat name reservations. Let me know if any additional information is needed to process this request.

Thank you,
Stacy Connery, AICP
(503) 828-5052

Pacific Community Design

Mailing Address:
PMB 519, 13500 SW Pacific Hwy, Ste. 58, Tigard, OR 97223

Please consider the environment before printing this e-mail

REQUEST TO RESERVE SUBDIVISION / CONDOMINIUM NAME

Clackamas County Surveyor's Office
150 Beavercreek Rd.
Oregon City, OR 97045
(503) 742-4475 / FAX (503) 742-4481
E-mail address: www.surveyor@clackamas.us

PLAT NAME REQUESTED:

Polygon Northwest at Villebois No. 2

	TWP/RANGE:	SECTION#:	TAX LOT#(s):
Location of Plat:	3S / 1W	15	2919

I understand that if the above name plat is not pending or recorded within two years, the name will be removed from the reserved list.

RESERVED BY: Stacy Connery

DATE:	TELEPHONE:	FAX:
3/26/13	(503) 941 - 9484	(503) 941 - 9485

EMAIL ADDRESS: stacy@pacific-community.com

PLAT SURVEYOR: #

Travis Jansen, #57751

NAME OF DEVELOPER:

Polygon Northwest Company

ADDRESS:

109 E. 13th Street, Vancouver, WA 98660

DATE:	TELEPHONE:	FAX:
3/26/13	(360) 695 - 7700	(360) 693 - 4442

EMAIL ADDRESS: fred.gast@polygonhomes.com

APPROVED BY:	APPROVAL DATE:

395-008

Stacy Connery

From: Fuller, Debbie [DebbieFul@co.clackamas.or.us]
Sent: Wednesday, March 27, 2013 11:48 AM
To: Stacy Connery
Cc: Travis Jansen
Subject: RE: Three (3) requests for plat name reservations

Hi Stacy,

Thank you for the clarification. All three requested names, "Tonquin Woods at Villebois No. 3", Tonquin Woods at Villebois No. 4, and "Tonquin Woods at Villebois No. 5" are all approved. Thank you for the updated map as well.

Debbie

SAP Central
PDP 4C
Tent. Plat - Part of
T.L. 2916

Debbie Fuller
Office Manager - Engineering/Surveyor
Development Services Building
150 Beavercreek Rd.
Oregon City, OR 97045

ph: 503.742.4492 | fax: 503.742.4481

Our office hours are 7:00 a.m. to 6:00 p.m. ~ We are closed on Fridays

---

From: Stacy Connery [mailto:stacy@pacific-community.com]
Sent: Wednesday, March 27, 2013 9:53 AM
To: Fuller, Debbie
Cc: Travis Jansen
Subject: RE: Three (3) requests for plat name reservations

Hi Debbie,

Sorry, my mistake. I didn't realize we had not yet reserved 'Tonquin Woods at Villebois No. 3.' Here is the request for No. 3 and the requests for No. 4 and No. 5 with 'at Villebois' added to the name. I've also attached a map showing relationship of the areas proposed to be platted with these names. Please let me know if you have any questions.

Thank you,
Stacy Connery, AICP
(503) 828-5052

Pacific Community Design

Mailing Address:
PMB 519, 13500 SW Pacific Hwy, Ste. 58, Tigard, OR 97223

Please consider the environment before printing this e-mail

REQUEST TO RESERVE SUBDIVISION / CONDOMINIUM NAME

Clackamas County Surveyor's Office
150 Beavercreek Rd.
Oregon City, OR 97045
(503) 742-4475 / FAX (503) 742-4481
E-mail address: www.surveyor@clackamas.us

PLAT NAME REQUESTED:

Tonquin Woods at Villebois No. 5

	TWP/RANGE:	SECTION#:	TAX LOT#(s):
Location of Plat:	3S / 1W	15	part of TL 2916

I understand that if the above name plat is not pending or recorded within two years, the name will be removed from the reserved list.

RESERVED BY: Stacy Connery

DATE:	TELEPHONE:	FAX:
3/26/13	(503) 941 - 9484	(503) 941 - 9485

EMAIL ADDRESS: stacy@pacific-community.com

PLAT SURVEYOR: #

Travis Jansen, #57751

NAME OF DEVELOPER:

Polygon Northwest Company

ADDRESS:

109 E. 13th Street, Vancouver, WA 98660

DATE:	TELEPHONE:	FAX:
3/26/13	(360) 695 - 7700	(360) 693 -4442

EMAIL ADDRESS: fred.gast@polygonhomes.com

APPROVED BY:	APPROVAL DATE:

SUPPORTING COMPLIANCE REPORT
ZONE CHANGE
PDP 4 - CENTRAL

SECTION IVA

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I. CITY OF WILSONVILLE COMPREHENSIVE PLAN

COMPACT URBAN DEVELOPMENT – IMPLEMENTATION MEASURES

IMPLEMENTATION MEASURE 4.1.6. A

Development in the "Residential – Village" Map area shall be directed by the Villebois Village Concept Plan (depicting the general character of proposed land uses, transportation, natural resources, public facilities, and infrastructure strategies), and subject to relevant Policies and Implementation Measures in the Comprehensive Plan; and implemented in accordance with the Villebois Village Master Plan, the "Village" Zone District, and any other provisions of the Wilsonville Planning and Land Development Ordinance that may be applicable.

Response: This application is being submitted and reviewed concurrently with a Preliminary Development Plan for Phase 4 of SAP-Central.

IMPLEMENTATION MEASURE 4.1.6.C

The "Village" Zone District shall be applied in all areas that carry the Residential – Village Plan Map Designation.

Response: The application proposes a zone change to "Village" for the subject property area, which includes the "Residential-Village" Comprehensive Plan Map Designation.

IMPLEMENTATION MEASURE 4.1.6.D

The "Village" Zone District shall allow a wide range of uses that benefit and support an "urban village", including conversion of existing structures in the core area to provide flexibility for changing needs of service, institutional, governmental and employment uses.

Response: This application seeks zone change approval from PF - Public Facilities to V – Village Zone on a portion of Villebois located within SAP Central. The subject property is 6.663 acres in size. The plan for subject property includes single family residential lots and park and open space areas. The 'Introductory Narrative' (see Section IA of Notebook) lists the proposed range of residential units which are interspersed to provide a diverse mix of housing. The proposed residential land use and housing types in this area are consistent with those portrayed in the *Villebois Village Master Plan*, which this regulation is intended to implement.

II. CITY OF WILSONVILLE LAND DEVELOPMENT ORDINANCE

SECTION 4.029 ZONING CONSISTENT WITH THE COMPREHENSIVE PLAN

If a development, other than a short-term temporary use, is proposed on a parcel or lot which is not zoned in accordance with the comprehensive plan, the applicant must receive approval of a zone change prior to, or concurrently with the approval of an application for a Planned Development.

Response: This zone change application is being requested concurrent with a PDP application and Tentative Plat for the site in conformance with the code. The PDP application material is located in Section II of this Notebook and the Tentative Plat application material is in Section III.

SECTION 4.110 ZONING – ZONES

(.01) The following Base Zones are established by this Code:

H. Village, which shall be designated "V" [per Section 4.125 enabling amendments (File No. 02PC08)]

Response: The subject property is within the city limits of Wilsonville. The area has a City of Wilsonville Comprehensive Plan designation of "Residential – Village." The site is currently zoned Public Facilities. This request is for a zone change to "Village," which is permitted within the area designated "Residential – Village" on the Comprehensive Plan Map.

SECTION 4.125 VILLAGE (V) ZONE

(.01) The Village (V) zone is applied to lands within the Residential Village Comprehensive Plan Map designation. The Village zone is the principal implementing tool for the Residential Village Comprehensive Plan designation. It is applied in accordance with the Villebois Village Master Plan and the Residential Village Comprehensive Plan designation as described in the Comprehensive Plan.

Response: The subject property lies within the area designated "Residential – Village" on the Comprehensive Plan Map. This request is for a zone change to "V – Village."

(.02) Permitted Uses

Response: The proposed uses listed in the associated application for a Preliminary Development Plan (see Section II of this Notebook) are consistent with the land uses permitted under the Village zone. The PDP, located in Section II of this Notebook, states that the proposed development will create lots for single family residential homes as well as parks, open spaces and linear greens. These uses are permitted under the Village zone.

(.18) Village Zone Development Permit Process

B. Unique Features and Processes of the Village (V) Zone

2. …Application for a zone change shall be made concurrently with an application for PDP approval…

Response: The application for a zone change is being made concurrent with an application for PDP approval (see Section II of this Notebook).

SECTION 4.197 ZONE CHANGES AND AMENDMENTS TO THIS CODE – PROCEDURES.

(.02) In recommending approval or denial of a proposed zone map amendment, the Planning Commission or Development Review Board shall at a minimum, adopt findings addressing the following criteria:

A. That the application before the Commission or Board was submitted in accordance with the procedures set forth in Section 4.008 or, in the case of a Planned Development, Section 4.140; and

Response: This application has been submitted in accordance with the procedures set forth in Section 4.140, which requires that:

(A) All parcels of land exceeding two (2) acres in size that are to be used for residential, commercial or industrial development, shall, prior to the issuance of building permit: 1. Be zoned for planned development; and

(B) Zone change and amendment to the zoning map are governed by the applicable provisions of the Zoning Sections, inclusive of Section 4.197.

This zone change application will establish the appropriate zone for this development and will be governed by the appropriate Zoning Sections.

B. That the proposed amendment is consistent with the Comprehensive Plan map designation and substantially complies with the applicable goals, policies and objectives, set forth in the Comprehensive Plan Text; and

Response: Comprehensive Plan Implementation Measure 4.1.6.c. states, *"the "Village" Zone District shall be applied in all areas that carry the Residential-Village Plan Map Designation."* Since the "Village" zone must be applied to areas designated Residential Village on the Comprehensive Plan Map, its application to these areas is consistent with the Comprehensive Plan.

C. In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with Implementation Measure 4.1.4.b, d, e, q, and x of Wilsonville's Comprehensive Plan text; and

Response: As noted above, Comprehensive Plan Implementation Measure 4.1.6.c. states, *"the "Village" Zone District shall be applied in all areas that carry the Residential-Village Plan Map Designation."* Since the Village Zone must be applied to areas designated "Residential Village" on the Comprehensive Plan Map and is the only zone that may be applied to these areas, its application is consistent with the Comprehensive Plan.

D. That the existing primary public facilities, i.e., roads and sidewalks, water, sewer and storm sewer are available and are of adequate size to serve the proposed development; or, that adequate facilities can be provided in conjunction with project development. The Planning Commission and Development Review

Board shall utilize any and all means to insure that <u>all</u> primary facilities are available and are adequately sized; and

<u>Response:</u> The Preliminary Development Plan compliance report and the plan sheets demonstrate that the existing primary public facilities are available and can be provided in conjunction with the project. Section IIC of this Notebook includes supporting utility and drainage reports. In addition, the applicant will fund the completion of a Traffic Impact Analysis, which is attached as Exhibit IID.

E. That the proposed development does not have a significant adverse effect upon Significant Resource Overlay Zone areas, an identified natural hazard, or an identified geologic hazard. When Significant Resource Overlay Zone areas or natural hazard, and/ or geologic hazard are located on or about the proposed development, the Planning Commission or Development Review Board shall use appropriate measures to mitigate and significantly reduce conflicts between the development and identified hazard or Significant Resource Overlay Zone; and

<u>Response:</u> The subject site does not include any areas within a Significant Resource Overlay Zone.

F. That the applicant is committed to a development schedule demonstrating that the development of the property is reasonably expected to commence within two (2) years of the initial approval of the zone change; and

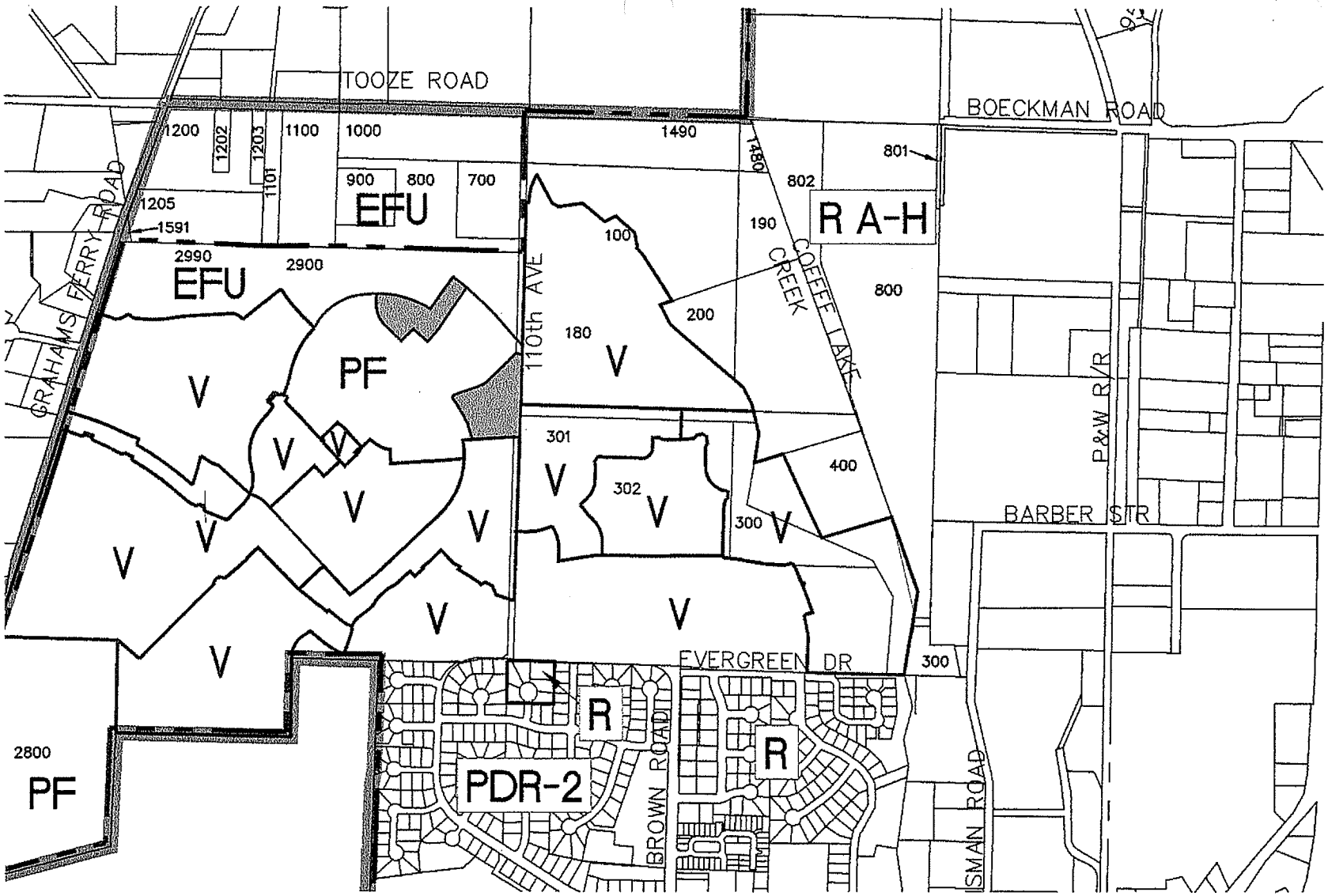
<u>Response:</u> The applicant is committed to a schedule demonstrating that the development of the subject property is reasonably expected to commence within two (2) years of the initial approval of the zone change.

G. That the proposed development and use(s) can be developed in compliance with the applicable development standards or appropriate conditions are attached to insure that the project development substantially conforms to the applicable development standards.

<u>Response:</u> The proposed development can be developed in compliance with the applicable development standards, as demonstrated by this report and the Preliminary Development Plan (Section II) and Tentative Plat (Section III) applications.

III. PROPOSAL SUMMARY & CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for the requested Zone Change. Therefore, the applicant requests approval of this application.



LEGEND

SUBJECT AREA – PROPOSED VILLAGE (V) ZONE (6.01 AC)

ZONE LINE

EXISTING UGB

EXISTING CITY BOUNDARY

PF EXISTING ZONING DESIGNATION

1" = 1000'

PROPOSED ZONE MAP AMENDMENT

N:\proj\395-008\09 Drawings\03 Planning\Exhibits\395011.Zoning Plan Exhibit PDP 4 Central.dwg – SHEET: 8x11 Mar 29, 2013 – 3:22pm JK

Pacific Community Design

EXHIBIT "A"

April 9, 2013

LEGAL DESCRIPTION Job No. 395-008

Two tracts of land being portions of Parcel 3 of Partition Plat No. 2007-127 and Parcel 2 of Partition Plat No. 2010-046, Clackamas County Plat Records, situated in the Northwest and Northeast Quarters of Section 15, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, more particularly described as follows:

Tract 1

BEGINNING at the most southerly corner of Parcel 3, Partition Plat No. 2007-127;

thence along the southerly line of said Parcel 3, North 43°36'51" West, a distance of 160.98 feet;

thence continuing along said line, on a 207.00 foot radius non-tangential curve, concave northeasterly, with a radius point bearing North 47°03'28" East, arc length of 128.16 feet, central angle of 35°28'22", chord bearing of North 25°12'21" West, and chord distance of 126.12 feet;

thence continuing along said line, North 07°28'09" West, a distance of 53.01 feet;

thence continuing along said line, on a 590.00 foot radius non-tangential curve, concave southeasterly, with a radius point bearing South 04°33'28" East, arc length of 423.75 feet, central angle of 41°09'04", chord bearing of South 64°52'00" West, and chord distance of 414.70 feet to the southwest corner of said Parcel 3;

thence continuing along said line, North 45°15'25" West, a distance of 48.20 feet;

thence leaving said line, on a 638.00 foot radius non-tangential curve, concave southerly, with a radius point bearing South 45°40'27" East, arc length of 872.67 feet, central angle of 78°22'13", chord bearing of North 83°30'40" East, and chord distance of 806.21 feet;

thence North 34°32'15" East, a distance of 263.51 feet;

thence South 54°57'30" East, a distance of 19.36 feet;

13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

thence along a 172.50 foot radius tangential curve to the right, arc length of 21.36 feet, central angle of 07°05'37", chord bearing of South 51°24'42" East, and chord distance of 21.34 feet;

thence South 47°51'53" East, a distance of 75.71 feet to an angle point on the southerly line of said Parcel 3;

thence along the southerly line of said Parcel 3, South 34°32'15" West, a distance of 255.92 feet;

thence continuing along said line, South 31°30'05" West, a distance of 67.17 feet;

thence continuing along said line, South 41°14'03" West, a distance of 118.86 feet;

thence continuing along said line, North 47°50'26" West, a distance of 127.82 feet;

thence continuing along said line, South 45°36'51" West, a distance of 146.27 feet to the POINT OF BEGINNING.

Containing 3.486 acres, more or less.

Tract 2

BEGINNING at the northwest corner of Parcel 2, Partition Plat No. 2010-046;

thence along the northerly line of said Parcel 2, North 72°02'29" East, a distance of 217.00 feet;

thence continuing along said northerly line, North 63°29'14" East, a distance of 61.38 feet;

thence continuing along said northerly line, North 45°34'29" East, a distance of 278.00 feet to the northwest corner of said Parcel 2;

thence along the westerly right-of-way line of SW 110th Avenue, South 01°35'01" West, a distance of 68.95 feet;

thence leaving said right-of-way line, South 46°43'10" West, a distance of 69.57 feet;

thence along a 15.00 foot radius tangential curve to the left, arc length of 13.72 feet, central angle of 52°24'38", chord bearing of South 20°30'51" West, and chord distance of 13.25 feet;

thence along a 85.00 foot radius reverse curve to the right, arc length of 44.28 feet, central angle of 29°50'47", chord bearing of South 09°13'56" West, and chord distance of 43.78 feet;

Pacific Community Design, Inc.
13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

thence along a 15.00 foot radius reverse curve to the left, arc length of 14.38 feet, central angle of 54°54'58", chord bearing of South 03°18'09" East, and chord distance of 13.83 feet;

thence along a 788.00 foot radius reverse curve to the right, arc length of 125.05 feet, central angle of 09°05'33", chord bearing of South 26°12'52" East, and chord distance of 124.92 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence along said right-of-way line, South 01°35'01" West, a distance of 235.23 feet to the southwest corner of said Parcel 2;

thence along the southerly line of said Parcel 2, North 88°24'59" West, a distance of 16.05 feet;

thence continuing along said line, on a 15.00 foot radius non-tangential curve, concave northwesterly, with a radius point bearing South 85°28'04" West, arc length of 23.89 feet, central angle of 91°15'24", chord bearing of South 41°05'46" West, and chord distance of 21.44 feet;

thence continuing along said line, South 86°43'28" West, a distance of 237.49 feet;

thence continuing along said line, on a 10.00 foot radius tangential curve to the right, arc length of 14.06 feet, central angle of 80°32'26", chord bearing of North 53°00'19" West, and chord distance of 12.93 feet;

thence along a 568.00 foot radius reverse curve to the left, arc length of 2.42 feet, central angle of 00°14'37", chord bearing of North 12°51'25" West, and chord distance of 2.42 feet;

thence South 77°08'47" West, a distance of 31.36 feet to the southwest corner of said Parcel 2;

thence along the westerly line of said Parcel 2, on a 535.50 foot radius non-tangential curve, concave southwesterly, with a radius point bearing South 77°08'46" West, arc length of 187.86 feet, central angle of 20°06'00", chord bearing of North 22°54'13" West, and chord distance of 186.90 feet;

thence continuing along said line, North 32°57'13" West, a distance of 117.17 feet to the POINT OF BEGINNING.

Containing 3.177 acres, more or less.

Basis of bearings per Partition Plat No. 2007-127, Clackamas County Plat Records.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

Pacific Community Design, Inc.
13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

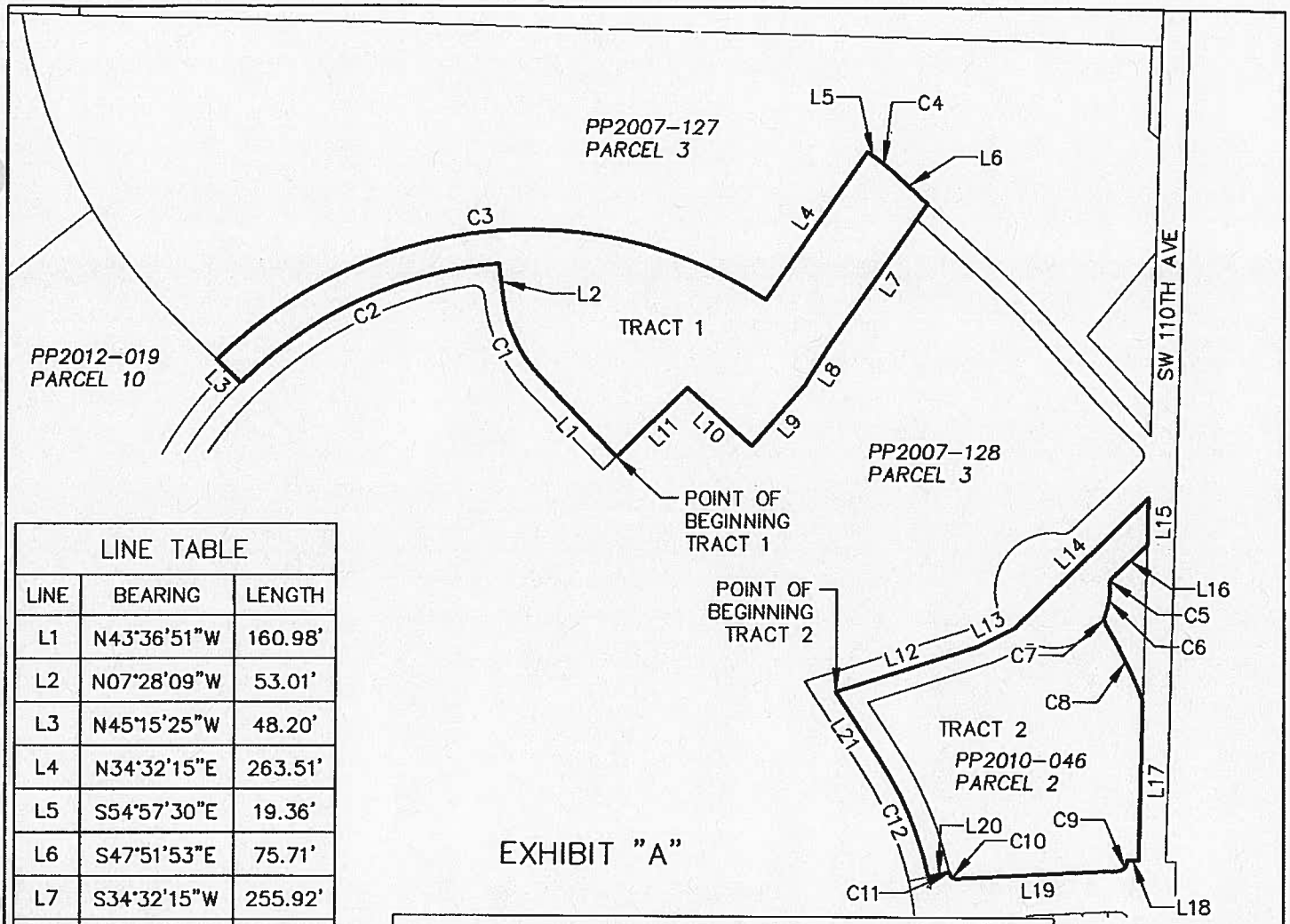


EXHIBIT "A"

LINE TABLE		
LINE	BEARING	LENGTH
L1	N43°36'51"W	160.98'
L2	N07°28'09"W	53.01'
L3	N45°15'25"W	48.20'
L4	N34°32'15"E	263.51'
L5	S54°57'30"E	19.36'
L6	S47°51'53"E	75.71'
L7	S34°32'15"W	255.92'
L8	S31°30'05"W	67.17'
L9	S41°14'03"W	118.86'
L10	N47°50'26"W	127.82'
L11	S45°36'51"W	146.27'
L12	N72°02'29"E	217.00'
L13	N63°29'14"E	61.38'
L14	N45°34'29"E	278.00'
L15	S01°35'01"W	68.95'
L16	S46°43'10"W	69.57'
L17	S01°35'01"W	235.23'
L18	N88°24'59"W	16.05'
L19	S86°43'28"W	237.49'
L20	S77°08'47"W	31.36'
L21	N32°57'13"W	117.17'

CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	CHORD	BEARING
C1	207.00'	128.16'	35°28'22"	126.12'	N25°12'21"W
C2	590.00'	423.75'	41°09'04"	414.70'	S64°52'00"W
C3	638.00'	872.67'	78°22'13"	806.21'	N83°30'40"E
C4	172.50'	21.36'	7°05'37"	21.34'	S51°24'42"E
C5	15.00'	13.72'	52°24'38"	13.25'	S20°30'51"W
C6	85.00'	44.28'	29°50'47"	43.78'	S09°13'56"W
C7	15.00'	14.38'	54°54'58"	13.83'	S03°18'09"E
C8	788.00'	125.05'	9°05'33"	124.92'	S26°12'52"E
C9	15.00'	23.89'	91°15'24"	21.44'	S41°05'46"W
C10	10.00'	14.06'	80°32'26"	12.93'	N53°00'19"W
C11	568.00'	2.42'	0°14'37"	2.42'	N12°51'25"W
C12	535.50'	187.86'	20°06'00"	186.90'	N22°54'13"W

DRAWN BY: CLL DATE: 4/9/13
REVIEWED BY: TCJ DATE: 4/9/13
PROJECT NO.: 395-008
SCALE: 1"=250'
PAGE 4 OF 4

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

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SUPPORTING COMPLIANCE REPORT
TYPE "C" TREE REMOVAL PLAN/PERMIT
PDP 4 – CENTRAL

SECTION VA

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I. WILSONVILLE PLANNING AND LAND DEVELOPMENT ORDINANCE

SECTION 4.610.10. STANDARDS FOR TREE REMOVAL, RELOCATION OR REPLACEMENT

(.01) Except where an application is exempt, or where otherwise noted, the following standards shall govern the review of an application for a Type A, B, C or D Tree Removal Permit:

A. Standard for the Significant Resource Overlay Zone. The standard for tree removal in the Significant Resource Overlay Zone shall be that removal or transplanting of any tree is not inconsistent with the purposes of this chapter.

Response: PDP 4 Central does not include areas within the Significant Resource Overlay Zone (SROZ).

B. Preservation and Conservation. No development application shall be denied solely because trees grow on the site. Nevertheless, tree preservation and conservation as a principle shall be equal in concern and importance as other design principles.

Response: The design of this Preliminary Development Plan has taken into account the preservation of trees on site. The *Tree Preservation Plan* in Section VC shows the existing trees to be retained and removed on site.

C. Development Alternatives. Preservation and conservation of wooded areas and trees shall be given careful consideration when there are feasible and reasonable location alternatives and design options on-site for proposed buildings, structures or other site improvements.

Response: The preservation and conservation of trees on site was carefully considered during the planning for onsite improvements. The *Tree Preservation Plan)*, shown in Section VC, depicts the trees that are to be removed and likely to be removed during construction due to homes, site improvements or due to tree condition.

D. Land Clearing. Where the proposed activity requires land clearing, the clearing shall be limited to designated street rights-of-way and areas necessary for the construction of buildings, structures or other site improvements.

Response: The clearing of land will be limited to areas necessary for the construction of on site improvements. The *Grading and Erosion Control Plan* in Section IIB of the Notebook depicts the extent of grading activities proposed on the site.

E. Residential Development. Where the proposed activity involves residential development, residential units shall, to the extent reasonably feasible, be designed and constructed to blend into the natural setting of the landscape.

Response: A Pattern Book was developed for the general design of residential structures within SAP – Central. These homes are designed to blend into the landscape as much as feasible. The design of homes within this phase of SAP –

Central will be in accordance with the Pattern Book for SAP - Central. This is assured through review of compliance with the Pattern Book at the time of Building Permit application.

F. Compliance with Statutes and Ordinances. The proposed activity shall comply with all applicable statutes and ordinances.

Response: The development in PDP 4C will comply with all applicable statutes and ordinances.

G. Relocation or Replacement. The proposed activity shall include necessary provisions for tree relocation or replacement, in accordance with WC 4.620.00, and the protection of those trees that are not removed, in accordance with WC 4.620.10.

Response: No relocation of trees is proposed. Tree replacement will occur in accordance with the necessary provisions from WC 4.620.00 and WC 4.620.10. As shown on in the Tree Report prepared by Morgan Holan of Walter H. Knapp & Associates, LLC (see Section VB), the tree mitigation proposed with the planting of street trees and trees within park or linear green areas exceeds the required amount of mitigation.

H. Limitation. Tree removal or transplanting shall be limited to instances where the applicant has provided completed information as required by this chapter and the reviewing authority determines that removal or transplanting is necessary based on the criteria of this subsection.

1. **Necessary for Construction. Where the applicant has shown to the satisfaction of the reviewing authority that removal or transplanting is necessary for the construction of a building, structure or other site improvement and that there is no feasible and reasonable location alternative or design option on-site for a proposed building, structure or other site improvement; or a tree is located too close to an existing or proposed building or structures, or creates unsafe vision clearance.**
2. **Disease, Damage, or Nuisance, or Hazard. Where the tree is diseased, damaged, or in danger of falling, or presents a hazard as defined in WC 6.208, or is a nuisance as defined in WC 6.200 it seq., or creates unsafe vision clearance as defined in this code.**
3. **Interference. Where the tree interferes with the healthy growth of other trees, existing utility service or drainage, or utility work in a previously dedicated right-of-way, and it is not feasible to preserve the tree on site.**
4. **Other. Where the applicant shows that tree removal or transplanting is reasonable under the circumstances.**

Response: Morgan Holan of Walter H. Knapp & Associates, LLC has prepared a Tree Report for PDP 4 Central. This report can be seen in Section VB following this Supporting Compliance Report. This Tree Report calls out trees to be removed and retained within the PDP. The determination to remove trees was based upon an assessment of what trees were necessary to remove due to construction, the health of the tree, and whether or not they interfered with the health of other trees or

utility work. A listing of all the trees to be removed is included in the attached Tree Report (see Section VB).

I. Additional Standards for Type C Permits.

1. Tree Survey. For all site development applications reviewed under the provisions of Chapter 4 Planning and Zoning, the developer shall provide a Tree Survey before site development as required by WC 4.610.40 , and provide a Tree Maintenance and Protection Plan, unless specifically exempted by the Planning Director or DRB, prior to initiating site development.

Response: The *Tree Preservation Plan* (see Section VC) along with the tree report (see Section VB) provide a tree survey with the location, species and health of each tree in the PDP area.

2. Platted Subdivisions. The recording of a final subdivision plat whose preliminary plat has been reviewed and approved after the effective date of Ordinance 464 by the City and that conforms with this subchapter shall include a Tree Survey and Maintenance and Protection Plan, as required by this subchapter, along with all other conditions of approval.

Response: The final subdivision plat will include this information, as necessary.

3. Utilities. The City Engineer shall cause utilities to be located and placed wherever reasonably possible to avoid adverse environmental consequences given the circumstances of existing locations, costs of placement and extensions, the public welfare, terrain, and preservation of natural resources. Mitigation and/or replacement of any removed trees shall be in accordance with the standards of this subchapter.

Response: The *Composite Utility Plans* for the site have been designed to minimize the impact upon the environment to the extent feasible given existing conditions. These plans can be seen in Section IIB of this Notebook. Any trees to be removed due to the placement of utilities will be replaced and/or mitigated in accordance with the provisions in this subchapter.

J. Exemption. Type D permit applications shall be exempt from review under standards D, E, H and I of this subsection.

Response: This application requests a Type C Tree Removal Permit, therefore this standard is not applicable.

SECTION 4.610.40. TYPE C PERMIT

(.01) Approval to remove any trees on property as part of a site development application may be granted in a Type C permit. A Type C permit application shall be reviewed by the standards of the subchapter and all applicable review criteria of Chapter 4. Application of the standards of this section shall not result in a reduction of square footage or loss of density, but may require an applicant to modify plans to allow for buildings of greater height. If an applicant proposes to remove trees and

submits a landscaping plan as part of a site development application, an application for a Tree Removal Permit shall be included. The Tree Removal Permit application will be reviewed in the Stage II development review process, and any changes made that affect trees after Stage II review of a development application shall be subject to review by DRB. Where mitigation is required for tree removal, such mitigation may be considered as part of the landscaping requirements as set forth in this Chapter. Tree removal shall not commence until approval of the required Stage II application and the expiration of the appeal period following that decision. If a decision approving a Type C permit is appealed, no trees shall be removed until the appeal has been settled.

Response: This application includes a request for approval of a Type "C" Tree Removal Plan for approval by the Development Review Board so that a Tree Removal Permit may be issued. Proposed tree removal is identified on The *Tree Preservation Plan* included in Section VC of this Notebook.

(.02) The applicant must provide ten copies of a Tree Maintenance and Protection Plan completed by an arborist that contains the following information:

A. A plan, including a topographical survey bearing the stamp and signature of a qualified, registered professional containing all the following information:

1. Property Dimensions. The shape and dimensions of the property, and the location of any existing and proposed structure or improvement.

2. Tree Survey. The survey must include:

a) An accurate drawing of the site based on accurate survey techniques at a minimum scale of one inch (1") equals one hundred feet (100') and which provides a) the location of all trees having six inches (6") or greater d.b.h. likely to be impacted, b) the spread of canopy of those trees, c) the common and botanical name of those trees, and d) the approximate location and name of any other trees on the property.

b) A description of the health and condition of all trees likely to be impacted on the site property. In addition, for trees in a present or proposed public street or road right-of-way that are described as unhealthy, the description shall include recommended actions to restore such trees to full health. Trees proposed to remain, to be transplanted or to be removed shall be so designated. All trees to remain on the site are to be designated with metal tags that are to remain in place throughout the development. Those tags shall be numbered, with the numbers keyed to the tree survey map that is provided with the application.

c) Where a stand of twenty (20) or more contiguous trees exist on a site and the applicant does not propose to remove any of those trees, the required tree survey may be simplified to

accurately show only the perimeter area of that stand of trees, including its drip line. Only those trees on the perimeter of the stand shall be tagged, as provided in "b", above.

d) All Oregon white oaks, native yews, and any species listed by either the state or federal government as rare or endangered shall be shown in the tree survey.

3. Tree Protection. A statement describing how trees intended to remain will be protected during development, and where protective barriers are necessary, that they will be erected before work starts. Barriers shall be sufficiently substantial to withstand nearby construction activities. Plastic tape or similar forms of markers do not constitute "barriers".

4. Easements and Setbacks. Location and dimension of existing and proposed easements, as well as all setback required by existing zoning requirements.

5. Grade Changes. Designation of grade proposed for the property that may impact trees.

6. Cost of Replacement. A cost estimate for the proposed tree replacement program with a detailed explanation including the number, size, and species.

7. Tree Identification. A statement that all trees being retained will be identified by numbered metal tags, as specified in subsection "A," above in addition to clear identification on construction documents.

Response: The attached plan sheets (see the *Tree Preservation Plan)* located in Section VC) identify the proposed tree removal. The *Tree Preservation Plans* provide information required by Section 4.610.40(.02). Morgan Holan of Walter H. Knapp & Associates, LLC has also prepared a Tree Report (see Section VB) that provides information required by Section 4.610.40(.02).

SECTION 4.620.00. TREE RELOCATION, MITIGATION, OR REPLACEMENT

(.01) Requirement Established. A Type B or C Tree Removal Permit grantee shall replace or relocate each removed tree having six (6) inches or greater d.b.h. within one year of removal.

Response: No relocation of trees is proposed. Tree replacement will occur in accordance with the necessary provisions from WC 4.620.00 and WC 4.620.10. As shown in the Tree Report prepared by Morgan Holan of Walter H. Knapp & Associates, LLC (see Section VB), the tree mitigation proposed with the planting of street trees and trees within park areas exceeds the required amount of mitigation.

(.02) <u>Basis For Determining Replacement.</u> The permit grantee shall replace removed trees on a basis of one (1) tree replaced for each tree removed. All replacement trees must measure two inches (2") or more in diameter. Alternatively, the Planning Director or Development Review board may require the permit grantee to replace removed trees on a per caliper inch basis, based on a finding that the large size of the trees being removed justifies an increase in the replacement trees required. Except, however, that the Planning Director or Development Review Board may allow the use of replacement Oregon white oaks and other uniquely valuable trees with a smaller diameter.

<u>Response:</u> Trees to be removed will be replaced in accordance with this criterion. The attached Tree Report (see Section VB) prepared by Morgan Holan of Walter H. Knapp & Associates, LLC includes mitigation analysis for planting replacement trees.

(.03) <u>Replacement Tree Requirements.</u> A mitigation or replacement tree plan shall be reviewed by the City prior to planting and according to the standards of this subsection.

A. Replacement trees shall have shade potential or other characteristics comparable to the removed trees, shall be appropriately chosen for the site from an approved tree species list supplied by the City, and shall be state Department of Agriculture nursery Grade No. 1 or better.

B. Replacement trees must be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date.

C. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced.

D. Diversity of tree species shall be encouraged where trees will be replaced, and diversity of species shall also be maintained where essential to preserving a wooded area or habitat.

<u>Response:</u> The attached Tree Report (see Section VB) prepared by Morgan Holan of Walter H. Knapp & Associates, LLC includes mitigation analysis for planting replacement trees.

(.04) All trees to be planted shall consist of nursery stock that meets requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade.

<u>Response:</u> All trees to be planted will meet the requirements as stated in this criterion.

(.05) <u>Replacement Tree Location.</u>

A. City Review Required. The City shall review tree relocation or replacement plans in order to provide optimum enhancement, preservation, and protection of wooded areas. To the extent feasible and desirable, trees shall be relocated or replaced on-site and within the same general area as trees removed

B. Relocation or Replacement Off-Site. When it is not feasible or desirable to relocate or replace trees on-site, relocation or replacement may be made at another location – approved by the city.

Response: Trees will be replaced within the same general area as the trees removed. The attached Tree Report (see Section VB) prepared by Morgan Holan of Walter H. Knapp & Associates, LLC includes a mitigation analysis for planting replacement trees.

(.06) City Tree Fund. Where it is not feasible to relocate or replace trees on site or at another approved location in the City, the Tree Removal Permit grantee shall pay into the City Tree Fund, which fund is hereby created, an amount of money approximately the value as defined by this subchapter, of the replacement trees that would otherwise be required by this subchapter. The City shall use the City Tree Fund for the purpose of producing, maintaining and preserving wooded areas and heritage trees, and for planting trees within the City.

Response: All trees removed will be replaced within PDP 4C. The attached Tree Report (see Section VB) prepared by Morgan Holan of Walter H. Knapp & Associates, LLC includes a mitigation analysis for planting replacement trees.

(.07) Exception. Tree replacement may not be required for applicants in circumstances where the Director determines that there is good cause to not so require. Good cause shall be based on a consideration of preservation of natural resources, including preservation of mature trees and diversity of ages of trees. Other criteria shall include consideration of terrain, difficulty of replacement and impact on adjacent property.

Response: No exception to the tree replacement requirements is requested with this application.

SECTION 4.620.10. TREE PROTECTION DURING CONSTRUCTION

(.01) Where tree protection is required by a condition of development under Chapter 4 or by a Tree Maintenance and Protection Plan approved under this subchapter, the following standards apply:

A. All trees required to be protected must be clearly labeled as such.

B. Placing Construction Materials Near Tree. No person may conduct any construction activity likely to be injurious to a tree designated to remain, including, but not limited to, placing solvents, building material, construction equipment, or depositing soil, or placing irrigated landscaping, within the drip line, unless a plan for such construction activity has been approved by the Planning Director or Development Review Board based upon the recommendations of an arborist.

C. Attachments to Trees During Construction. Notwithstanding the requirement of WC 4.620.10(1)(A), no person shall attach any device or wire to any protected tree unless needed for tree protection.

D. Protective Barrier. Before development, land clearing, filling or any land alteration for which a Tree Removal Permit is required, the developer shall erect and maintain suitable barriers as identified by an arborist to protect remaining trees. Protective barriers shall remain in place until the City authorizes their removal or issues a final certificate of occupancy, whichever occurs first. Barriers shall be sufficiently substantial to withstand nearby construction activities. Plastic Tape or similar forms of markers do not constitute "barriers". The most appropriate and protective barrier shall be utilized. Barriers are required for all trees designated to remain, except in the following cases.

1. Rights-of-ways and Easements.

2. Any property area separate from the construction or land clearing area onto which no equipment may venture.

Response: Trees to be retained will be protected to the greatest extent possible during construction. Additional details about tree protection during construction will be provided with the construction drawings.

SECTION 4.620.20. MAINTENANCE AND PROTECTION STANDARDS

(.01) The following standards apply to all activities affecting trees, including, but not limited to, tree protection as required by a condition of approval on a site development application brought under this chapter or as required by an approved Tree Maintenance and Protection Plan.

A. Pruning activities shall be guided by the most recent version of the ANSI 300 Standards for Tree, Shrub and Other Woody Plant Maintenance.

B. Topping is prohibited

1. Exception from this section may be granted under a Tree Removal Permit if necessary for utility work or public safety.

Response: All pruning activities will comply with ANSI 300 standards. Additional details about the pruning activities proposed for trees during construction will be further addressed in the construction drawings. Any topping necessary will be applied for with the Tree Removal Permit.

SECTION 4.640.00. APPLICATION REVIEW PROCEDURES

(.03) Reviewing Authority

B. Type C. Where the site is proposed for development necessitating site plan review or plat approval by the Development Review Board, the Development Review Board shall be responsible for granting or denying the application for a Tree Removal Permit, and that decision may be subject to affirmance, reversal or modification by the City Council, if subsequently reviewed by the Council.

Response: This application includes *Tree Preservation Plans*, located in Section VC for review by the Development Review Board. The applicant is requesting that

the Development Review Board approve this plan so that a Tree Removal Permit may be issued.

II. CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable criteria of the City of Wilsonville Land Development Ordinance for the requested review of the Type "C" Tree Removal Plan and Permit. Therefore, the applicant respectfully requests approval of this application.

Walter H. Knapp & Associates, LLC
Consultants in Arboriculture, Silviculture, and Forest Ecology

April 10, 2013

VILLEBOIS SAP CENTRAL – ZION
TREE MAINTENANCE AND PROTECTION PLAN

1315

Purpose

This Tree Maintenance and Protection Plan for Villebois SAP Central – Zion in Wilsonville, Oregon, is provided pursuant to the City of Wilsonville Development Code, Section 4.610.40. This report describes the existing trees located on the project site, as well as recommendations for tree removal, retention, protection, and mitigation.

General Description

The Zion Property in SAP Central at Villebois spans two small areas west of SW 110th Avenue. We visited the site on April 5, 2013 in order to verify existing tree inventory data and to evaluate trees in terms of potential construction impacts. A complete description of individual trees is provided in the enclosed tree inventory data.

Eleven trees are located within the project boundaries in SAP Central and are planned for removal for the purposes of construction, but also because of poor and hazardous condition. This includes seven fast-growing and short-lived black cottonwoods (*Populus trichocarpa*), one non-native, invasive sweet cherry (*Prunus avium*), and one dying Douglas-fir (*Pseudotsuga menziesii*). In addition, one Norway spruce (*Picea abies*) in fair condition and one red maple (*Acer rubrum*) in poor condition must be removed for street construction.

An additional six trees are located just beyond the project boundary, within the Village Center in SAP Central. Five of these neighboring trees may be retained with tree protection during construction, but the sixth tree is hazardous and recommended for removal with the proposed construction on the Zion property. The hazardous tree on adjacent property is a bigleaf maple (*Acer macrophyllum*) with codominant stems and included bark; this tree is already failing at the codominant juncture and has an open cavity with decay (photo 1, tree 572).

No Oregon white oak (*Quercus garryana*), native yews (*Taxus* spp.), or any species listed by either the state or federal government as rare or endangered were found on the site.

Table 1 provides a summary of the count of trees by species and treatment recommendation.

7615 SW Dunsmuir Lane, Beaverton, OR 97007
Phone: (503) 646-4349 Fax: (503) 747-4863

Photo 1. Tree 572, hazardous bigleaf maple in the process of failing.

Table 1. Count of Trees by Species and Treatment Recommendation.

Common Name	Species Name	Remove	Retain	Total
Atlas cedar	*Cedrus atlantica*		2*	2 (12%)
bigleaf maple	*Acer macrophyllum*	1*		1 (6%)
black cottonwood	*Populus trichocarpa*	7		7 (41%)
Douglas-fir	*Pseudotsuga menziesii*	1		1 (6%)
Norway spruce	*Picea abies*	1		1 (6%)
pin oak	*Quercus palustris*		1*	1 (6%)
red maple	*Acer rubrum*	1	2*	3 (18%)
sweet cherry	*Prunus avium*	1		1 (6%)
Grand Total		**12** (71%)	**5** (29%)	**17 trees**

*identifies trees located off-site, on adjacent properties

Tree Plan Recommendations

All 11 of the inventoried trees located within the SAP Central Zion project boundaries are proposed for removal for development. One tree located on neighboring property is hazardous to the project site and removal is recommended at the time of construction because of condition. The five non-hazardous trees located on adjacent properties can be adequately protected with tree protection fencing established at the property boundary or as otherwise directed by the project arborist. The project arborist can monitor the adjacent trees during building and provide additional tree protection recommendations if necessary.

Mitigation Requirements

The 12 trees recommended for removal all measured larger than 6-inches in diameter and require mitigation per Section 4.620.00; removed trees shall be replaced on a basis of one tree planted for each tree removed. Therefore, 12 trees measuring at least 2-inch in diameter will be planted as mitigation for tree removal.

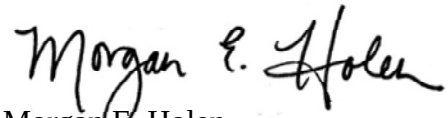
Tree Protection Standards

Trees located on adjacent properties will need special consideration to assure their protection during construction. We recommend a preconstruction meeting with the owner, contractors and project arborist to review tree protection measures and address questions or concerns on site. Tree protection measures include:

- **Fencing.** Trees to remain will be protected by installation of tree protection fencing to prevent injury to tree trunks or roots, or soil compaction within the root protection area, which generally coincides with the tree dripline. Fences will be 6-foot high steel on concrete blocks. The project arborist will determine the exact location of tree protection fencing. Trees located more than 30-feet from construction activity will not require fencing. Without authorization from the Project Arborist, none of the following will occur within root protection zones:
    1. New buildings;
    2. Grade change or cut and fill, during or after construction;
    3. New impervious surfaces;
    4. Utility or drainage field placement;
    5. Staging or storage of materials and equipment during construction;
    6. Vehicle maneuvering during construction.

  Root protection zones may be entered for tasks like surveying, measuring and sampling. Fences must be closed upon completion of these tasks.
- **Soil protection.** The stripping of topsoil around retained trees will be restricted, except under the guidance of the project arborist. No fill (including temporary storage of spoils) will be placed within the root protection area, except as otherwise directed by the project arborist.
- **Quality Assurance.** The project arborist will supervise proper execution of this plan during construction activities that could encroach on retained trees. Tree protection site inspection monitoring reports will be provided to the Client and City on a regular basis throughout construction.

Please contact us if you have questions or need any additional information.



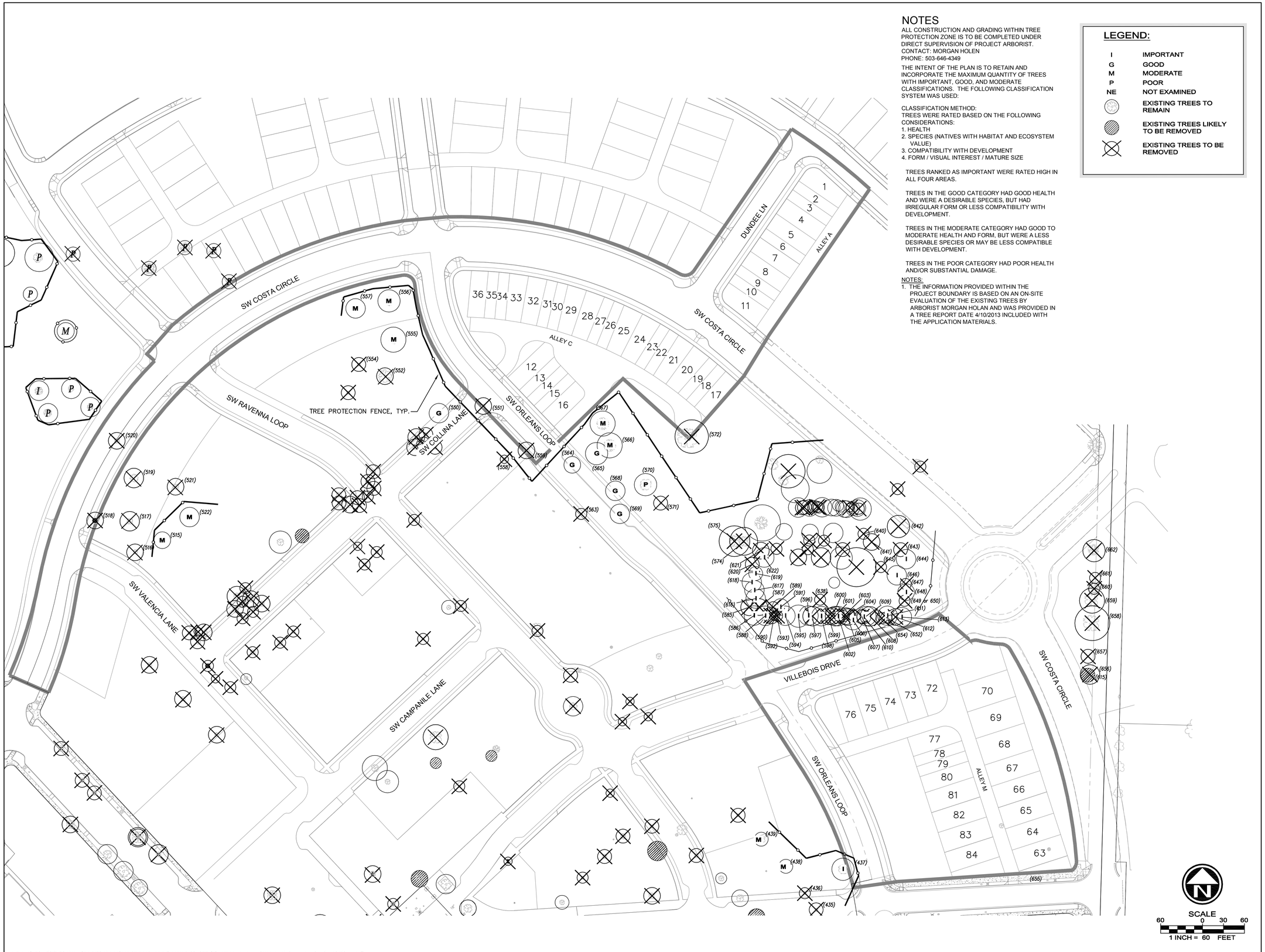
Morgan E. Holen
Morgan Holen & Associates, LLC
ISA Certified Arborist, PN-6145A
ISA Tree Risk Assessment Qualified
Forest Biologist

Enclosure: Villebois SAP Central Zion - Tree Data 4-5-13

1315 Villebois SAP Central Zion
Tree Inventory 4-5-13

No.	Tree Tag	Common Name	Species Name	DBH (in.)	Crad (ft.)	Condition	Rating	Recommendation
4432	437	pin oak	*Quercus palustris*	22	22	needs pruning	I	Protect adjacent tree
3830	551	Norway spruce	*Picea abies*	20	18	viable	F	Remove - construction
3858	559	red maple	*Acer rubrum*	20	12	extensive decay, needs pruning	P	Remove - construction, condition
3859	564	red maple	*Acer rubrum*	16	20	viable, prune for clearance	G	Protect adjacent tree
3860	565	red maple	*Acer rubrum*	26	16	viable, major limb failure	F	Protect adjacent tree
3861	566	Atlas cedar	*Cedrus atlantica*	43	22	viable	F	Protect adjacent tree
3862	567	Atlas cedar	*Cedrus atlantica*	37	26	viable	F	Protect adjacent tree
	572	bigleaf maple	*Acer macrophyllum*	65		failing, open cavity, extensive decay; hazard	P	Remove adjacent tree - condition
4637	615	black cottonwood	*Populus trichocarpa*	8,6		codom stems, included bark, inherent species limitations	P	Remove - condition
	615.1	black cottonwood	*Populus trichocarpa*	14,10		small, poor structure, inherent species limitations	P	Remove - condition
	656	black cottonwood	*Populus trichocarpa*	24		poor structure, basal swelling	P	Remove - condition
	657	black cottonwood	*Populus trichocarpa*	20		poor structure, broken top, inherent species limitations	P	Remove - condition
	658	black cottonwood	*Populus trichocarpa*	50		already a snag, advanced decay; hazard	P	Remove - condition
	659	black cottonwood	*Populus trichocarpa*	50		dead top, stem decay; hazard	P	Remove - condition
	660	sweet cherry	*Prunus avium*	12		invasive species, poor structure	P	Remove - condition
	661	black cottonwood	*Populus trichocarpa*	10,8		poor structure and condition	P	Remove - condition
	662	Douglas-fir	*Pseudotsuga menziesii*	40		codom stems at 20', dead branches, one dead leader	P	Remove - condition

*DBH: Diameter at Breast Height (measured 4.5-feet above ground level in inches)
^C-Rad: Crown Radius, the distance from the center of the tree to the edge of the dripline (measured in feet)
#Condition Codes:
I: Special Importance
G: Good
F: Fair
P: Poor



NOTES

ALL CONSTRUCTION AND GRADING WITHIN TREE PROTECTION ZONE IS TO BE COMPLETED UNDER DIRECT SUPERVISION OF PROJECT ARBORIST.
CONTACT: MORGAN HOLEN
PHONE: 503-646-4349

THE INTENT OF THE PLAN IS TO RETAIN AND INCORPORATE THE MAXIMUM QUANTITY OF TREES WITH IMPORTANT, GOOD, AND MODERATE CLASSIFICATIONS. THE FOLLOWING CLASSIFICATION SYSTEM WAS USED:

CLASSIFICATION METHOD:
TREES WERE RATED BASED ON THE FOLLOWING CONSIDERATIONS:
1. HEALTH
2. SPECIES (NATIVES WITH HABITAT AND ECOSYSTEM VALUE)
3. COMPATIBILITY WITH DEVELOPMENT
4. FORM / VISUAL INTEREST / MATURE SIZE

TREES RANKED AS IMPORTANT WERE RATED HIGH IN ALL FOUR AREAS.

TREES IN THE GOOD CATEGORY HAD GOOD HEALTH AND WERE A DESIRABLE SPECIES, BUT HAD IRREGULAR FORM OR LESS COMPATIBILITY WITH DEVELOPMENT.

TREES IN THE MODERATE CATEGORY HAD GOOD TO MODERATE HEALTH AND FORM, BUT WERE A LESS DESIRABLE SPECIES OR MAY BE LESS COMPATIBLE WITH DEVELOPMENT.

TREES IN THE POOR CATEGORY HAD POOR HEALTH AND/OR SUBSTANTIAL DAMAGE.

NOTES:
1. THE INFORMATION PROVIDED WITHIN THE PROJECT BOUNDARY IS BASED ON AN ON-SITE EVALUATION OF THE EXISTING TREES BY ARBORIST MORGAN HOLAN AND WAS PROVIDED IN A TREE REPORT DATE 4/10/2013 INCLUDED WITH THE APPLICATION MATERIALS.

LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Tree Preservation Plan

DATE 04/15/2013

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SUPPORTING COMPLIANCE REPORT

FINAL DEVELOPMENT PLAN 4 - CENTRAL

SECTION VIA

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I. WILSONVILLE PLANNING & LAND DEVELOPMENT ORDINANCE

SECTION 4.125. VILLAGE (V) ZONE

(.02) Permitted Uses

Examples of principle uses that typically permitted:

H. Non-commercial parks, plazas, playgrounds, recreational facilities, community buildings and grounds, tennis courts, and other similar recreational and community uses owned and operated either publicly or by an owners association.

Response: The parks proposed within PDP 4C are permitted uses. These are non-commercial parks to be owned and operated by a homeowners association.

(.07) General Regulations – Off-Street Parking, Loading & Bicycle Parking

Response: The proposed parks within PDP 4C do not include any off-street parking. These areas are not planned to provide amenities that require off-street parking. All proposed parks include pathways for pedestrians and bicycle travel.

(.08) Open Space.

Response: The Parks *Master Plan* for Villebois states that there are 57.87 acres of parks and 101.46 acres of open space for a total of 159.33 acres within Villebois, approximately 33%. SAP Central includes parks and open space areas consistent with *Master Plan*. PDP 4C includes the addition of linear green not shown in the *Villebois Village Master Plan*, thereby increasing the amount of parks. The PDP provides more park areas than originally included in this phase.

(.09) Street and Access Improvement Standards.

Response: The Supporting Compliance Report for the PDP demonstrates that streets and access improvement standards are met (See Section IIA). This code section does not apply to the proposed parks, except to assure that vision clearance standards are met in proposed planting schemes for these areas. Proposed landscaping is sited to meet vision clearance standards (see Exhibit VIB).

(.10) Sidewalk and Pathway Improvement Standards.

Response: This code section refers directly to code Section 4.176, which is addressed in subsequent sections of this report.

(.11) Landscaping, Screening and Buffering

A. Except as noted below, the provisions of Section 4.176 shall apply in the Village zone:

1. Streets in the Village zone shall be developed with street trees as described in the Community Elements Book.

Response: The applicable provisions of Section 4.176 are addressed in the subsequent sections of this report. The PDP provides information regarding street trees for the proposed streets (See Section IIB). This FDP application reflects the provision of street trees consistent with that shown in the PDP application.

(.12) Master Signage and Wayfinding

Response: The SAP Central *Signage & Wayfinding Plan* indicates the provision of 'Internal Site Identifier' with the roundabout at the intersection of Villebois Drive and Costa Circle. The attached PDP plans (see Section IIB of this Notebook) and FDP plans (see Section VIB of this Notebook) show provision of the 'Internal Site Identifier' with the future roundabout construction.

(.14) Design Standards Applying to the Village Zone

A. The following design standards implement the Design Principles found in (.13), above, and enumerate the architectural details and design requirements applicable to buildings and other features within the Village (V) zone. The Design Standards are based primarily on the features, types, and details of the residential traditions in the Northwest, but are not intended to mandate a particular style or fashion. All development within the Village zone shall incorporate the following:

2. Building and site design shall include:

b. Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Architectural Pattern Book, Community Elements Book or approved Village Center Design.

Response: The materials proposed for the parks of the subject PDP are consistent with the approved *Community Elements Book* as shown in the FDP Approval Criteria section of this report. The *Pattern Book* is not applicable to the proposed park uses. The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent with the design shown in the *Community Elements Book* on Page 14. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP Central; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

f. The protection of existing significant trees as identified in an approved Community Elements Book.

Response: The design of the parks will protect existing significant trees consistent with the Tree Protection component of the *Community Elements Book* and the *Tree Preservation Plan* (see Section IIB of this Notebook). The FDP plans (Exhibit VIB) show retention of existing significant trees.

g. A landscape plan in compliance with Sections 4.125(.07) and (.11), above.

Response: A detailed landscape plan is provided with this FDP application in accordance with the requirements of Section 4.125 (.07) and (.11), 4.176(.09), and 4.440(.01)B (see attached plans in Exhibit VIB).

3. Lighting and site furnishings shall be in compliance with the approved Community Elements Book.

Response: Lighting and site furnishings as identified in the approved *Community Elements Book* for SAP – Central are addressed in the FDP Approval Criteria section of this report. The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent with the design shown in the *Community Elements Book* on Page 14. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP Central; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

(.18) Village Zone Development Permit Process

L. Final Development Plan Approval Procedures (Equivalent to Site Design Review):

1. Unless an extension has been granted by the Development Review Board as enabled by Section 4.023, within two (2) years after the approval of a PDP, an application for approval of a FDP shall:

a. Be filed with the City Planning Division for the entire FDP, or when submission of the PDP in phases has been authorized by the development Review Board, for a phase in the approved sequence.

b. Be made by the owner of all affected property or the owner's authorized agent.

c. Be filed on a form prescribed by the City Planning Division and filed with said division and accompanied by such fee as the City Council may prescribe by resolution.

d. Set forth the professional coordinator and professional design team for the project.

Response: This application has been made by the owner and applicant of the affected property and has been filed on the prescribed form and accompanied by the prescribed fee (copies of the application form and fee payment are included in Sections IB and IC, respectively, of this Notebook). The professional coordinator and professional design team for the project are listed in the Introductory Narrative (see Section IA of this Notebook).

M. FDP Application Submittal Requirements:

1. An application for approval of a FDP shall be subject to the provisions of Section 4.034.

Response: Section 4.034(.08), states that "Applications for development approvals within the Village zone shall be reviewed in accordance with the standards and procedures set forth in Section 4.125." The proposed FDP is reviewed in accordance with the standards and procedures set forth in Section 4.125, as demonstrated by this report.

N. FDP Approval Procedures

1. An application for approval of a FDP shall be subject to the provisions of Section 4.421.

Response: The provisions of Section 4.421 are addressed in the following sections of this report.

O. FDP Refinements to an Approved Preliminary Development Plan

Response: This FDP is submitted for review and approval concurrent with the PDP. Thus, the FDP is consistent with the PDP and does not propose any refinements or amendments to the PDP.

P. FDP Approval Criteria

1. An application for approval of a FDP shall be subject to the provisions of Section 4.421.

Response: The provisions of Section 4.421 are addressed in the following sections of this report.

2. An application for an FDP shall demonstrate that the proposal conforms to the applicable Architectural Pattern Book, Community Elements Book, Village Center Design and any other conditions of a previously approved PDP.

Response: This FDP addresses parks within PDP 4C. The *Architectural Pattern Book* is not applicable to this FDP as no architecture is proposed. The Village Center Design is not applicable as the FDP is outside the Village Center. The FDP is submitted for review and approval concurrent with the PDP; therefore, there are no conditions of a previously approved PDP that apply to this request. Conformance of the proposed FDP with the *Community Elements Book* for SAP – Central is demonstrated as follows.

LIGHTING MASTER PLAN

Response: The lighting shown on the attached plans (see Exhibit VIB) is consistent with the Lighting Master Plan Diagram shown on page 5 of the *Community Elements Book* for SAP Central.

CURB EXTENSIONS

Response: PDP 4C will be developed with curb extensions shown on the Curb Extension Concept Plan Diagram located on page 6 of the *Community Elements Book* for SAP – Central. This has been demonstrated in the concurrent PDP application in Section II of this Notebook. The FDP is consistent with the PDP.

STREET TREE MASTER PLAN

Response: The location and species of street trees shown on the attached plans (see Exhibit VIB) is consistent with the Street Tree Master Plan Diagram and List shown on pages 7-10 of the *Community Elements Book*. These tree species will be planted along the perimeter of the parks in the FDP where streets are located.

SITE FURNISHINGS

Response: The furnishings shown the attached plans (see Exhibit VIB) were selected to maintain the identity and continuity of Villebois. The site furnishings shown in the parks are consistent with those described in the Site Furnishings Concept shown on pages 11-13 of the *Community Elements Book*.

The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent with the design shown in the *Community Elements Book* on Page 14. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP Central; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

PLAY STRUCTURES

Response: No play structures are proposed within the subject FDP.

TREE PROTECTION

Response: The Tree Protection component shown on page 15 of the *Community Elements Book* for SAP – Central describes the goal, policies, and implementation measures that were used to promote the protection of existing trees in the design of the PDP area. Tree preservation and removal is shown in conjunction with the concurrent PDP and *Tree Removal Plan* applications (see Sections II and Section V, respectively, of this Notebook). The proposed FDP, which includes numerous parks, is consistent with the tree protection shown in PDP and *Tree Removal Plan*.

PLANT LIST

Response: The *Community Elements Book* for SAP – Central contains a Plant List (pages 16-18) of non-native and native trees, shrubs, and herbs/grasses for species to be used within Villebois. The attached plans (see Exhibit VIB) list the plants that will be planted in the proposed parks. The proposed plantings are consistent with the Plant List in the SAP – Central *Community Elements Book*.

PART II – ADDRESS OVERLAY AREAS

Response: The subject FDP area is not located within an Address Overlay Area. Part II of the *Community Elements Book* for SAP – Central is not applicable to this FDP.

GENERAL DEVELOPMENT REGULATIONS

SECTION 4.156. SIGN REGULATIONS

Response: The SAP Central *Signage & Wayfinding Plan* indicates the provision of 'Internal Site Identifier' with the roundabout at the intersection of Villebois Drive and Costa Circle. The attached PDP plans (see Section IIB of this Notebook) and FDP plans (see Section VIB of this Notebook) show provision of the 'Internal Site Identifier' with the future roundabout construction.

SECTION 4.176. LANDSCAPING, SCREENING & BUFFERING

(.02) Landscaping and Screening Standards.

Response: As shown on the attached plans (see Exhibit VIB), the parks will be landscaped with a mixture of ground cover, lawn areas, shrubs, and trees. Streets and public right-of-way improvements, including street trees, are reviewed with the PDP (see Section II of this Notebook). This FDP consistently reflects street trees shown in the PDP.

(.03) Landscape Area.

Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable.

Response: The proposed parks are nearly 100% landscaped as shown in the attached plans (see Exhibit VIB), except for walkways, play structures, and areas beneath the understory of existing trees.

(.04) Buffering and Screening.

Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.

A. All intensive or higher density developments shall be screened and buffered from less intense or lower density developments.

B. Activity areas on commercial and industrial sites shall be buffered and screened from adjacent residential areas. Multi-family developments shall be screened and buffered from single-family areas.

C. All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties.

D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit.

E. In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking.

F. In any zone any fence over six (6) feet high measured from soil surface at the outside of fenceline shall require Development Review Board approval.

Response: None of the above-listed areas or uses exist within the proposed parks. Therefore, no buffering or screening is required in relation to the FDP.

(.05) Sight-Obscuring Fence or Planting.

The use for which a sight-obscuring fence or planting is required shall not begin operation until the fence or planting is erected or in place and approved by the City. A temporary occupancy permit may be issued upon a posting of a bond or other security equal to one hundred ten percent (110%) of the cost of such fence or planting and its installation. (See Sections 4.400 to 4.470 for additional requirements.)

Response: No sight-obscuring fence or planting is required in this FDP area.

(.06) Plant Materials.

A. Shrubs and Ground Cover. All required ground cover plants and shrubs must be of sufficient size and number to meet these standards within three (3) years of planting. Non-horticultural plastic sheeting or other impermeable surface shall not be placed under mulch. Surface mulch or bark dust are to be fully raked into soil of appropriate depth, sufficient to control erosion, and are confined to areas around plantings. Areas exhibiting only surface mulch, compost or barkdust are not to be used as substitutes for plants areas.

1. Shrubs. All shrubs shall be well branched and typical of their type as described in current AAN Standards and shall be equal to or better than 2-gallon containers and 10" to 12" spread.

Response: As shown on the attached plans (see Exhibit VIB) all shrubs will be equal to or better than 2-gallon size with a 10 to 12 inch spread. All shrubs will be well branched and typical of their type as described in current AAN standards.

2. Ground cover. Shall be equal to or better than the following depending on the type of plant materials used: Gallon containers spaced at 4 feet on center minimum, 4" pot spaced 2 feet on center minimum, 2-1/4" pots spaced at 18 inch on center minimum. No bare root planting shall be permitted. Ground cover shall be sufficient to cover at least 80% of the bare soil in required landscape areas within three (3) years of planting. Where wildflower seeds are designated for use as a ground cover, the City may require annual re-seeding as necessary.

Response: As shown on the attached plans (see Exhibit VIB) all ground covers will be at least 4" pots and spaced appropriately. These plants will be installed as required.

3. **Turf or lawn in non-residential developments. Shall not be used to cover more than ten percent (10%) of the landscaped area, unless specifically approved based on a finding that, due to site conditions and availability of water, a larger percentage of turf or lawn area is appropriate. Use of lawn fertilizer shall be discouraged. Irrigation drainage runoff from lawns shall be retained within lawn areas.**

Response: The subject FDP area is within a residential development; therefore this criterion does not apply.

4. **Plant materials under trees or large shrubs. Appropriate plant materials shall be installed beneath the canopies of trees and large shrubs to avoid the appearance of bare ground in those locations.**

Response: As shown on the attached plans (see Exhibit VIB) appropriate plant materials will be installed beneath the canopies of trees and large shrubs. Areas that are not appropriate to plant beneath the canopies of existing trees will be mulched with bark.

B. **Trees. All trees shall be well-branched and typical of their type as described in current American Association of Nurserymen (AAN) Standards and shall be balled and burlapped. The trees shall be grouped as follows:**

1. **Primary trees which define, outline or enclose major spaces, such as Oak, Maple, Linden, and Seedless Ash, shall be a minimum of 2" caliper.**
2. **Secondary trees which define, outline or enclose interior areas, such as Columnar Red Maple, Flowering Pear, Flame Ash, and Honeylocust, shall be a minimum of 1-3/4" to 2" caliper.**
3. **Accent trees which, are used to add color, variation and accent to architectural features, such as Flowering Pear and Kousa Dogwood, shall be 1-3/4" minimum caliper.**
4. **Large conifer trees such as Douglas Fir or Deodar Cedar shall be installed at a minimum height of eight (8) feet.**
5. **Medium-sized conifers such as Shore Pine, Western Red Cedar or Mountain Hemlock shall be installed at a minimum height of five to six (5 to 6) feet.**

Response: As shown on the attached plans (see Exhibit VIB), proposed tree species have been selected from the Villebois Plant List in the *Community Elements Book*. All proposed trees meet the minimum 2" caliper code requirement or the minimum height requirement for conifers as appropriate. All proposed trees will be

well-branched, typical of their type as described in current AAN, and balled and burlapped.

C. Where a proposed development includes buildings larger than twenty-four (24) feet in height or greater than 50,000 square feet in footprint area, the Development Review Board may require larger or more mature plant materials:

Response: This standard does not apply to the subject FDP as no buildings are proposed in the parks.

D. Street Trees.

Response: Review of streets and rights-of-way, including street trees, occurs with the PDP (see Section II of this Notebook). Street trees shown in the plans for this FDP are consistent with those shown in the PDP application. Compliance with the Street Tree Master Plan is demonstrated in the PDP (Section II of Notebook).

E. Types of Plant Species.

1. Existing landscaping or native vegetation may be used to meet these standards, if protected and maintained during the construction phase of the development and if the plant species do not include any that have been listed by the City as prohibited. The existing native and non-native vegetation to be incorporated into the landscaping shall be identified.

Response: As shown on the attached plans (see Exhibit VIB), there are existing trees in the FDP area to be retained. The existing trees will be protected and maintained during the construction phase and are incorporated into the landscaping as appropriate.

2. Selection of plant materials. Landscape materials shall be selected and sited to produce hardy and drought-tolerant landscaping. Selection shall be based on soil characteristics, maintenance requirements, exposure to sun and wind, slope and contours of the site, and compatibility with other vegetation that will remain on the site. Suggested species lists for street trees, shrubs and groundcovers shall be provided by the City of Wilsonville.

Response: All proposed landscaping materials are selected from the Villebois Plant List in the *Community Elements Book*. Specific materials were selected to best meet the site characteristics of the subject property.

3. Prohibited plant materials. The City may establish a list of plants that are prohibited in landscaped areas. Plants may be prohibited because they are potentially damaging to sidewalks, roads, underground utilities, drainage improvements, or foundations, or because they are known to be invasive to native vegetation.

Response: No plant materials listed as "Prohibited Plant Species" on the Villebois Plant List are included in the proposed landscaping.

F. Tree Credit.

Response: Tree credits are not applicable to this FDP application.

G. Exceeding Standards. Landscape materials that exceed the minimum standards of this Section are encouraged, provided that height and vision clearance requirements are met.

H. Compliance with Standards. The burden of proof is on the applicant to show that proposed landscaping materials will comply with the purposes and standards of this Section.

Response: The attached plans (see Exhibit VIB) and this report demonstrate that the proposed landscaping complies with the standards of the Wilsonville Development Code and the *Community Elements Book*.

(.07) Installation and Maintenance.

A. Installation. Plant materials shall be installed to current industry standards and shall be properly staked to assure survival. Support devices (guy wires, etc.) shall not be allowed to interfere with normal pedestrian or vehicular movement.

B. Maintenance. Maintenance of landscaped areas is the on-going responsibility of the property owner. Any landscaping installed to meet the requirements of this Code, or any condition of approval established by a City decision-making body acting on an application, shall be continuously maintained in a healthy, vital and acceptable manner. Plants that die are to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City. Failure to maintain landscaping as required in this Section shall constitute a violation of this Code for which appropriate legal remedies, including the revocation of any applicable land development permits, may result.

C. Irrigation. The intent of this standard is to assure that plants will survive the critical establishment period when they are most vulnerable due to a lack of watering and also to assure that water is not wasted through unnecessary or inefficient irrigation. Approved irrigation system plans shall specify one of the following:

1. A permanent, built-in, irrigation system with an automatic controller. Either a spray or drip irrigation system, or a combination of the two, may be specified.

2. A permanent or temporary system designed by a landscape architect licensed to practice in the State of Oregon, sufficient to assure that the plants will become established and drought-tolerant.

3. **Other irrigation system specified by a licensed professional in the field of landscape architecture or irrigation system design.**

4. **A temporary permit issued for a period of one year, after which an inspection shall be conducted to assure that the plants have become established. Any plants that have died, or that appear to the Planning Director to not be thriving, shall be appropriately replaced within one growing season. An inspection fee and a maintenance bond or other security sufficient to cover all costs of replacing the plant materials shall be provided, to the satisfaction of the Community Development Director. Additionally, the applicant shall provide the City with a written license or easement to enter the property and cause any failing plant materials to be replaced.**

Response: Plants will be installed and maintained properly. A permanent-built-in irrigation system with an automatic controller will be installed underground to irrigate the proposed landscaping. Additional details about the irrigation system will be provided with construction plans.

D. **Protection. All required landscape areas, including all trees and shrubs, shall be protected from potential damage by conflicting uses or activities including vehicle parking and the storage of materials.**

Response: The attached planting plans demonstrate that all landscape areas will be protected from potential damage by vehicle travel along streets and alleys.

(.08) Landscaping on Corner Lots.

All landscaping on corner lots shall meet the vision clearance standards of Section 4.177. If high screening would ordinarily be required by this Code, low screening shall be substituted within vision clearance areas. Taller screening may be required outside of the vision clearance area to mitigate for the reduced height within it.

Response: All landscaping at corners will meet the vision clearance standards of Section 4.177.

(.09) Landscape Plans.

Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated. Landscape plans shall divide all landscape areas into the following categories based on projected water consumption for irrigation:

A. High water usage areas (+/- two (2) inches per week): small convoluted lawns, lawns under existing trees, annual and perennial flower beds, and temperamental shrubs;

B. Moderate water usage areas (+/- one (1) inch per week): large lawn areas, average water-using shrubs, and trees;

C. Low water usage areas (Less than one (1) inch per week, or gallons per hour): seeded field grass, swales, native plantings, drought-tolerant shrubs, and ornamental grasses or drip irrigated areas.

D. Interim or unique water usage areas: areas with temporary seeding, aquatic plants, erosion control areas, areas with temporary irrigation systems, and areas with special water-saving features or water harvesting irrigation capabilities.
These categories shall be noted in general on the plan and on the plant material list.

Response: The attached plans (see Exhibit VIB) include the required information listed in Section 4.176(.09).

(.10) Completion of Landscaping.

The installation of plant materials may be deferred for a period of time specified by the Board or Planning Director acting on an application, in order to avoid hot summer or cold winter periods, or in response to water shortages. In these cases, a temporary permit shall be issued, following the same procedures specified in subsection (.07)(C)(3), above, regarding temporary irrigation systems. No final Certificate of Occupancy shall be granted until an adequate bond or other security is posted for the completion of the landscaping, and the City is given written authorization to enter the property and install the required landscaping, in the event that the required landscaping has not been installed. The form of such written authorization shall be submitted to the City Attorney for review.

Response: The applicant does not anticipate deferring the installation of plant materials. Should it be necessary to defer installation of plant materials, the applicant will apply for a temporary permit.

(.11) Street Trees Not Typically Part of Site Landscaping.

Street trees are not subject to the requirements of this Section and are not counted toward the required standards of this Section. Except, however, that the Development Review Board may, by granting a waiver or variance, allow for special landscaping within the right-of-way to compensate for a lack of appropriate on-site locations for landscaping. See subsection (.06), above, regarding street trees.

Response: Street trees are not counted toward the required standards of this Section.

(.12) Mitigation and Restoration Plantings.

Response: No additional tree removal is proposed with the FDP. The PDP includes a concurrent Tree Removal Plan (see Section V of this Notebook) which addresses required tree mitigation.

SECTION 4.177. STREET IMPROVEMENT STANDARDS

(.01) Except as specifically approved by the Development Review Board, all street and access improvements shall conform to the Street System Master Plan, together with the following standards:

H. Access drives and lanes.

Response: The proposed parks are accessible from the adjacent street rights-of way and/or pathways as shown on the attached plans. All streets and alleys accommodate 2-way traffic.

I. Corner or clear vision area.

1. A clear vision area shall be maintained on each corner of property at the intersection of any two streets, a street and a railroad or a street and a driveway. No structures, plantings, or other obstructions that would impede visibility between the height of 3- inches and 10 feet shall be allowed within said area. Measurements shall be made from the top of the curb, or, when there is no curb, from the established street center line grade. However, the following items shall be exempt:

a. Light and utility poles with a diameter less than 12 inches.

b. An existing tree, trimmed to the trunk, 10 feet above the curb.

c. Official warning or street sign.

d. Natural contours where the natural elevations are such that there can be no cross-visibility at the intersection and necessary excavation would result in an unreasonable hardship on the property owner or deteriorate the quality of the site.

Response: Landscaping at the corners of the parks will be less than 30 inches in height to assure that visibility is not blocked.

SECTION 4.178. SIDEWALK & PATHWAY STANDARDS

(.01) Sidewalks. All sidewalks shall be concrete and a minimum of five (5) feet in width, except where the walk is adjacent to commercial storefronts. In such cases, they shall be increased to a minimum of ten (10) feet in width.

Response: All sidewalks and pathways in the subject FDP area are at least 5 feet in width and concrete.

(.03) Pavement surface.

A. All bike paths shall be paved with asphalt to provide a smooth riding surface. Where pathways are adjacent to and accessible from improved public streets, the Public Works Director may require a concrete surface. At a minimum the current AASHTO "Guide for the Development of Bicycle Facilities" and the State "Oregon Bicycle Plan" shall be used to design all bicycle facilities within the City of Wilsonville. Any deviation from the AASHTO, ODOT, and City standards will require approval from the City Engineer prior to implementation of the design.

B. To increase safety, all street crossings shall be marked and should be designed with a change of pavement such as brick or exposed aggregate. All arterial crossings should be signalized.

C. All pathways shall be clearly posted with standard bikeway signs.

D. Pedestrian and equestrian trails may have a gravel or sawdust surface if not intended for all weather use.

Response: There are no bicycle pathways in this FDP area. Details about sidewalks in the public right-of-way were addressed in the PDP application (Section II of this Notebook). No Major or Minor pathways are identified on the subject property.

(.06) Pathway Clearance.

A. Vertical clearance of at least 8 feet 6 inches shall be maintained above the surface of all pathways. The clearance above equestrian trails shall be a minimum of ten feet.

B. All landscaping, signs and other potential obstructions shall be set back at least (1) foot from the edge of the pathway surface. No exposed rock should be permitted within two (2) feet of the path pavement and all exposed earth within two (2) feet of the pavement shall be planted with grass, sod or covered with 2" of barkdust.

Response: As shown on the attached plans, all potential obstructions are at least one foot from the edge of the pathway surfaces, and vertical clearance will be maintained.

SITE DESIGN REVIEW

SECTION 4.400. PURPOSE.

(.01) Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development

of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefore.

Response: No buildings are proposed within park areas. The SAP Central *Signage & Wayfinding Plan* indicates the provision of 'Internal Site Identifier' with the roundabout at the intersection of Villebois Drive and Costa Circle. The attached PDP plans (see Section IIB of this Notebook) and FDP plans (see Section VIB of this Notebook) show provision of the 'Internal Site Identifier' with the future roundabout construction. The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent with the design shown in the *Community Elements Book* on Page 14. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP Central; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

The proposed landscaping within the parks is designed in compliance with the standards for the rest of Villebois, so the entire development will have a cohesive, harmonious appearance, creating a desirable place of residence and adding to the overall quality of life in the City.

(.02) The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:

A. Assure that Site Development Plans are designed in a manner that insures proper functioning of the site and maintains a high quality visual environment.

Response: The parks in the FDP area have been designed to assure proper functioning of the site and to maintain an aesthetically pleasing environment. The proposed landscaping and park design will add to the quality of the environment as well as the functioning of the site.

B. Encourage originality, flexibility and innovation in site planning and development, including the architecture, landscaping and graphic design of said development;

Response: The FDP includes landscaping as shown on the attached plans (Exhibit VIB), which will enhance the visual environment of the site. Pedestrian connections to sidewalks, trails, and adjacent residences will be provided to enhance the site's connectivity to surrounding uses.

C. Discourage monotonous, drab, unsightly, dreary and inharmonious developments;

Response: The FDP area will include landscaping as shown on the attached plans (see Exhibit VIB). Landscaping will consist of an appropriate mixture of ground cover, shrubs, and trees selected from the Villebois Plant List to create a harmonious appearance throughout the larger Villebois development. The proposed

landscaping will contribute to an interesting and aesthetically appealing development.

D. Conserve the City's natural beauty and visual character and charm by assuring that structures, signs and other improvements are properly related to their sites, and to surrounding sites and structures, with due regard to the aesthetic qualities of the natural terrain and landscaping, and that proper attention is given to exterior appearances of structures, signs and other improvements;

Response: The parks will incorporate landscaping that makes sense for a Pacific Northwest community, while matching the City's natural beauty and visual character.

E. Protect and enhance the City's appeal and thus support and stimulate business and industry and promote the desirability of investment and occupancy in business, commercial and industrial purposes;

Response: The parks, along with their pedestrian connections to adjacent residences and streets, will help to maintain the appeal of Villebois as a unique and attractive community in which to live, work, and recreate. Residents of Villebois will stimulate the local economy by opening new businesses and thus creating jobs and by spending money in existing businesses.

F. Stabilize and improve property values and prevent blighted areas and, thus, increase tax revenues;

Response: The proposed parks will create neighborhood amenities that will help to maintain property values in this new community. A Home Owners Association will ensure that these areas are properly maintained over time.

G. Insure that adequate public facilities are available to serve development as it occurs and that proper attention is given to site planning and development so as to not adversely impact the orderly, efficient and economic provision of public facilities and services.

Response: The process used to plan for Villebois incorporates a tiered system that originates at the *Villebois Village Master Plan*. The *Master Plan* shows how facilities, including parks and open space, are distributed and available to residents throughout Villebois.

Figure 5 – Parks & Open Space Plan of the *Master Plan* shows that approximately 33% of Villebois will be in parks and open space. Phase 4 Central will contain more areas for parks than originally shown for this area with SAP – Central, as demonstrated in the PDP (see Section II of this Notebook). This FDP is consistent with the PDP, SAP – Central, and the *Villebois Village Master Plan*, and therefore, complies with this criterion.

H. Achieve the beneficial influence of pleasant environments for living and working on behavioral patterns and, thus, decrease the cost of

governmental services and reduce opportunities for crime through careful consideration of physical design and site layout under defensible space guidelines that clearly define all areas as either public, semi-private, or private, provide clear identity of structures and opportunities for easy surveillance of the site that maximize resident control of behavior -- particularly crime;

Response: The *Villebois Village Master Plan* shows that the community will include a variety of housing options (living) and the Village Center will contain places for employment (working). This FDP shows a living environment in Phase 4 Central that is enhanced by proximity to park and open space areas. Residents who will surround the parks and open spaces will provide on-going surveillance and control.

I. Foster civic pride and community spirit so as to improve the quality and quantity of citizen participation in local government and in community growth, change and improvements;

Response: The design of the Villebois Village has been created to develop a community that is truly unique. The City and Villebois Master Planner, as well as the Applicant, are working in partnership with nearby residents, property owners, and local and regional governments to create a complete, livable, pedestrian-oriented community that will be an asset to the City of Wilsonville and Portland region. This partnership has generated citizen participation in the project and the unique design shall foster civic pride and community spirit amongst the residents of Villebois.

J. Sustain the comfort, health, tranquillity and contentment of residents and attract new residents by reason of the City's favorable environment and, thus, to promote and protect the peace, health and welfare of the City.

Response: The design of the Villebois Village revolves around three guiding principles: connectivity, diversity, and sustainability. These principles are intended to sustain the comfort, health, tranquility, and contentment of Villebois residents, while also promoting and protecting the peace, health and welfare of the City. *Connectivity* refers to creating connections between Villebois neighborhoods and between Villebois and other parts of the City and region for multiple modes of transportation. *Diversity* includes multiple choices of housing styles, housing affordability, recreation, employment, goods and services, and infrastructure for transportation. *Sustainability* involves the protection of natural resources and open space, energy conservation, and storm and rainwater management.

SECTION 4.421. CRITERIA AND APPLICATION OF DESIGN STANDARDS.

(.01) The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular

architectural styles is not included in these standards. (Even in the Boones Ferry Overlay Zone, a range of architectural styles will be encouraged.)

A. Preservation of Landscape. The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soils removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.

Response: As shown in the attached plans (see Exhibit VIB), proposed plant materials are drawn from the Villebois Plant List, which includes native species, to ensure consistency of general appearance within the Villebois community.

B. Relation of Proposed Buildings to Environment. Proposed structures shall be located and designed to assure harmony with the natural environment, including protection of steep slopes, vegetation and other naturally sensitive areas for wildlife habitat and shall provide proper buffering from less intensive uses in accordance with Sections 4.171 and 4.139 and 4.139.5. The achievement of such relationship may include the enclosure of space in conjunction with other existing buildings or other proposed buildings and the creation of focal points with respect to avenues of approach, street access or relationships to natural features such as vegetation or topography.

Response: Chapter 3 of the *Villebois Village Master Plan* takes into account scenic views, topography, existing vegetation, and other natural features in the design and location of parks and open spaces in the Villebois development. The FDP area does not include any steep slopes, sensitive wildlife habitat areas, wetlands, SROZ areas, or flood plains. The proposed parks are in addition to the parks shown in the *Master Plan* and SAP Central. Existing trees within the parks are maintained to the extent possible as reviewed in the concurrent PDP and Tree Removal Plan applications (see Sections II and V, respectively, of this Notebook).

C. Drives, Parking and Circulation. With respect to vehicular and pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the design of proposed buildings and structures and the neighboring properties.

Response: No driveways or parking areas are proposed or required with this FDP. The parks included in the FDP are all accessible from adjacent streets and pathways, as shown on the FDP plans (see Reduced Drawings in Section VIB).

D. Surface Water Drainage. Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties of the public storm drainage system.

Response: Surface water drainage is addressed in the PDP application (see Section II of Notebook). The FDP is consistent with grading and drainage shown in the PDP. This system has been carefully designed so as not to adversely affect neighboring properties.

E. Utility Service. Any utility installations above ground shall be located so as to have an harmonious relation to neighboring properties and site. The proposed method of sanitary and storm sewage disposal from all buildings shall be indicated.

Response: The PDP application addresses utility installation (see Section II of Notebook). The FDP is consistent with the PDP.

F. Advertising Features. In addition to the requirements of the City's sign regulations, the following criteria should be included: the size, location, design, color, texture, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties.

Response: No advertising features are proposed in this FDP.

G. Special Features. Exposed storage areas, exposed machinery installations, surface areas, truck loading areas, utility buildings and structures and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall be required to prevent their being incongruous with the existing or contemplated environment and its surrounding properties. Standards for screening and buffering are contained in Section 4.176.

Response: This FDP does not propose any exposed storage areas, exposed machinery installations, surface areas, truck loading areas, utility buildings and structures or other accessory areas and structures. Compliance with Section 4.176 is addressed earlier in this report.

(.02) The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures.

Response: No accessory buildings or structures are proposed.

(.03) The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards.

Response: Compliance with the purpose of Section 4.400 has been addressed earlier in this report.

SECTION 4.440. PROCEDURE.

(.01) Submission of Documents.

A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:

A. A site plan, drawn to scale, showing the proposed layout of all structures and other improvements including, where appropriate, driveways, pedestrian walks, landscaped areas, fences, walls, off-street parking and loading areas, and railroad tracks. The site plan shall indicate the location of entrances and exits and direction of traffic flow into and out of off-street parking and loading areas, the location of each parking space and each loading berth and areas of turning and maneuvering vehicles. The site plan shall indicate how utility service and drainage are to be provided.

B. A Landscape Plan, drawn to scale, showing the location and design of landscaped areas, the variety and sizes of trees and plant materials to be planted on the site, the location and design of landscaped areas, the varieties, by scientific and common name, and sizes of trees and plant materials to be retained or planted on the site, other pertinent landscape features, and irrigation systems required to maintain trees and plant materials. An inventory, drawn at the same scale as the Site Plan, of existing trees of 4" caliper or more is required. However, when large areas of trees are proposed to be retained undisturbed, only a survey identifying the location and size of all perimeter trees in the mass in necessary.

C. Architectural drawings or sketches, drawn to scale, including floor plans, in sufficient detail to permit computation of yard requirements and showing all elevations of the proposed structures and other improvements as they will appear on completion of construction. Floor plans shall also be provided in sufficient detail to permit computation of yard requirements based on the relationship of indoor versus outdoor living area, and to evaluate the floor plan's effect on the exterior design of the building through the placement and configuration of windows and doors.

D. A Color Board displaying specifications as to type, color, and texture of exterior surfaces of proposed structures. Also, a phased development schedule if the development is constructed in stages.

E. A sign plan, drawn to scale, showing the location, size, design, material, color and methods of illumination of all exterior signs.

F. The required application fee.

Response: Section VIB of this notebook includes FDP plans that meet the requirements of Section 4.440 (.01). A copy of the application fee submitted is included in Exhibit IB of this notebook. Architectural drawings, etc., and a color board are not required as no buildings are proposed with this FDP. The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent

with the design shown in the *Community Elements Book* on Page 14. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP Central; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

The SAP Central *Signage & Wayfinding Plan* indicates the provision of 'Internal Site Identifier' with the roundabout at the intersection of Villebois Drive and Costa Circle. The attached PDP plans (see Section IIB of this Notebook) and FDP plans (see Section VIB of this Notebook) show provision of the 'Internal Site Identifier' with the future roundabout construction. A copy of the required application fee is included in Exhibit IC.

SECTION 4.450. INSTALLATION OF LANDSCAPING.

(.01) All landscaping required by this section and approved by the Board shall be installed prior to issuance of occupancy permits, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned to the applicant.

Response: The applicant understands that they must provide a security to guarantee installation of the proposed landscaping.

(.02) Action by the City approving a proposed landscape plan shall be binding upon the applicant. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, as specified in this Code.

Response: The applicant understands that changes to the landscape plan included in this application cannot be made without official action of the Planning Director or the Development Review Board.

(.03) All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered with Board approval.

Response: The applicant understands that they are responsible for the ongoing maintenance of the proposed landscaping.

(.04) If a property owner wishes to add landscaping for an existing development, in an effort to beautify the property, the Landscape Standards set forth in Section 4.176 shall not apply and no Plan approval or permit shall be required. If the owner wishes to modify or remove landscaping that has been accepted or approved through the City's development review process, that removal or modification must first be approved through the procedures of Section 4.010.

Response: This FDP does not include any existing development; therefore this criterion does not apply.

II. CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for the requested Final Development Plan. Therefore, the applicant requests approval of this application.

PHASE 4 CENTRAL
VILLEBOIS
FINAL DEVELOPMENT PLAN

TL PART OF 2916, 2919, & 2922, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

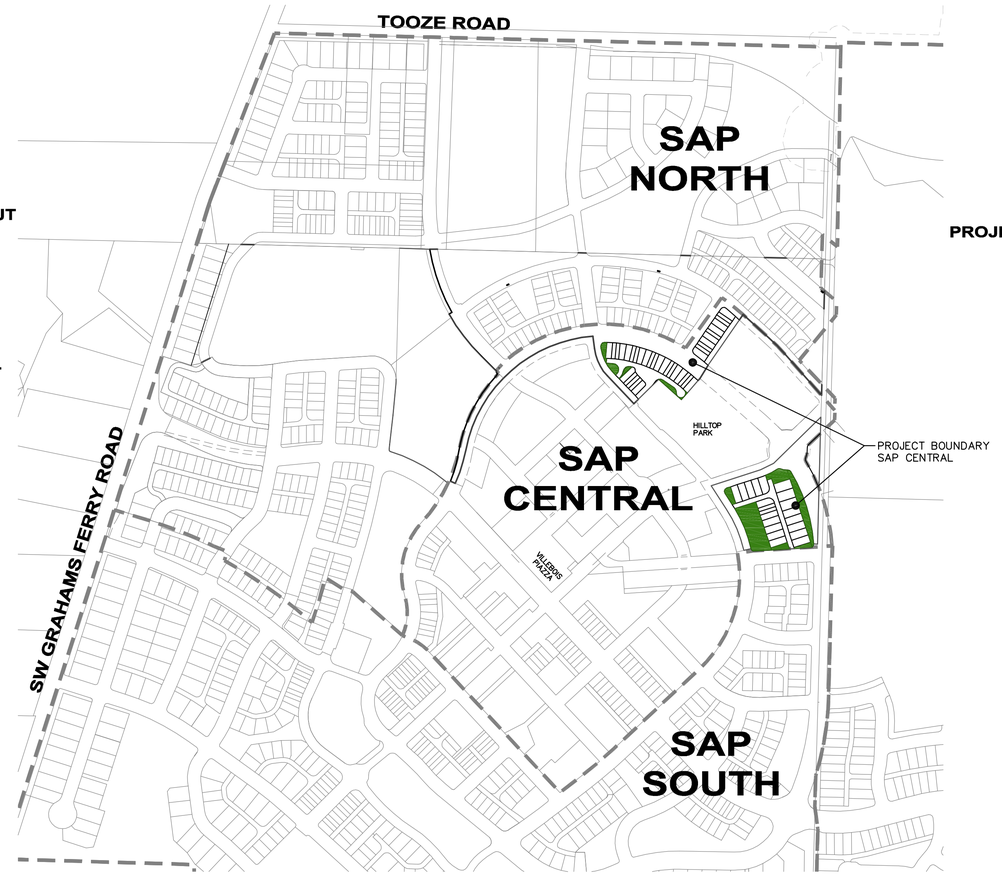
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

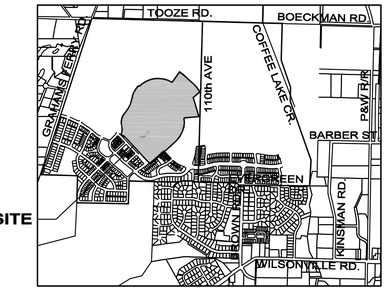
CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE





VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1 COVER SHEET
L1.0 LANDSCAPE PLAN
L2.0 LANDSCAPE PLAN
L3.0 LANDSCAPE DETAILS

SCALE
300 0 150 300
1 INCH = 300 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Final Development Plan

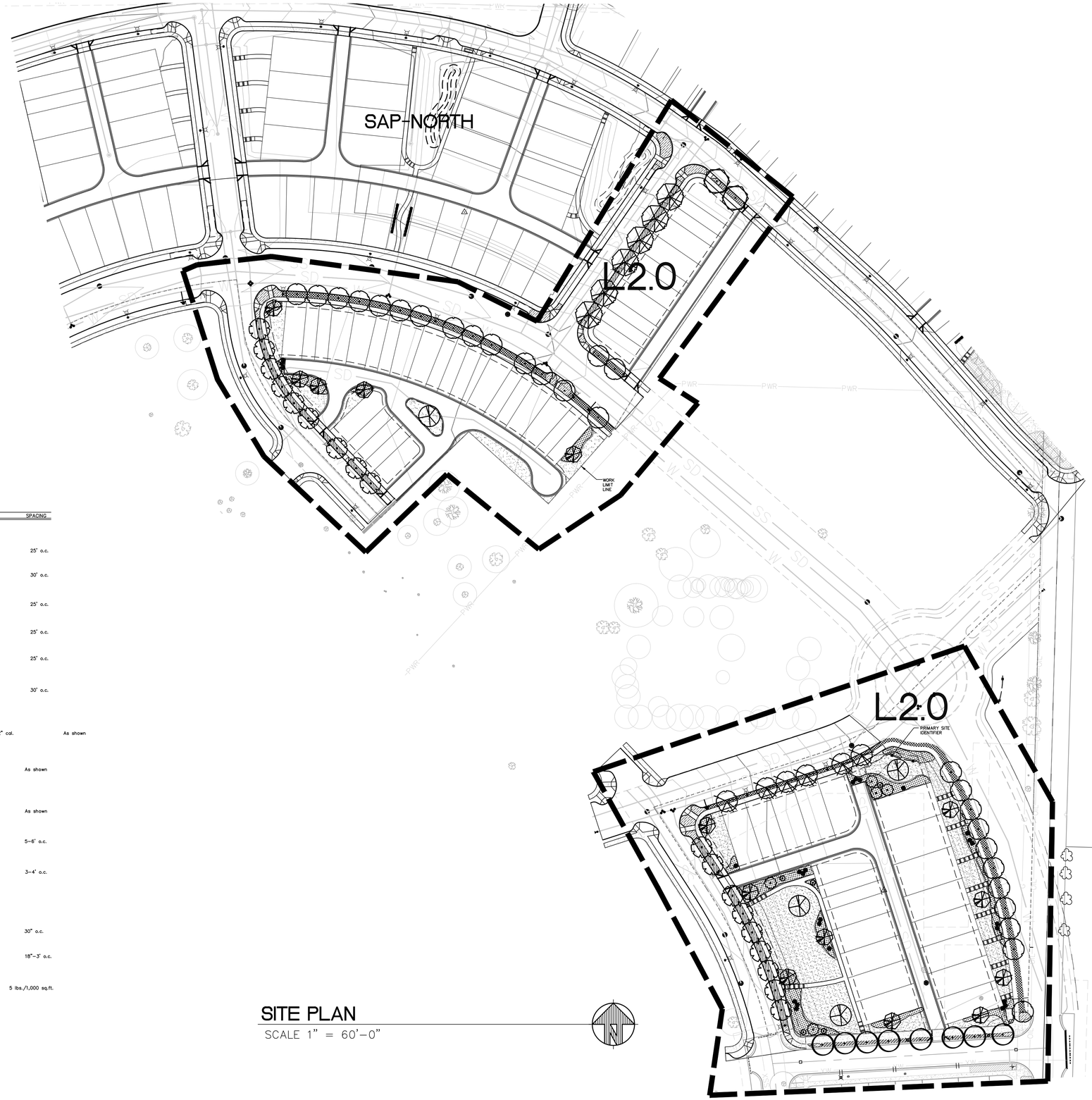
Cover Sheet

DATE 04/15/2013

1

GENERAL NOTES:

1. Contractor is to verify all plant quantities.
2. Adjust plantings in the field as necessary.
3. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. System is to be design/build by Landscape Contractor. Guarantee system for a minimum one year. Show drip systems as alternate bid only.
4. All plants are to be fully foliaged, well branched and true to form.



SUGGESTED PLANT LIST: SAP CENTRAL

SYM.	LATIN NAME / Common Name	SIZE	SPACING
	Street Trees		
	ACER PLATANOIDES "EZESTRE" Easy Street Maple	2 1/2" cal.	25' o.c.
	FAGUS SYLVATICA European Beech	2" cal.	30' o.c.
	FRAXINUS AMERICANA "AUTUMN APPLAUSE" Autumn Applause Ash	2 1/2" cal.	25' o.c.
	LIRIODENDRON TULIPIFERA Tulip Tree	2 1/2" cal.	25' o.c.
	PYRUS CALLERYANA "REDSPIRE" Redspire Flowering Pear	2 1/2" cal.	25' o.c.
	TILIA x EUCHLORA Crimean Linden	2" cal.	30' o.c.
Shade Tree	Quercus rubra Fagus sylvatica Acer rubrum	2" cal.	As shown
Small Columnar or Ornamental Trees	Malus 'Snowdrift' Stewartia pseudocamellia Magnolia stellata 'Royal Star' Acer circinatum	1 3/4" cal.	As shown
Conifer Tree	Pseudotsuga menziesii Calocedrus decurrens	8' ht. 5-6' ht.	As shown
Large Flowering Deciduous Shrubs	Hamamelis mollis 'Coombe Wood' Viburnum plic. tom. 'Mariesii' Syringa microphylla 'Superba' Hydrangea macrophylla 'Nikko Blue'	5 gal.	5-6' o.c.
Medium Ornamental Shrubs	Abelia grandiflora 'Edward Goucher' Berberis thunbergii Ilex crenata Euonymus japonica 'Silver Princess' Lonicera nitida Pieris 'Forest Flame' Rhododendron Spiraea bumalda 'Anthony Waterer' Weigela florida Mahonia aquifolium	2-5 gal.	3-4' o.c.
Small Ornamental Shrubs	Cornus stolonifera 'Kelseyi'	2 gal.	30" o.c.
Groundcover	Fragaria chiloensis Rubus calycynoides Arctostaphylos uva-ursi	1 gal.	18"-3' o.c.
Lawn	Fine Seed Lawn	seed	5 lbs./1,000 sq.ft.

SITE PLAN

SCALE 1" = 60'-0"

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT JANET L. OTTEN OREGON 232

PHASE 4 CENTRAL VILLEBOIS

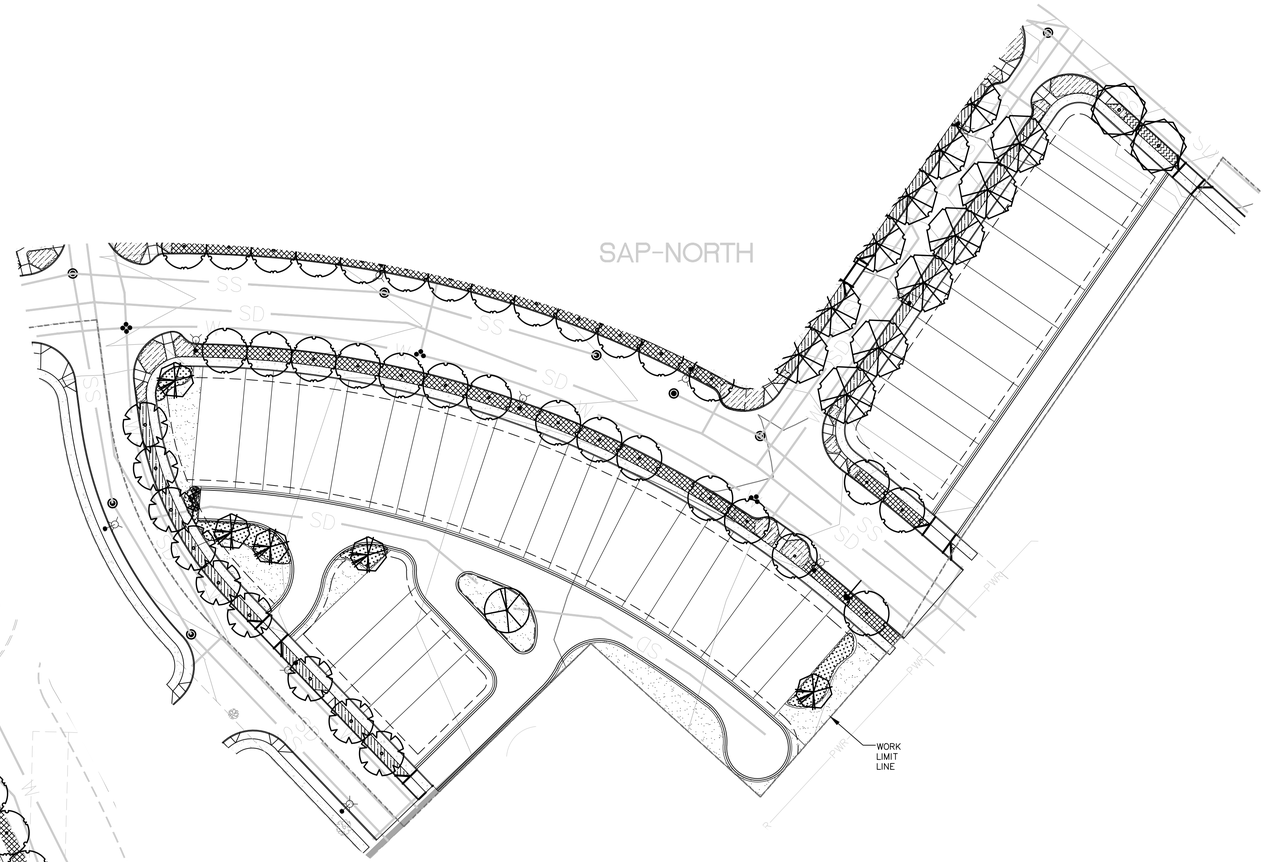
Final Development Plan

Landscape Plan

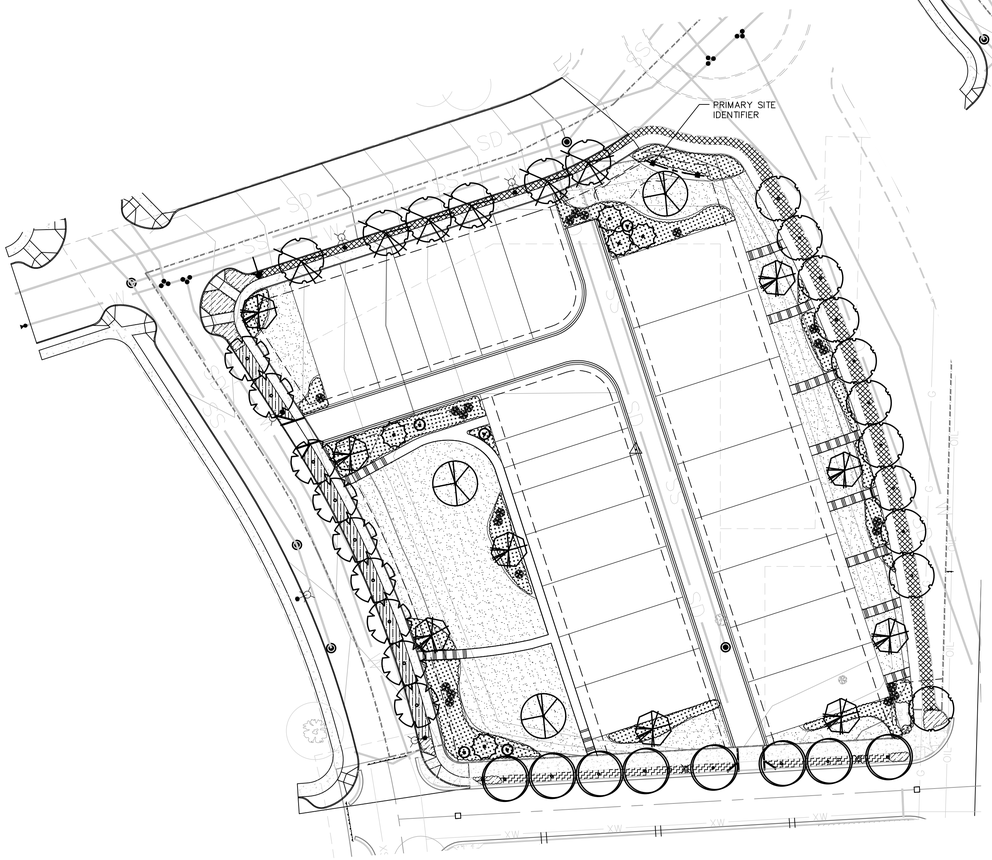
DATE 04/15/2013

L1.0

1 OF 3



LANDSCAPE PLAN
SCALE 1" = 40'-0"



LANDSCAPE PLAN
SCALE 1" = 40'-0"

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT
JANET L. OTTEN
OREGON

PHASE 4 CENTRAL VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L2.0

2 OF 3

OUTLINE SPECIFICATIONS PLANTING AND SEEDING:

GENERAL: All plants shall conform to all applicable standards of the latest edition of the "American Association of Nurserymen Standards", A.N.S.I. Z60.1 – 1973. Meet or exceed the regulations and laws of Federal, State, and County regulations, regarding the inspection of plant materials, certified as free from hazardous insects, disease, and noxious weeds, and certified fit for sale in Oregon.

The apparent silence of the Specifications and Plans as to any detail, or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of first quality are to be used. All interpretations of these Specifications shall be made upon the basis above stated.

Landscape contractor shall perform a site visit prior to bidding to view existing conditions.

PERFORMANCE QUALITY ASSURANCE: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary horticultural practices and who are completely familiar with the specified requirements and methods needed for the proper performance of the work of this section.

NOTIFICATION: Give Landscape Architect minimum of 2 days advance notice of times for inspections. Inspections at growing site does not preclude Landscape Architect's right of rejection of deficient materials at project site. Each plant failing to meet the above mentioned "Standards" or otherwise failing to meet the specified requirements as set forth shall be rejected and removed immediately from the premises by the Contractor and at his expense, and replaced with satisfactory plants or trees conforming to the specified requirements.

SUBSTITUTIONS: Only as approved by the Landscape Architect or the Owner's Representative.

GUARANTEE AND REPLACEMENT: All plant material shall be guaranteed from final acceptance for one full growing season or one year, whichever is longer. During this period the Contractor shall replace any plant material that is not in good condition and producing new growth (except that material damaged by severe weather conditions, due to Owner's negligence, normally unforeseen peculiarities of the planting site, or lost due to vandalism). Guarantee to replace, at no cost to Owner, unacceptable plant materials with plants of same variety, age, size and quality as plant originally specified. Conditions of guarantee on replacement plant shall be same as for original plant.

Landscape Contractor shall keep on site for Owner's Representative's inspection, all receipts for soil amendment and topsoil deliveries.

PROTECTION: Protect existing roads, sidewalks, and curbs, landscaping, and other features remaining as final work. Verify location of underground utilities prior to doing work. Repair and make good any damage to service lines, existing features, etc. caused by landscaping installation.

PLANT QUALITY ASSURANCE: Deliver direct from nursery. Maintain and protect roots of plant material from drying or other possible injury. Store plants in shade and protect them from weather immediately upon delivery, if not to be planted within four hours.

Nursery stock shall be healthy, well branched and rooted, formed true to variety and species, full foliaged, free of disease, injury, defects, insects, weeds, and weed roots. Trees shall have straight trunks, symmetrical tips, and have an intact single leader. Any trees with double leaders will be rejected upon inspection. All Plants: True to name, with one of each bundle or lot tagged with the common and botanical name and size of the plants in accordance with standards of practice of the American Association of Nurserymen, and shall conform to the Standardized Plant Names, 1942 Edition.

Container grown stock: Small container–grown plants, furnished in removable containers, shall be well rooted to ensure healthy growth. **Grow container plants in containers a minimum of one year** prior to delivery, with roots filling container but not root bound. Bare root stock: Roots well–branched and fibrous. Balled and burlapped (B&B): Ball shall be of natural size to ensure healthy growth. Ball shall be firm and the burlap sound. No loose or made ball will be acceptable.

TOPSOIL AND FINAL GRADES: Landscape Contractor is to verify with the General Contractor if the on site topsoil is or is not conducive to proper plant growth. Supply alternate bid for imported topsoil.

Landscape Contractor is to supply and place 12" of topsoil in planting beds and 6" in lawn areas. If topsoil stockpiled on site is not conducive to proper plant growth, the Landscape Contractor shall import the required amount. Landscape Contractor is to submit samples of the imported soil and/or soil amendments to the Landscape Architect. The topsoil shall be a sandy loam, free of all weeds and debris inimical to lawn or plant growth.

Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated. Planting bed grades shall be approximately 3" below adjacent walks, paving, finished grade lines, etc., to allow for bark application. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

PLANTING SPECIFICATIONS:

HERBICIDES: Prior to soil preparation, all areas showing any undesirable weed or grass growth shall be treated with Round–up in strict accordance with the manufacturer's instructions.

SOIL PREPARATION: Work all areas by rototilling to a minimum depth of 8". Remove all stones (over 1½" size), sticks, mortar, large clumps of vegetation, roots, debris, or extraneous matter turned up in working. Soil shall be of a homogeneous fine texture. Level, smooth and lightly compact area to plus or minus .10 of required grades.

In groundcover areas add 2" of compost (or as approved) and till in to the top 6" of soil.

PLANTING HOLE: Lay out all plant locations and excavate all soils from planting holes to 2 1/2 times the root ball or root system width. Loosen soil inside bottom of plant hole. Dispose of any "subsoil" or debris from excavation. Check drainage of planting hole with water, and adjust any area showing drainage problems.

SOIL MIX: Prepare soil mix in each planting hole by mixing:
2 part native topsoil (no subsoil)
1 part compost (as approved)

Thoroughly mix in planting hole and add fertilizers at the following rates:
Small shrubs – 1/8 lb./ plant
Shrubs – 1/3 to 1/2 lb./ plant
Trees – 1/3 to 1 lb./ plant

FERTILIZER: For trees and shrubs use Commercial Fertilizer "A" Inorganic (5–4–3) with micro–nutrients and 50% slow releasing nitrogen. For initial application in fine seed lawn areas use Commercial Fertilizer "B" (8–16–8) with micro–nutrients and 50% slow–releasing nitrogen. For lawn maintenance use Commercial Fertilizer "C" (22–16–8) with micro–nutrients and 50% slow–releasing nitrogen. DO NOT apply fertilizer to Water Quality Swale.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Place 6" minimum, lightly compacted layer of prepared planting soil under root system. Loosen and remove twine binding and burlap from top 1/2 of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with soil mix while working each layer to eliminate voids.

When approximately 2/3 full, water thoroughly, then allow water to soak away. Place remaining backfill and dish surface around plant to hold water. Final grade should keep root ball slightly above surrounding grade, not to exceed 1". Water again until no more water is absorbed. Initial watering by irrigation system is not allowed.

STAKING OF TREES: Stake or guy all trees. Stakes shall be 2" X 2" (nom.) quality tree stakes with point. They shall be of Douglas Fir, clear and sturdy. Stake to be minimum 2/3 the height of the tree, not to exceed 8'–0". Drive stake firmly 1'–6" below the planting hole. Tree ties for deciduous trees shall be "Chainlock" (or better). For Evergreen trees use "Gro–Strait" Tree Ties (or a reinforced rubber hose and guy wires) with guy wires of a minimum 2 strand twisted 12 ga. wire. Staking and guying shall be loose enough to allow movement of tree while holding tree upright.

MULCHING OF PLANTINGS: Mulch planting areas with dark, aged, medium grind fir or hemlock bark (aged at least 6 months) to a depth of 2" in ground cover areas and 2½" in shrub beds. Apply evenly, not higher than grade of plant as it came from the nursery, and rake to a smooth finish. Water thoroughly, then hose down planting area with fine spray to wash leaves of plants.

FINE LAWN AREAS: In fine lawn area apply Commercial Fertilizer Mix "B" at 4.5 lbs. Per 1,000 sq.ft. and rake into soil surface. Establish an even, fine textured seedbed meeting grades, surfaces and texture. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

ROUGH SEED AREA: In rough seeded area, establish an evenly graded seedbed. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
Fine Lawn Seed Mix: To contain 50% Top Hat Perennial Ryegrass, 30% Derby Supreme Ryegrass, 20% Longfellow Chewings Fescue (Hobbs and Hopkins Pro–Time 303 Lawn Mix or as approved) Sow Seed at 5 lbs. / 1000 sq. ft.
Rough Seed Mix: To Contain: 60% Perennial Ryegrass, 15% Eureka Hard Fescue, and 20% Herbaceous Plants and Clover (Hobbs and Hopkins Pro–Time 705 PDX, or approved equal). Sow at 2 lbs. Per 1,000 sq.ft.

MAINTENANCE OF SEEDED AREAS:
Fine Lawn Areas: The lawn areas shall be maintained by watering, mowing, reseeding, and weeding for a minimum of 60 days after seeding. After 30 days, or after the second mowing, apply Commercial Fertilizer Mix "C" at 5 lbs. per 1,000 sq. ft. Mow and keep at 1½" to 2" in height. Remove clippings and dispose of off site.

GENERAL MAINTENANCE: Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance. Replace plants not in normal healthy condition at the end of this period. Water, weed, cultivate, mulch, reset plants to proper grade or upright position, remove dead wood and do necessary standard maintenance operations. Irrigate when necessary to avoid drying out of plant materials, and to promote healthy growth.

CLEAN–UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.

CITY OF WILSONVILLE WATER QUALITY FACILITY SPECIFICATIONS:

SOIL PREPARATION: Remove all nonnative plant materials, including plants, roots, and seeds prior to adding topsoils. Till the sub–grade in these areas to a depth of at least four inches. Water Quality Swale area shall be over–excavated and filled to final grade with 4 iches of topsoil in areas where topsoil has been removed or not adequate. Topsoil shall be tested for the following characteristics provide a good growing medium:
A) Texture
B) Fertility
C) Microbial

Incorporate 2" garden compost, free of conventional fertilizer, to a depth of 4" on all areas of the water quality facility. DO NOT apply fertilizer to the Water Quality Facility.

TIMING: Plantings should be installed between February 1 and May 1 or between October 1 and November 15. Bare root stock shall be installed only from December 15 through April 15. When plantings must be installed outside these times, additional measures may be needed to assure survival.

EROSION CONTROL: Grading, soil preparation, and seeding shall be performed during optimal weather conditions and at low flow levels to minimize sediment impacts. Site disturbance shall be minimized and desirable vegetation retained, where possible. Slopes shall be graded to support the establishment of vegetation. Where seeding is used for erosion control, an appropriate native grass, Regreen (or its equivalent), or sterile wheat shall be used to stabilize slopes until permanent vegetation is established. Biodegradable fabrics (coir, coconut or approved jute matting (minimum 1/4" square holes) may be used to stabilize slopes and channels. Fabrics such as burlap may be used to secure plant plugs in place and to discourage floating upon inundation.

A biodegradable Erosion Control Matting shall be placed over the topsoil throughout the swale cross section, fabric shall be held in place in accordance with the manufacturer's installation requirements. Use high density jute matting in the treatment area (Geojute Plus or approved equal). In all other areas use low density jute matting (Econojute or approved equal). Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated on civil plans. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

HERBICIDES: Removal of invasive non–native species is required by hand for the entire wetland buffer area. If necessary, excessive weed growth may be treated with Rodeo or Garlon 3–A (or approved equals) in strict accordance with the manufacturer's instructions.

FERTILIZER: Do not apply fertilizer to any plantings within the Wetland Buffer or Water Quality Facilities.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Loosen and remove twine binding and burlap from top one–half of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with native soil mix while working each layer to eliminate voids.

MULCHING: Trees, shrubs, and groundcovers planted in upland areas shall be mulched a minimum of 3" in depth and 18" in diameter, to retain moisture and discourage weed growth around newly installed plant material. Appropriate mulches are made from composted bark or leaves that have not been chemically treated. The use of mulch in frequently inundated areas shall be limited, to avoid any possible water quality impacts including the leaching of tannins and nutrients, and the migration of mulch into waterways.

WILDLIFE PROTECTION: Appropriate measures shall be taken to discourage wildlife browsing. Biodegradable plastic mesh tubing, or other substitute approved by the City, shall be placed around individual trees and shrubs to prevent browsing by wildlife, including beaver, nutria, deer, mice and voles.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
Moist Area Seed Mix: To contain 47% Blue Wildry, 40% Meadow Barley, 10% Tufted Hairgrass, 2% Western Mannagrass and 1% American Sloughgrass (Hobbs & Hopkins Pro–Time 840 Native Wetland Mix) Sow Seed at 20–40 lbs./acre.
Dry Area Seed Mix: To contain 60% Blue Wildry, 30% Meadow Barley and 10% Native California Brome (Hobbs & Hopkins Pro–Time 400 Native Grass Mix) Sow Seed at 15–30 lbs./acre.

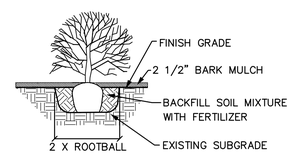
IRRIGATION: Is to be provided as per a separate plan design/build by Landscape Contractor. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. Guarantee system for a minimum one year.

MAINTENANCE: The permitee is responsible for the maintenance of this facility for a minimum of two years following the acceptance of the facility by the City of Wilsonville. The City's authorized representative shall inspect the condition of all landscaping located within the water quality facility, at the end of the of the firest year of the post–construction period. The authorized representative shall provide a report describing any deficiencies to the applicant.

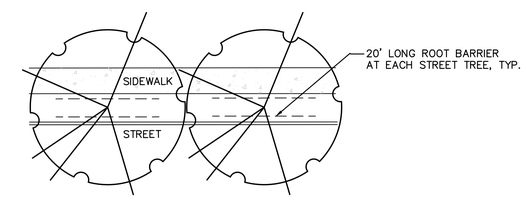
If, at any time during the warranty period, the landscaping falls below 90% survival of trees and shrubs or 90% aerial coverage, the Owner shall remove the undesirable vegetation and reinstall all deficient planting at the next appropriate time. Prior to replanting, the cause of the plant loss shall be determined and corrected. The two–year maintenance period shall begin again from the date of replanting.

Water Quality Facility is to be kept free of debris and maintained to insure water flow and proper functioning. Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance.

CLEAN–UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.



SHRUB PLANTING DETAIL
NOT TO SCALE



ROOT BARRIER DETAIL
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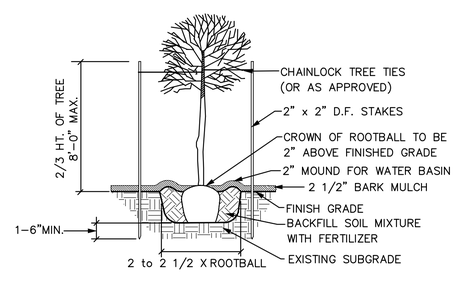

DECIDUOUS TREE PLANTING DETAIL
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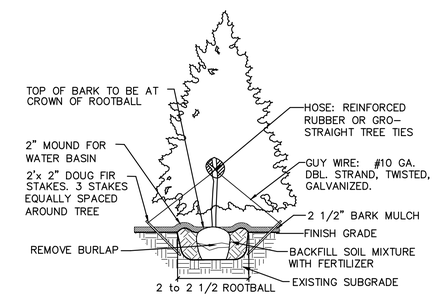

EVERGREEN TREE STAKING DETAIL
NOT TO SCALE

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT OREGON JANET L. OTTEN 212

PHASE 4
CENTRAL
VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L3.0

3 OF 3

SUPPORTING COMPLIANCE REPORT
SAP AMENDMENT
SAP CENTRAL ARCHITECTURAL PATTERN BOOK

SECTION VIIA

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I. DESCRIPTION OF SAP AMENDMENT TO PATTERN BOOK

The Applicant proposes to amend the SAP Central *Pattern Book* to add information for Small Cottages. The following is a list of the proposed additions and a 'Mock Up' of the proposed additions is included in Exhibit VIIB to help illustrate the intended result of this amendment. (NOTE: Only pages affected by the proposed amendment are included in the 'Mock Up.')

- Cover Page – Revise to update approval date and add case file reference (to be determined).
- Table of Contents (A1) – Update accordingly for the following additions for Small Cottages.

  'Introduction'

- Introduction (A5) – Update image to include Small Cottages.

  'Land Use Patterns & Lot Diagrams'

- Lot Diagrams (B5) – Add Lot Diagram page for Small Cottages.
- Lot Diagrams (B6) – Renumber the 'Row Houses' page from B5 to B6.
- Lot Diagrams (B7) – Renumber the 'Building Placement at Typical Slope Condition' page from B6 to B7.

  'Architectural Scale & Proportions'

- Diversity & Rules of Adjacencies (D1) – Add Small Cottages to rules of adjacencies affecting Small Lots.
- Scale & Proportions (D3) – Add Small Cottages to label.

  'Master Fencing Program'

- Fencing Lot Diagrams (E9-E11) – Update Small Lots diagrams to include Small Cottages in label.

No changes are proposed to the following sections of the Pattern Book:

'*Appropriate Architectural Styles*' (C 1-2);
'*Basic Elements of Architectural Styles*' (C3-20); and
'*Appendices*' (F1-2).

II. VILLEBOIS VILLAGE MASTER PLAN

LAND USE

GENERAL – LAND USE PLAN

Goal

Villebois Village shall be a complete community that integrates land use, transportation, and natural resource elements to foster a unique sense of place and cohesiveness.

Policies

1. **The *Villebois Village Master Plan* shall provide a complete community with a wide range of living choices, transportation choices, and working and shopping choices. Housing shall be provided in a mix of types and densities resulting in a minimum of 2,300 dwelling units within the *Villebois Village Master Plan* area.**

Response: The vision of the *Villebois Village Master Plan* for a complete community with a wide range of living choices, transportation choices, and working and shopping choices is maintained with the proposed amendment. In fact, the proposed amendment will enhance the variety in the range of living choices by adding a smaller detached option that is more affordable. Thus, the proposed amendment is consistent with General Land Use Plan Policy 1.

Implementation Measures

1. **Allow for unique planning and regulatory tools that are needed to realize the *Villebois Village Master Plan*. These tools shall include, but are not limited to: Specific Area Plans; Pattern Books; and Community Elements Plans.**

Response: This application is a request to amend the SAP Central *Pattern Book*, which is one of these unique planning tools. The proposed amendment is only intended to add information for Small Cottages. The applicable approval standards for this unique planning tool are addressed in Section III of this report. The proposed amendment is consistent with General Land Use Plan Implementation Measure 1 by demonstrating compliance with the applicable approval criteria for an *Architectural Pattern Book* in Section III of this report.

RESIDENTIAL NEIGHBORHOOD HOUSING

Goal

The Villebois Village shall provide neighborhoods consisting of a mix of homes for sale, apartments for rent, row homes, and single-family homes on a variety of lot sizes, as well as providing housing for individuals with special needs. The Villebois Village shall provide housing choices for people of a wide range of economic levels and stages of life through diversity in product type.

Policies

1. **Each of the Villebois Village's neighborhoods shall include a wide variety of housing options and shall provide home ownership options ranging from affordable housing to estate lots.**

Response: The proposed amendment will add information for Small Cottages to the SAP Central *Pattern Book*. Approval of the requested amendment will allow for a wider variety of housing options in SAP Central by adding a smaller detached option that is more affordable. Therefore, the proposed amendment is consistent with Residential Neighborhood Housing Policy 1.

3. **The mix of housing shall be such that the Village development provides an overall average density of at least 10 dwelling units per net residential acre.**

Response: The proposed amendment will add information to the SAP Central *Pattern Book* for Small Cottages. A PDP application is included in Section II of the Notebook which demonstrates that the density proposed for the subject area is consistent with that shown in the SAP and will not compromise the ability of the project to achieve an overall average density of at least 10 dwelling units per net residential acre. The proposed amendment is consistent with Residential Housing Policy 2.

5. **The Villebois Village shall provide a mix of housing types within each neighborhood and on each street to the greatest extent practicable.**

Response: As previously noted, approval of the proposed amendment will add to the mix of housing types. This will increase available options in SAP Central, thereby providing for a greater potential mix of housing types to the greatest extent practicable. Thus, the proposed amendment is consistent with Residential Housing Policy 5.

Implementation Measures

1. **Ensure, through the development standards and Pattern Book(s) required by the Village zone, that the design and scale of dwellings are compatible with the compact, pedestrian-oriented character of the concepts contained in the *Villebois Village Concept Plan* and the contents of this *Villebois Village Master Plan*.**

Response: The *Architectural Pattern Books* provide guidelines for evaluating the design and scale of dwellings. The SAP Central *Pattern Book* was approved in 2006. The proposed amendment will only add information for Small Cottages. The design guidelines that are the applicable approval standards for development of any *Architectural Pattern Book* and for the proposed amendment are addressed in Section III of this report. Compliance of future residential building permit applications with an approved *Architectural Pattern Book* will assure compatibility with the compact, pedestrian-oriented character of the project. The proposed amendment is consistent with Residential Housing Implementation Measure 1.

2. **Create a set of design guidelines for the development of Pattern Books with the Village zone requirements. Pattern Books shall address, at a minimum,**

architectural styles and elements, scale and proportions, and land use patterns with lot diagrams.

Response: The SAP Central *Pattern Book* already includes architectural styles and elements, scale and proportions, and land use patterns, and was adopted in 2006 in accordance with the appropriate Village zone standards. The proposed amendment will only add information for Small Cottages. The design guidelines that are the applicable approval standards for development of any *Architectural Pattern Book* and to the proposed amendment are addressed in Section III of this report. The proposed amendment is shown to be consistent with Residential Housing Implementation Measure 2 by demonstrating compliance with the design guidelines.

III. WILSONVILLE PLANNING & DEVELOPMENT ORDINANCE

SECTION 4.125 – VILLAGE (V) ZONE

(.13) DESIGN PRINCIPLES APPLYING TO THE VILLAGE ZONE

A. The following design principles reflect the fundamental concepts, and support the objectives of the *Villebois Village Master Plan*, and guide the fundamental qualities of the built environment within the Village zone.

1. **The design of landscape, streets, public places and buildings shall create a place of distinct character.**
2. **The landscape, streets, public places and buildings within individual development projects shall be considered related and connected components of the *Villebois Village Master Plan*.**

Response: Each SAP has a toolkit that regulates proposed development. These toolkits are similar to maintain consistency in areas that are important for a cohesive community identity. The toolkit includes the *Architectural Pattern Book*, the *Community Elements Book*, the *Master Signage and Wayfinding Plan* and the *Rainwater Management Program*. Of these documents, the *Architectural Pattern Book* and the *Community Elements Book* serve the largest role in regulating the look and feel of the community. These documents address the character of the buildings and public spaces, providing standards as well as required and encouraged elements to maintain consistency with the *Villebois Village Master Plan*.

This application is a request to amend the SAP Central *Pattern Book* to add information for Small Cottages. The proposed amendment will continue to contribute to the creation of a place of distinct character that is related to and connected with other areas of Villebois, by providing the necessary guidance for Small Cottages to assure consistency with the intended character. The proposed amendment is consistent with these design principles.

3. **The design of buildings shall functionally relate to adjacent open space, gateways, street orientation, and other features as shown in the *Villebois Village Master Plan*.**
4. **The design of buildings and landscape shall functionally relate to sunlight, climate, and topography in a way that acknowledges these conditions as particular to the Willamette Valley.**

Response: In their guidance of architecture and landscape elements, the *Architectural Pattern Book* and *Community Elements Book* acknowledge the interconnected nature of each SAP to adjacent SAP areas and to the specific natural conditions of the site. The proposed amendment will not alter the way buildings in SAP Central functionally relate to adjacent open space, gateways, street orientation, and other applicable features shown in the *Villebois Village Master Plan*; it will only provide added information for Small Cottages to assure consistency in this relationship. The proposed amendment is consistent with these design principles.

5. **The design of buildings shall incorporate regional architectural character and regional building practices.**

6. **The design of buildings shall include architectural diversity and variety in its built form.**

Response: The *Architectural Pattern Books* provide required standards and optional elements to guide architecture to reflect the regional architectural character and building practices while maintaining diversity throughout the area. The proposed amendment will have no effect on the implementation of these principles. Approval of the proposed amendment is consistent with these principles.

7. **The design of buildings shall contribute to the vitality of the street environment through incorporation of storefronts, windows, and entrances facing the sidewalk.**

Response: The *Architectural Pattern Books* specifically call for buildings to show a direct connection to the street environment with windows, and entrances directly facing adjacent sidewalks. The proposed amendment does not alter compliance with this design principle.

8. **The design of streets and public spaces shall provide for and promote pedestrian safety, connectivity and activity.**

Response: The specifications of the *Community Elements Book* include curb extensions, street lighting and various landscape elements which promote the inclusion of pedestrians into the environment in a safe and easy manner. Approval of the proposed amendment will have no effect on the functionality of the *Community Elements Book*, and is, thereby, consistent with this design principle.

9. **The design of buildings and landscape shall minimize the visual impact of, and screen views of, off-street parking from streets.**

Response: Approval of the proposed amendment will have no effect on existing building design or fencing requirements which are designed to minimize the visual impact of, and screen views of, off-street parking from streets. Thus, the proposed amendment is consistent with this design principle.

10. **The design of exterior lighting shall minimize off-site impacts, yet enable functionality.**

Response: The *Community Elements Book* provides a street lighting plan that allows for safe traveling while being mindful of surrounding areas. Exterior lighting of single-family homes is reviewed through the building permit process to assure safe and

compatible lighting. Approval of the proposed amendment will have no effect on the functionality of the *Community Elements Book*, and is, thereby, consistent with this design principle.

(.14) DESIGN STANDARDS APPLYING TO THE VILLAGE ZONE

A. The following design standards implement the Design Principles found in Section 4.125(.13), above, and enumerate the architectural details and design requirements applicable to buildings and other features within the Village (V) zone. The Design Standards are based primarily on the features, types, and details of the residential traditions in the Northwest, but are not intended to mandate a particular style or fashion. All development within the Village zone shall incorporate the following:

1. General Provisions:

Response: The proposed amendment does not affect the General Provisions of Section 4.125(.14). Therefore, approval of the proposed amendment is consistent with these general provisions.

2. Building and site design shall include:

a. Proportions and massing of architectural elements consistent with those established in an approved Architectural Pattern Book or the Village Center Architectural Standards.

Response: Each *Architectural Pattern Book* includes consistent, required and optional, components to guide the proportion and massing of buildings. The proposed amendment will only add clarifying information for Small Cottages. The proposed amendment will not alter the intended character resulting from these components. Therefore, the proposed amendment is consistent with the above design standard.

b. Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Architectural Pattern Book, Community Elements Book or approved Village Center Architectural Standards.

Response: The proposed amendment does not alter existing provisions for materials, colors and architectural details. Therefore, the proposed amendment is consistent with the above design standard.

c. Protective overhangs or recesses at windows and doors.

Response: The proposed amendment will have no effect on guidelines for protective overhangs or recesses at windows and doors, and is, therefore, consistent with this design standard.

d. Raised stoops, terraces or porches at single-family dwellings.

Response: The proposed amendment will have no effect on guidelines for raised stoops, terraces or porches at single-family dwellings, and is, therefore, consistent with this design standard.

e. Exposed gutters, scuppers, and downspouts, or approved equivalent.

Response: The proposed amendment will have no effect on guidelines for exposed gutters, scuppers and downspouts, or their approved equivalent, and is, therefore, consistent with this design standard.

f. The protection of existing significant trees as identified in an approved Community Elements Book.

Response: The proposed amendment will have no effect on the protection that exists in the *Community Elements Book* for existing significant trees, and is, therefore, consistent with this design standard.

g. A landscape plan in compliance with Sections 4.125(.07) and (.11), above.

Response: The proposed amendment will have no effect on the provisions for a landscape plan in Sections 4.125(.07) and (.11), and is, therefore, consistent with this design standard.

h. Building elevations of block complexes shall not repeat an elevation found on an adjacent block.

Response: The proposed amendment does not include any alteration to the above design standard, and is, therefore, consistent with this design standard.

i. Building elevations of detached buildings shall not repeat an elevation found on buildings on adjacent lots.

Response: The proposed amendment does not include any alteration to the above design standard, and is, therefore, consistent with this design standard.

j. A porch shall have no more than three walls.

Response: The proposed amendment does not include any alteration to the above design standard, and is, therefore, consistent with this design standard.

k. A garage shall provide enclosure for the storage of no more than three vehicles, as described in the definition of Parking Space.

Response: The proposed amendment does not include any alteration to the above design standard, and is, therefore, consistent with this design standard.

3. Lighting and site furnishings shall be in compliance with the approved Architectural Pattern Book, Community Elements Book, or approved Village Center Architectural Standards.

Response: The proposed amendment will have no effect on the guidelines for lighting and site furnishings in the *Architectural Pattern Books* or the *Community Elements Book*, and is, therefore, consistent with this design standard.

4. **Building systems, as noted in Tables V-3 and V-4 (Permitted Materials and Configurations), below, shall comply with the materials, applications and configurations required therein. Design creativity is encouraged. The LEED Building Certification Program of the U.S. Green Building Council may be used as a guide in this regard.**

Response: The proposed amendment will have no effect on the building systems in Tables V-3 and V-4, and is, therefore, consistent with this design standard.

(.18) VILLAGE ZONE DEVELOPMENT PERMIT PROCESS

D. SAP Application Submittal Requirements:

3. **Architectural Pattern Book – An Architectural Pattern Book shall be submitted with a SAP Application. The Architectural Pattern Book shall apply to all development outside of the Village Center Boundary, as shown on Figure 1 of the currently adopted Villebois Village Master Plan. An Architectural Pattern Book shall address the following:**

Response: The SAP Central *Pattern Book* was approved in 2006 and is essentially the same as the SAP South *Pattern Book*, which was approved in 2005 and resulted from an intensive coordination process.

a. **Illustrate areas within the Specific Area Plan covered by the Architectural Pattern Book.**

Response: The SAP Central *Pattern Book* includes this information. The proposed amendment will only update it for Small Cottages.

b. **An explanation of how the Architectural Pattern Book is organized, and how it is to be used.**

Response: The SAP Central *Pattern Book* already includes this information. No change to this section is proposed, except to add the appropriate references for Small Cottages.

c. **Define specific standards for architecture, color, texture, materials, and other design elements.**

Response: The SAP Central *Pattern Book* already includes this information. The proposed amendment will have no effect on this information, except to add clarifying references to Small Cottages where appropriate.

d. **Include a measurement or checklist system to facilitate review of development conformity with the Architectural Pattern Book.**

Response: The SAP Central *Pattern Book* already includes this information. No changes to these sections are proposed.

e. **Include the following information for all row houses, duplexes, and single-family detached housing inside and**

outside of the Village Center, and for all other buildings outside of the Village Center, including Neighborhood Center(s) within the SAP:

i. Illustrate and describe the Regional and Climatic conditions affecting the SAP, and the proposed building types including:

- **Relationship of indoor and outdoor spaces.**
- **Design for rainwater paths including roof forms, gutters, scuppers and downspouts.**
- **Design for natural day-lighting.**
- **Massing and materials**

Response: The SAP Central *Pattern Book* already includes this information. The proposed amendment will have no effect on this information, except to add clarifying references to Small Cottages where appropriate.

f. Illustrate and describe examples of appropriate architectural styles and how they would be applied to specific land use types, including the definitions (i.e., specifications) of the elements, massing, and façade composition for each style including:

i. Architectural precedent and/or historic relevance of each style.

ii. Massing, proportions, and roof forms, including details.

iii. Doors, windows and entrances showing trim types and details.

iv. Porches, chimneys and unique features and details.

v. Materials, colors, light fixtures and accents.

vi. Downspouts and gutters.

Response: The SAP Central *Pattern Book* already includes this information. The proposed amendment will have no effect on this information, except to add clarifying references to Small Cottages where appropriate.

g. Illustrate and describe examples of appropriate exterior lighting types, and how their design:

i. Minimizes glare.

ii. Minimizes emission of light beyond the boundaries of a development site.

iii. Conserves energy.

iv. Maintains nighttime safety, utility, security, and productivity...

v. Minimizes the unnatural brightening of the night sky.

Response: The SAP Central *Pattern Book* already includes this information. No changes to these sections are proposed.

h. A Master Fencing Program illustrating and describing the specifications and materials for fencing within the SAP.

Response: The SAP Central *Pattern Book* already includes this information. The proposed amendment will have no effect on this information, except to add clarifying references to Small Cottages where appropriate.

8. SAP Narrative Statement – A narrative statement shall be submitted addressing the following:

e. Includes information demonstrating how the Architectural Pattern Book satisfies the goals and concepts of the Villebois Village Master Plan, the Design Principles and Design Standards of the Village zone.

Response: Section II of this report provides an explanation of how the proposed amendment satisfies the applicable goals and concepts of the *Villebois Village Master Plan*. Section III of this report provides an explanation of how the proposed amendment meets the Design Principles and Standards of the Village zone.

f. Where applicable, a written description of the proposal's conformance with the Village Center Design Principles and Standards.

Response: The Village Center Design Principals and Standards only apply to areas inside the Village Center. The SAP Central *Architectural Pattern Book* applies to the areas in SAP Central that are outside the Village Center. Therefore, this standard does not apply.

E. SAP Approval Process and Review Criteria

1. An application for SAP approval shall be reviewed using the following procedures:

a. Notice of a public hearing before the Development Review Board regarding a proposed SAP shall be made in accordance with the procedures contained in Section 4.012.

Response: In accordance with the procedures contained in Section 4.012, the City shall provide notice of a public hearing before the Development Review Board on the proposed SAP amendment.

b. The Development Review Board may approve an application for SAP approval only upon finding the following approval criteria are met:

i. That the proposed SAP:

- **Is consistent with the standards identified in this section.**

Response: Section III of this report provides an explanation of how the proposed amendment is consistent with the standards of the Village zone.

- **Complies with the applicable standards of the Planning and Land Development Ordinance, and**

Response: Outside of the applicable standards of the Village zone, other sections of the Planning and Land Development Ordinance do not apply to the proposed amendment. As noted above, Section III of this report provides an explanation of how the proposed amendment is consistent with the standards of the Village zone.

- **Is consistent with the Villebois Village Master Plan. Those elements of the Village Master Plan with which the SAP must be consistent are the Plan's Goals, Policies, and Implementation Measures, and, except as the text otherwise provides, Figures 1, 5, 6A, 7, 8, 9A and 9B.**

Response: This request is a proposal to amend the SAP Central *Pattern Book*, which was approved in 2006, to add information for Small Cottages. Section II of this report provides an explanation of how the proposed amendment satisfies the applicable goals and concepts of the *Villebois Village Master Plan*.

ii. If the SAP is to be phased, as enabled by Section 4.125(.18)(D)(2)(g) and (h), that the phasing sequence is reasonable.

Response: This amendment will not impact the phasing schedule of SAP Central.

iii. The Development Review Board may require modifications to the SAP, or otherwise impose such conditions, as it may deem necessary to ensure conformance with the Villebois Village Master Plan, and compliance with applicable requirements and standards of the Planning and Land Development Ordinance, and the standards of this section.

Response: The applicant acknowledges that the Development Review Board may require modifications or conditions that it deems necessary to ensure conformance with the *Master Plan* and other standards of the Wilsonville Planning and Land Development Ordinance.

IV. CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for approval of the requested amendment of SAP Central. Therefore, the applicant respectfully requests approval of this application.

S.A.P. CENTRAL
VOLUME VII

VILLEBOIS

ARCHITECTURAL PATTERN BOOK

MARCH 17, 2006
CITY CASE FILE NO.06-0005

Revision Date ____
Casefile No. ____

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- Standard Detached ..... B 3
- Medium & Small Detached ..... B 4 (B5)
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Small Cottages

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Small Cottages

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Villebois

PATTERN BOOK ORGANIZATION

INTRODUCTION

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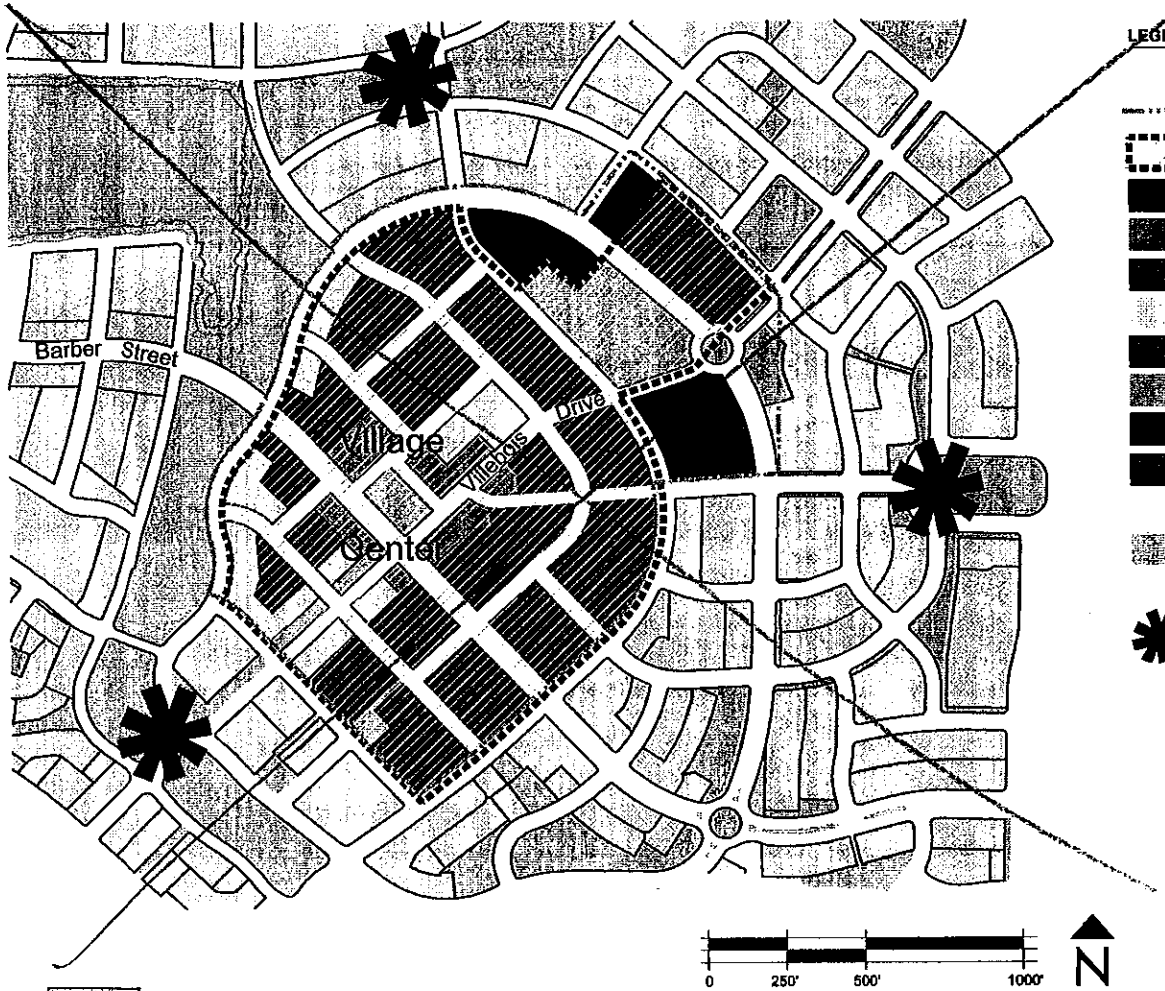
Update Map + Legend + Small Cottages



LEGEND

- SAP Central Boundary
- Village Center (see Volume III-Village Center Architectural Standards)
- Specialty Condos
- Mixed Use Condos
- Urban Apartments
- Condos
- Village Apartments
- Neighborhood Apartments
- Rowhouses
- Small Lot Single Family
- Open Space
- Neighborhood Commons

Small Cottages

Lot Types and Sustainability in The Specific Area Plan Central

In order to comply with the sustainability goals of the Villebois Village Master Plan, buildings within the Specific Area Plan Central must meet or exceed the design standards required for third-party certification by Earth Advantage™, a sustainable building program created and administered by Portland General Electric. Earth Advantage™ is a comprehensive program that offers education, guidance, and project certification to homebuilders. To be certified under the program, homes must satisfy requirements in each of four categories: energy efficiency, healthier indoor air, environmental responsibility, and resource efficiency. Earth Advantage™ homes are designed to protect the environment, use less energy, and improve indoor air quality through the use of more earth-friendly materials, mechanical systems, and construction techniques.

By the use of environmentally sound building practices the environmental impact can be minimized, and consumer demand for healthy homes can be met. For further information on the Portland General Electric Earth Advantage™ program, see References, page E1.

The Specific Area Plan Central plans include advanced engineering and planning documents that will coordinate the development of grading, drainage, streets, utilities, and related infrastructure throughout the Village Master Plan area. Each Specific Area Plan provides the detailed design criteria for the development of the Villebois Village Master Plan.

Villebois

LOT TYPES & SUSTAINABILITY IN THE SPECIFIC AREA PLAN CENTRAL

INTRODUCTION

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Small Cottage Detached

The ~~Small Lot Attached~~ is the ~~largest~~ smallest of the single family ~~attached~~ detached Villebois neighborhood lot types. The residential buildings are on lots ranging from ~~2,400~~ 1850 to about ~~9,000~~ 3000 square feet. ~~The houses may be attached in pairs just at the garages or along the entire side of the dwellings. (See note below)~~ Off-street parking is located at the rear of the house, off of an alley, in attached or detached garages. The houses typically face the street but may also front onto a public park or greenbelt or be arranged in clusters. When located on a greenbelt, the sidewalk is placed in a public access easement. Use easements to maximize the usable yard space for each house are allowed but not required. Accessory buildings are allowed, and they may be detached or attached; they must be of the same exterior design as the primary dwelling unit on the property.

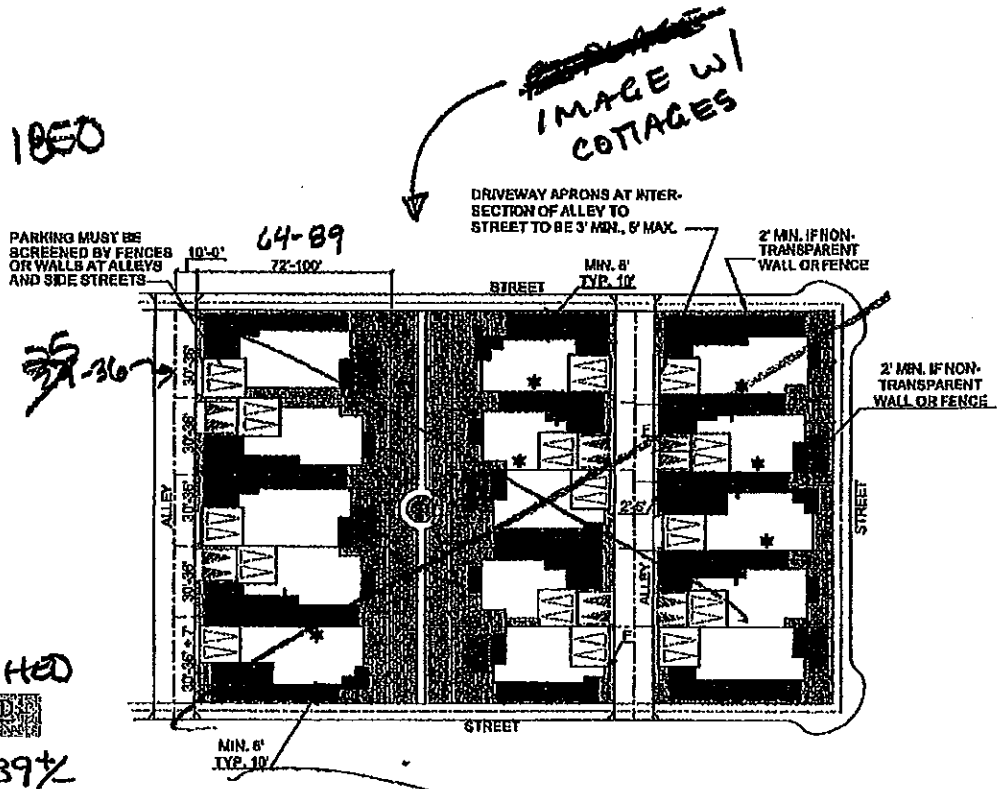
~~NOTE: IN THE SMALL ATTACHED LAND USE CATEGORY A MINIMUM OF 40% OF A STREET FRONTAGE AND A MAXIMUM OF 80% OF A STREET FRONTAGE ALONG A BLOCK SHALL BE ATTACHED.~~

Small Cottage Detached

~~SMALL LOTS ATTACHED~~

+/- 29-36 x 64-89 +/-

25



LEGEND

WHERE SETBACKS ARE MEASURED TO:

- A FRONT YARD BUILDING SETBACK
- B SETBACK TO PORCHES, STOOPS, DECKS, CANOPIES, BALCONIES, BAY WINDOWS, CHIMNEYS, AWNINGS, AND ARCHITECTURAL PROJECTIONS
- C NOT USED
- D SIDEYARD BUILDING SETBACK
- E REAR YARD BUILDING SETBACK
- F ALLEY-LOADED GARAGE SETBACK

PRIVATE OUTDOOR SPACE

- YARDS
- PATIOS

SEMI-PRIVATE OUTDOOR SPACE

- PORCHES, STOOPS
- COURTYARDS, TERRACES

SEMI-PUBLIC OUTDOOR SPACE

- YARDS, ETC.

AUTO PARKING

- GARAGE
- PARKING APRON
- AT ACCESSORY DWELLING WITH NO APRON PARKING

- ACTIVE SIDE OF HOUSE WITH USE OF ADJACENT LOT SIDEYARD
- PASSIVE SIDE OF HOUSE WITH HIGH OR OBSCURE GLAZING ONLY, FOR PRIVACY OF ADJACENT YARD (USE MINIMUM SETBACK WHEN PASSIVE IS ADJACENT TO PASSIVE)

Villebois

Small Cottage Detached

~~SMALL ATTACHED~~

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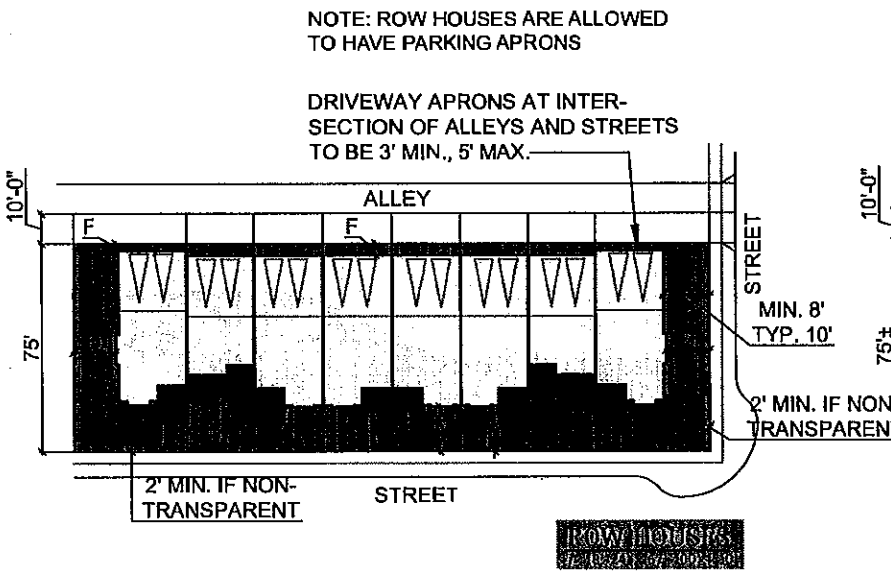
LOT DIAGRAMS

Land Use Patterns

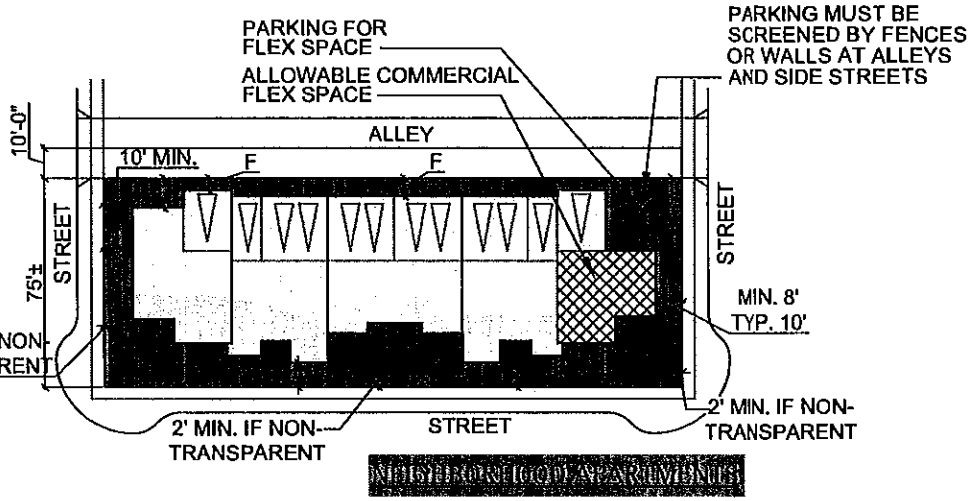
Add New Page

The *Row house Lot* land use types are designed for attached residential buildings located as delineated on the Specific Area Plan Central. No fewer than two, and no more than ten row houses shall be attached in one composite building. Off-street parking is located at the rear of the lot, off of an alley, in attached or detached garages. The houses typically face the street but they may also face onto a greenbelt or park with public access.

The *Neighborhood Apartment* land use type is planned to provide residences for multi-family uses in buildings with the scale of large single-family detached houses located at key locations on the Specific Area Plan Central. Off-street parking is located at the rear of the lot, off of an alley. A small-scale convenience retail or service commercial use may be located at the corner on the ground floor of the apartment building. Such flex space retail/commercial uses shall only occur at neighborhood commons areas adjacent to public open space and a transit stop.



ROW HOUSES



NEIGHBORHOOD APARTMENTS

LEGEND

WHERE SETBACKS ARE MEASURED TO:

A FRONT YARD BUILDING SETBACK
B SETBACK TO PORCHES, STOOPS, DECKS, CANOPIES, BALCONIES, BAY WINDOWS, CHIMNEYS, AWNINGS, AND ARCHITECTURAL PROJECTIONS
C NOT USED
D SIDEYARD BUILDING SETBACK
E REAR YARD BUILDING SETBACK
F ALLEY-LOADED GARAGE SETBACK

PRIVATE OUTDOOR SPACE
YARDS
PATIOS

SEMI-PRIVATE OUTDOOR SPACE
PORCHES, STOOPS
COURTYARDS, TERRACES

SEMI-PUBLIC OUTDOOR SPACE
YARDS, ETC.

AUTO PARKING
GARAGE
PARKING APRON
AT ACCESSORY DWELLING WITH NO APRON PARKING

Villebois

ROW HOUSES AND NEIGHBORHOOD APARTMENTS

LOT DIAGRAMS

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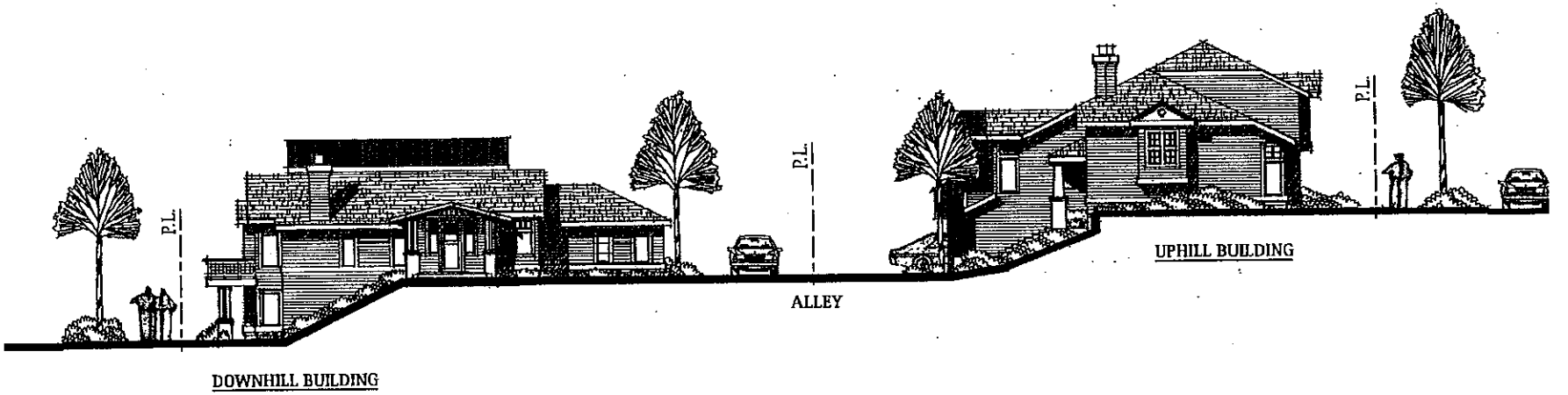

NOTE: BUILDINGS ON SLOPES MUST BE CONFIGURED TO CONFORM TO THE SLOPE. DESIGN CRITERIA FOR BUILDING PLACEMENT AT TYPICAL SLOPE CONDITIONS IS REQUIRED TO BE REFINED AND DETAILED FOR THE PDP SUBMITTAL.

Villebois

BUILDING PLACEMENT AT TYPICAL SLOPE CONDITION

LOT DIAGRAMS

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Diversity and Rules of Adjacencies

Diversity Since diversity is one of the guiding principals for Villebois, rules for allowable adjacencies and diversity are required. Houses and buildings based on the Appropriate Architectural Styles from the Architectural Pattern Book shall be combined using the Rules of Adjacencies to achieve the variety of styles required by the Villebois Village Master Plan.

Rules of Adjacencies This section is included to provide direction and examples for the Scale and Proportions requirement and Repetition issues in the Villebois Village Design Standards. The drawings are arranged on the following pages according to the land use type and the width of the front façade of the building. For each of the lot or land use types, examples are provided for each of the four Architectural Styles.

Drawings The drawings are the guidelines for proportions, scale and massing, composition of doors and windows, and additional examples of an Architectural Style. Although only the front elevation is shown, the other elevations of the building within the public view shed shall continue the style, massing and general composition as denoted on Page B1. In response to natural light and climate and to maximize daylighting, elevations not within the public view shed can have more glazing at the first floor and on second floors, and may have less detailing than is otherwise required.

Options The Architectural Style drawings illustrate patterns intended to be used only as a guideline for design. There are many other possibilities that would meet the Design Standards if they follow these examples of massing, composition, scale, and proportions appropriate for the width of the lot or land use type and the architectural style.

Adjacency For all lot types, no single family detached dwellings with both the same floor plan and style shall be plotted adjacent to each other or directly across the street from each other. For row houses and neighborhood apartmants, no buildings with both the same composite floor plan configuration and style shall be plotted on adjacent blocks. Adjacent row house and neighborhood apartment buildings separated by a green space or facing directly across the street from each other may be of both the same floor plan configuration and Style.

+ small cottage

Small Lots Small lots may use the same style for up to 6 lots in a group when arranged on a courtyard.

small cottage

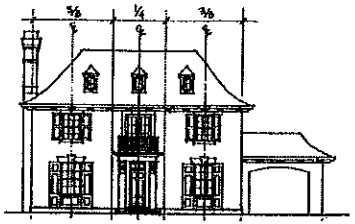
Small, Medium, Standard, & Large Lots Required house Style diversity for small, medium, standard, and large lots shall be as follows:

1. For five or less lots that are in-line along a street, or located directly across the same street, a minimum of one Appropriate Styles shall be utilized.
2. For six to twelve lots that are in-line along a street or located directly across the same street, a minimum of two Appropriate Styles shall be utilized.
3. For thirteen or more lots in-line on a street or located directly across the same street, a minimum of three Appropriate Styles shall be utilized.

Note: When more than one Style is required at least one shall be the European type.

Row Houses & Neighborhood Apartments Required diversity for row houses and neighborhood apartments shall be as follows:

1. For three or less buildings that are located in-line along a street or separated by a cross street, or four buildings plotted with two buildings directly across the street from two buildings,a minimum of one Appropriate Styles shall be utilized.
2. For four or more buildings that are located in-line along a street or separated by a cross street, or five or more buildings plotted directly across the street from each other, a minimum of two Appropriate Styles shall be utilized.



Required continuity for row houses and neighborhood apartments shall be as follows:

1. Buildings located directly across the same street shall be of the same Style.
2. Buildings located on the same block shall be of the same Style unless this would cause a conflict with rule number one, above.

Color For all lot types, no single family detached dwellings with the same color scheme shall be plotted adjacent to each other or directly across the street from each other. For row houses and neighborhood apartments, buildings with the same color scheme may be plotted on adjacent blocks.

Color palette for each Architectural Style shall be approved prior to building permit issuance and is subject to the Rules of Adjacencies.

Plot Plan Requirement Prior to building permit issuance, a plot plan is required showing all of the types of lots or uses, on which a builder plans to build, in the approved Specific Area Plan. The plot plan shall indicate the type of floor plan for single family detached dwellings and the floor plan composite configuration for row houses and neighborhood apartments for each lot or location. The plan shall also indicate the proposed Architectural Style for each lot or land use.

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Villebois

Small Cottage,

VSMALL AND MEDIUM DETACHED

SCALE & PROPORTIONS

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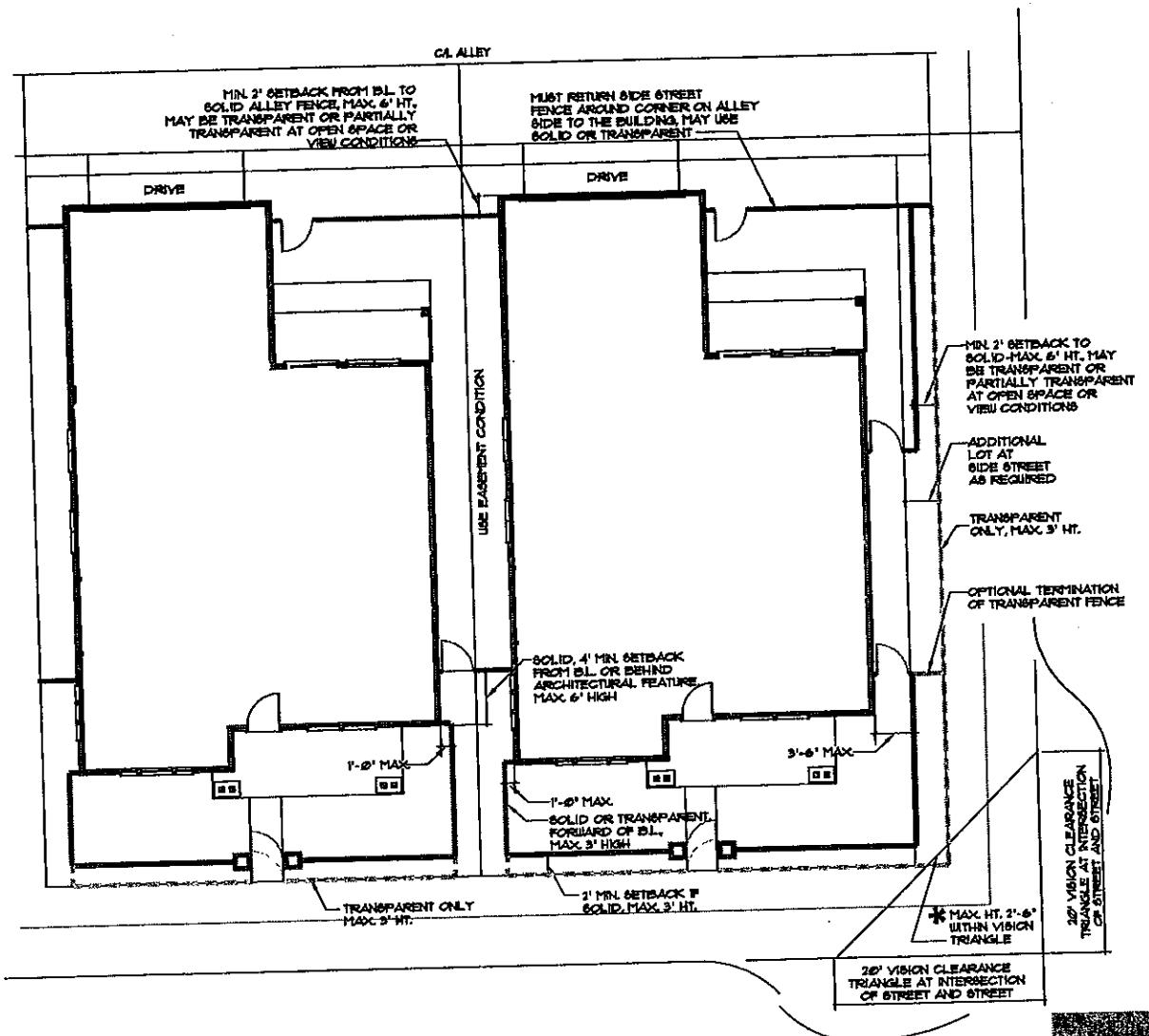

LEGEND

- SOLID - MAX. HT. 3'-0"
- SOLID - MAX. HT. 6'-0"
- TRANSPARENT - MAX. HT. 3'-0"
- ALLEY - SOLID OR TRANSPARENT - MAX. HT. 6'-0"

BUILDING FOOTPRINTS ARE APPROXIMATE AND MAY BE SUBJECT TO CHANGE

FENCING LOT DIAGRAMS

Villebois

SmallCottage

SMALL LOTS - (COURTYARD CLASSIC)

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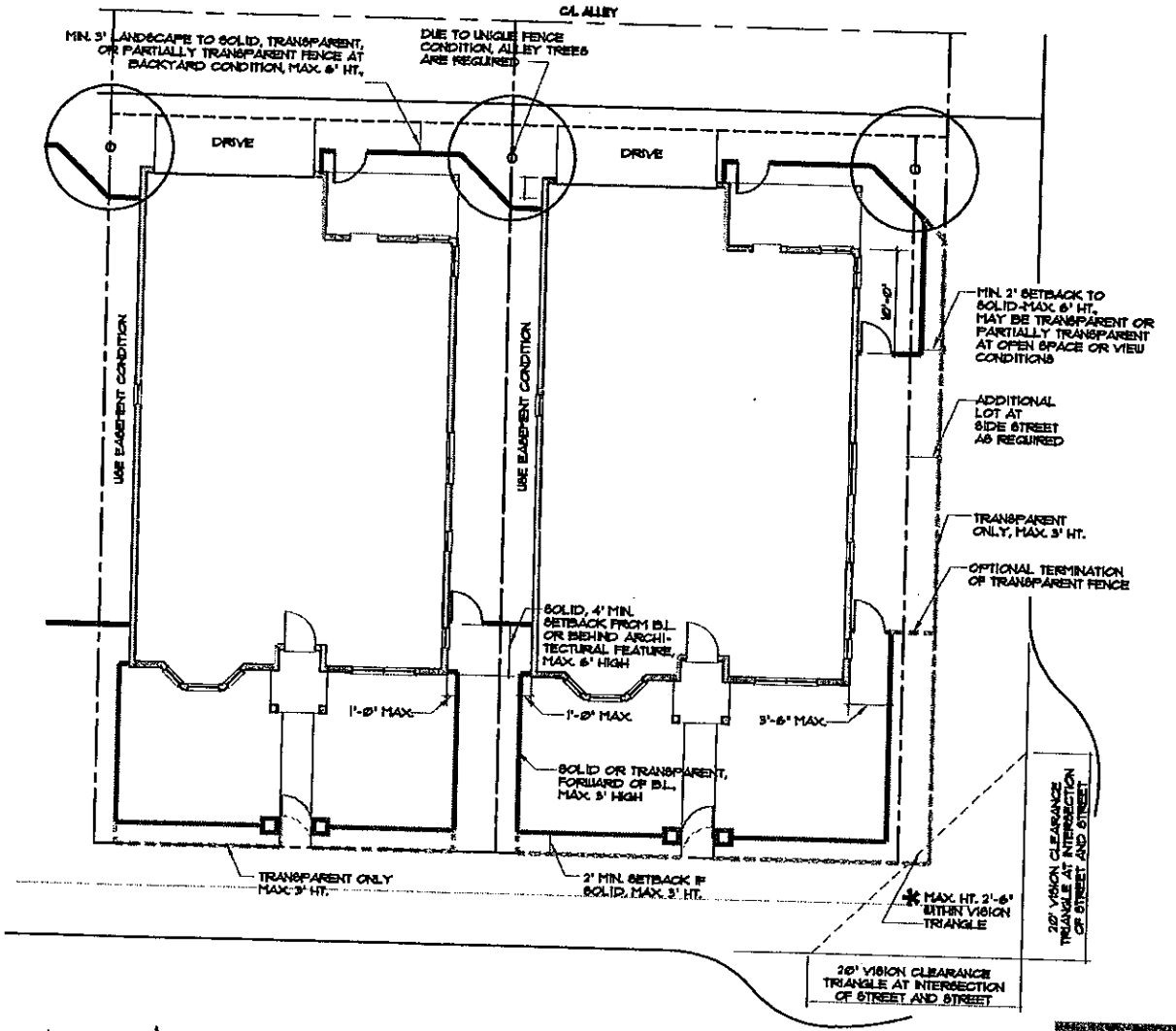
X



LEGEND

- SOLID - MAX. HT. 3'-0"
- SOLID - MAX. HT. 6'-0"
- TRANSPARENT - MAX. HT. 3'-0"

Villebois

Small Cottage +

SMALL LOTS - (COTTAGE)

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BUILDING FOOTPRINTS ARE APPROXIMATE AND MAY BE SUBJECT TO CHANGE

FENCING PLOT DIAGRAMS

PHASE 4 CENTRAL
VILLEBOIS
PRELIMINARY DEVELOPMENT PLAN

TL PART OF 2916, 2919, & 2922 TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

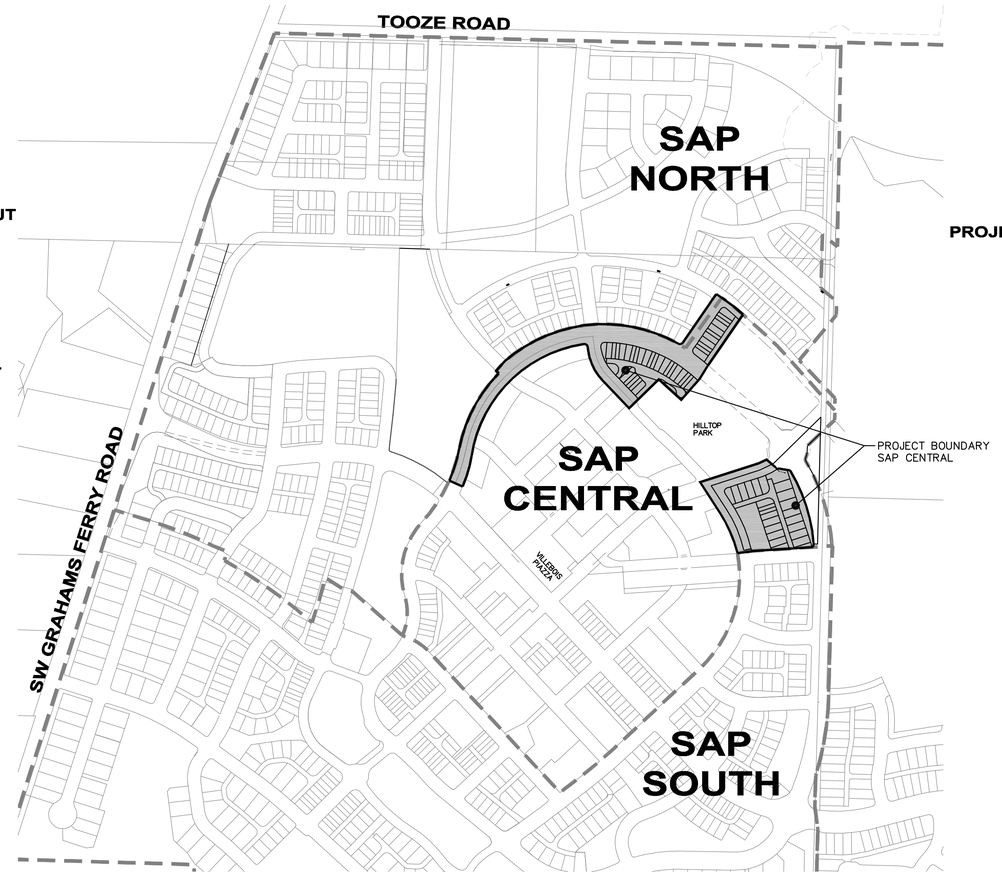
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

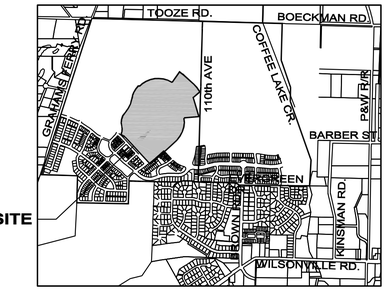
CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE





VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1	COVER SHEET
2	EXISTING CONDITIONS
3	AERIAL PHOTOGRAPH
4.1	TENTATIVE PLAT
4.2	TENTATIVE PLAT
5	GRADING / EROSION CONTROL PLAN
6	COMPOSITE UTILITY PLAN
7.1	CIRCULATION PLAN
7.2	STREET SECTIONS
8.1	SITE / LAND USE PLAN
8.2	TYPICAL LOT PLAN
9	TREE PRESERVATION PLAN
10	STREET TREE / LIGHTING PLAN
11	PHASING PLAN

SCALE
300 0 150 300
1 INCH = 300 FEET

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

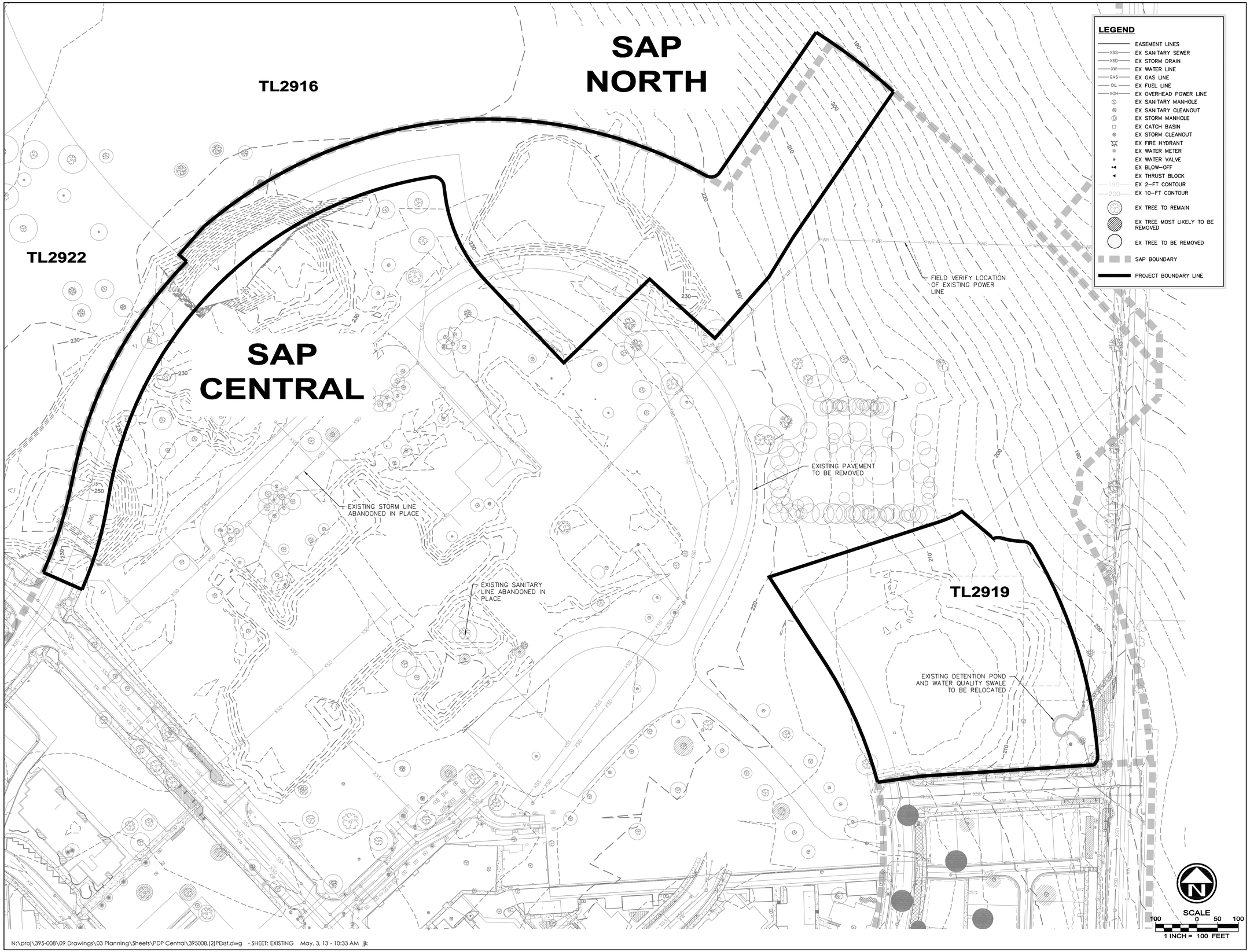
Preliminary Development Plan

City of Wilsonville
EXHIBIT B2 DB13-0013 et seq

Cover Sheet

DATE 04/15/2013

1



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

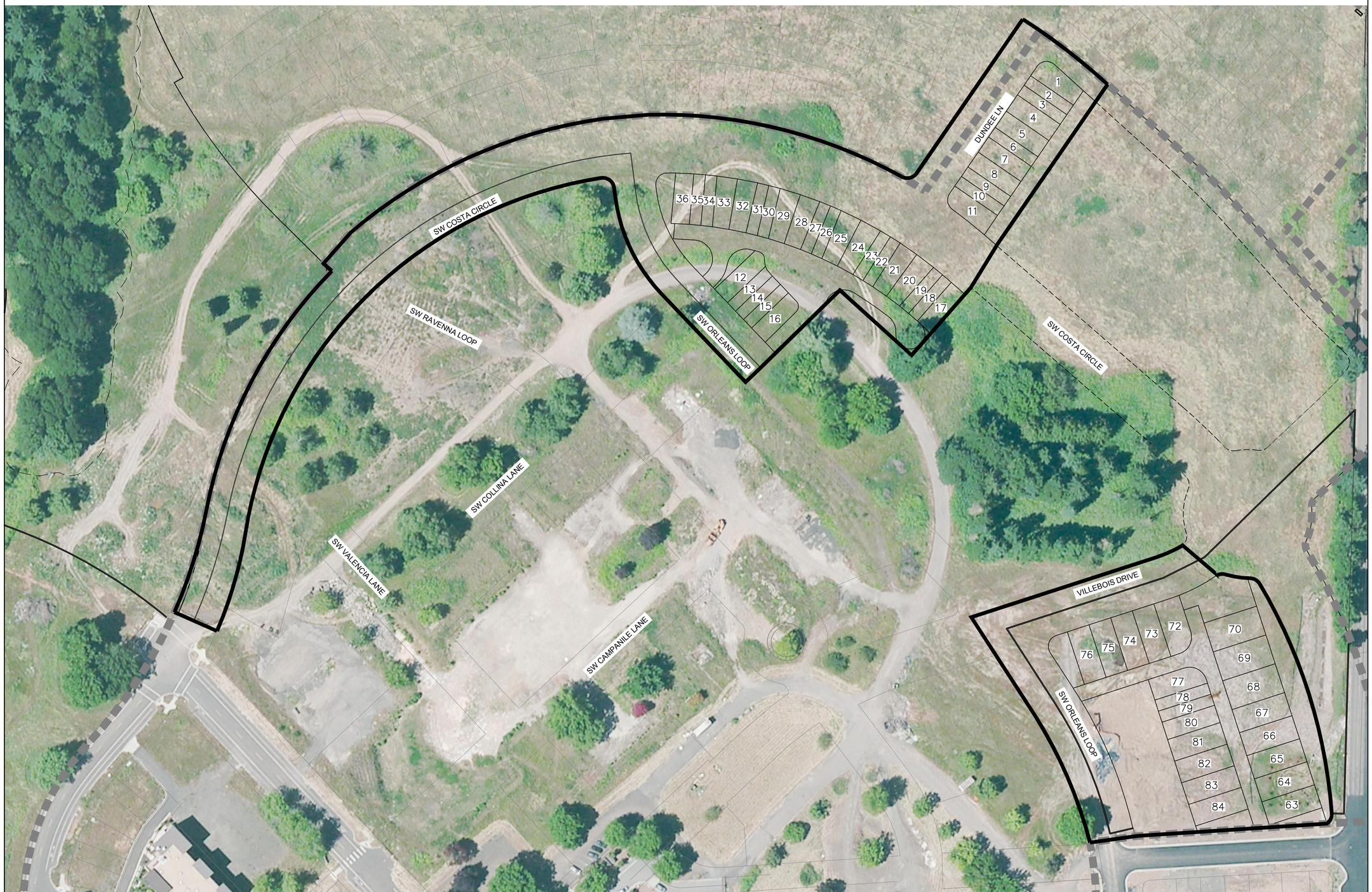
PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Existing Conditions

DATE 04/15/2013

2



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SCALE
60 0 30 60
1 INCH = 60 FEET

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Aerial Photograph

DATE 04/15/2013

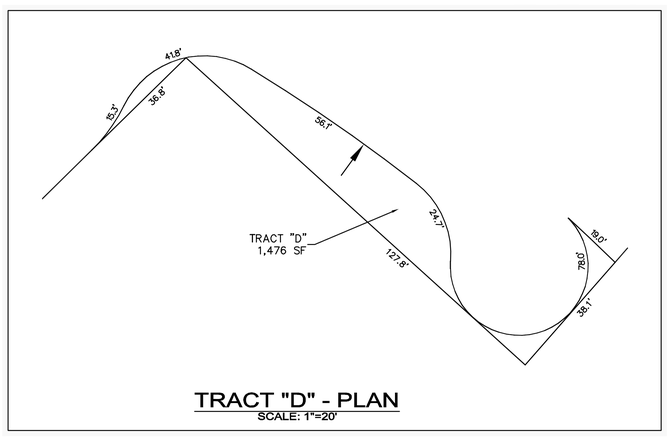
3

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
S	SMALL LOTS
SC	COTTAGES
RH	ROW HOMES

GROSS AREA = 6.83 AC



TRACT "D" - PLAN
SCALE: 1"=20'

SCALE
30 0 15 30
1 INCH = 30 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.(4)PPlat.dwg - SHEET: PLAT May. 3, 13 - 10:34 AM jjk

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.1

KEY MAP
NTS

LEGEND:

PDP BOUNDARY	
S	SMALL LOTS
SC	COTTAGES
RH	ROW HOMES

GROSS AREA = 6.83 AC

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

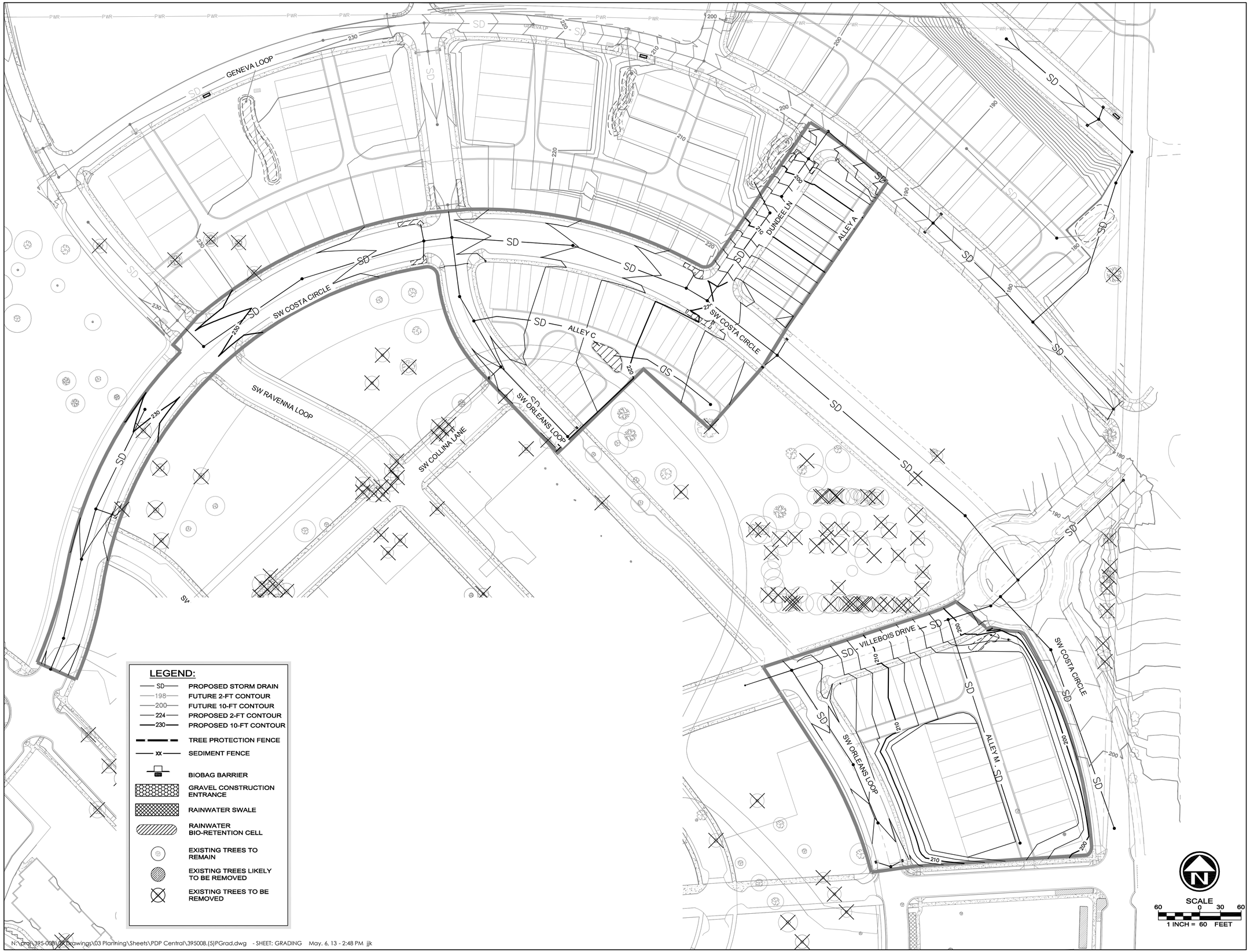
Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.2

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.[4]PPlat.dwg - SHEET: PLAT (2) May. 6, 13 - 2:34 PM jjk



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

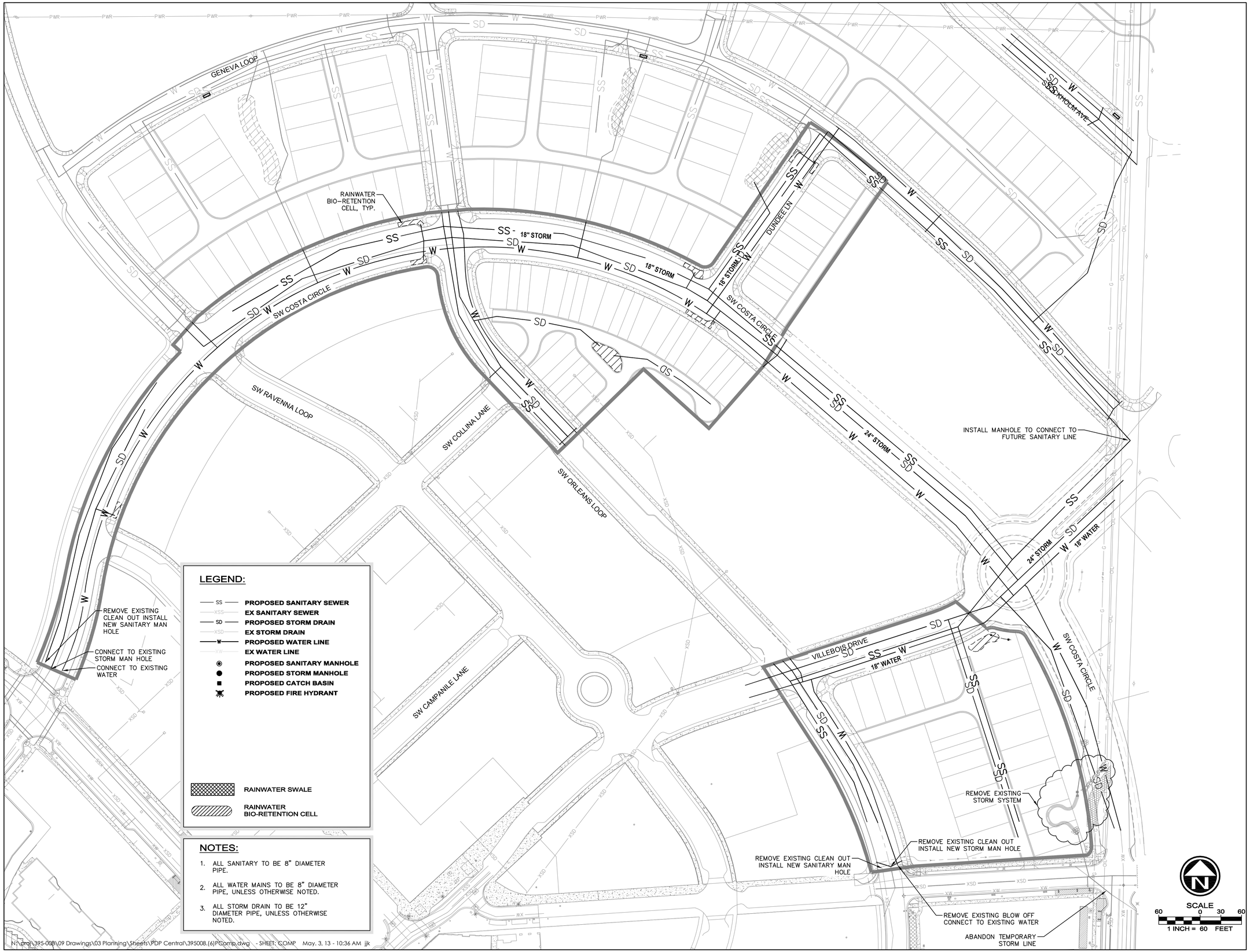
PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Grading & Erosion Control Plan

DATE 04/15/2013

5



Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

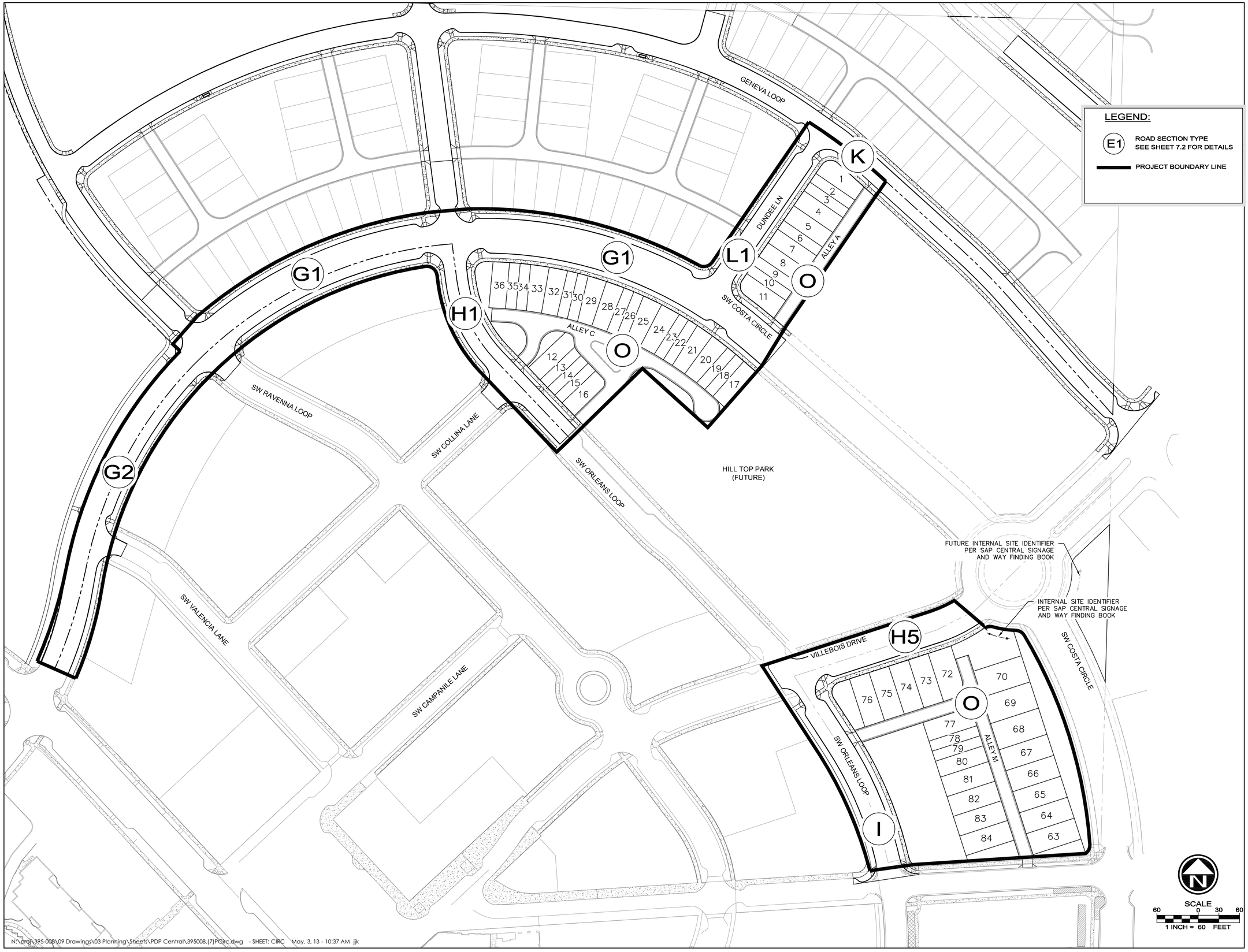
PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Composite Utility Plan

DATE 04/15/2013

6



Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

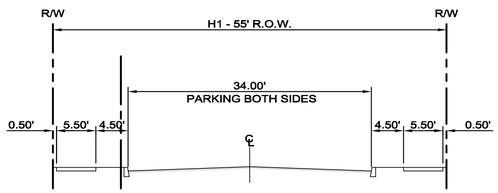
Preliminary Development Plan

Circulation Plan

DATE 04/15/2013

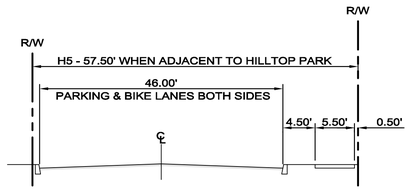
7.1

H1



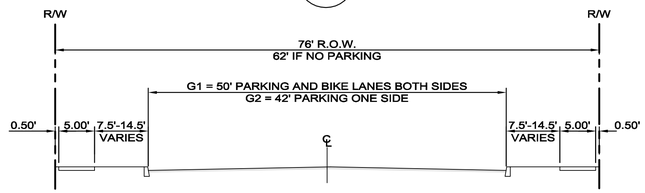
RESIDENTIAL
VILLAGE CENTER
SCALE: 1"=10'

H5



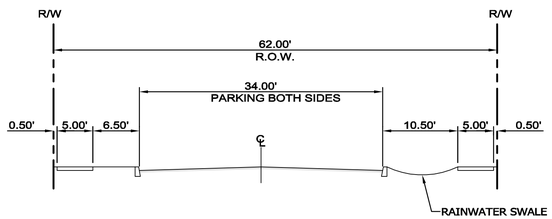
RESIDENTIAL
VILLAGE CENTER
SCALE: 1"=10'

G



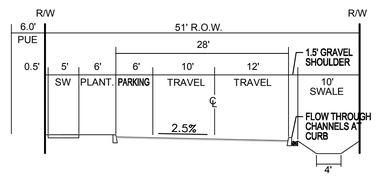
RESIDENTIAL - VILLAGE LOOP
SCALE: 1"=10'

I



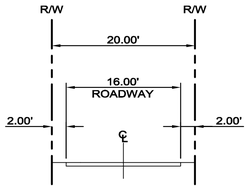
RESIDENTIAL VILLAGE CENTER
WITH SWALE
SCALE: 1"=10'

L1



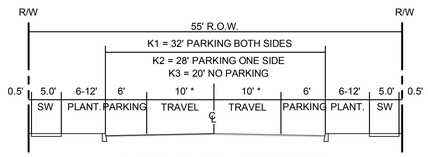
RESIDENTIAL - PARKING ONE SIDE
SCALE: 1"=10'

O



PRIVATE LANE
SCALE: 1"=10'

K



RESIDENTIAL - MINIMUM
N.T.S.

RESIDENTIAL - MINIMUM
SCALE: 1"=10'

* 12' TRAVEL ON OUTSIDE LANE WHEN PARKING ONE SIDE.

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.(7)PCirc.dwg - SHEET: SECT May. 3, 13 - 10:37 AM jjk

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

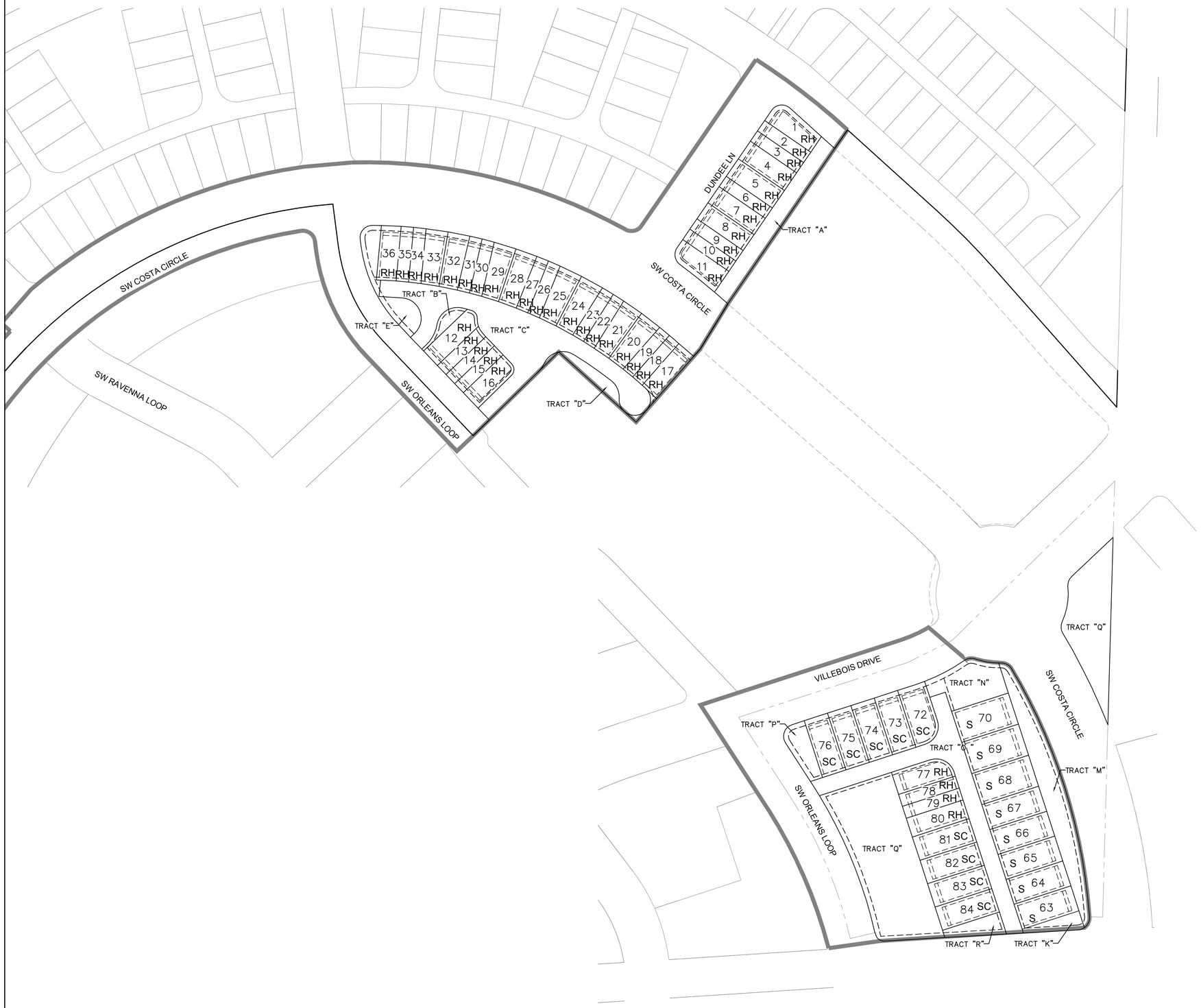
PHASE 4
CENTRAL
VILLEBOIS

Preliminary
Development Plan

Street
Sections

DATE 04/15/2013

7.2



LEGEND:

PDP BOUNDARY

S	SMALL LOTS
SC	COTTAGES
RH	ROW HOMES

LOT COUNT:

8	SMALL LOTS
9	COTTAGES
40	ROW HOMES
57	TOTAL

LAND AREA TABLE:

TOTAL AREA:	6.83 AC
PUBLIC STREETS:	3.14 AC
OPEN SPACE / PARK AREAS:	0.84 AC
LOTS & ALLEYS:	2.85 AC
AVG. DENSITY PER NET ACRE:	
57 / 2.85 =	20.00 UNITS / AC

NOTE:
FOR TYPICAL LOT PLAN SEE SHEET 8.2

SCALE
60 0 30 60
1 INCH = 60 FEET

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

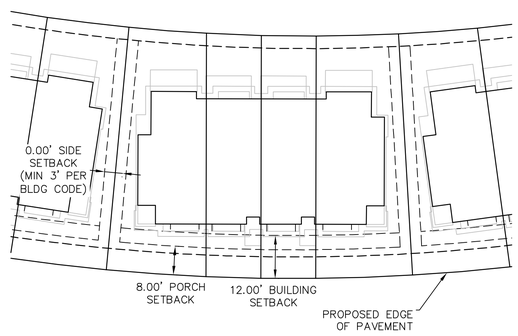
Preliminary Development Plan

Site / Land Use Plan

DATE 04/15/2013

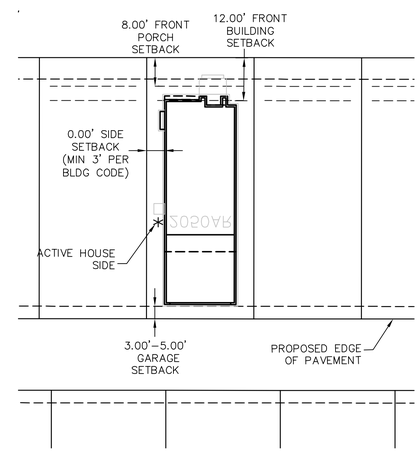
8.1

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.(8)PSite.dwg - SHEET: SITE May. 6, 13 - 2:26 PM jjk



TYPICAL LOT PLAN - REAR LOADED ROWHOME

SCALE: 1" = 20'



TYPICAL LOT PLAN - REAR LOADED SMALL & COTTAGE

SCALE: 1" = 20'

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

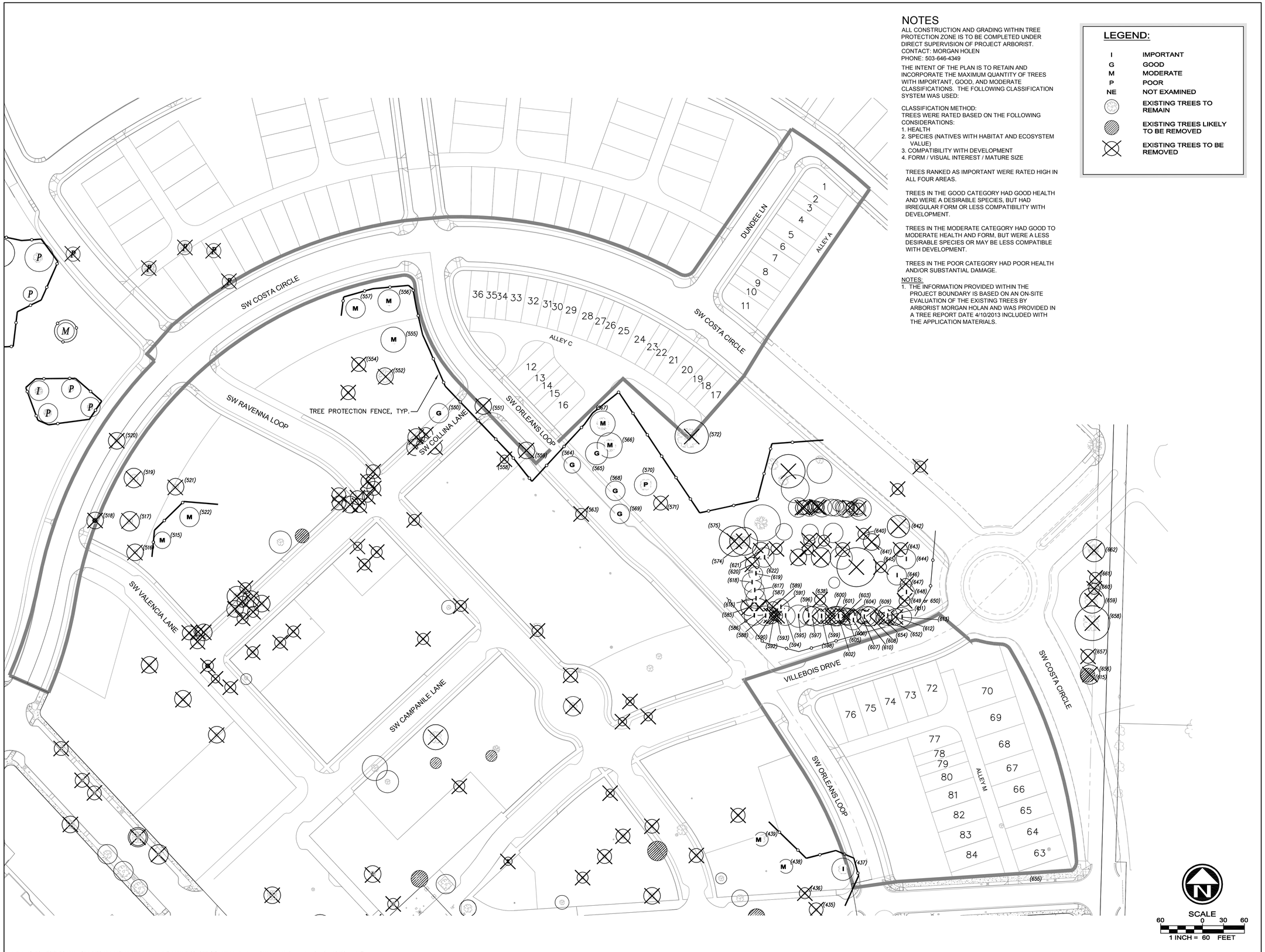
PHASE 4
CENTRAL
VILLEBOIS

Preliminary
Development Plan

Typical Lot
Plan

DATE 04/15/2013

8.2



NOTES

ALL CONSTRUCTION AND GRADING WITHIN TREE PROTECTION ZONE IS TO BE COMPLETED UNDER DIRECT SUPERVISION OF PROJECT ARBORIST.
CONTACT: MORGAN HOLEN
PHONE: 503-646-4349

THE INTENT OF THE PLAN IS TO RETAIN AND INCORPORATE THE MAXIMUM QUANTITY OF TREES WITH IMPORTANT, GOOD, AND MODERATE CLASSIFICATIONS. THE FOLLOWING CLASSIFICATION SYSTEM WAS USED:

CLASSIFICATION METHOD:
TREES WERE RATED BASED ON THE FOLLOWING CONSIDERATIONS:
1. HEALTH
2. SPECIES (NATIVES WITH HABITAT AND ECOSYSTEM VALUE)
3. COMPATIBILITY WITH DEVELOPMENT
4. FORM / VISUAL INTEREST / MATURE SIZE

TREES RANKED AS IMPORTANT WERE RATED HIGH IN ALL FOUR AREAS.

TREES IN THE GOOD CATEGORY HAD GOOD HEALTH AND WERE A DESIRABLE SPECIES, BUT HAD IRREGULAR FORM OR LESS COMPATIBILITY WITH DEVELOPMENT.

TREES IN THE MODERATE CATEGORY HAD GOOD TO MODERATE HEALTH AND FORM, BUT WERE A LESS DESIRABLE SPECIES OR MAY BE LESS COMPATIBLE WITH DEVELOPMENT.

TREES IN THE POOR CATEGORY HAD POOR HEALTH AND/OR SUBSTANTIAL DAMAGE.

NOTES:
1. THE INFORMATION PROVIDED WITHIN THE PROJECT BOUNDARY IS BASED ON AN ON-SITE EVALUATION OF THE EXISTING TREES BY ARBORIST MORGAN HOLAN AND WAS PROVIDED IN A TREE REPORT DATE 4/10/2013 INCLUDED WITH THE APPLICATION MATERIALS.

LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

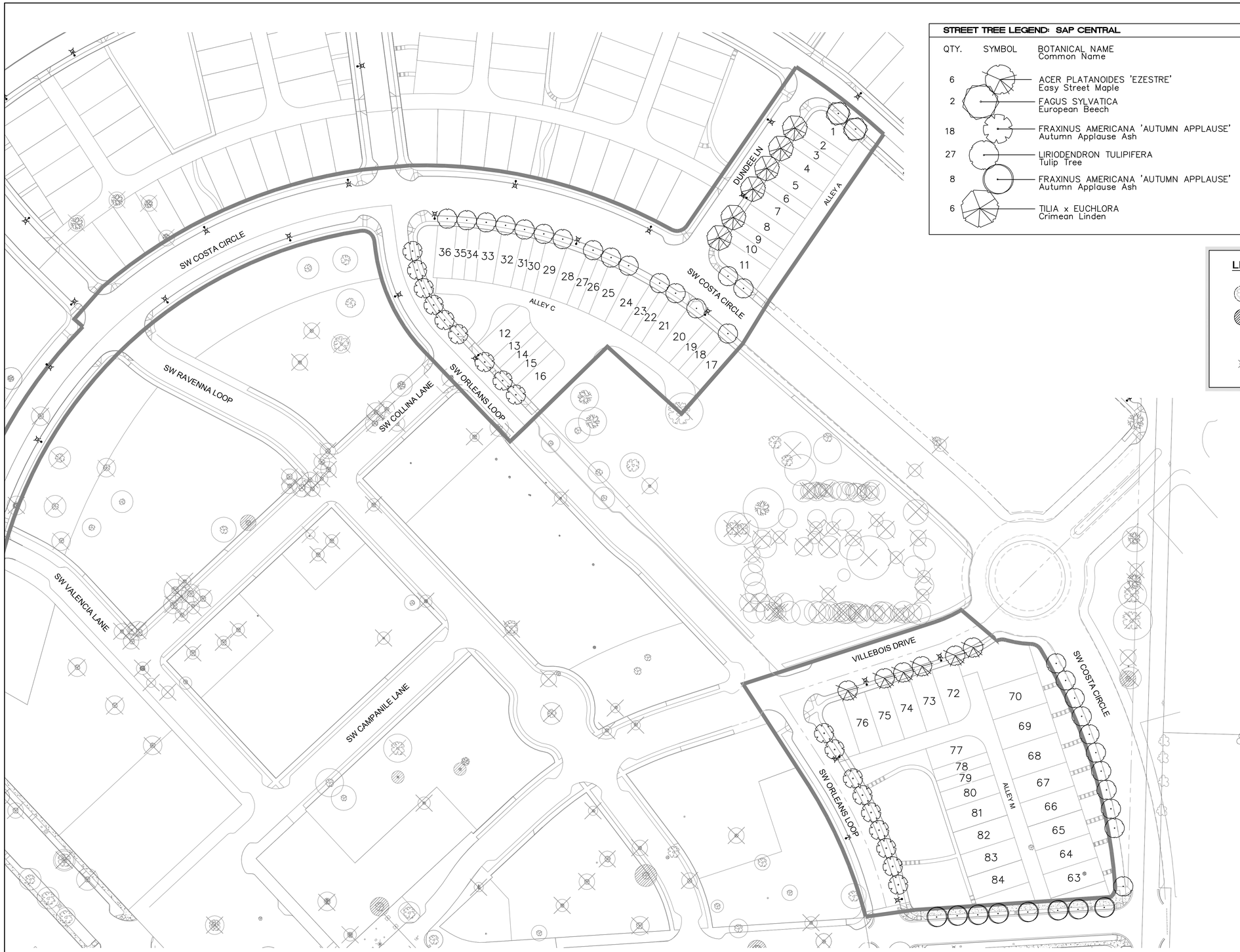
Preliminary Development Plan

Tree Preservation Plan

DATE 04/15/2013

9

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.(9)PTreeP.dwg - SHEET: PRES May. 3, 13 - 10:38 AM jjk



STREET TREE LEGEND: SAP CENTRAL

QTY.	SYMBOL	BOTANICAL NAME Common Name	SIZE	SPACING
6		ACER PLATANOIDES 'EZESTRE' Easy Street Maple	2 1/2" cal.	25' o.c.
2		FAGUS SYLVATICA European Beech	2" cal.	30' o.c.
18		FRAXINUS AMERICANA 'AUTUMN APPLAUSE' Autumn Applause Ash	2 1/2" cal.	25' o.c.
27		LIRIODENDRON TULIPIFERA Tulip Tree	2 1/2" cal.	25' o.c.
8		FRAXINUS AMERICANA 'AUTUMN APPLAUSE' Autumn Applause Ash	2 1/2" cal.	25' o.c.
6		TILIA x EUCHLORA Crimean Linden	2" cal.	30' o.c.

LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

N

SCALE
60 0 30 60
1 INCH = 60 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.(10)PSTree.dwg - SHEET: LIGHT May. 3, 13 - 10:39 AM jjk

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

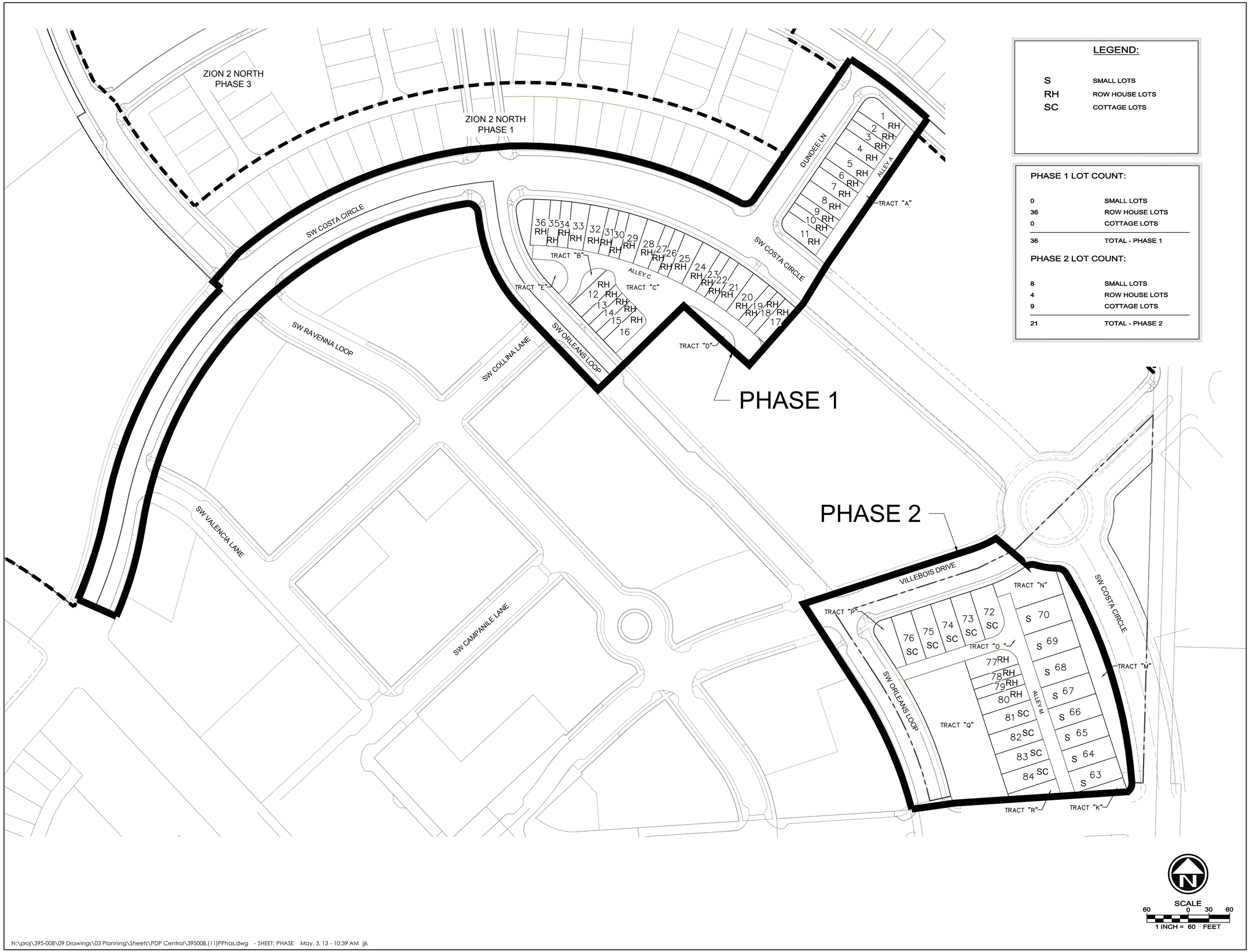
PHASE 4
CENTRAL
VILLEBOIS

Preliminary
Development Plan

Street Tree &
Lighting Plan

DATE 04/15/2013

10



LEGEND:

S	SMALL LOTS
RH	ROW HOUSE LOTS
SC	COTTAGE LOTS

PHASE 1 LOT COUNT:

0	SMALL LOTS
36	ROW HOUSE LOTS
0	COTTAGE LOTS
36	TOTAL - PHASE 1

PHASE 2 LOT COUNT:

8	SMALL LOTS
4	ROW HOUSE LOTS
9	COTTAGE LOTS
21	TOTAL - PHASE 2

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

Phasing Plan

DATE 04/15/2013

11

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP Central\395008.(11)PPhas.dwg - SHEET: PHASE May. 3, 13 - 10:39 AM jjk

PHASE 4 CENTRAL
VILLEBOIS
FINAL DEVELOPMENT PLAN

TL PART OF 2916, 2919, & 2922, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

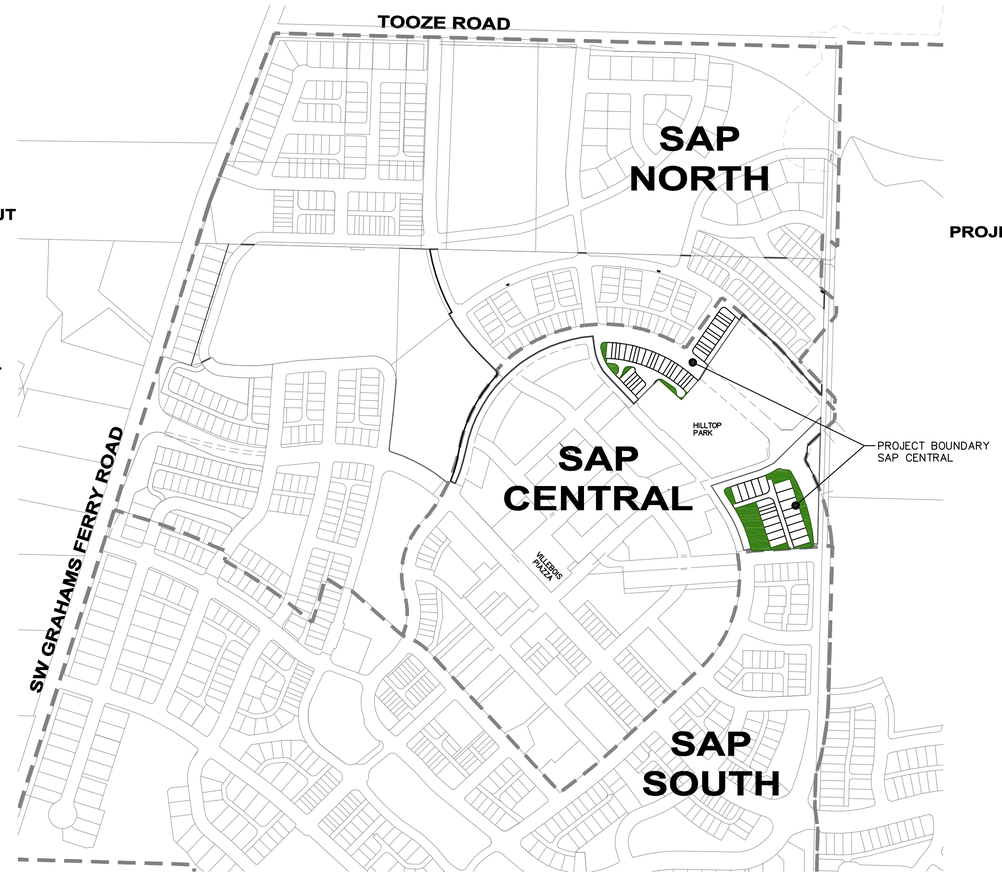
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

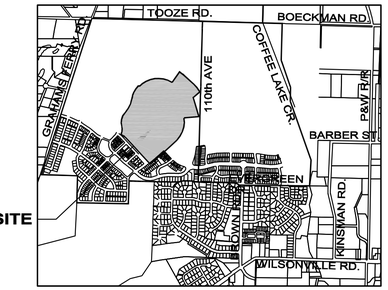
CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE





VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1 COVER SHEET
L1.0 LANDSCAPE PLAN
L2.0 LANDSCAPE PLAN
L3.0 LANDSCAPE DETAILS

SCALE
300 0 150 300
1 INCH = 300 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\FDP Central\395008.(1)FTitle.dwg - SHEET: TITLE May. 2, 13 - 11:03 AM jjk

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4
CENTRAL
VILLEBOIS

Final Development Plan

City of Wilsonville
EXHIBIT B3 DB13-0013 et seq

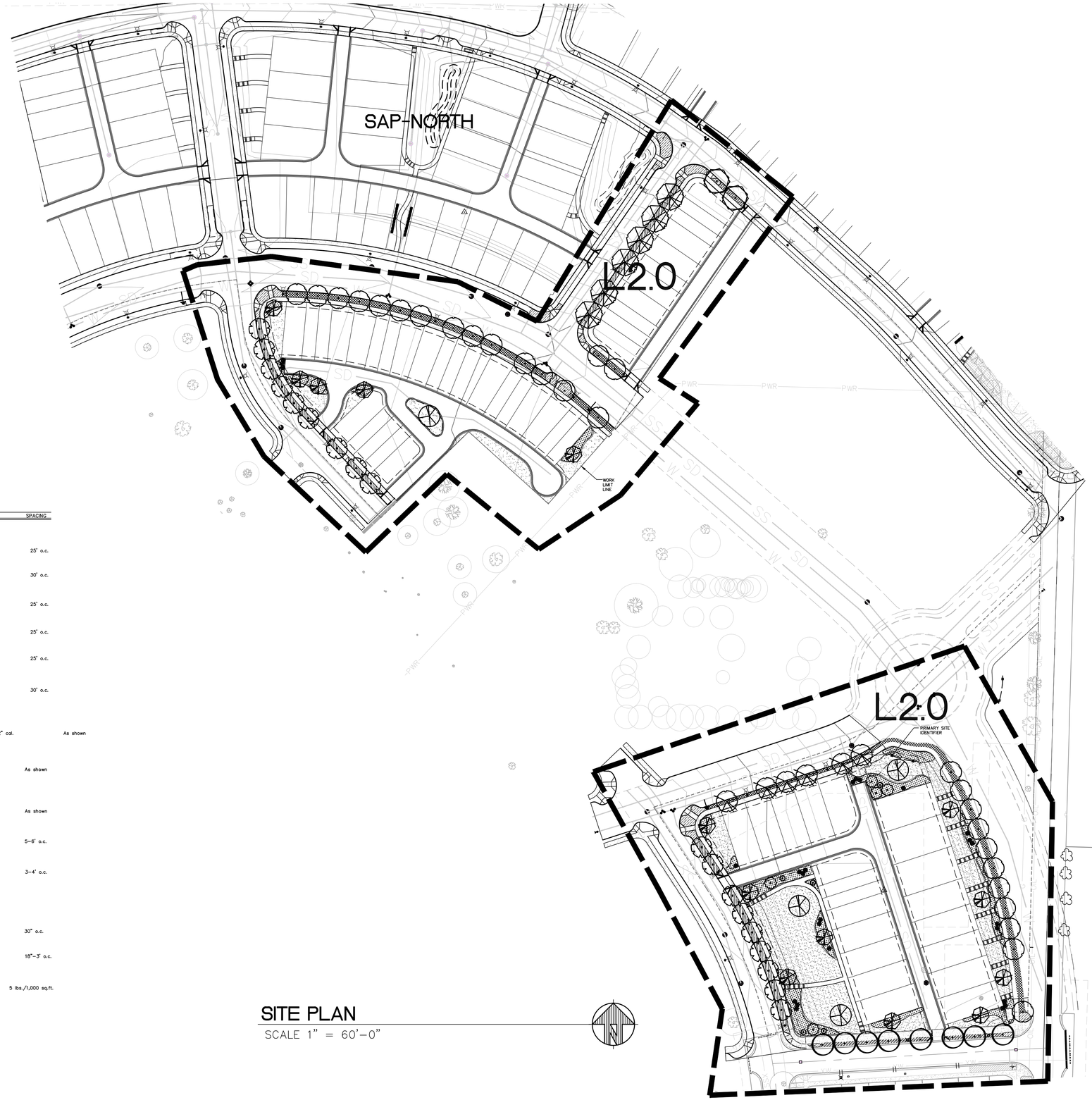
Cover Sheet

DATE 04/15/2013

1

GENERAL NOTES:

1. Contractor is to verify all plant quantities.
2. Adjust plantings in the field as necessary.
3. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. System is to be design/build by Landscape Contractor. Guarantee system for a minimum one year. Show drip systems as alternate bid only.
4. All plants are to be fully foliaged, well branched and true to form.



SUGGESTED PLANT LIST: SAP CENTRAL

SYM.	LATIN NAME/ Common Name	SIZE	SPACING
	Street Trees		
	ACER PLATANOIDES 'EZESTRE' Easy Street Maple	2 1/2" cal.	25' o.c.
	FAGUS SYLVATICA European Beech	2" cal.	30' o.c.
	FRAXINUS AMERICANA 'AUTUMN APPLAUSE' Autumn Applause Ash	2 1/2" cal.	25' o.c.
	LIRIODENDRON TULIPIFERA Tulip Tree	2 1/2" cal.	25' o.c.
	PYRUS CALLERYANA 'REDSPIRE' Redspire Flowering Pear	2 1/2" cal.	25' o.c.
	TILIA x EUCHLORA Crimean Linden	2" cal.	30' o.c.
	Shade Tree	Quercus rubra Fagus sylvatica Acer rubrum	2" cal.	As shown
	Small Columnar or Ornamental Trees	Malus 'Snowdrift' Stewartia pseudocamellia Magnolia stellata 'Royal Star' Acer circinatum	1 3/4" cal.	As shown
	Conifer Tree	Pseudotsuga menziesii Calocedrus decurrens	8' ht. 5–6' ht.	As shown
	Large Flowering Deciduous Shrubs	Hamamelis mollis 'Coombe Wood' Viburnum plic. tom. 'Mariesii' Syringa microphylla 'Superba' Hydrangea macrophylla 'Nikko Blue'	5 gal.	5–6' o.c.
	Medium Ornamental Shrubs	Abelia grandiflora 'Edward Goucher' Berberis thunbergii Ilex crenata Euonymus japonica 'Silver Princess' Lonicera nitida Pieris 'Forest Flame' Rhododendron Spiraea bumalda 'Anthony Waterer' Weigela florida Mahonia aquifolium	2–5 gal.	3–4' o.c.
	Small Ornamental Shrubs	Cornus stolonifera 'Kelseyi'	2 gal.	30" o.c.
	Groundcover	Fragaria chiloensis Rubus calycynoides Arctostaphylos uva-ursi	1 gal.	18"–3' o.c.
	Lawn	Fine Seed Lawn	seed	5 lbs./1,000 sq.ft.

SITE PLAN

SCALE 1" = 60'–0"

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

REGISTERED 212 JANET L. OTTEN OREGON LANDSCAPE ARCHITECT

PHASE 4 CENTRAL VILLEBOIS

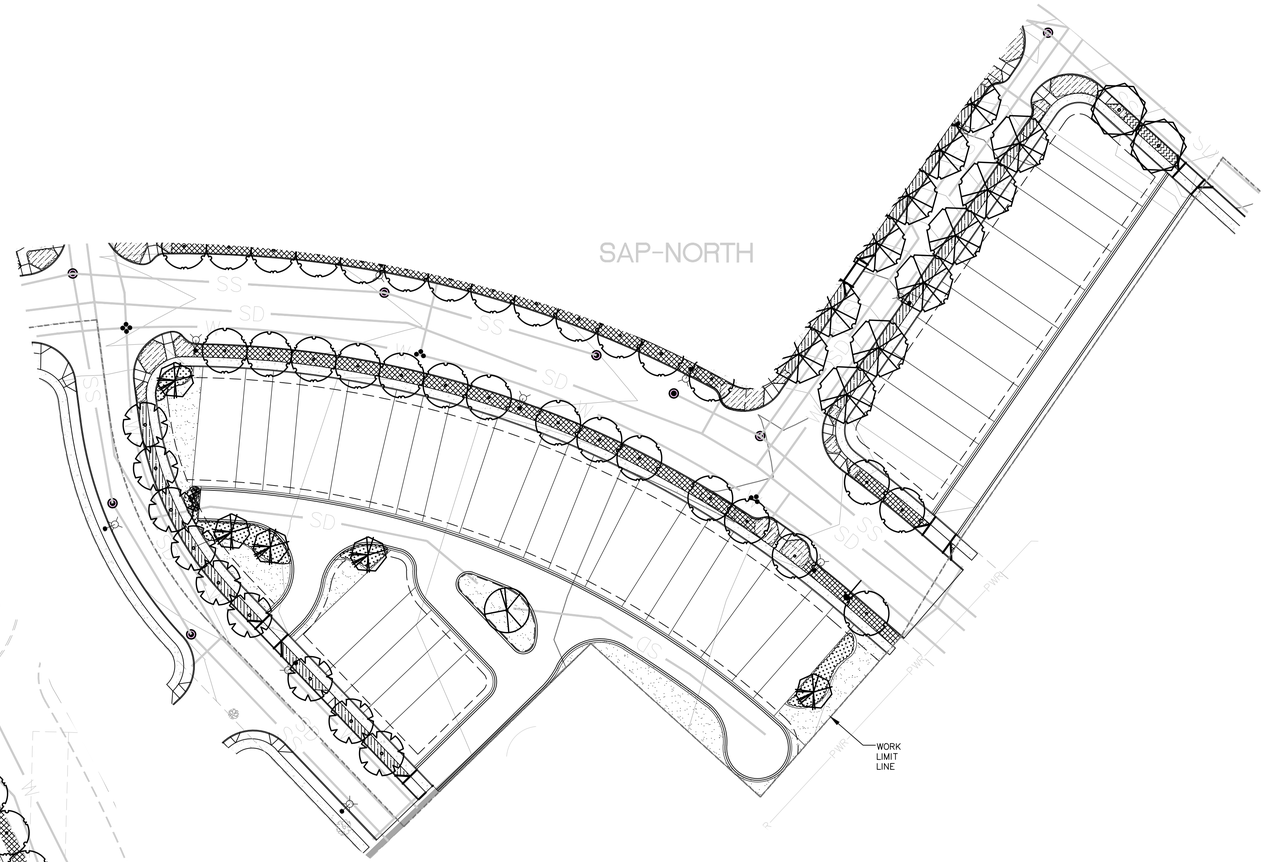
Final Development Plan

Landscape Plan

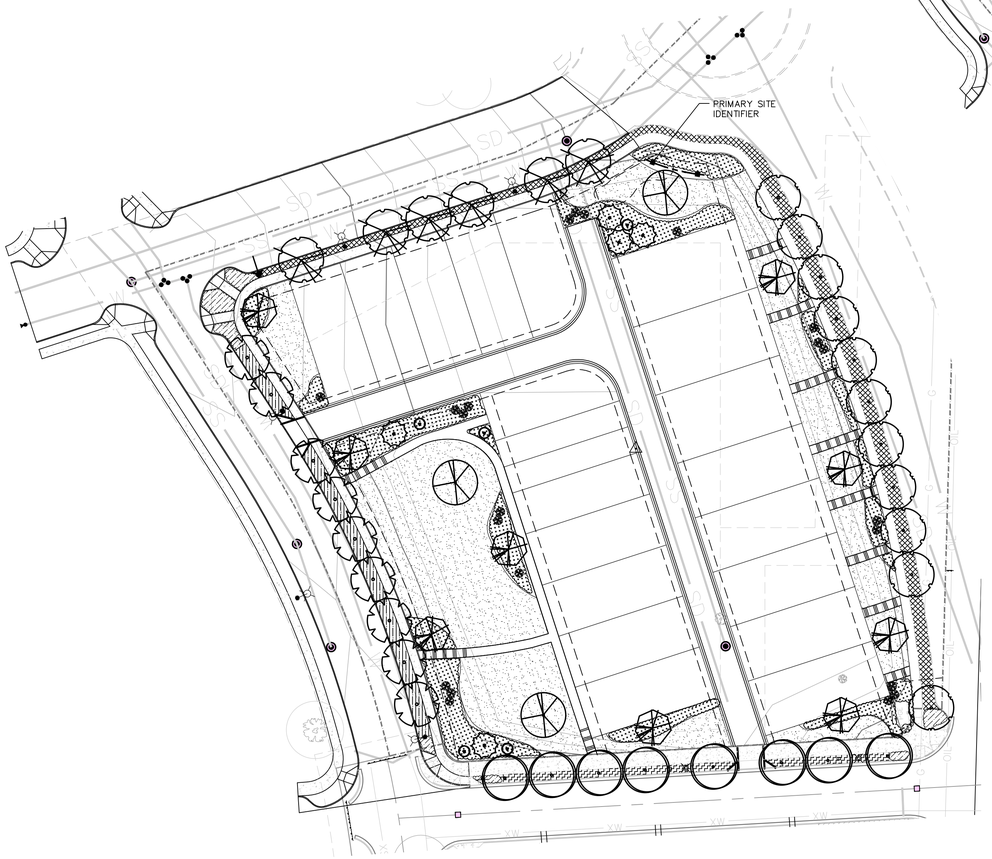
DATE 04/15/2013

L1.0

1 OF 3



LANDSCAPE PLAN
SCALE 1" = 40'-0"



LANDSCAPE PLAN
SCALE 1" = 40'-0"

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT
JANET L. OTTEN
OREGON

PHASE 4 CENTRAL VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L2.0

2 OF 3

OUTLINE SPECIFICATIONS PLANTING AND SEEDING:

GENERAL: All plants shall conform to all applicable standards of the latest edition of the "American Association of Nurserymen Standards", A.N.S.I. Z60.1 – 1973. Meet or exceed the regulations and laws of Federal, State, and County regulations, regarding the inspection of plant materials, certified as free from hazardous insects, disease, and noxious weeds, and certified fit for sale in Oregon.

The apparent silence of the Specifications and Plans as to any detail, or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of first quality are to be used. All interpretations of these Specifications shall be made upon the basis above stated.

Landscape contractor shall perform a site visit prior to bidding to view existing conditions.

PERFORMANCE QUALITY ASSURANCE: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary horticultural practices and who are completely familiar with the specified requirements and methods needed for the proper performance of the work of this section.

NOTIFICATION: Give Landscape Architect minimum of 2 days advance notice of times for inspections. Inspections at growing site does not preclude Landscape Architect's right of rejection of deficient materials at project site. Each plant failing to meet the above mentioned "Standards" or otherwise failing to meet the specified requirements as set forth shall be rejected and removed immediately from the premises by the Contractor and at his expense, and replaced with satisfactory plants or trees conforming to the specified requirements.

SUBSTITUTIONS: Only as approved by the Landscape Architect or the Owner's Representative.

GUARANTEE AND REPLACEMENT: All plant material shall be guaranteed from final acceptance for one full growing season or one year, whichever is longer. During this period the Contractor shall replace any plant material that is not in good condition and producing new growth (except that material damaged by severe weather conditions, due to Owner's negligence, normally unforeseen peculiarities of the planting site, or lost due to vandalism). Guarantee to replace, at no cost to Owner, unacceptable plant materials with plants of same variety, age, size and quality as plant originally specified. Conditions of guarantee on replacement plant shall be same as for original plant.

Landscape Contractor shall keep on site for Owner's Representative's inspection, all receipts for soil amendment and topsoil deliveries.

PROTECTION: Protect existing roads, sidewalks, and curbs, landscaping, and other features remaining as final work. Verify location of underground utilities prior to doing work. Repair and make good any damage to service lines, existing features, etc. caused by landscaping installation.

PLANT QUALITY ASSURANCE: Deliver direct from nursery. Maintain and protect roots of plant material from drying or other possible injury. Store plants in shade and protect them from weather immediately upon delivery, if not to be planted within four hours.

Nursery stock shall be healthy, well branched and rooted, formed true to variety and species, full foliaged, free of disease, injury, defects, insects, weeds, and weed roots. Trees shall have straight trunks, symmetrical tips, and have an intact single leader. Any trees with double leaders will be rejected upon inspection. All Plants: True to name, with one of each bundle or lot tagged with the common and botanical name and size of the plants in accordance with standards of practice of the American Association of Nurserymen, and shall conform to the Standardized Plant Names, 1942 Edition.

Container grown stock: Small container–grown plants, furnished in removable containers, shall be well rooted to ensure healthy growth. **Grow container plants in containers a minimum of one year** prior to delivery, with roots filling container but not root bound. Bare root stock: Roots well–branched and fibrous. Balled and burlapped (B&B): Ball shall be of natural size to ensure healthy growth. Ball shall be firm and the burlap sound. No loose or made ball will be acceptable.

TOPSOIL AND FINAL GRADES: Landscape Contractor is to verify with the General Contractor if the on site topsoil is or is not conducive to proper plant growth. Supply alternate bid for imported topsoil.

Landscape Contractor is to supply and place 12" of topsoil in planting beds and 6" in lawn areas. If topsoil stockpiled on site is not conducive to proper plant growth, the Landscape Contractor shall import the required amount. Landscape Contractor is to submit samples of the imported soil and/or soil amendments to the Landscape Architect. The topsoil shall be a sandy loam, free of all weeds and debris inimical to lawn or plant growth.

Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated. Planting bed grades shall be approximately 3" below adjacent walks, paving, finished grade lines, etc., to allow for bark application. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

PLANTING SPECIFICATIONS:

HERBICIDES: Prior to soil preparation, all areas showing any undesirable weed or grass growth shall be treated with Round–up in strict accordance with the manufacturer's instructions.

SOIL PREPARATION: Work all areas by rototilling to a minimum depth of 8". Remove all stones (over 1½" size), sticks, mortar, large clumps of vegetation, roots, debris, or extraneous matter turned up in working. Soil shall be of a homogeneous fine texture. Level, smooth and lightly compact area to plus or minus .10 of required grades.

In groundcover areas add 2" of compost (or as approved) and till in to the top 6" of soil.

PLANTING HOLE: Lay out all plant locations and excavate all soils from planting holes to 2 1/2 times the root ball or root system width. Loosen soil inside bottom of plant hole. Dispose of any "subsoil" or debris from excavation. Check drainage of planting hole with water, and adjust any area showing drainage problems.

SOIL MIX: Prepare soil mix in each planting hole by mixing:
2 part native topsoil (no subsoil)
1 part compost (as approved)

Thoroughly mix in planting hole and add fertilizers at the following rates:
Small shrubs – 1/8 lb./ plant
Shrubs – 1/3 to 1/2 lb./ plant
Trees – 1/3 to 1 lb./ plant

FERTILIZER: For trees and shrubs use Commercial Fertilizer "A" Inorganic (5–4–3) with micro–nutrients and 50% slow releasing nitrogen. For initial application in fine seed lawn areas use Commercial Fertilizer "B" (8–16–8) with micro–nutrients and 50% slow–releasing nitrogen. For lawn maintenance use Commercial Fertilizer "C" (22–16–8) with micro–nutrients and 50% slow–releasing nitrogen. DO NOT apply fertilizer to Water Quality Swale.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Place 6" minimum, lightly compacted layer of prepared planting soil under root system. Loosen and remove twine binding and burlap from top 1/2 of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with soil mix while working each layer to eliminate voids.

When approximately 2/3 full, water thoroughly, then allow water to soak away. Place remaining backfill and dish surface around plant to hold water. Final grade should keep root ball slightly above surrounding grade, not to exceed 1". Water again until no more water is absorbed. Initial watering by irrigation system is not allowed.

STAKING OF TREES: Stake or guy all trees. Stakes shall be 2" X 2" (nom.) quality tree stakes with point. They shall be of Douglas Fir, clear and sturdy. Stake to be minimum 2/3 the height of the tree, not to exceed 8'–0". Drive stake firmly 1'–6" below the planting hole. Tree ties for deciduous trees shall be "Chainlock" (or better). For Evergreen trees use "Gro–Strait" Tree Ties (or a reinforced rubber hose and guy wires) with guy wires of a minimum 2 strand twisted 12 ga. wire. Staking and guying shall be loose enough to allow movement of tree while holding tree upright.

MULCHING OF PLANTINGS: Mulch planting areas with dark, aged, medium grind fir or hemlock bark (aged at least 6 months) to a depth of 2" in ground cover areas and 2½" in shrub beds. Apply evenly, not higher than grade of plant as it came from the nursery, and rake to a smooth finish. Water thoroughly, then hose down planting area with fine spray to wash leaves of plants.

FINE LAWN AREAS: In fine lawn area apply Commercial Fertilizer Mix "B" at 4.5 lbs. Per 1,000 sq.ft. and rake into soil surface. Establish an even, fine textured seedbed meeting grades, surfaces and texture. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

ROUGH SEED AREA: In rough seeded area, establish an evenly graded seedbed. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
Fine Lawn Seed Mix: To contain 50% Top Hat Perennial Ryegrass, 30% Derby Supreme Ryegrass, 20% Longfellow Chewings Fescue (Hobbs and Hopkins Pro–Time 303 Lawn Mix or as approved) Sow Seed at 5 lbs. / 1000 sq. ft.
Rough Seed Mix: To Contain: 60% Perennial Ryegrass, 15% Eureka Hard Fescue, and 20% Herbaceous Plants and Clover (Hobbs and Hopkins Pro–Time 705 PDX, or approved equal). Sow at 2 lbs. Per 1,000 sq.ft.

MAINTENANCE OF SEEDED AREAS:
Fine Lawn Areas: The lawn areas shall be maintained by watering, mowing, reseeding, and weeding for a minimum of 60 days after seeding. After 30 days, or after the second mowing, apply Commercial Fertilizer Mix "C" at 5 lbs. per 1,000 sq. ft. Mow and keep at 1½" to 2" in height. Remove clippings and dispose of off site.

GENERAL MAINTENANCE: Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance. Replace plants not in normal healthy condition at the end of this period. Water, weed, cultivate, mulch, reset plants to proper grade or upright position, remove dead wood and do necessary standard maintenance operations. Irrigate when necessary to avoid drying out of plant materials, and to promote healthy growth.

CLEAN–UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.

CITY OF WILSONVILLE WATER QUALITY FACILITY SPECIFICATIONS:

SOIL PREPARATION: Remove all nonnative plant materials, including plants, roots, and seeds prior to adding topsoils. Till the sub–grade in these areas to a depth of at least four inches. Water Quality Swale area shall be over–excavated and filled to final grade with 4 iches of topsoil in areas where topsoil has been removed or not adequate. Topsoil shall be tested for the following characteristics provide a good growing medium:
A) Texture
B) Fertility
C) Microbial

Incorporate 2" garden compost, free of conventional fertilizer, to a depth of 4" on all areas of the water quality facility. DO NOT apply fertilizer to the Water Quality Facility.

TIMING: Plantings should be installed between February 1 and May 1 or between October 1 and November 15. Bare root stock shall be installed only from December 15 through April 15. When plantings must be installed outside these times, additional measures may be needed to assure survival.

EROSION CONTROL: Grading, soil preparation, and seeding shall be performed during optimal weather conditions and at low flow levels to minimize sediment impacts. Site disturbance shall be minimized and desirable vegetation retained, where possible. Slopes shall be graded to support the establishment of vegetation. Where seeding is used for erosion control, an appropriate native grass, Regreen (or its equivalent), or sterile wheat shall be used to stabilize slopes until permanent vegetation is established. Biodegradable fabrics (coir, coconut or approved jute matting (minimum 1/4" square holes) may be used to stabilize slopes and channels. Fabrics such as burlap may be used to secure plant plugs in place and to discourage floating upon inundation.

A biodegradable Erosion Control Matting shall be placed over the topsoil throughout the swale cross section, fabric shall be held in place in accordance with the manufacturer's installation requirements. Use high density jute matting in the treatment area (Geojute Plus or approved equal). In all other areas use low density jute matting (Econojute or approved equal). Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated on civil plans. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

HERBICIDES: Removal of invasive non–native species is required by hand for the entire wetland buffer area. If necessary, excessive weed growth may be treated with Rodeo or Garlon 3–A (or approved equals) in strict accordance with the manufacturer's instructions.

FERTILIZER: Do not apply fertilizer to any plantings within the Wetland Buffer or Water Quality Facilities.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Loosen and remove twine binding and burlap from top one–half of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with native soil mix while working each layer to eliminate voids.

MULCHING: Trees, shrubs, and groundcovers planted in upland areas shall be mulched a minimum of 3" in depth and 18" in diameter, to retain moisture and discourage weed growth around newly installed plant material. Appropriate mulches are made from composted bark or leaves that have not been chemically treated. The use of mulch in frequently inundated areas shall be limited, to avoid any possible water quality impacts including the leaching of tannins and nutrients, and the migration of mulch into waterways.

WILDLIFE PROTECTION: Appropriate measures shall be taken to discourage wildlife browsing. Biodegradable plastic mesh tubing, or other substitute approved by the City, shall be placed around individual trees and shrubs to prevent browsing by wildlife, including beaver, nutria, deer, mice and voles.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
Moist Area Seed Mix: To contain 47% Blue Wildry, 40% Meadow Barley, 10% Tufted Hairgrass, 2% Western Mannagrass and 1% American Sloughgrass (Hobbs & Hopkins Pro–Time 840 Native Wetland Mix) Sow Seed at 20–40 lbs./acre.
Dry Area Seed Mix: To contain 60% Blue Wildry, 30% Meadow Barley and 10% Native California Brome (Hobbs & Hopkins Pro–Time 400 Native Grass Mix) Sow Seed at 15–30 lbs./acre.

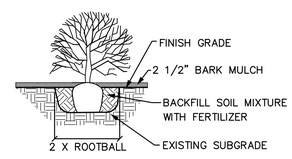
IRRIGATION: Is to be provided as per a separate plan design/build by Landscape Contractor. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. Guarantee system for a minimum one year.

MAINTENANCE: The permitee is responsible for the maintenance of this facility for a minimum of two years following the acceptance of the facility by the City of Wilsonville. The City's authorized representative shall inspect the condition of all landscaping located within the water quality facility, at the end of the of the firest year of the post–construction period. The authorized representative shall provide a report describing any deficiencies to the applicant.

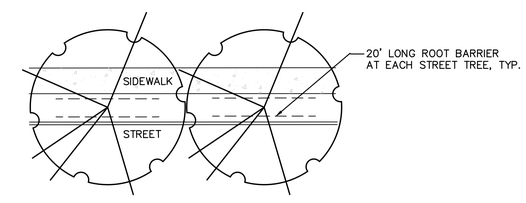
If, at any time during the warranty period, the landscaping falls below 90% survival of trees and shrubs or 90% aerial coverage, the Owner shall remove the undesirable vegetation and reinstall all deficient planting at the next appropriate time. Prior to replanting, the cause of the plant loss shall be determined and corrected. The two–year maintenance period shall begin again from the date of replanting.

Water Quality Facility is to be kept free of debris and maintained to insure water flow and proper functioning. Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance.

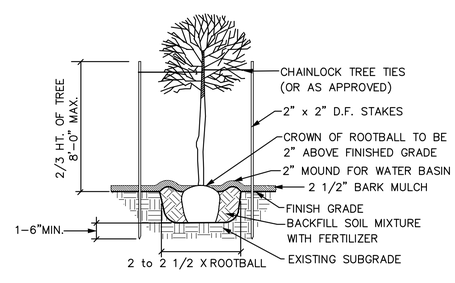
CLEAN–UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.



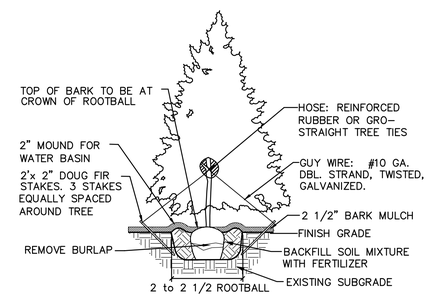
SHRUB PLANTING DETAIL
NOT TO SCALE



ROOT BARRIER DETAIL
NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



EVERGREEN TREE STAKING DETAIL
NOT TO SCALE

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT OREGON JANET L. OTTEN 212

PHASE 4
CENTRAL
VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L3.0

3 OF 3

VII. Public Hearing:

C. Resolution No. 259. Villebois Phase 2 North: Stacy Connery, Pacific Community Design, Inc. – representative for Fred Gast, Polygon at Villebois II LLC/Polygon at Villebois III, LLC - applicant. The applicant is requesting approval a Zone Map Amendment from Exclusive Farm Use (EFU) and Public Facilities (PF) to Village (V), a Preliminary Development Plan, SAP Refinements, SAP Amendment, Tentative Subdivision Plat, Type C Tree Plan, Final Development Plan for Parks and Open Space and SRIR Review for a 90-lot residential subdivision and associated improvements in Villebois PDP-2 North. Properties involved are Tax Lots 2915, 2992, 2995, and portions of Tax Lots 2916 and 2922, Section 15, Township 3 South, Range 1 West, Willamette Meridian, City Of Wilsonville, Clackamas County, Oregon. Staff: Daniel Pauly

The DRB action on the Zone Map Amendment is a recommendation to the City Council.

Case Files: DB13-0020 – Villebois SAP-North PDP-2N, Preliminary Development Plan
DB13-0021 – SAP-North Refinements
DB13-0022 – SAP-North Amendment
DB13-0023 – *Zone Map Amendment*
DB13-0024 – Tentative Subdivision Plat
DB13-0025 – Type C Tree Plan
DB13-0026 – Final Development Plan for Parks and Open Space
SI13-0001 – SRIR Review

DEVELOPMENT REVIEW BOARD
RESOLUTION NO. 259

A RESOLUTION ADOPTING FINDINGS RECOMMENDING APPROVAL OF A ZONE MAP AMENDMENT FROM EXCLUSIVE FARM USE (EFU) AND PUBLIC FACILITIES (PF) TO VILLAGE (V) AND ADOPTING FINDINGS AND CONDITIONS APPROVING A PRELIMINARY DEVELOPMENT PLAN, SAP REFINEMENTS, SAP AMENDMENT, TENTATIVE SUBDIVISION PLAT, TYPE C TREE PLAN, FINAL DEVELOPMENT PLAN FOR PARKS AND OPEN SPACE AND SRIR REVIEW FOR A 90-LOT RESIDENTIAL SUBDIVISION AND ASSOCIATED IMPROVEMENTS IN VILLEBOIS PDP-2 NORTH. PROPERTIES INVOLVED ARE TAX LOTS 2915, 2992, 2995, AND PORTIONS OF TAX LOTS 2916 AND 2922, SECTION 15, TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON. STACY CONNERY, AICP, PACIFIC COMMUNITY DESIGN, INC. – REPRESENTATIVE FOR FRED GAST, POLYGON NW COMPANY-APPLICANT.

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated June 3, 2013, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel A at a scheduled meeting conducted on June 10, 2013, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report dated June 3, 2013, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations, subject to City Council approval of the Zone Map Amendment Request (DB13-0023), for:

DB13-0020 through DB13-0022, DB13-0024 through DB13-0026, and SI13-0001 Preliminary Development Plan, SAP Refinements, SAP Amendment, Tentative Subdivision Plat, Type C Tree Plan, Final Development Plan, and Significant Resource Impact Report for a 90-lot residential subdivision, and associated parks and open space and other improvements..

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 10th day of June, 2013 and filed with the Planning Administrative Assistant on _____. This resolution is final on the l5th calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03).*

_____,
Mary Fierros Bower Chair, Panel A
Wilsonville Development Review Board

Attest:

_____
Shelley White, Planning Administrative Assistant

Exhibit A1

STAFF REPORT
WILSONVILLE PLANNING DIVISION

Polygon Homes- Villebois Phase 2 North
"Tonquin Woods at Villebois No. 4"
and SAP North Amendments

DEVELOPMENT REVIEW BOARD PANEL 'A'
QUASI-JUDICIAL PUBLIC HEARING
STAFF REPORT

HEARING DATE	June 10, 2013
DATE OF REPORT:	June 3, 2013

APPLICATION NOS.: DB13-0020 SAP-North PDP 2 North, Preliminary Development Plan
DB13-0021 SAP-North Refinements
DB13-0022 SAP-North Amendment
DB13-0023 Zone Map Amendment
DB13-0024 Tentative Subdivision Plat
DB13-0025 Type C Tree Plan
DB13-0026 Final Development Plan for Parks and Open Space
SI13-0001 SRIR Review

REQUEST/SUMMARY: The Development Review Board is being asked to review a Preliminary Development Plan, SAP Refinements, SAP Amendment, Zone Map Amendment, Tentative Subdivision Plat, Type C Tree Plan, Final Development Plan, and Significant Resource Impact Report for a 90-lot residential subdivision, and associated parks and open space and other improvements.

LOCATION: West of 110th Avenue, east of Grahams Ferry Road, north of Barber Street and former Dammasch State Hospital site. The property is specifically known as Tax Lots 2915, 2992, 2995, and portions of 2916 and 2922, Section 15, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon.

APPLICANT/OWNER: Fred Gast, Polygon NW Company

APPLICANT'S REP.: Stacy Connery, AICP
Pacific Community Design, Inc.

COMPREHENSIVE PLAN MAP DESIGNATION: Residential-Village

ZONE MAP CLASSIFICATIONS: PF and EFU (Public Facility and Exclusive Farm Use (Clackamas County Zoning))

STAFF REVIEWERS: Daniel Pauly AICP, Associate Planner
Steve Adams PE, Development Engineering Manager

Kerry Rappold, Natural Resource Program Manager
Don Walters, Building Plans Examiner

STAFF RECOMMENDATIONS: **Approve with conditions** the requested Preliminary Development Plan, SAP Refinements, SAP Amendment, Tentative Subdivision Plat, Tree Removal Plan, Final Development Plan for Parks and Open Space, and SRIR Review. **Recommend approval** of the requested Zone Map Amendment to City Council.

APPLICABLE REVIEW CRITERIA

DEVELOPMENT CODE	
Section 4.008	**Application Procedures-In General**
Section 4.009	**Who May Initiate Application**
Section 4.010	**How to Apply**
Section 4.011	**How Applications are Processed**
Section 4.014	**Burden of Proof**
Section 4.031	**Authority of the Development Review Board**
Section 4.033	**Authority of City Council**
Subsection 4.035 (.04)	**Site Development Permit Application**
Subsection 4.035 (.05)	**Complete Submittal Requirement**
Section 4.110	**Zones**
Section 4.125	**V-Village Zone**
Sections 4.139.00 through 4.139.11 as applicable	**Significant Resource Overlay Zone (SROZ)**
Section 4.154	**Bicycle, Pedestrian, and Transit Facilities**
Section 4.155	**Parking, Loading, and Bicycle Parking**
Section 4.167	**Access, Ingress, and Egress**
Section 4.169	**General Regulations-Double Frontage Lots**
Section 4.171	**Protection of Natural Features and Other Resources**
Section 4.175	**Public Safety and Crime Prevention**
Section 4.176	**Landscaping, Screening, and Buffering**
Section 4.177	**Street Improvement Standards**
Section 4.178	**Sidewalk and Pathway Standards**
Section 4.197	**Zone Changes and Amendments to Development Code-Procedures**
Sections 4.199.20 through 4.199.60	**Outdoor Lighting**
Sections 4.200 through 4.220	**Land Divisions**
Sections 4.236 through 4.270	**Land Division Standards**
Sections 4.300 through 4.320	**Underground Utilities**
Sections 4.400 through 4.440 as applicable	**Site Design Review**
Sections 4.600 through 4.640.20 as applicable	**Tree Preservation and Protection**
COMPREHENSIVE PLAN	
Implementation Measure 4.1.6.a.	
Implementation Measure 4.1.6.b.	
Implementation Measure 4.1.6.c.	
Implementation Measure 4.1.6.d.	

OTHER PLANNING DOCUMENTS	
Villebois Village Master Plan	
SAP North Approval Documents	

Vicinity Map

BACKGROUND/SUMMARY:

PDP 2N Preliminary Development Plan (DB13-0020)

The proposed Preliminary Development Plan 2 of Specific Area Plan North (also known as PDP 2N) comprises approximately 28.91 acres. The applicant proposes a variety of single-family housing types totaling 90 units, 19.12 acres of parks and open space, and associated infrastructure improvements. A majority of the houses will back up to alleys. 10 houses on the western edge of the subdivision will not back up to alleys and will have vehicle access from the street. The front of all the houses will face tree lined streets, parks and green spaces.

Proposed Housing Type	Number of Units
Standard Size Single Family	10
Medium Size Single Family	6
Small Size Single Family	37
Cottage Size Single Family	37
Total	90

Refinements to SAP North (DB13-0021)

When submitting a Preliminary Development Plan the Development Code allows applicants to request "refinements" to the previously approved Specific Area Plan (SAP) and Villebois Village Master Plan. "Refinements" are specifically defined changes not significant in a quantifiable or qualitative sense, as defined in the code. Refinements are required to equally or better implement relevant goals, policies, and implementation measures of the Villebois Village Master Plan as well as not have a detrimental effect on natural and scenic resources, or preclude adjoining areas from developing according to the Villebois Village Master Plan.

In concurrence with their PDP request, the applicant is requesting five refinements: street network; parks, trails, and open space; utilities and storm water facilities; location and mix of land uses; and density. Notable drivers of refinements include topographic restraints for streets in the northeast corner of the subdivision, increasing the size of and number of pocket parks and linear greens, and changing the product types to reflect developer preferences, as the SAP was requested by a different developer.

As demonstrated by the findings under Request B the requested refinements are not significant changes as defined by code and equally or better meet the applicable components of the Villebois Village Master Plan.

Amendment to SAP North Phasing (DB13-0022)

The phasing for SAP North was set during the review of PDP 1N when little was known about the timeline in which the remainder of the SAP would develop. The requested phasing amendment reflects the fact that Polygon now owns the subject the property and has a specific timeline to develop it. The phasing works in terms of utilities and infrastructure with certain infrastructure being provided through a portion of SAP East which Polygon has approvals to

develop. The remainder of SAP North, which remains outside of City limits still does not have a defined timeline for development, so previously adopted phasing is being left as is.

Zone Map Amendment (DB13-0023)

The zoning proposal is to change the current PF zone, a remnant of the former Dammasch State Hospital use, and the current Clackamas County EFU zone, a remnant of pre-annexation zoning designation, to the Village (V) zone. The proposed residential and park uses are permitted under Wilsonville Code Section 4.125. The proposed Zone Map Amendment would enable the development permitting process for this area of Villebois.

Tentative Subdivision Plat (DB13-0024)

The applicant is proposing the subdivision of the properties into 90 residential lots, along with alleys, parks areas, and street rights-of-way. In addition, a number of a number of future development tracts are proposed which will be developed with future development to the north. The name of the proposed subdivision approved by Clackamas County is "Tonquin Woods No. 4."

Type C Tree Plan (DB13-0025)

Thirty-two (32) trees, or about 15 percent of the trees on the site, will be removed and mitigated with street trees and trees in parks and open spaces.

Final Development Plan for Parks and Open Space (DB13-0026)

Details have been provided for all the parks and open space matching the requirements of the Community Elements Book. Street trees, curb extensions, street lights, and mail kiosks are also shown conforming to the Community Elements Book. Specific requirements are being placed on the materials for retaining walls within the public view shed and any hand rails for stairs if they are placed within the various pocket parks and linear greens. Regional Park 4 and Open Space 2 are proposed substantially consistent with the Villebois Village Master Plan.

Parks Board Review of Regional Park 4 and Open Space 2

On May 23, 2013 the plans for Regional Park 4 and Open Space 2 were reviewed by the Wilsonville Parks and Recreation Advisory Board. The result of the meeting was a recommendation to the Development Review Board in support of the park design with the additional consideration to have a full-size basketball court reoriented north to south, locating pet waste bags near trail entrances, and considering more seating around the columns of the shelter. The park plan as shown in Exhibit B3 reflects the Parks Board's comments.

Significant Resource Impact Report (SI13-0001)

The proposed non-exempt development will encroach into the Significant Resource Overlay Zone and its associated 25 foot Impact Area. All non-exempt development will occur within the Area of Limited Conflicting Use of the isolated significant wildlife habitat (i.e., upland forest). The impacted area totals 16,255 square feet and is situated within and along the edge of the

upland forest. The impact to the SROZ is necessary to accommodate street improvements, a paved pedestrian trail, and encroachments related to a future PDP.

The proposed par course fitness stations and leaf identification creative play areas have not been addressed in the SRIR and are not approved as part of the SRIR review. In addition, the applicant is required to relocate a picnic table area (situated along the eastern edge of the forest) outside the SROZ. A Condition of Approval NRH 3 requires the applicant to modify the site plan.

Proposed exempt development in the SROZ and its associated 25 foot Impact Area includes the following a soft surface pedestrian pathway within forest.

DISCUSSION TOPICS:

Use of the Term "Area"

The terms "plan area" and "area" have duplicate and potentially confusing meanings in relation to SAP North. The first is three "plan areas" SAP North was divided into in the submitted documents for SAP review. Plan Area 1 includes PDP 1N plus areas to the north to the future street labeled Firenze and east to just past the future alignment of Ravenna Loop. Plan Area 2 includes areas of SAP North to the north and east of Plan Area 1 to a line drawing north from the intersection of Orleans Loop and Costa Circle West. Plan Area 3 includes the remainder of the SAP to the east of Plan Area 2.

In the staff report approving with conditions SAP North (DB07-0054) the SAP is divided into two "areas". The staff report identifies Area 1 as the principally the area proposed at the time to be developed as PDP 1 North. Area 2 is the remainder of the SAP. Area 1 includes a portion of Plan Area 1. Area 2 includes the remainder of Plan Area 1 and the entirety of Plan Areas 2 and 3. (See Phasing discussion on page 4 of 85 of the staff report, Exhibit A1 of DB07-0054; and finding A168 on page 73 of 85 of the same report: Exhibit A4 of this report)

A number of conditions of approval and findings in the SAP North approval (DB07-0054) refer to "Area 2". While a portion of "Area 2" is now being developed, these conditions of approval and findings will continue to apply to other portions of "Area 2" not yet developed to the north of the proposed development.

Prior SAP Partial Approval and Circulation

As discussed above, the approval of SAP North divided the SAP into two areas, Area 1 and Area 2. All SAP elements were approved for Area 1, but only certain elements were approved for Area 2. Similar to how Stage I Master Plans are often amended with Stage II Final Plan requests in other zones in the City, the applicant's request includes amending the SAP North approval to adopt the elements not previously approved but shown in the PDP drawings. The majority of these elements are consistent with the Villebois Village Master Plan, with the exception of necessary circulation changes due to topographic restraints in the block bounded by Geneva Loop, Villebois Drive, Stockholm Avenue, and Cherbourg Lane. In the SAP Request (DB07-0054) the applicant requested the two intermediate road connections be removed and Stockholm be realigned to intersect Geneva Loop at what is proposed as Dundee Lane. A new street was proposed to connect Stockholm and Verdun Loop between Cherbourg Lane (formerly Coffee Lake Drive) and the SAP boundary. This change is not listed as one of the circulation refinements in the adopted Staff Report for the SAP, but neither is it explicitly not approved. Both the Master Plan and SAP proposed circulation will not work in this area due to topographic restraints. The applicant proposes keeping an orientation of Stockholm and Geneva similar to the Villebois Village Master Plan and removing the two intermediate streets due to topography restraints. Topographic restraints is an allowed reason in Subsection 4.125 (.05) A. to exceed the maximum block perimeter and street spacing. The remainder of Area 2 will necessitate further review in the future.

SAP Elements "Area 2" of SAP North

Approved	Not Approved or Uncertain
	Site Circulation
	Lot layout
	Parks and Open Space
	Utility Plan
	Proposed Contours
Sequencing/Phasing (being modified)	
	Tree Removal
	Traffic Impact Analysis
Master Signage and Wayfinding Plan	
Rainwater Management Program	
Architectural Pattern Book	
Community Elements Book	

Future Development Tracts

In this and previous applications PDP and phasing boundaries have been adjusted to reflect property ownership. Often this leads to remnant areas between the PDP's developable with homes using land from multiple PDP's. The tentative subdivision plat for PDP 2 North shows three such tracts that will need land from a future PDP to develop. This includes a tract at the northeast corner of Cherbourg Lane and Geneva Loop; a tract north of the alley between Geneva and Stockholm, west of Lot 84; and north of Stockholm Avenue adjacent to Linear Green 15. The first two tracts are labeled as one tract on the tentative plat. The timeframe for the development of the property to the north is unknown and may be a number of years. These tracts thus have the potential to be in a rough seeded state for an extended period.

LG 15 and NP 5 Tracts

Two tracts proposed along the eastern edge of the subdivision are portions of parks approved as part of PDP 3 East. These tracts, along with the adjoining areas to the east will be developed as Linear Green 15 and Neighborhood Park 5 in accordance with the PDP 3 East approvals.

Tract for Overhanging Building Easement

540 square foot Tract 'Z' is located on the northern edge of the forested area in the western part of the subdivision in order to accommodate the overhang of an existing outbuilding on the adjacent property. It is expected this outbuilding will be removed and this easement no longer needed when the property to the north develops.

Regional Parks 5 and 6.

The proposed subdivision includes a 1.4 acre tract, Tract 'X', planned to a portion of public Regional Park 5. At the City's request this area is being left as a rough sodded area pending future park planning and development incorporating the entirety of the park now spread across three ownerships. In addition, Tract 'Q' is a small portion (9,010 square feet) of the future Regional Park 6, which will be planned and built together with future development to the north.

Amenities on Northern Edge of Open Space 2 "Upland Forest Preserve"

A majority of Open Space 2 "Upland Forest Preserve" is within the proposed subdivision with the northern edge on a property to the north. In the conceptual drawings for the preserve a number of planned amenities, including a child play structure and seating, are shown along this northern edge, though on the property subject to the current application. However, it is undesirable to develop these amenities at a location that will have limited public access and visibility. Staff recommends these amenities be built with development to the north when public access and visibility are created. It is thought the primary users of the play area and other amenities will be the homes in the future phase to the north.

Retaining Walls and Potential Hand Rails

The applicant aims at grading and designing stairs in the pocket parks and linear greens to avoid the need of retaining walls and hand rails. While staff understands this intent, a possibility remains construction will necessitate either or both retaining walls and hand rails. For this reason a Condition of Approval requires any of these elements built to be appropriately enhanced to be consistent with the Architectural Pattern Book.

Enhanced Third Story Rear Elevations.

The third story of the rear of houses facing the alley between Geneva Loop and Stockholm Avenue will be within the view shed of Stockholm as houses on the opposite side of the alley will only be two stories. For this reason, a condition of approval requires the third story of these houses to receive enhanced architectural treatment required for elevations in the public view shed in the Architectural Pattern Book.

Courtyard Fencing

In order to increase consistency with the Architectural Pattern Book and other development elsewhere in Villebois a condition of approval requires courtyard fencing consistent with the pattern book and the architectural style of the home for all but the standard lots. Where necessary, this includes installation of up to forty-eight inch (48") dry stack rock or brick wall along the front of the lot or side of a lot to create a fairly level and usable front yard outdoor living area (5% maximum slope) enclosed by the courtyard fencing. The applicant/owner can install a greater than forty-eight inch (48") wall, but if maintaining the required five (5) percent slope requires greater than a forty-eight inch (48") wall the applicant/owner can request an exception from the courtyard wall and courtyard slope requirements as part of building plan review.

Prior Street Dedication-Geneva

As shown in Exhibit B8 a number of street dedications and have been recorded from the parcel owned by Villebois LLC adjacent to property owned by Polygon. The appropriate public utility easements have also been recorded on the Villebois LLC property. These street dedication areas are currently zoned Public Facility, which is appropriate for the proposed street use they are thus not being rezoned at this time. These dedications allow the section of Geneva Loop from Dundee

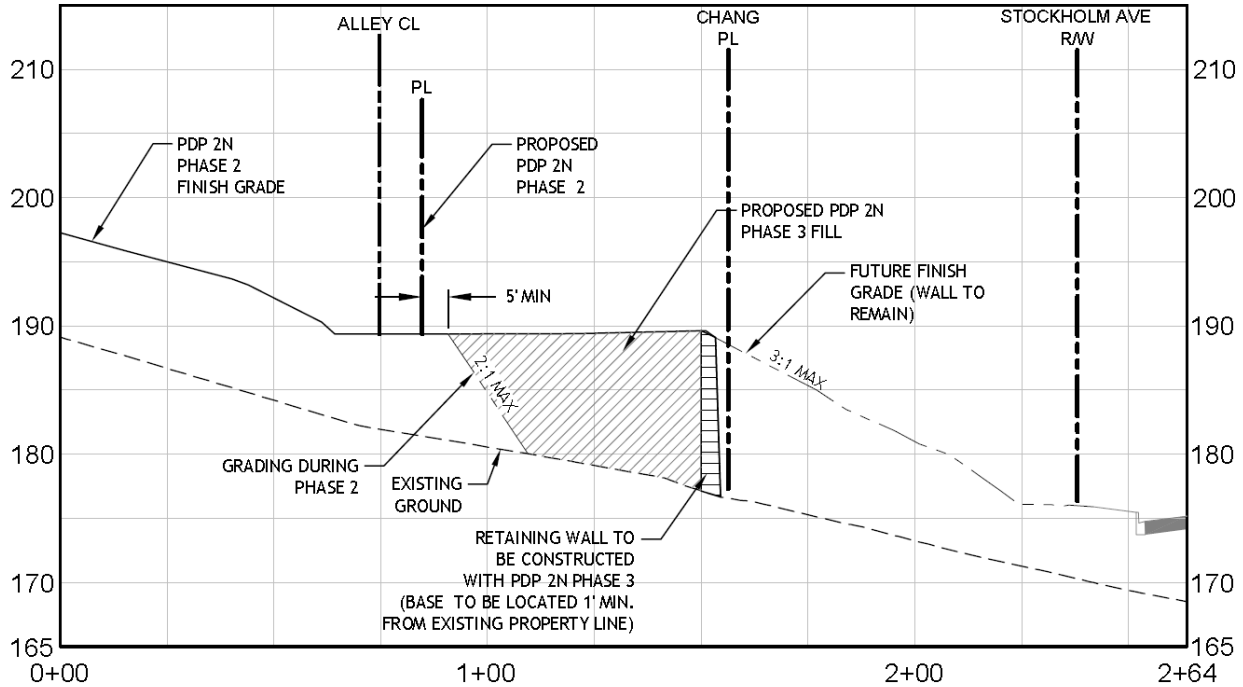
Lane to Villebois Drive North to be fully built with this development.

Relationship with 4 Central and Costa Circle Improvements

Phase 1 of the proposed PDP, including the areas along Costa Circle, Dundee Lane, and Geneva Loop, are planned to be developed at the same time as the adjacent streets and development across these streets in PDP 4 Central. These streets form the SAP boundaries, but in reality both sides of the street will be developed at the same time.

Phasing, Including Grading

A significant amount of grading is proposed for the subject property. After construction of Phase 1 and 2, intermittent grading will be left to the north of the alleys servicing Phase 1 and 2 until the construction of Phase 3. See example sections in Exhibit B6.



SECTION A-A

HORIZ SCALE: 1" = 30', VERT SCALE: 1" = 10'

Retaining Wall, Future Development on Property to the North

Due to the amount of fill required for the project a noticeable elevation difference will exist between the proposed grading between Geneva Loop and Stockholm Avenue and the natural contours on the undeveloped property to the north. Due to this difference the applicant proposes a temporary retaining wall along the property line. It is expected that the retaining wall will be buried with fill during the future development on the adjoining property. See Section A-A above

from Exhibit B6. In addition, fill will be required to bring the future development tracts up to the same elevation as areas being developed. See also Sheet 5.2, Grading Plan, in Exhibit B2.

PGE Power Line and Easement

An existing overhead power line and associated PGE easement run across the northern edge of the subject property. The power line is planned to be removed and easement extinguished as part of this development. The applicant's representative has indicated they are working with PGE to extinguish the easement, but no documentation has yet been received. A condition of approval requires the easement be extinguished prior to City approval of the final plat for the subdivision.

Interim Mid-block Crossing Geneva to Stockholm

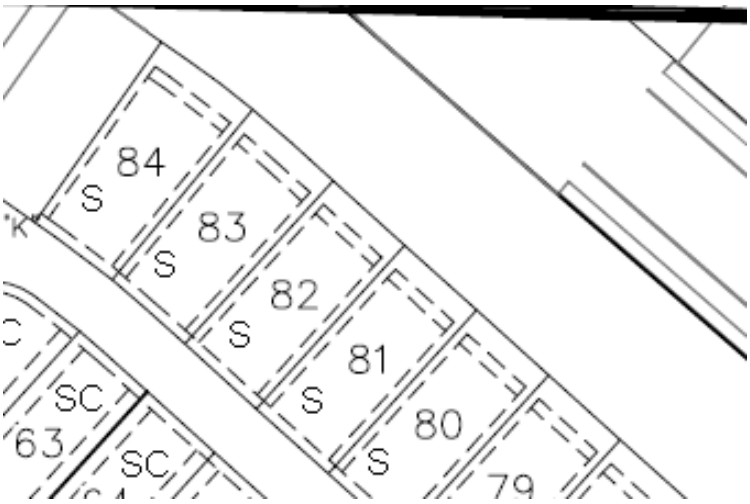
A mid-block pedestrian connection is proposed extending from Geneva Loop to Stockholm Avenue at Dundee Lane. A portion of the planned connection lies on the property to the north of the proposed subdivision. Currently, the fully improved path is proposed to end at the retaining wall along the property line. At the City's request the applicant is proposing an interim asphalt path to connect the end of the path at the retaining wall to the sidewalk fronting the lots facing Stockholm Avenue.

Diversity of Home Styles Along Palermo Street

The conceptual drawings in Section IIF of the applicant's notebook, Exhibit B1, includes only American style homes for the standard lots. A condition of approval requires, pursuant to the Architectural Pattern Book, at least two different architectural styles be used in the block along Palermo Street backing up to Grahams Ferry Road, one of which must be a European style.

Street Trees for Homes without Frontage on Stockholm

Until Stockholm Avenue is extended with the development of the property to the north there will be no street, including sidewalk and planting strip, along the linear green directly in front of Lots 81 through 84. Typically street trees are planted at the same time as development of homes and park areas adjacent to the street. In this case the adjacent development will occur prior to the street. The street tree planting will need to occur with the future development of the street. These four lots will have access via an alley as well as pathways within the linear green.



Park Maintenance

The parks within the subject PDP are identified as regional parks and open space in the Villebois Village Master Plan. In addition a number of linear greens and pocket parks have been added. The regional parks will be turned over to the City for maintenance after being maintained by the homeowners association for a period of 5 years after City acceptance of the park. Maintenance of the Open Space is a subject of further discussion between the developer and the City. The pocket parks and linear greens will be privately maintained by a homeowners association in perpetuity. The developer will be required to enter into an Operations and Maintenance Agreement for the PDP that clearly identifies ownership and maintenance responsibilities. This document will be recorded with the subdivision for "Tonquin Woods No. 4". This requirement has been added as Condition of Approval PDA 4.

CONCLUSION AND CONDITIONS OF APPROVAL:

Staff has reviewed the applicant's analysis of compliance with the applicable criteria. This Staff report adopts the applicant's responses as Findings of Fact except as noted in the Findings. Based on the Findings of Fact and information included in this Staff Report, and information received from a duly advertised public hearing, staff recommends that the Development Review Board approve the proposed applications (DB13-0020 through DB13-0022 and DB13-0024 through DB13-0026 as well as SI13-0001) and recommend approval of the zone map amendment to City Council (DB13-0023) with the following conditions:

The Developer is proposing improvements consistent with past agreements between the City's and preceding owners and past City approvals.

REQUEST A: DB13-0020 SAP-North PDP 2 North, Preliminary Development Plan

Planning Division Conditions:	
PDA 1.	Approval of DB13-0020 SAP-North PDP 2 North, Preliminary Development Plan is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) and Exclusive Farm Use (EFU) to Village (V) (Case File DB13-0023).
PDA 2.	Street lighting types and spacing shall be as shown in the Community Elements Book.

	See Finding A30.
PDA 3.	All landscaping, and park improvements approved by the Development Review Board and Engineering Division Public Works Permit punch list items for the specific phase of the PDP shall be completed before 50% of the homes are occupied for the phase unless weather or other special circumstances prohibit completion, which case bonding for the improvements is permitted. See Finding A61.
PDA 4.	The applicant/owner shall enter into an Operations and Maintenance Agreement for the subdivision that clearly identifies ownership and maintenance for parks and open space, paths, and natural area tracts. Such agreement shall ensure maintenance in perpetuity and shall be recorded with the subdivision for 'Tonquin Woods No. 4.' Such agreement shall be reviewed and approved by the City Attorney prior to recordation. See also Findings E6. and G4.
PDA 5.	Except for the Standard sized lots along Palermo, the applicant/owner shall install courtyard fencing in the front yard of all houses consistent with the Architectural Pattern Book and the architectural style of the house. The courtyard area enclosed by the fence shall not exceed a five (5) percent slope from front building line of the house to the point of the courtyard closest to the front lot line or between the points of the courtyard closest to opposite side lot lines. Where necessary, the applicant shall install dry stack rock or brick wall along the front or side of the lot to ensure a five (5) percent or less slope is maintained. Where the topography of a lot would require a greater than forty-eight inch (48") wall to maintain a five (5) percent slope for the courtyard the applicant/owner can request an exception from the courtyard fencing and courtyard slope requirements as part of the building permit review. See Finding A27.
PDA 6.	Pursuant to the Architectural Pattern Book, at least two different architectural styles shall be used in the block along Palermo Street, one of which must be a European Style. See Finding A27.
PDA 7.	Where a building foundation is exposed in the public view shed more than would be typical on a level lot, the foundation shall have a brick or stone façade matching the design of the house. See Finding A27.

REQUEST B: DB13-0021 SAP-North Refinements

<u>Planning Division Conditions:</u>	
PDB 1.	Approval of DB13-0021 SAP-North Refinements is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) and Exclusive Farm Use (EFU) to Village (V) (Case File DB13-0023).

REQUEST C DB13-0022 SAP-North Amendment

<u>Planning Division Conditions:</u>	
PDC 1.	Approval of DB13-0022 SAP-North Amendment is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) and Exclusive Farm Use (EFU) to Village (V) (Case File DB13-0023).

REQUEST D: DB13-0023 Zone Map Amendment

<u>Planning Division Conditions:</u> ***No Conditions of Approval Proposed for This Request***
This action recommends adoption of the Zone Map Amendment to the City Council for the subject properties. Case files DB13-0020, DB13-0021, DB13-0022, DB13-0024, DB13-0025,

DB13-0026, and SI13-0001 are contingent upon City Council's action on the Zone Map Amendment request.

REQUEST E: DB13-0024 Tentative Subdivision Plat

Planning Division Conditions:	
PDE 1.	Approval of DB13-0025 Type C Tree Plan is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) and Exclusive Farm Use (EFU) to Village (V) (Case File DB13-0023).
PDE 2.	Any necessary easements or dedications shall be identified on the Final Subdivision Plat.
PDE 3.	If one or more of the park/open space tracts are to be dedicated to the City or other public entity, this dedication(s) shall also be executed and recorded with the Final Plat.
PDE 4.	Alleyways, parking lots and drives shall remain in private ownership and be maintained by the Homeowner's Association established by the subdivision's CC&Rs. The CC&R's shall be reviewed and approved by the City Attorney prior to recordation.
PDE 5.	The Final Subdivision Plat shall indicate dimensions of all lots, lot area, minimum lot size, easements, proposed lot and block numbers, parks/open space by name and/or type, and any other information that may be required as a result of the hearing process for PDP-2N or the Tentative Plat.
PDE 6.	The easement for the overhead power line along the northern edge of the subdivision shall be extinguished prior to City approval of the final plat for the subdivision.
PDE 7.	A non-access reservation strip shall be applied on the final plat to those lots with access to a public street and an alley. All lots with access to a public street and an alley must take vehicular access from the alley to a garage or parking area. A plat note effectuating that same result can be used in the alternative. The applicant shall work with the County Surveyor and City Staff regarding appropriate language. See Finding E3.
PDE 8.	All reserve strips and street plugs shall be detailed on the Final Subdivision Plat. See Finding E3.
PDE 9.	All tracts shall, except those indicated for future home development, shall include a public access easement across their entirety.

REQUEST F: DB13-0025 Type C Tree Plan

Planning Division Conditions:	
PDF 1.	Approval of DB13-0025 Type C Tree Plan is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) to Village (V) (Case File DB13-0023).
PDF 2.	The property owner/applicant or their successors in interest shall grant access to the property for authorized City representatives as needed to verify the tree related information provided, to observe tree related site conditions, and to verify, once a removal permit is granted, that the terms and conditions of the permit are followed. See Finding F1.
PDF 3.	Prior to granting a Tree Removal Permit in accordance with the proposed Tree Removal Plan the permit grantee shall file with the City a cash or corporate surety bond or irrevocable bank letter of credit in an amount determined by the City to

	ensure compliance with the Tree Removal Permit conditions and the requirements of the Tree Preservation and Protection Ordinance. See Finding F5.
PDF 4.	Trees planted as replacement of removed trees shall be, state Department of Agriculture Nursery Grade No. 1. or better, shall meet the requirements of the American Association of Nursery Men (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade, shall be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced. See Findings F11 and F12.
PDF 5.	Solvents, building material, construction equipment, soil, or irrigated landscaping, shall not be placed within the drip line of any preserved tree, unless a plan for such construction activity has been approved by the Planning Director or Development Review Board based upon the recommendations of an arborist. See Finding F14.
PDF 6.	Before and during development, land clearing, filling or any land alteration the applicant shall erect and maintain suitable tree protective barriers which shall include the following: • 6' high fence set at tree drip lines. • Fence materials shall consist of 2 inch mesh chain links secured to a minimum of 1 ½ inch diameter steel or aluminum line posts. • Posts shall be set to a depth of no less than 2 feet in native soil. Protective barriers shall remain in place until the City authorizes their removal or issues a final certificate of occupancy, whichever occurs first. See Finding F14.

REQUEST G: DB13-0026 Final Development Plan for Parks and Open Space

<u>Planning Division Conditions:</u>	
PDG 1.	Approval of DB13-0026 Final Development Plan for Parks and Open Space is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) and Exclusive Farm Use (EFU) to Village (V) (Case File DB13-0023).
PDG 2.	All plant materials shall be installed consistent with current industry standards.
PDG 3.	All construction, site development, and landscaping of the parks shall be carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. Minor alterations may be approved by the Planning Division through the Class I Administrative Review process. See Finding G32.
PDG 4.	All retaining walls within the public view shed shall be a decorative stone or brick construction or veneer. Final color and material for the retaining walls shall be approved by the Planning Division through the Class I Administrative Review Process. See Finding G37.
PDG 5.	All hand rails within the parks and open space shall be of a design similar to the approved courtyard fencing shown in the Architectural Pattern Book. Final design of any hand rails in parks and open space shall be approved by the Planning Division through the Class I Administrative Review Process. See Finding G37.
PDG 6.	All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Development Review Board. See Finding G 42.
PDG 7.	The applicant shall submit final parks, landscaping and irrigation plans to the City prior to construction of parks. The irrigation plan must be consistent with the

	requirements of Section 4.176(.07)C.
PDG 8.	Prior to occupancy of each house the Applicant/Owner shall install landscaping along the public view-sheds of each house, unless otherwise approved by the Community Development Director. Homeowners association shall contract with a professional landscape service to maintain the landscaping.
PDG 9.	Street trees, as shown on the approved landscape plans, shall be planted as each house or park is built.

REQUEST H: SI13-0001 SRIR REVIEW

Planning Division Conditions: *see also Natural Resource Division Conditions Below*	
PDH 1.	Approval of SI13-0001 SRIR Review is contingent upon City Council approval of the Zone Map Amendment from Public Facility (PF) and Exclusive Farm Use (EFU) to Village (V) (Case File DB13-0023).

The following Conditions of Approval are provided by the Engineering, Natural Resources, or Building Divisions of the City's Community Development Department or Tualatin Valley Fire and Rescue, all of which have authority over development approval. A number of these Conditions of Approval are not related to land use regulations under the authority of the Development Review Board or Planning Director. Only those Conditions of Approval related to criteria in Chapter 4 of Wilsonville Code and the Comprehensive Plan, including but not limited to those related to traffic level of service, site vision clearance, recording of plats, and concurrency, are subject to the Land Use review and appeal process defined in Wilsonville Code and Oregon Revised Statutes and Administrative Rules. Other Conditions of Approval are based on City Code chapters other than Chapter 4, state law, federal law, or other agency rules and regulations. Questions or requests about the applicability, appeal, exemption or non-compliance related to these other Conditions of Approval should be directed to the City Department, Division, or non-City agency with authority over the relevant portion of the development approval.

REQUEST A: DB13-0020 SAP-North PDP 2 North, Preliminary Development Plan
& REQUEST E: DB13-0024 Tentative Subdivision Plat

Engineering Division Conditions:	
Standard Comments:	
PFA 1.	All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards.
PFA 2.	Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:

Coverage (Aggregate, accept where noted)	*Limit*
Commercial General Liability	
General Aggregate (per project)	$ 2,000,000
Fire Damage (any one fire)	$ 50,000
Medical Expense (any one person)	$ 10,000
Business Automobile Liability Insurance	
Each Occurrence	$ 1,000,000
Aggregate	$ 2,000,000
Workers Compensation Insurance	$ 500,000

PFA 3.	No construction of, or connection to, any existing or proposed public

	utility/improvements will be permitted until all plans are approved by Staff, all fees have been paid, all necessary permits, right-of-way and easements have been obtained and Staff is notified a minimum of 24 hours in advance.
PFA 4.	All public utility/improvement plans submitted for review shall be based upon a 22”x 34” format and shall be prepared in accordance with the City of Wilsonville Public Work’s Standards.
PFA 5.	Plans submitted for review shall meet the following general criteria: a. Utility improvements that shall be maintained by the public and are not contained within a public right-of-way shall be provided a maintenance access acceptable to the City. The public utility improvements shall be centered in a minimum 15-ft. wide public easement for single utilities and a minimum 20-ft wide public easement for two parallel utilities and shall be conveyed to the City on its dedication forms. b. Design of any public utility improvements shall be approved at the time of the issuance of a Public Works Permit. Private utility improvements are subject to review and approval by the City Building Department. c. In the plan set for the PW Permit, existing utilities and features, and proposed new private utilities shall be shown in a lighter, grey print. Proposed public improvements shall be shown in bolder, black print. d. All elevations on design plans and record drawings shall be based on NAVD 88 Datum. e. All proposed on and off-site public/private utility improvements shall comply with the State of Oregon and the City of Wilsonville requirements and any other applicable codes. f. Design plans shall identify locations for street lighting, gas service, power lines, telephone poles, cable television, mailboxes and any other public or private utility within the general construction area. g. As per City of Wilsonville Ordinance No. 615, all new gas, telephone, cable, fiber-optic and electric improvements etc. shall be installed underground. Existing overhead utilities shall be undergrounded wherever reasonably possible. h. Any final site landscaping and signing shall not impede any proposed or existing driveway or interior maneuvering sight distance. i. Erosion Control Plan that conforms to City of Wilsonville Ordinance No. 482. j. Existing/proposed right-of-way, easements and adjacent driveways shall be identified. k. All engineering plans shall be stamped by a Professional Engineer registered in the State of Oregon.
PFA 6.	Submit plans in the following general format and order for all public works construction to be maintained by the City: a. Cover sheet b. City of Wilsonville construction note sheet c. General construction note sheet d. Existing conditions plan. e. Erosion control and tree protection plan.

	f. Site plan. Include property line boundaries, water quality pond boundaries, sidewalk improvements, right-of-way (existing/proposed), easements (existing/proposed), and sidewalk and road connections to adjoining properties. g. Grading plan, with 1-foot contours. h. Composite utility plan; identify storm, sanitary, and water lines; identify storm and sanitary manholes. i. Detailed plans; show plan view and either profile view or provide i.e.'s at all utility crossings; include laterals in profile view or provide table with i.e.'s at crossings; vertical scale 1"= 5', horizontal scale 1"= 20' or 1"= 30'. j. Street plans. k. Storm sewer/drainage plans; number all lines, manholes, catch basins, and cleanouts for easier reference l. Water and sanitary sewer plans; plan; number all lines, manholes, and cleanouts for easier reference. m. Detailed plan for storm water detention facility (both plan and profile views), including water quality orifice diameter and manhole rim elevations. Provide detail of inlet structure and energy dissipation device. Provide details of drain inlets, structures, and piping for outfall structure. Note that although storm water detention facilities are typically privately maintained they will be inspected by engineering, and the plans must be part of the Public Works Permit set. n. Detailed plan for water quality facility (both plan and profile views). Note that although storm water quality facilities are typically privately maintained they will be inspected by Natural Resources, and the plans must be part of the Public Works Permit set. o. Composite franchise utility plan. p. City of Wilsonville detail drawings. q. Illumination plan. r. Striping and signage plan. s. Landscape plan.
PFA 7.	Prior to manhole and sewer line testing, design engineer shall coordinate with the City and update the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to the updated numbering system. Design engineer shall also show the updated numbering system on As-Built drawings submitted to the City.
PFA 8.	The applicant shall install, operate and maintain adequate erosion control measures in conformance with the standards adopted by the City of Wilsonville Ordinance No. 482 during the construction of any public/private utility and building improvements until such time as approved permanent vegetative materials have been installed.
PFA 9.	Applicant shall work with City's Natural Resources office before disturbing any soil on the respective site. If 5 or more acres of the site will be disturbed applicant shall obtain a 1200-C permit from the Oregon Department of Environmental Quality. If 1 to less than 5 acres of the site will be disturbed a 1200-CN permit from the City of Wilsonville is required.
PFA 10.	To lessen the impact of the proposed project on the downstream storm drain system, and adjacent properties, project run-off from the site shall be detained and limited to the difference between a developed 25-year storm and an undeveloped 25-year storm.

	The detention and outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
PFA 11.	A storm water analysis prepared by a Professional Engineer registered in the State of Oregon shall be submitted for review and approval by the City to address appropriate pipe and detention facility sizing.
PFA 12.	The applicant shall be in conformance with all water quality requirements for the proposed development per the Public Works Standards. If a mechanical water quality system is used, prior to City acceptance of the project the applicant shall provide a letter from the system manufacturer stating that the system was installed per specifications and is functioning as designed.
PFA 13.	Storm water quality facilities shall have approved landscape planted and/or some other erosion control method installed and approved by the City of Wilsonville prior to streets and/or alleys being paved.
PFA 14.	The applicant shall provide the City with a Stormwater Maintenance and Access Easement (on City approved forms) for City inspection of those portions of the storm system to be privately maintained. Applicant shall maintain all LID storm water components and private conventional storm water facilities located within medians and from the back of curb onto and including the project site.
PFA 15.	Fire hydrants shall be located in compliance with TVF&R fire prevention ordinance and approval of TVF&R.
PFA 16.	The applicant shall contact the Oregon Water Resources Department and inform them of any existing wells located on the subject site. Any existing well shall be limited to irrigation purposes only. Proper separation, in conformance with applicable State standards, shall be maintained between irrigation systems, public water systems, and public sanitary systems. Should the project abandon any existing wells, they shall be properly abandoned in conformance with State standards.
PFA 17.	All survey monuments on the subject site, or that may be subject to disturbance within the construction area, or the construction of any off-site improvements shall be adequately referenced and protected prior to commencement of any construction activity. If the survey monuments are disturbed, moved, relocated or destroyed as a result of any construction, the project shall, at its cost, retain the services of a registered professional land surveyor in the State of Oregon to restore the monument to its original condition and file the necessary surveys as required by Oregon State law. A copy of any recorded survey shall be submitted to Staff.
PFA 18.	Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
PFA 19.	No surcharging of sanitary or storm water manholes is allowed.
PFA 20.	The project shall connect to an existing manhole or install a manhole at each connection point to the public storm system and sanitary sewer system.
PFA 21.	A City approved energy dissipation device shall be installed at all proposed storm system outfalls. Storm outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
PFA 22.	The applicant shall provide a 'stamped' engineering plan and supporting information that shows the proposed street light locations meet the appropriate AASHTO lighting standards for all proposed streets and pedestrian alleyways.

PFA 23.	All required pavement markings, in conformance with the Transportation Systems Plan and the Bike and Pedestrian Master Plan, shall be completed in conjunction with any conditioned street improvements.
PFA 24.	Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
PFA 25.	The applicant shall provide adequate sight distance at all project driveways by driveway placement or vegetation control. Specific designs to be submitted and approved by the City Engineer. Coordinate and align proposed driveways with driveways on the opposite side of the proposed project site.
PFA 26.	Access requirements, including sight distance, shall conform to the City's Transportation Systems Plan (TSP) or as approved by the City Engineer. Landscaping plantings shall be low enough to provide adequate sight distance at all street intersections and alley/street intersections.
PFA 27.	Applicant shall design interior streets and alleys to meet specifications of Tualatin Valley Fire & Rescue and Allied Waste Management (United Disposal) for access and use of their vehicles.
PFA 28.	Applicant shall prepare an Ownership and Maintenance agreement between the City and the Owner. Stormwater or rainwater facilities may be located within the public right-of-way upon approval of the City Engineer. The Ownership and Maintenance agreement shall specify that the rainwater and stormwater facilities shall be privately maintained by the Applicant; maintenance shall transfer to the respective homeowners association when it is formed.
PFA 29.	The applicant shall "loop" proposed waterlines by connecting to the existing City waterlines where applicable.
PFA 30.	All water lines that are to be temporary dead-end lines due to the phasing of construction shall have a valved tee with fire-hydrant assembly installed at the end of the line.
PFA 31.	Applicant shall provide a minimum 6-foot Public Utility Easement on lot frontages to all public right-of-ways. An 8-foot PUE shall be provided along Minor and Major Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
PFA 32.	For any new public easements created with the project the Applicant shall be required to produce the specific survey exhibits establishing the easement and shall provide the City with the appropriate Easement document (on City approved forms).
PFA 33.	Mylar Record Drawings: At the completion of the installation of any required public improvements, and before a 'punch list' inspection is scheduled, the Engineer shall perform a record survey. Said survey shall be the basis for the preparation of 'record drawings' which will serve as the physical record of those changes made to the plans and/or specifications, originally approved by Staff, that occurred during construction. Using the record survey as a guide, the appropriate changes will be made to the construction plans and/or specifications and a complete revised 'set' shall be submitted. The 'set' shall consist of drawings on 3 mil. Mylar and an electronic copy in AutoCAD, current version, and a digitally signed PDF.
PFA 34.	Subdivision or Partition Plats: Paper copies of all proposed subdivision/partition plats shall be provided to the City for review. Once the subdivision/partition plat is

	approved, applicant shall have the documents recorded at the appropriate County office. Once recording is completed by the County, the applicant shall be required to provide the City with a 3 mil Mylar copy of the recorded subdivision/partition plat.
PFA 35.	Subdivision or Partition Plats: All newly created easements shown on a subdivision or partition plat shall also be accompanied by the City's appropriate Easement document (on City approved forms) with accompanying survey exhibits that shall be recorded immediately after the subdivision or partition plat.
PFA 36.	The applicant shall work with the other developers of Villebois and the City to develop an equitable storm water and parks maintenance fee or a maintenance memorandum of understanding prior to any final plat approval.
Specific Comments:	
PFA 37.	At the request of Staff, DKS Associates completed a Transportation Review dated May 31, 2013. The project is hereby limited to no more than the following impacts. Estimated New PM Peak Hour Trips 91 Estimated Weekday PM Peak Hour Trips 29 Through Wilsonville Road Interchange Area
PFA 38.	All construction traffic shall access the site via Grahams Ferry Road to Barber Street or via 110th Avenue. No construction traffic will be allowed on Brown Road or Barber Street east of Costa Circle West.
PFA 39.	Applicant shall be required to complete full design and construction through the far right-of-way and to the far extent of the approved project and all intersections through the far corner radii of all planned streets bordering the development. Streets shall be designed in conformance to the applicable street type as shown in the Villebois Village Master Plan.
PFA 40.	The applicant shall provide 'stamped' engineering details with dimensions for intersection sight distance verification and AutoTURN layouts for all proposed intersections, including alley/street connections. Adequate clearance shall be provided at all intersections and alleyways. The sight distance point for exiting vehicles shall be located 14.4 feet from the edge of the traveled way. At a minimum, the applicant shall provide 'stamped' engineering AutoTURN layouts for fire trucks and buses (WB-60) that show the overhang and/or mirrors of the vehicle as opposed to the wheel paths. Turning vehicles may use the width of the minor street to start the appropriate turn. The vehicle must however, stay within the appropriate receiving (inside) lane of the major street. Additionally, the turning vehicle must not intrude onto the wheel chair ramp on the inside of the turning movement.
PFA 41.	The proposed subdivision lacks direct sidewalk access to Villebois SAP South PDP 6 or SAP East PDP 1 and to the Lowrie Primary School. Applicant shall construct a temporary sidewalk, and provide the necessary easements, linking the proposed development to existing sidewalks and/or crosswalks to provide a safe route to Lowrie Primary School.
PFA 42.	The Villebois Village Master Plan identifies a major path, the Tonquin Trail, in a portion of this development. Applicant shall construct a minimum 12-foot wide paved major pathway with 12-ft wide ADA ramps in compliance with the Villebois

	Master Plan. Enhanced trail crossing treatment, such as a painted crosswalk, street lighting and/or median treatment, shall be installed at the location along the proposed Tonquin Trail system where it crosses the right-of-way.
PFA 43.	The Villebois Village Master Plan identifies a minor pedestrian path in a portion of the development. Applicant shall construct a minimum 8-foot wide paved minor pathway with 8-ft wide ADA ramps in compliance with the Villebois Master Plan.
PFA 44.	Alleys that are identified by Tualatin Valley Fire and Rescue (TVF&R) as possible routes for medical and/or fire emergencies shall meet TVF&R's design requirements.
PFA 45.	At the time of plan submittal for a Public Works Permit, the applicant shall provide to the City a copy of correspondence showing that the plans have also been distributed to the franchise utilities. Prior to issuance of a Public Works Permit, the applicant shall have coordinated the proposed locations and associated infrastructure design for the franchise utilities. Should permanent/construction easements or right-of-way be required to construct the public improvements or to relocate a franchised utility, the applicant shall provide a copy of the recorded documents. Should the construction of public improvements impact existing utilities within the general area, the applicant shall obtain written approval from the appropriate utility prior to commencing any construction.
PFA 46.	All streets shall be lighted with approved Westbrooke style street lights.
PFA 47.	Applicant shall provide sufficient mail box units for the proposed phasing plan; applicant shall construct mail kiosk at locations coordinated with City staff and the Wilsonville U.S. Postmaster.
PFA 48.	Plans show several water, storm and sanitary lines lying outside of the project boundaries or not shown connected. Applicant shall construct SAP Central PDP 4 concurrently with SAP North PDP 2. Applicant shall provide a complete utility system capable of servicing all proposed lots in compliance with Public Works Standards. For proposed lines lying outside of planned right-of-ways, applicant shall provide the City with construction easement(s) and permanent pipeline easement(s) prior to the City issuing a Public Works Permit for their construction. Pipeline easements lying within planned street right-of-ways shall expire at time of future street dedication.
PFA 49.	Applicant shall connect to existing water, storm and sanitary line at north end of Palermo Street.
PFA 50.	The project site appears to straddle the Arrowhead Creek basin, the Mill Creek basin and the Coffee Lake Creek basin. Applicant shall direct stormwater runoff to the correct basin; no interbasin transfer of stormwater is allowed.
PFA 51.	Detention of stormwater flows within the Arrowhead Creek basin have already been accounted for in existing stormwater detention features. No additional detention is required.
PFA 52.	Detention of stormwater flows within the Mill Creek basin have already been accounted for in existing stormwater detention features. No additional detention is required.
PFA 53.	Much of the proposed development lies within the Coffee Lake Creek basin. Per City Ord. 608, detention is not required for areas of Villebois that drain directly to the

	Coffee Lake Wetlands; however, until the stormwater system is completed east of 110th Avenue (Costa Circle), applicant shall be in conformance with PFA 10 and PFA 11 for this portion of the development.
PFA 54.	Applicant shall be required to build the off-site sanitary sewer line prior to or concurrently with this project. This off-site line runs from near the intersection of 110th Ave. and Stockholm Ave. to the existing main line in the future Coffee Lake Drive.
PFA 55.	Applicant shall be required to build the off-site sanitary sewer line prior to or concurrently with this project. This off-site line runs from near the intersection of 110th Ave. and Stockholm Ave. to the existing main line in the future Coffee Lake Drive.
PFA 56.	In accordance with the Public Works Standards, sewer lines entering manholes must be greater than 90 degrees from the line out to minimize turbidity within the manhole.
PFA 57.	Both Northwest Natural Gas line and Kinder Morgan have existing gas/fuel lines located on the west side of the existing 110th Avenue right-of-way. No obstruction can be placed within, adjacent or across the pipelines that will impede access to the pipelines or easement. Applicant's contractor shall contact representatives from both Northwest Natural Gas line and Kinder Morgan prior to commencing any work within 10 feet of the lines.
PFA 58.	Applicant shall be required to reimburse the City for their share of a sanitary sewer reimbursement fee established per Res. 2350 for their corresponding share of tax lot 31W15 02916 at time of issuance of a PW Permit.
PFA 59.	SAP North PDP 2 consists of 90 lots. All construction work in association with the Public Works Permit and Project Corrections List shall be completed prior to the City Building Division issuing a certificate of occupancy, or a building permit for the housing unit(s) in excess of 50% of total (46th lot).

REQUEST A: DB13-0020 SAP-North PDP 2 North, Preliminary Development Plan

Building Division Conditions:	
BD 1.	PREMISES IDENTIFICATION. Buildings shall have approved address numbers, building numbers or approved building identification placed on a position that is plainly visible from the street or road fronting the property. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means [approved by the fire marshal] shall be used to identify the structure. (OFC 505.1) This applies to all situations such as the homes facing Tract "V" and Tract "S" but not Tract "I" or "U". The sign shall be located in an easement or on common land that shall be maintained available for maintenance. If a walkway adjoins the front of the homes, locating the signs in the common area adjacent to the walkway as close as possible to the right-of-way would be ideal. Placing the signs at the mouth of the adjacent alley mouth would also be acceptable.
BD 2.	FIRE HYDRANTS shall be provided along required fire apparatus access roads and adjacent public streets with locations approved by the fire marshal. (2010 OFC C102.1)
BD 3.	STOCKHOLM AVENUE appears to temporarily end near proposed lot 74, and Palermo Street near proposed Lot 126. Dead-end fire apparatus access roads in

	excess of 150' [or a little longer because of the sprinkler systems] shall be provided with width and turn-around provisions in accordance with Table D103.4 of the fire code. (OFC D103.4) An approved fire department turn-around or temporary roadway meeting fire access roadway requirements allowing fire vehicles to access adjacent streets, or other means meeting the approval of the fire marshal shall be provided.

REQUEST A: DB13-0020 SAP-North PDP 2 North, Preliminary Development Plan
& REQUEST G: DB13-0026 Final Development Plan for Parks and Open Space

Natural Resources Division Conditions:	
Rainwater Management Plan:	
NRA 1.	The applicant shall submit a detailed operations and maintenance manual for the rainwater management components that has been reviewed and approved by city staff before 50% of the units are occupied in PDP 1, SAP North.
NRA 2.	Pursuant to the City of Wilsonville Public Works Standards, access should be provided for the entire perimeter of the rainwater management components. At a minimum, at least one access shall be provided for maintenance and inspection.
NRA 3.	All Rainwater Management Components and associated infrastructure located in public areas shall be designed to the Public Works Standards. Rainwater Management Components in private areas shall comply with the plumbing code.
NRA 4.	Plantings in Rainwater Management Components located in public areas shall comply with the Public Works Standards. Plantings in Rainwater Management Components located in private areas shall comply with the Plant List in the Rainwater Management Program or Community Elements Plan.
NRA 5.	The rainwater management components shall comply with the requirements of the Oregon DEQ UIC (Underground Injection Control) Program.
Stormwater Management:	
NRA 6.	Provide profiles, plan views and specifications for the proposed water quality treatment facilities consistent with the requirements of the City of Wilsonville's Public Works Standards.
NRA 7.	Pursuant to the Public Works Standards, the applicant shall submit a maintenance plan (including the City's stormwater maintenance covenant) for the proposed stormwater facilities, inclusive of the rainwater management components, prior to approval for occupancy of the associated development.
NRA 8.	Pursuant to the City of Wilsonville's Public Works Standards, access shall be provided to all areas of the proposed water quality treatment facilities. At a minimum, at least one access shall be provided for maintenance and inspection.
Other:	
NRA 9.	The applicant shall comply with all applicable state and federal requirements for the proposed construction activities and proposed facilities (e.g. DEQ NPDES #1200–C permit).

REQUEST H: SI13-0001 SRIR REVIEW

Natural Resources Division Conditions:	
NRH 1.	All landscaping, including herbicides used to eradicate invasive plant species and existing vegetation, in the SROZ shall be reviewed and approved by the Natural Resources Program Manager. Native plants are required for landscaping in the SROZ.

NRH 2.	Prior to any site grading or ground disturbance, the applicant is required to delineate the boundary of the SROZ. Six-foot (6') tall cyclone fences with metal posts pounded into the ground at 6'-8' centers shall be used to protect the significant natural resource area where development encroaches into the 25-foot Impact Area.
NRH 3.	Pursuant to Section 4.139.03(C), the applicant shall revise the proposed site plan to remove some of the proposed impacts to the Area of Limited Conflicting Use. The proposed par course fitness stations and leaf identification creative play areas have not been addressed in the SRIR and are not approved as part of the SRIR review. In addition, the applicant is required to relocate a picnic table area (situated along the eastern edge of the forest) outside the SROZ.
NRH 4.	Pursuant to Section 4.139.04, the applicant shall demonstrate proposed development (i.e. soft surface pedestrian trail) within the 25-foot Impact Area and the Significant Resource Overlay Zone has been designed to avoid, minimize and mitigate impact to the significant natural resources.
NRH 5.	Mitigation actions shall be implemented prior to or at the same time as the impact activity is conducted.
NRH 6.	The applicant shall submit a mitigation plan that addresses the requirements of Section 4.139.07.
NRH 7.	Pursuant to Section 4.139.03 (.05) of the Wilsonville Code, the applicant is required to use habitat-friendly development practices (Table NR-2) to the extent practicable for any encroachment into the Significant Resource Overlay Zone and the 25-foot Impact Area.
NRH 8.	The applicant shall submit a monitoring and maintenance plan to be conducted for a period of five years following mitigation implementation. The applicant shall be responsible for ongoing maintenance and management activities, and shall submit an annual report to the Planning Director documenting such activities, and reporting progress towards the mitigation goals. The report shall contain, at a minimum, photographs from established photo points, quantitative measure of success criteria, including plant survival and vigor if these are appropriate data. The Year 1 annual report shall be submitted one year following mitigation action implementation. The final annual report (Year 5 report) shall document successful satisfaction of mitigation goals, as per the stated performance standards. If the ownership of the mitigation site property changes, the new owners will have the continued responsibilities established by this section.
NRH 9.	The Significant Resource Overlay Zone (SROZ) and mitigation area depicted on the SRIR mapping for the site shall be identified in a conservation easement. The applicant shall record the conservation easement with Clackamas Court Clerk's office. The conservation easement shall include language prohibiting any disturbance of natural vegetation without first obtaining approval from the City Planning Division and the Natural Resources Program Manager. The conservation easement shall be reviewed by the City Attorney prior to recording.

MASTER EXHIBIT LIST:

The following exhibits are hereby entered into the public record by the Development Review Board as confirmation of its consideration of the application as submitted. This is the exhibit list

that includes exhibits for Planning Case File DB13-0020 through DB13-0026, SI13-0001.

A1. Staff report and findings (this document)
A2. Excerpts from DB07-0054, SAP North Approval
A3. Slides and notes for Staff's Public Hearing Presentation *(available at Public Hearing)*
B1. Applicant's Notebook: *Under separate cover*

Section I: General Information
- IA) Introductory Narrative
- IB) Form/Ownership Documentation
- IC) Fee Calculation
- ID) Mailing List *Staff Note: This information has been revised*
- IE) Updated SAP North Phasing + Unit Counts

Section II: Preliminary Development Plan (Includes Phasing Amendment and Refinements)
- IIA) Supporting Compliance Report
- IIB) Reduced Drawings
- IIC) Utility & Drainage Reports
- IID) Traffic Analysis
- IIE) Tree Report
- IIF) Conceptual Elevations
- IIG) Copy of SROZ Report

Section III: Tentative Plat
- IIIA) Supporting Compliance Report
- IIIB) Tentative Plat
- IIIC) Draft CC&R's
- IIID) Copy of Certification of Assessments and Liens
- IIIE) Subdivision Name Approval

Section IV: Zone Change
- IVA) Supporting Compliance Report
- IVB) Zone Change Map
- IVC) Legal Description and Sketch

Section V: Tree Removal Plan
- VA) Supporting Compliance Report
- VB) Tree Report
- VC) Tree Preservation Plan

Section VI: Final Development Plan
- VIA) Supporting Compliance Report
- VIB) Reduced Drawings

B2. Applicant's Large Format Plans (Smaller 11x17 plans included in Sections IIB and IIIB of the applicant's notebook Exhibit B1.) *Under separate cover.*
- Sheet 1 Cover Sheet
- Sheet 2.1 Existing Conditions
- Sheet 2.2 Existing Conditions
- Sheet 3.1 Aerial Photograph

Sheet 3.2 Aerial Photograph
Sheet 4.1 Tentative Plat *Staff Note: information revised. See Exhibit B9.*
Sheet 4.2 Tentative Plat *Staff Note: information revised. See Exhibit B9.*
Sheet 4.3 Tentative Plat *Staff Note: information revised. See Exhibit B9.*
Sheet 4.4 Tentative Plat *Staff Note: information revised. See Exhibit B9.*
Sheet 4.5 Tentative Plat *Staff Note: information revised. See Exhibit B9.*
Sheet 5.1 Grading and Erosion Control
Sheet 5.2 Grading and Erosion Control
Sheet 6.1 Composite Utility Plan
Sheet 6.2 Composite Utility Plan
Sheet 7.1 Circulation Plan *Staff Note: information on this sheet has been revised for the park and open space areas. See FDP plans in Exhibit B3.*
Sheet 7.2 Circulation Plan
Sheet 7.3 Street Sections
Sheet 8.1 Site/Land Use Plan
Sheet 8.2 Site/Land Use Plan
Sheet 8.3 Typical Lot Pattern
Sheet 9.1 Tree Preservation Plan *Staff Note: information on this sheet has been revised for the park and open space areas. See FDP plans in Exhibit B3.*
Sheet 9.2 Tree Preservation Plan
Sheet 9.3 SROZ Impacts and Mitigation Plan *Staff Note: information on this sheet has been revised for the park and open space areas. See FDP plans in Exhibit B3.*
Sheet 10.1 Street Tree/Lighting Plan
Sheet 10.2 Street Tree/Lighting Plan
Sheet 11.1 PDP Phasing Plan
Sheet 11.2 PDP Phasing Plan

B3. Final Develop Plan Large Format Plans (Smaller 11x17 plans included in Section VIB of the applicant's notebook, Exhibit B1.) *Under separate cover.*
Sheet 1 Cover Sheet (Landscape Plans)
Sheet L 1.0 Landscape Plan
Sheet L 2.0 Landscape Plan
Sheet L 3.0 Landscape Plan
Sheet L 4.0 Landscape Plan
Sheet L 5.0 Landscape Plan
Sheet L 6.0 Landscape Details

B4. EX1 Reference Diagram, Including Phasing, for PDP 4 Central and PDP 2 North

B5. EX2 Phasing Diagram for PDP 4 Central and PDP 2 North

B6. Supplemental Exhibits Regarding Grading and Profiles
Exhibit A Preliminary Plan and Profile Dundee Lane
Exhibit B Preliminary Plan and Profile Alley I
Exhibit C Future Grading Exhibit Chang Property *Staff Note: information revised. See Exhibit B9.*
Exhibit D Future Grading Exhibit Fir Park

B7. Memo dated May 15, 2013 regarding circulation in northeast corner of subdivision and adjoining areas. *Staff Note: information from this memo was later revised. See Exhibit B9.*

B8. Documentation of dedication of adjacent right-of-way for street improvements associated

with proposed development.

B9. Memo dated May 30, 2013 regarding circulation in northeast corner of subdivision and adjoining areas and alignment of pathway. includes the following revised sheets and Exhibits:

Exhibit C of Exhibit B6- Future Grading Exhibit Change Property *Staff Note: Revision of a portion of Exhibit B6.*
Tract L Supplemental Grading Plan
Sheet 1 of Exhibit B2- Cover Sheet *Staff Note: Revision of a portion of Exhibit B2.*
Sheets 4.1 to 4.4 of Exhibit B2- Tentative Plat *Staff Note: Revision of a portion of Exhibit B2.*

B10. Memo Regarding Revisions to Regional Park 4 and Open Space 2 dated May 20, 2013
B11. Additional Phasing Plan Update Exhibits
C1. Comments and Conditions from Engineering Division
C2. Comments and Conditions from Building Division
C3. Comments, Findings, and Conditions from Natural Resources
C4. Comments from Public Works Department

FINDINGS OF FACT:

1. The statutory 120-day time limit applies to this application. The application was received on April 15, 2013. On May 15, 2013, staff conducted a completeness review within the statutorily allowed 30-day review period, and, on April 18, May 3, May 6, and May 7, 2013, the Applicant submitted new materials. On May 31, 2013 the application was deemed complete. The City must render a final decision for the request, including any appeals, by September 28, 2013

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2. Surrounding land uses are as follows:

Compass Direction	Zone:	Existing Use:
North:	--	Unincorporated Rural Residential
East:	V	Phase 3 East Villebois (approved/unbuilt)
South:	PF/V	Phase 1 North Villebois (under construction) Future Phase 4 Central (proposed) Undeveloped portions of SAP Central
West:	--	Unincorporated Rural Residential

3. Prior land use actions include:

<u>Legislative:</u>
02PC06 - Villebois Village Concept Plan
02PC07A - Villebois Comprehensive Plan Text
02PC07C - Villebois Comprehensive Plan Map
02PC07B - Villebois Village Master Plan
02PC08 - Village Zone Text
04PC02 – Adopted Villebois Village Master Plan

LP-2005-02-00006 – Revised Villebois Village Master Plan
LP-2005-12-00012 – Revised Villebois Village Master Plan (Parks and Recreation)
LP10-0001 – Amendment to Villebois Village Master Plan (School Relocation from SAP North to SAP East)

Quasi Judicial:
DB07-0054 et seq – SAP-North
DB07-0087 et seq – PDP-1N, Arbor at Villebois
DB11-0024 et seq – PDP-1N Modification, SAP North Amendment Polygon NW
DB12-0066 et seq – PDP-1N Modification, SAP North Amendment Polygon NW

4. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

CONCLUSIONARY FINDINGS:

NOTE: Pursuant to Section 4.014 the burden of proving that the necessary findings of fact can be made for approval of any land use or development application rests with the applicant in the case.

GENERAL INFORMATION

Section 4.008 Application Procedures-In General

Review Criteria: This section lists general application procedures applicable to a number of types of land use applications and also lists unique features of Wilsonville's development review process.
Finding: These criteria are met.
Details of Finding: The application is being processed in accordance with the applicable general procedures of this Section.

Section 4.009 Who May Initiate Application

Review Criterion: "Except for a Specific Area Plan (SAP), applications involving specific sites may be filed only by the owner of the subject property, by a unit of government that is in the process of acquiring the property, or by an agent who has been authorized by the owner, in writing, to apply."
Finding: This criterion is satisfied.
Details of Finding: The application has been submitted on behalf of the property owner, Polygon at Villebois II, and LLC Polygon at Villebois III, LLC.

Subsection 4.010 (.02) Pre-Application Conference

Review Criteria: This section lists the pre-application process
Finding: These criteria are satisfied.
Details of Finding: A pre-application conference was held on March 28, 2013 in accordance with this subsection.

Subsection 4.011 (.02) B. Lien Payment before Application Approval

Review Criterion: "City Council Resolution No. 796 precludes the approval of any development application without the prior payment of all applicable City liens for the subject property. Applicants shall be encouraged to contact the City Finance Department to verify that there are no outstanding liens. If the Planning Director is advised of outstanding liens while an application is under consideration, the Director shall advise the applicant that payments must be made current or the existence of liens will necessitate denial of the application."
Finding: This criterion is satisfied.
Details of Finding: No applicable liens exist for the subject property. The application can thus move forward. Section IIID of the applicant's notebook, Exhibit B1, includes a copy of certification of assessments and liens.

Subsection 4.035 (.04) A. General Site Development Permit Submission Requirements

Review Criteria: "An application for a Site Development Permit shall consist of the materials specified as follows, plus any other materials required by this Code." Listed 1. through 6. j.
Finding: These criteria are satisfied.
Details of Finding: The applicant has provided all of the applicable general submission requirements contained in this subsection.

Section 4.110 Zoning-Generally

Review Criteria: "The use of any building or premises or the construction of any development shall be in conformity with the regulations set forth in this Code for each Zoning District in which it is located, except as provided in Sections 4.189 through 4.192." "The General Regulations listed in Sections 4.150 through 4.199 shall apply to all zones unless the text indicates otherwise."
Finding: These criteria are satisfied.
Details of Finding: This proposed development is in conformity with the Village zoning district and general development regulations listed in Sections 4.150 through 4.199 have been applied in accordance with this Section.

The applicant's findings in Section IIA of their notebook, Exhibit B1, respond to the majority of the applicable criteria.

Village Zone

Subsection 4.125 (.02) Permitted Uses in Village Zone

A1. **Review Criteria:** This subsection lists the uses typically permitted in the Village Zone, including single-family detached dwellings, row houses, and non-commercial parks, playgrounds, and recreational facilities.
Finding: These criteria are satisfied.
Details of Finding: The uses proposed includes single-family homes, parks and playgrounds, and open space which are permitted in the Village Zone.

Subsection 4.125 (.05) Development Standards Applying to All Development in the Village Zone

"All development in this zone shall be subject to the V Zone and the applicable provisions of the Wilsonville Planning and Land Development Ordinance. If there is a conflict, then the standards of this section shall apply. The following standards shall apply to all development in the V zone:"

Subsection 4.125 (.05) A. 1. Block, Alley, Pedestrian and Bicycle Standards: Maximum Block Perimeter

A2. **Review Criteria:** "Maximums Block Perimeter: 1,800 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent a block perimeter from meeting this standard.
Finding: These criteria are satisfied.
Details of Finding: Blocks within the proposed PDP plan meet the maximum 1,800-foot block perimeter, except as follows.
• The block bounded by Palermo Street, Barber Street, Costa Circle West, Ravenna Loop, and the north property line will exceed the maximum 1,800-foot block perimeter. This block includes Open Space 2 and Regional Park 4. Open Space 2 includes a large forested area that is designated as a Significant Resource Overlay Zone (SROZ). The SROZ prevents this block from meeting the block perimeter standard; however, this block includes trails throughout both parks. A paved path is provided from Palermo Street to Ravenna Loop pursuant to PDA 6 of case file DB07-0054.
• The remaining blocks along the northern portion of the PDP can only be developed to the property line. Compliance of these blocks with the 1,800-foot block perimeter standard cannot be fully determined until the abutting property to the north develops. However, the proposed blocks include provisions for pedestrian/bicycle connections or trails.

Subsection 4.125 (.05) A. 2. Block, Alley, Pedestrian and Bicycle Standards: Maximum Spacing Between Streets for Local Access

A3. **Review Criteria:** "If the maximum spacing for streets for local access exceeds 530 feet, intervening pedestrian and bicycle access shall be provided, with a maximum spacing of 330 feet from those local streets, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions from meeting this standard."

Finding: These criteria are satisfied.

Details of Finding: Streets within the proposed PDP plan meet the maximum 530-foot spacing standard, except as follows.

• The block bounded by Geneva Loop, Villebois Drive, Stockholm Avenue and Cherbourg Lane will exceed the maximum 530-foot spacing standard. Topographic variations prevent cross streets meeting the 8% slope requirement in Subsection 4.125 (.09) A. 3.

• The block bounded by Palermo Street, Barber Street, Costa Circle West, Ravenna Loop, and the north property line will exceed the maximum 530-foot spacing standard. This block includes Open Space 2 and Regional Park 4. Open Space 2 includes a large forested area that is designated as a Significant Resource Overlay Zone (SROZ). The SROZ prevents this block from meeting the block spacing standard; however, this block includes trails throughout both parks.

• The block including the 10 Standard lots along Palermo Street will also exceed the 530-foot spacing standard due to the fact that it abuts Grahams Ferry Road to the west, which is a minor arterial with access spacing limitations.

As described above, barriers exist that prevent three (3) blocks in PDP 2 North from meeting the maximum street spacing. Bike/pedestrian connections are provided, where feasible.

Subsection 4.125 (.05) A. 3. Block, Alley, Pedestrian and Bicycle Standards: Intervening Pedestrian and Bicycle Access

A4. **Review Criteria:** "If the maximum spacing for streets for local access exceeds 530 feet, intervening pedestrian and bicycle access shall be provided, with a maximum spacing of 330 feet from those local streets, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions from meeting this standard."

Finding: These criteria are satisfied.

Details of Finding:

The block bounded by Geneva Loop, Villebois Drive, Stockholm Avenue and Cherbourg Lane has intervening paths north of Dundee Lane and just to the northwest of Fir Park meeting these standards.

The block bounded by Palermo Street, Barber Street, Costa Circle West, Ravenna Loop has an intervening path extending from a point opposite Geneva Loop through to Palermo street meeting these standards.

The block including the 10 Standard lots along Palermo Street have no crossings shown in the Master Plan or SAP documents for the subject property, although a path will likely be required in the future phase to the north aligning with the sidewalk on the south side of future Firenze street.

Subsection 4.125 (.05) B. Access

A5. **Review Criterion:** "All lots with access to a public street, and an alley, shall take vehicular access from the alley to a garage or parking area, except as determined by the City Engineer."
Finding: This criterion is satisfied.
Details of Finding: All of the lots within the proposed PDP that have frontage on a public street and an alley will take vehicular access from an alley to a garage or parking area. See also Finding E3 and Condition of Approval PDE 7.

Table V-1, Development Standards

A6. **Review Criteria:**

Table V-1: Development Standards

Building Type	Min. Lot Size (sq.ft.)	Min. Lot Width (ft.)	Min. Lot Depth (ft.)	Max. Lot Coverage (note)	Min. Frontage Width [10, 12] (%age)	Max. Bldg. Height [9] (ft.)	Setbacks [10, 13, 20] Front Min. (ft.)	Front Max. (ft.)	Rear Min. (ft.)	Side Min. (ft.)	Alley-Loaded Garage (note)	Street-Loaded Garage (note)
Commercial Buildings - Village Center [14]	NR	NR	NR	1	90	60	NR [3]	5	NR	NR	NR	NA
Hotels - Village Center [14]	NR	NR	NR	1	80	60	NR [3]	15	NR	NR	NR	NA
Mixed Use Buildings - Village Center [14]	NR	NR	NR	1	90	60	NR [3]	8	NR	NR	NR	NA
Multi-Family Dwellings - Village Center [14]	NR	NR	NR	1	80	45	5 [4]	15	NR	NR	NR	NA
Row Houses [11] - Village Center [14]	NR	NR	NR	1	80	45	5 [4]	10	NR	NR	NR	NA
Commercial Buildings	NR	NR	NR	1	60	45	NR	15	NR	NR	NR	NA
Mixed Use Buildings	NR	NR	NR	1	60	45	NR	15	NR	NR	NR	NA
Multi-Family Dwellings	NR	NR	NR	1	60	45	8 [4]	15	NR	NR	NR	NA
Row Houses [11]	NR	15	50	1	80	45	8 [5]	15	NR	NR	NR	NA
Duplexes	4,000	45	70	2	60 [16]	35	12 [5, 6]	20 [6]	5	5 [15]	7	8,17,18
Single-Family Dwellings	2,250	35	50	2	60 [16]	35	12 [5, 6]	20 [6]	5	5 [15]	7	8,17

Notes: NR No Requirement
NA Not Allowed
1 Lot < 8000sf: NR; Lot >8000sf: 80% (Max. Lot Coverage)
2 Small lots: 75%, Medium Lots: 65%, Standard and Large Lots: 55%, Estate Lots: 45% Maximum Lot Coverage
On lots where detached accessory buildings are built, maximum lot coverage may be increased by 10%.
3 Bay windows, balconies, and other structural building projections above 8 ft. may encroach up to 5 ft. into the Public Way; canopies, awnings, and other non-structural projections may encroach up to 8 ft. into the Public Way.
4 Porches, stairs, stoops, decks, canopies, balconies, bay windows, chimneys, awnings, and other building projections may encroach up to the Public Way.
5 Porches, stoops, decks, canopies, balconies, bay windows, chimneys, awnings, and other building projections may encroach to within 8 ft. of the Public Way. Stairs may encroach to the Public Way.
6 For Standard, or Large Lots on Collector Avenues, front setbacks are 20 ft. min., (13' setback to porch), side street setbacks are 15' (8' setback to porch). Pie-shaped lots or lots with significant trees or grade banks at frontage have no maximum front setback.
7 The garage setback from alley shall be between 3 and 5 foot or, when as optional parking space is located between the garage and the alley, shall be 16 ft. minimum. Lots with important trees, as identified in the Master Plan, or grade differences at the alley, affecting garage location shall be exempt from this requirement.
8 Street-loaded garages shall be a minimum 20 ft. front setback to face of garage, and located a minimum of 5 ft. behind main façade of the associated dwelling unit.
9 Vertical encroachments are allowed up to ten additional feet, for up to 10% of the building footprint; vertical encroachments shall not be habitable space.
10 For Village Center buildings with lots fronting two or more streets, at least two facades shall be subject to the minimum frontage width and front setback requirements.
11 Row Houses are typically attached, but may be detached within the Village Center Boundary. When attached, no more than ten units shall be contiguous along a street edge. When row houses are detached, the Minimum Frontage Width is 65%. The Minimum Frontage Width for detached row houses may be less than 65% on corner lots or to accommodate the curve radius of street frontage, public utility easements, important trees, grade differences, public open space requirements, or as otherwise approved by the DRB.
12 See Definitions, 4.125.01, for measurement of Minimum Frontage Width.
13 Front Setback is measured as the offset of the front lot line or a vehicular or pedestrian access easement line. On lots with alleys, Rear Setback shall be measured from the rear lot line abutting the alley.
14 See Figure 2A - Village Center Boundary & Land Use Plan in the Villebois Village Master Plan for areas included within the Village Center.
15 On Estate Lots and Large Lots with frontage 70 ft. or wider, the minimum combined side yard setbacks shall total 15 ft. with a minimum of 5 ft. On Small and Medium Lots, minimum side setback shall be 0 ft. or as required by Building Code.
16 For cluster housing with lots arranged on a courtyard, frontage shall be measured at the front door face of the building adjacent to a public right of way or a public pedestrian access easement linking the courtyard with the Public Way.
17 Dwellings on lots without alley access shall be at least 36 feet wide.
18 Duplexes with front-loaded garages are limited to one shared standard-sized driveway/apron.
19 Maximum setbacks may be increased as necessary to accommodate deeper porches, building code, public utility easements or public open space requirements.
20 Lots are categorized as small, medium, standard, large or estate as shown in the Pattern Book.
[Table V-1 amended by Ord. 667 on 8/17/09; Ord. 682, 9/9/10]

Finding: These criteria are satisfied.
Details of Finding: In previous PDP's it has consistently been interpreted to allow the lot width and lot sizes to be governed by the Pattern Book. All lot dimensions and sizes meet the standards established in the SAP North Pattern Book.

Subsection 4.125 (.07) Table V-2 Off-Street Parking, Loading & Bicycle Parking

A7. **Review Criteria:**

Table V-2: Off Street Parking Requirements

Permitted or Conditional Use	Min. Vehicle Spaces	Max. Vehicle Spaces	Bicycle Short-term (Spaces)	Bicycle Long-term (Spaces)
Permitted Uses				
Single-Family Detached Dwellings	1.0/DU	NR	NR	NR
Single-Family Accessory Dwelling Units*	1.0/DU	NR	NR	NR
Duplex	1.0/DU	NR	NR	NR
Row Houses	1.0/DU	NR	NR	NR
Multi-Family Dwellings	1.0/1 Bdr 1.5/2 Bdr 1.75/3 Bdr	NR	1 per 20 units Min. of 2	1 per 4 units Min. of 2
Community Housing	1 per 4 residents	1 per unit	None	1 per 8 residents Min. of 2
Commercial Uses				
Convenience Store	2/1000 sf	5/1000 sf	1 per 5000 sf Min. of 2	1 per 12,000 sf Min. of 2
Restaurant/Pub	2/1000 sf	10/1000 sf	1 per 5000 sf Min. of 2	1 per 12,000 sf Min. of 2
Child Day Care	0.2 per student/staff	0.3 per student/staff	None	1 per 10,000 sf Min. of 2
Medical/Dental	3/1000 sf	4/1000 sf	1 per 40,000 sf Min. of 2	1 per 70,000 sf Min. of 2
All other commercial uses	2/1000 sf	4/1000 sf	1 per 10,000 sf Min. of 2	1 per 40,000 sf Min. of 2
Conditional Uses				
Schools	0.2 per student/staff	0.3 per student/staff	0.3 per student/staff	0.2 per classroom
Recreational Facilities	3/1000 sf [1]	5/1000 sf [1]	1 per 3,000 sf Min. of 4	1 per 3000 sf Min. of 4
Conference Center	0.3 per seat	0.5 per seat	1 per 15 seats Min. of 2	1 per 40 seats Min. of 10
Library/Museum	2/1000 sf	4/1000 sf	1 per 1000 sf Min. of 6	1 per 1000 sf Min. of 6
Religious Institution	.25 per seat	.5 per seat	1 per 2,000 sf Min. of 2	1 per 4,000 sf Min. of 2
Theater	.25 per seat	.5 per seat	1 per 20 seats Min. of 2	1 per 50 seats Min. of 4
Overnight Lodging Facility	1 per room	1.5 per room	1 per 20 rooms Min. of 2	1 per 20 rooms Min. of 2
Light Manufacturing/Research and Development	2/1000 sf	4/1000 sf	1 per 10,000 sf Min. of 2	1 per 40,000 sf Min. of 2
All other Conditional Uses	2/1000 sf	4/1000 sf	1 per 10,000 sf Min. of 2	1 per 40,000 sf Min. of 2

Notes: [1] 1/1000 sf min. for court facilities
NR No requirement
* See WC Section 4.113(.11) Assessory Dwelling Units

[Table 4-2 amended by Ord. 677, 3/1/10]

Finding: These criteria are satisfied.

Details of Finding: At least one (1) parking space is provided for each dwelling unit. The houses are designed to provide a two-car garage.

Subsection 4.125 (.08) Parks & Open Space

A8. **Review Criteria:** This subsection prescribes the open space requirement for development in the Village Zone.
Finding: These criteria are satisfied.
Details of Finding: The applicant states the following regarding these requirements, "The Parks Master Plan for Villebois states that there are 57.87 acres of parks and 101.46 acres of open space for a total of 159.33 acres within Villebois, approximately 33%. SAP North includes parks and open space areas consistent with the Master Plan. The proposed PDP includes the parks and open space areas shown in the Villebois Village Master Plan for this area, with increased areas and new linear greens and pocket parks.

Subsection 4.125 (.09) Street Alignment and Access Improvements

Subsection 4.125 (.09) A. 1. a. Street Alignment and Access Improvements Conformity with Master Plan, etc.

A9. **Review Criterion:** "All street alignment and access improvements shall conform to the Villebois Village Master Plan, or as refined in the Specific Area Plan, Preliminary Development Plan, or Final Development Plan . . ."
Finding: This criterion is satisfied.
Details of Finding: The street alignments and access improvements within this PDP are generally consistent with those approved in the Villebois Village Master Plan and SAP North, as refined by this PDP application. See Request B and Findings B2 through B7.

Subsection 4.125 (.09) A. 1. a. i. Street Improvement: Conformity with Public Works Standards and Continuation of Streets

A10. **Review Criteria:** "All street improvements shall conform to the Public Works Standards and shall provide for the continuation of streets through proposed developments to adjoining properties or subdivisions, according to the Master Plan."
Finding: These criteria are satisfied.
Details of Finding: All street improvements within this PDP will comply with the applicable Public Works Standards. The street system within this PDP is designed to provide for the continuation of streets within Villebois and to adjoining properties or subdivisions according to the Master Plan.

Subsection 4.125 (.09) A. 1. a. ii. Streets Developed According to Master Plan

A11. **Review Criterion:** "All streets shall be developed according to the Master Plan."
Finding: This criterion is satisfied.
Details of Finding: All streets within this PDP will be developed with curbs, landscape strips, sidewalks, and bikeways or pedestrian pathways as depicted on the Circulation Plan, applicant's sheet 7.1 and 7.2 in Exhibit B2, and in accordance with the Master Plan.

Subsection 4.125 (.09) A. 2. a. & b. Intersections of Streets: Angles and Intersections

A12. **Review Criteria:**

- "Angles: Streets shall intersect one another at angles not less than 90 degrees, unless existing development or topography makes it impractical.
- Intersections: If the intersection cannot be designed to form a right angle, then the right-of-way and paving within the acute angle shall have a minimum of thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than ninety (90) degrees shall require approval by the City Engineer after consultation with the Fire District."

Finding: These criteria are satisfied.

Details of Finding: The Circulation Plan, applicant's sheet 7.1 and 7.2 in Exhibit B2, demonstrates that all proposed streets will intersect at angles consistent with the above standards.

Subsection 4.15 (.09) A. 2. c. Intersection of Streets: Offsets

A13. **Review Criterion:** "Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections shall be separated by at least:

- 1000 ft. for major arterials
- 600 ft. for minor arterials
- 100 ft. for major collector
- 50 ft. for minor collector"

Finding: These criteria are satisfied.

Details of Finding: The plan sheets demonstrate that opposing intersections on public streets are offset, as appropriate, so that no danger to the traveling public is created.

Subsection 4.125 (.09) A. 2. d. Curb Extensions

A14. **Review Criteria:** "Curb extensions at intersections shall be shown on the Specific Area Plans required in subsection 4.125(.18)(C) through (F) below, and shall:

- Not obstruct bicycle lanes on collector streets.
- Provide a minimum 20 foot wide clear distance between curb extensions at all local residential street intersections shall have, shall meet minimum turning radius requirements of the Public Works Standards, and shall facilitate fire truck turning movements as required by the Fire District."

Finding: These criteria are satisfied.

Details of Finding: Curb extensions are shown on the Circulation Plan, sheets 7.1 and 7.2 in Exhibit B2. Curb extensions will not obstruct bicycle lanes on collector streets. The plan sheets illustrate that all local street intersections will have a minimum 20 foot wide clear distance between curb extensions.

Subsection 4.125 (.09) A. 3. Street Grades

A15. **Review Criteria:** "Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate, grades in excess of 8%, but not more than 12%, may be permitted for short distances, as approved by the City Engineer, where topographic conditions or existing improvements warrant modification of these standards."

Finding: These criteria are satisfied.
Details of Finding: The Grading & Erosion Control Plan, sheets 5.1 and 5.2 of Exhibit B2, as well as 'Exhibit A' of Exhibit B6, demonstrate that proposed streets comply with this standard. The City Engineer has approved the profile for Dundee Lane at 11.87% grade.

Subsection 4.125 (.09) A. 4. Centerline Radius Street Curves

A16. **Review Criterion:** "The minimum centerline radius street curves shall be as follows:

- Arterial streets: 600 feet, but may be reduced to 400 feet in commercial areas, as approved by City Engineer.
- Collector streets: 600 feet, but may be reduced to conform with the Public Works Standards, as approved by the City Engineer.
- Local streets: 75 feet"

Finding: These criteria are satisfied.
Details of Finding: Compliance is shown on the plan sheets.

Subsection 4.125 (.09) A. 5. Rights-of-way

A17. **Review Criteria:** Pursuant to subsection (.09) A. above, the provisions of 4.177 apply for rights-of-way as no other provisions are noted.
Finding: These criteria are satisfied.
Details of Finding: Proposed rights-of-way are shown on the applicant's plan sheets, including sheets 4.1 through 4.5, Tentative Subdivision Plat, in Exhibit B2. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with recordation of a final plat in accordance with Section 4.177.

Subsection 4.125 (.09) A. 6. Access Drives

A18. **Review Criteria:** Access drives are required to be 16 feet for two-way traffic. Otherwise, pursuant to subsection (.09) A. above, the provisions of 4.177 apply for access drives as no other provisions are noted.
Finding: These criteria are satisfied.
Details of Finding: The applicant states, "Access drives (alleys) will be paved at least 16-feet in width within a 20-foot tract, as shown on the Circulation Plan. In accordance with Section 4.177, all access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions."

Subsection 4.125 (.09) A. 7. Clear Vision Areas

A19. **Review Criteria:** Pursuant to subsection (.09) A. above, the provisions of 4.177 apply for clear vision areas as no other provisions are noted.
Finding: These criteria are satisfied.
Details of Finding: The applicant states that clear vision areas will be provided and maintained in compliance with the Section 4.177.

Subsection 4.125 (.09) A. 8. Vertical Clearance

A20. **Review Criteria:** Pursuant to subsection (.09) A. above, the provisions of 4.177 apply for vertical clearance as no other provisions are noted.
Finding: These criteria are satisfied.
Details of Finding: The applicant states that Vertical clearance will be provided and maintained in compliance with the Section 4.177.

Subsection 4.125 (.09) A. 9. Interim Improvement Standards

A21. **Review Criteria:** Pursuant to subsection (.09) A. above, the provisions of 4.177 apply for interim improvement standards as no other provisions are noted.
Finding: This criterion will be satisfied.
Details of Finding: No interim improvement standards are proposed related to the interim improvement standards described in Section 4.177.

Subsection 4.125 (.10) Sidewalk and Pathway Improvement Standards

A22. **Review Criteria:** "The provisions of Section 4.178 shall apply within the Village zone."
Finding: These criteria are satisfied.
Details of Finding: The applicant states, "All sidewalks and pathways within SAP North will be constructed in accordance with the standards of Section 4.178 and the Villebois Village Master Plan." Sidewalks and pathways are shown in the circulation plan and street cross-sections. See applicant's sheets 7.1 through 7.3, Exhibit B2.

Subsection 4.125 (.11) Landscaping, Screening and Buffering

A23. **Review Criteria:** "Except as noted below, the provisions of Section 4.176 shall apply in the Village zone:
- Streets in the Village Zone shall be developed with street trees as described in the Community Elements Book."

Finding: These criteria are satisfied.
Details of Finding: The appropriate landscaping is provided. The proposed street trees are among the choices provided in the Community Elements Book.

Subsection 4.125 (.12) Signage and Wayfinding

A24. **Review Criteria:** "Except as this subsection may otherwise be amended, or until such time as a Signage and Wayfinding Plan is approved as required by Section 4.125(.18)(D)(2)(f), signs within the Village zone shall be subject to provisions of Section 4.156."
Finding: These criteria are satisfied.
Details of Finding: The SAP North Signage & Wayfinding Plan does not require any signage for the subject area that would otherwise be subject to a sign permit.

Subsection 4.125 (.13) Design Principles Applying to the Village Zone

A25. **Review Criteria:** "The following design principles reflect the fundamental concepts, and support the objectives of the Villebois Village Master Plan, and guide the fundamental qualities of the built environment within the Village zone.

- The design of landscape, streets, public places and buildings shall create a place of distinct character.
- The landscape, streets, public places and buildings within individual development projects shall be considered related and connected components of the Villebois Village Master Plan.
- The design of streets and public spaces shall provide for and promote pedestrian safety, connectivity and activity.
- The design of exterior lighting shall minimize off-site impacts, yet enable functionality."

Finding: These criteria are satisfied.

Details of Finding: The Architectural Pattern Book and Community Elements Book ensure the design meets the fundamental design concepts and support the objectives of the Villebois Village Master Plan. By complying with an approved Architectural Pattern Book and Community Elements Book the design of the PDP will satisfy these criteria. See also Final Development Plan, Request G.

Subsection 4.125 (.14) A. 1. a. Design Standards: Flag Lots

A26. **Review Criterion:** "Flag lots are not permitted."

Finding: This criterion is satisfied.

Details of Finding: No flag lots are proposed.

Subsection 4.125 (.14) A. 2. a. - e. and h. – k. Building and Site Design Requirements

A27. **Review Criteria:** "Building and site design shall include:

- Proportions and massing of architectural elements consistent with those established in an approved Architectural Pattern Book or Village Center Architectural Standards.
- Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Architectural Pattern Book, Community Elements Book or approved Village Center Architectural Standards.
- Protective overhangs or recesses at windows and doors.
- Raised stoops, terraces or porches at single-family dwellings.
- Exposed gutters, scuppers, and downspouts, or approved equivalent.
- Building elevations of block complexes shall not repeat an elevation found on an adjacent block.
- Building elevations of detached buildings shall not repeat an elevation found on buildings on adjacent lots.
- A porch shall have no more than three walls.
- A garage shall provide enclosure for the storage of no more than three motor vehicles, as described in the definition of Parking Space."

Finding: These criteria are satisfied or will be satisfied by Conditions of Approval.

Details of Finding: The application requests PDP approval for single family detached houses. Conformance with the Pattern Book and Community Elements Book will assure consistency with the Design Standards of subsection (.14). Conformance with the Architectural Pattern Book will be reviewed at the issuance of each building permit. Compliance with the Community Elements Book is being reviewed as part of Request G

Final Development Plan. In order to increase consistency with the Architectural Pattern Book and other development elsewhere in Villebois Condition of Approval PDA 5 requires courtyard fencing consistent with the pattern book and the architectural style of the home. This includes installation of up to forty-eight inch (48") dry stack rock or brick wall along the front of the lot or side of a lot to create a fairly level and usable front yard outdoor living area enclosed by the courtyard fencing. The applicant/owner can install a greater than forty-eight inch (48") wall, but if maintaining the required five (5) percent slope requires greater than a forty-eight inch (48") wall the applicant/owner can request an exception from the courtyard wall and courtyard slope requirements as part of building plan review. The conceptual drawings in Section IIF of the applicant's notebook, Exhibit B1, includes only American style homes for the standard lots. Condition of Approval PDA 6 requires, pursuant to the Architectural Pattern Book, at least two different architectural styles be used in the block along Palermo Street backing up to Grahams Ferry Road, one of which must be a European style. Condition of Approval PDA 7 requires building foundations exposed to the public view shed due to elevation differences on the lot to receive brick or stone facades consistent with the architectural pattern book.

Subsection 4.125 (.14) A. 2. g. Landscape Plans

A28. **Review Criterion:** "Building and site design shall include:

- A landscape plan in compliance with Sections 4.125(.07) and (.11), above."

Finding: This criterion is satisfied.

Details of Finding: The appropriate landscape plans have been provided. See Landscape Sheets in Exhibit B3.

Subsection 4.125 (.14) A. 2. f. Protection of Significant Trees

A29. **Review Criterion:** "Building and site design shall include:

- The protection of existing significant trees as identified in an approved Community Elements Book."

Finding: This criterion is satisfied.

Details of Finding: Tree protection information is provided. See also Request F.

Subsection 4.125 (.14) A. 3. Lighting and Site Furnishings

A30. **Review Criteria:** "Lighting and site furnishings shall be in compliance with the approved Architectural Pattern Book, Community Elements Book, or approved Village Center Architectural Standards."

Finding: These criteria are satisfied or will be required to do so by Condition of Approval PDA 2.

Details of Finding: Park plans show furnishings consistent with the Community Elements Book. A condition of approval ensure the final street lighting installation is consistent with the Community Elements Book.

Subsection 4.125 (.14) A. 4. Building Systems

A31. **Review Criteria:** "Building systems, as noted in Tables V-3 and V-4 (Permitted Materials and Configurations), below, shall comply with the materials, applications and configurations required

therein. Design creativity is encouraged. The LEED Building Certification Program of the U.S. Green Building Council may be used as a guide in this regard."

Finding: These criteria are satisfied.

Details of Finding: Subsequent Building Permit applications will review proposed buildings for consistency with the criteria of Table V-3 and the Architectural Pattern Book.

Subsection 4.125 (.18) G. Preliminary Development Plan Approval Process

Subsection 4.125 (.18) G. 1. a. Preliminary Development Plan: Submission Timing

A32. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall be filed with the City Planning Division for the entire SAP, or when submission of the SAP in phases has been authorized by the Development Review Board, for a phase in the approved sequence."

Finding: This criterion is satisfied.

Details of Finding: This PDP addresses Phase 1B on the amended SAP North Phasing Plan. This PDP includes a request to amend the SAP North Phasing." See Request C.

Subsection 4.125 (.18) G. 1. b. Preliminary Development Plan: Owners' Consent

A33. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall be made by the owner of all affected property or the owner's authorized agent;"

Finding: This criterion is satisfied.

Details of Finding: This application is made by Fred Gast for Polygon at Villebois II, LLC and Polygon at Villebois III, LLC the property owner.

Subsection 4.125 (.18) G. 1. c. Preliminary Development Plan Permit Process: Proper Form & Fees

A34. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall be filed on a form prescribed by the City Planning Division and filed with said division and accompanied by such fee as the City Council may prescribe by resolution;"

Finding: These criteria are satisfied.

Details of Finding: The applicant has used the prescribed form and paid the required application fees.

Subsection 4.125 (.18) G. 1. d. Preliminary Development Plan Permit Process: Professional Coordinator

A35. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall set forth the professional coordinator and professional design team for the project;"

Finding: This criterion is satisfied.

Details of Finding: A professional design team is working on the project with Stacy Connery AICP from Pacific Community Design as the professional coordinator.

Subsection 4.125 (.18) G. 1. e. Preliminary Development Plan Permit Process: Mixed Uses

A36. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall state whether the development will include mixed land uses, and if so, what uses and in what proportions and locations."
Finding: This criterion is satisfied.
Details of Finding: The proposed PDP includes only residential uses with supporting recreational amenities.

Subsection 4.125 (.18) G. 1. f. Preliminary Development Plan Permit Process: Land Division

A37. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall include a preliminary land division (concurrently) per Section 4.400, as applicable."
Finding: This criterion is satisfied.
Details of Finding: A preliminary subdivision plat has been submitted concurrently with this request. See Request E.

Subsection 4.125 (.18) G. 1. g. Preliminary Development Plan Permit Process: Zone Map Amendment

A38. **Review Criterion:** "An application for approval of a Preliminary Development Plan for a development in an approved SAP shall include a concurrent application for a Zone Map Amendment (i.e., Zone Change) for the subject phase."
Finding: This criterion is satisfied.
Details of Finding: A zone change request has been submitted concurrently with this request. See Request D.

Subsection 4.125 (.18) G. 2. a. – c. Preliminary Development Plan Permit Process: Information Required

A39. **Review Criteria:** "The application for Preliminary Development Plan approval shall include conceptual and quantitatively accurate representations of the entire development sufficient to demonstrate conformance with the approved SAP and to judge the scope, size and impact of the development on the community and shall be accompanied by the following information:

- A boundary survey or a certified boundary description by a surveyor licensed in the State of Oregon.
- Topographic information sufficient to determine direction and percentage of slopes, drainage patterns, and in environmentally sensitive areas, (e.g., flood plain, wetlands, forested areas, steep slopes or adjacent to stream banks). Contour lines shall relate to North American Vertical Datum of 1988 and be at minimum intervals as follows:
    - One (1) foot contours for slopes of up to five percent (5%);
    - Two (2) foot contours for slopes from six percent (6%) to twelve (12%);
    - Five (5) foot contours for slopes from twelve percent (12%) to twenty percent (20%). These slopes shall be clearly identified, and
    - Ten (10) foot contours for slopes exceeding twenty percent (20%).

- The location of areas designated Significant Resource Overlay Zone (SROZ), and associated 25-foot Impact Areas, within the PDP and within 50 feet of the PDP boundary, as required by Section 4.139.

Finding: These criteria are satisfied.

Details of Finding: A certified boundary description by a surveyor licensed in the State of Oregon is provided as the legal description and sketch for the zone map amendment See Section IVC of the applicant's notebook, Exhibit B1. Boundary information for the City property and the portions of Tax Lots 2916 and 2919 will be prepared for the City Council Zoning Order. Topographic information and SROZ information in accordance with Sections 4.125(.18) G. 2. b. & c. is shown on sheets 2.1, 2.2, and 9.3 of Exhibit B2.

Subsection 4.125 (.18) G. 2. d. Preliminary Development Plan Permit Process: Land Area Tabulation

A40. **Review Criteria:** "A tabulation of the land area to be devoted to various uses, and a calculation of the average residential density per net acre."

Finding: These criteria are satisfied.

Details of Finding: Following is a tabulation of land area devoted to the various uses and a calculation of net residential density:

Approx. Gross Acreage (all properties) 28.91 Acres
Parks 19.12 Acres
Public Streets 3.10 Acres
Lots and Alleys 6.69 Acres

Net Residential Density: 90 lots / 6.69 Acres = 13.45 units per net acre

Subsection 4.125 (.18) G. 2. e. Preliminary Development Plan Permit Process: Streets, Alleys, and Trees

A41. **Review Criteria:** "The location, dimensions and names, as appropriate, of existing and platted streets and alleys on and within 50 feet of the perimeter of the PDP, together with the location of existing and planned easements, sidewalks, bike routes and bikeways, trails, and the location of other important features such as section lines, section corners, and City boundary lines. The plan shall also identify all trees 6 inches and greater d.b.h. on the project site only."

Finding: These criteria are satisfied.

Details of Finding: Information on planned alleys and streets are provided or the information is readily available. Easements, sidewalks, bike routes and bikeways, trails, and other relevant features are shown. The required trees are shown.

Subsection 4.125 (.18) G. 2. f. Preliminary Development Plan Permit Process: Building Drawings

A42. **Review Criteria:** "Conceptual drawings, illustrations and building elevations for each of the listed housing products and typical non-residential and mixed-use buildings to be constructed within the Preliminary Development Plan boundary, as identified in the approved SAP, and where required, the approved Village Center Design."

Finding: This criterion is satisfied.

Details of Finding: The proposed PDP includes Standard, Medium, Small Detached, Cottage, and Row House housing products, along with a number of variations within these product types based on varying lot widths, lot depths, and split grading. Conceptual elevations are included in Section IIF of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) G. 2. g. Preliminary Development Plan Permit Process: Utility Plan

A43. **Review Criterion:** "A composite utility plan illustrating existing and proposed water, sanitary sewer, and storm drainage facilities necessary to serve the SAP."
Finding: This criterion is satisfied.
Details of Finding: A composite utility plan has been provided. See applicant's sheets 6.1 and 6.2 in Exhibit B2.

Subsection 4.125 (.18) G. 2. h. Preliminary Development Plan Permit Process: Phasing Sequence

A44. **Review Criterion:** "If it is proposed that the Preliminary Development Plan will be executed in Phases, the sequence thereof shall be provided."
Finding: This criterion is satisfied.
Details of Finding: The PDP is proposed to be executed in three phases. The proposed phases of the subject PDP are shown on the PDP Phasing Plan, applicant's sheets 11.1 and 11.2 in Exhibit B2 as well as Exhibits B4 and B5.

Subsection 4.125 (.18) G. 2. i. Preliminary Development Plan Permit Process: Security for Capital Improvements

A45. **Review Criterion:** "A commitment by the applicant to provide a performance bond or other acceptable security for the capital improvements required by the project."
Finding: This criterion is satisfied.
Details of Finding: The applicant states "the applicant will provide a performance bond or other acceptable security for the capital improvements required by the project."

Subsection 4.125 (.18) G. 2. j. Preliminary Development Plan Permit Process: Traffic Report

A46. **Review Criterion:** "At the applicant's expense, the City shall have a Traffic Impact Analysis prepared, as required by Section 4.030(.02)(B), to review the anticipated traffic impacts of the proposed development. This traffic report shall include an analysis of the impact of the SAP on the local street and road network, and shall specify the maximum projected average daily trips and maximum parking demand associated with buildout of the entire SAP, and it shall meet Subsection 4.140(.09)(J)(2)."
Finding: This criterion is satisfied.
Details of Finding: The required traffic report has been provided, and can be found in Section IID of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) H. PDP Application Submittal Requirements

Subsection 4.125 (.18) H. 1. PDP Application Submittal Requirements: General

A47. **Review Criteria:** "The Preliminary Development Plan shall conform with the approved Specific Area Plan, and shall include all information required by (.18)(D)(1) and (2), plus the following:

- The location of water, sewerage and drainage facilities;
- Conceptual building and landscape plans and elevations, sufficient to indicate the general character of the development;
- The general type and location of signs;
- Topographic information as set forth in Section 4.035;
- A map indicating the types and locations of all proposed uses; and
- A grading and erosion control plan illustrating existing and proposed contours as prescribed previously in this section."

Finding: These criteria are satisfied.

Details of Finding: As stated by the applicant, "the proposed PDP generally conforms to the approved SAP North, with the proposed refinements described in the following sections of this report. As demonstrated above, the PDP application includes all information required by 4.125(.18)(D)(1) and (2), as applicable to a PDP."

Subsection 4.125 (.18) H. 2. PDP Application Submittal Requirements: Traffic Report

A48. **Review Criteria:** "In addition to this information, and unless waived by the City's Community Development Director as enabled by Section 4.008(.02)(B), at the applicant's expense, the City shall have a Traffic Impact Analysis prepared, as required by Section 4.030(.02)(B), to review the anticipated traffic impacts of the proposed development. This traffic report shall include an analysis of the impact of the PDP on the local street and road network, and shall specify the maximum projected average daily trips and maximum parking demand associated with buildout of the entire PDP, and it shall meet Subsection 4.140(.09)(J)(2) for the full development of all five SAPs."

Finding: These criteria are satisfied.

Details of Finding: The required traffic report is included in Section IID of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) H. 3. PDP Application Submittal Requirements: Level of Detail

A49. **Review Criterion:** "The Preliminary Development Plan shall be sufficiently detailed to indicate fully the ultimate operation and appearance of the phase of development. However, approval of a Final Development Plan is a separate and more detailed review of proposed design features, subject to the standards of Section 4.125(.18)(L) through (P), and Section 4.400 through Section 4.450."

Finding: This criterion is satisfied.

Details of Finding: As stated by the applicant, "the plan sheets for the proposed Preliminary Development Plan provide sufficient detail to show the ultimate operation and appearance of the subject phase of development. The FDP application for design of the included park areas within the PDP area is submitted concurrent with this application." See Request G.

Subsection 4.125 (.18) H. 4. PDP Application Submittal Requirements: Copies of Legal Documents

A50. **Review Criterion:** "Copies of legal documents required by the Development Review Board for dedication or reservation of public facilities, or for the creation of a non-profit homeowner's association, shall also be submitted."

Finding: This criterion is satisfied.
Details of Finding: The required legal documents for review have been provided. See Section IIIC in the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) I. PDP Approval Procedures

A51. **Review Criteria:** "An application for PDP approval shall be reviewed using the following procedures:

- Notice of a public hearing before the Development Review Board regarding a proposed PDP shall be made in accordance with the procedures contained in Section 4.012.
- A public hearing shall be held on each such application as provided in Section 4.013.
- After such hearing, the Development Review Board shall determine whether the proposal conforms to the permit criteria set forth in this Code, and shall approve, conditionally approve, or disapprove the application."

Finding: These criteria are satisfied.
Details of Finding: The request is being reviewed according to this subsection.

Subsection 4.125 (.18) J. PDP Refinements to Approved SAP

Subsection 4.125 (.18) J. 1. a. i. Refinements to the SAP: Street Network and Classification

A52. **Review Criterion:** "Changes to the street network or functional classification of streets that do not significantly reduce circulation system function or connectivity for vehicles, bicycles or pedestrians."
Finding: This criterion is satisfied.
Details of Finding: Concurrently with this PDP request refinements to the street network are being requested that meet the applicable criteria. See Request B.

Subsection 4.125 (.18) J. 1. a. ii. Refinements to the SAP: Parks, Trails, and Open Space

A53. **Review Criterion:** "Changes to the nature or location of park types, trails or open space that do not significantly reduce function, usability, connectivity, or overall distribution or availability of these uses in the Specific Area Plan."
Finding: This criterion is satisfied.
Details of Finding: Concurrently with this PDP request refinements to the parks, trails, and open space are being requested that meet the applicable criteria. See Request B.

Subsection 4.125 (.18) J. 1. a. iii. Refinements to the SAP: Utilities and Storm Water Facilities

A54. **Review Criterion:** "Changes to the nature or location of utilities or storm water facilities that do not significantly reduce the service or function of the utility or facility."
Finding: This criterion is satisfied.
Details of Finding: Concurrently with this PDP request refinements to the location of utilities or storm water facilities are being requested that meet the applicable criteria. See Request B.

Subsection 4.125 (.18) J. 1. a. iv. and v/ Refinements to the SAP: Mix of Land Uses and Density

A55. **Review Criteria:**

- "Changes to the location or mix of land uses that do not significantly alter the overall distribution or availability of uses in the Preliminary Development Plan.
- A change in density that does not exceed ten percent, provided such density change has not already been approved as a refinement to the underlying SAP or PDP, and does not result in fewer than 2,300 dwelling units in the Village."

Finding: These criteria are satisfied.

Details of Finding: Concurrently with this PDP request refinements to the location and mix of land uses and density are being requested that meet the applicable criteria. See Request B.

Subsection 4.125 (.18) K. PDP Approval Criteria

Subsection 4.125 (.18) K. 1. a. PDP Approval Criteria: Consistent with Standards of Section 4.125

A56. **Review Criteria:** "Is consistent with the standards identified in this section."

Finding: These criteria are satisfied.

Details of Finding: As shown elsewhere in this request, the proposed Preliminary Development Plan is consistent with the standards of Section 4.125.

Subsection 4.125 (.18) K. 1. b. PDP Approval Criteria: Complies with the Planning and Land Development Ordinance

A57. **Review Criterion:** "Complies with the applicable standards of the Planning and Land Development Ordinance, including Section 4.140(.09)(J)(1)-(3)."

Finding: This criterion is satisfied.

Details of Finding: Findings are provided showing compliance with applicable standards of the Planning and Land Development Ordinance. Specifically Findings A65 through A67 address Subsections 4.140 (.09) J. 1. through 3.

Subsection 4.125 (.18) K. 1. c. PDP Approval Criteria: Consistent with Approved SAP

A58. **Review Criterion:** "Is consistent with the approved Specific Area Plan in which it is located."

Finding: This criterion is satisfied.

Details of Finding: Together with the proposed refinements and amendments, the PDP is consistent with the approved SAP.

Subsection 4.125 (.18) K. 1. d. PDP Approval Criteria: Consistent with Approved Pattern Book

A59. **Review Criterion:** "Is consistent with the approved Pattern Book and, where required, the approved Village Center Architectural Standards."

Finding: This criterion is satisfied.

Details of Finding: As stated by the applicant, "No buildings are proposed with this Preliminary Development Plan. Subsequent Building Permit applications for residential buildings in this Preliminary Development Plan will document compliance with the Architectural Pattern Book. However, proposed lots are sized to accommodate proposed uses in a manner consistent with Table V-1 and the Architectural Pattern Book."

Subsection 4.125 (.18) K. 2. PDP Approval Criteria: Reasonable Phasing Schedule

A60. **Review Criterion:** "If the PDP is to be phased, that the phasing schedule is reasonable and does not exceed two years between commencement of development of the first, and completion of the last phase, unless otherwise authorized by the Development Review Board."
Finding: This criterion is satisfied.
Details of Finding: The applicant is requesting a phasing schedule involving 3 phases over a number of years. The rationale for which is included on page 29 of Section IIA of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) K. 3. PDP Approval Criteria: Parks Concurrency

A61. **Review Criterion:** "Parks within each PDP or PDP Phase shall be constructed prior to occupancy of 50% of the dwelling units in the PDP or PDP phase, unless weather or other special circumstances prohibit completion, in which case bonding for such improvements shall be permitted."
Finding: This criterion will be satisfied by Condition of Approval PDA 3.
Details of Finding: The applicant asserts and a condition of approval ensures the parks within PDP 2N will be completed prior to occupancy of 50% of the housing units or bonding will be provided if special circumstances prevent completion.

Subsection 4.125 (.18) K. 5. PDP Approval Criteria: DRB Conditions

A62. **Review Criterion:** "The Development Review Board may require modifications to the PDP, or otherwise impose such conditions as it may deem necessary to ensure conformance with the approved SAP, the Villebois Village Master Plan, and compliance with applicable requirements and standards of the Planning and Land Development Ordinance, and the standards of this section."
Finding: This criterion is satisfied.
Details of Finding: No additional conditions of approval are recommended.

Subsection 4.140 (.09) J. Planned Development Permit Review Criteria

"A planned development permit may be granted by the Development Review Board only if it is found that the development conforms to all the following criteria, as well as to the Planned Development Regulations in Section 4.140:"

Subsection 4.140 (.09) J. 1. Consistency with Comprehensive Plan and Other Plans, Ordinances

A63. **Review Criteria:** "The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council."
Finding: These criteria are satisfied.
Details of Finding: The applicant's findings demonstrate that the location, design, size, and uses proposed with the PDP are both separately and as a whole consistent with SAP North, and thus the Villebois Village Master Plan, the City's Comprehensive Plan

designation of Residential – Village for the area, and any other applicable ordinance of which staff is aware.

Subsection 4.140 (.09) J. 2. Meeting Traffic Level of Service D

A64. **Review Criteria:** That the location, design, size and uses are such that traffic generated by the development at the most probable used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D, as defined in the Highway Capacity manual published by the National Highway Research Board, on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets. Immediately planned arterial and collector streets are those listed in the City's adopted Capital Improvement Program, for which funding has been approved or committed, and that are scheduled for completion within two years of occupancy of the development or four year if they are an associated crossing, interchange, or approach street improvement to Interstate 5.
Finding: These criteria are satisfied.
Details of Finding: The location, design, size and uses are such that traffic generated within the PDP at the most heavily used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D. The proposed uses and the circulation system are consistent with the SAP – North application, which included an Internal Circulation Evaluation including an assessment of intersection performance by DKS Associates. A copy of the Traffic Impact Analysis is attached in Section IID of the applicant's notebook, Exhibit B1.

Subsection 4.140 (.09) J. 3. Concurrency for Other Facilities and Services

A65. **Review Criteria:** "That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services."
Finding: These criteria are satisfied.
Details of Finding: As shown in the Utility and Drainage Report, Section IIC of the applicant's notebook, Exhibit B1, and the applicant's sheets 6.1 and 6.2, Exhibit B2, adequate or immediately planned facilities and services are sufficient to serve the planned development.

Section 4.171 Protection of Natural Features & Other Resources

Subsection 4.171 (.02) General Terrain Preparation

A66. **Review Criteria:**

- "All developments shall be planned designed, constructed and maintained with maximum regard to natural terrain features and topography, especially hillside areas, floodplains, and other significant land forms.
- All grading, filling and excavating done in connection with any development shall be in accordance with the Uniform Building Code, all development shall be planned, designed, constructed and maintained so as to:
    - Limit the extent of disturbance of soils and site by grading, excavation and other land alterations.

- Avoid substantial probabilities of: (1) accelerated erosion; (2) pollution, contamination or siltation of lakes, rivers, streams and wetlands; (3) damage to vegetation; (4) injury to wildlife and fish habitats.
- Minimize the removal of trees and other native vegetation that stabilize hillsides, retain moisture, reduce erosion, siltation and nutrient runoff, and preserve the natural scenic character.

Finding: These criteria are satisfied.

Details of Finding: As explained on page 33-34 of the applicant's PDP narrative, Section IIA of Exhibit B1, considerable attention has been given to working with the natural terrain especially the sloped areas towards the eastern edge of the project site. This includes split level home design to better conform to natural contours. The applicant additionally states that grading will be done in accordance with the Uniform Building Code.

Subsection 4.171 (.03) Hillsides

A67. **Review Criterion:** "Hillsides: All developments proposed on slopes greater than 25% shall be limited to the extent that:"

Finding: This criterion does not apply.

Details of Finding: The subject Preliminary Development Plan does not include any areas of slopes in excess of 25%. Therefore, this standard does not apply to this application.

Subsection 4.171 (.04) Trees and Wooded Area

A68. **Review Criteria:**

- "All developments shall be planned, designed, constructed and maintained so that:
  - Existing vegetation is not disturbed, injured, or removed prior to site development and prior to an approved plan for circulation, parking and structure location.
  - Existing wooded areas, significant clumps/groves of trees and vegetation, and all trees with a diameter at breast height of six inches or greater shall be incorporated into the development plan and protected wherever feasible.
  - Existing trees are preserved within any right-of-way when such trees are suitably located, healthy, and when approved grading allows.
- Trees and woodland areas to be retained shall be protected during site preparation and construction according to City Public Works design specifications, by:
  - Avoiding disturbance of the roots by grading and/or compacting activity.
  - Providing for drainage and water and air filtration to the roots of trees which will be covered with impermeable surfaces.
  - Requiring, if necessary, the advisory expertise of a registered arborist/horticulturist both during and after site preparation.
  - Requiring, if necessary, a special maintenance, management program to insure survival of specific woodland areas of specimen trees or individual heritage status trees.

Finding: These criteria are satisfied.

Details of Finding: The Tree Preservation Plan, applicant's sheets 9.1 and 9.2 of their plan set, Exhibit B2, depicts existing trees within the subject area and identifies trees to be retained and to be removed. This application includes a request for approval of a Type "C" Tree Removal Plan, which can be found in Section V of the applicant's notebook, Exhibit B1.

Subsection 4.171 (.05) High Voltage Power Lines

A69. **Review Criteria:** "High Voltage Power line Easements and Rights of Way and Petroleum Pipeline Easements:

- Due to the restrictions placed on these lands, no residential structures shall be allowed within high voltage power line easements and rights of way and petroleum pipeline easements, and any development, particularly residential, adjacent to high voltage power line easements and rights of way and petroleum pipeline easement shall be carefully reviewed.
- Any proposed non-residential development within high voltage power line easements and rights of way and petroleum pipeline easements shall be coordinated with and approved by the Bonneville Power Administration, Portland General Electric Company or other appropriate utility, depending on the easement or right of way ownership.

Finding: These criteria do not apply.

Details of Finding: The development area and surrounding area are not around high voltage power lines.

Subsection 4.171 (.06) Safety Hazards

A70. **Review Criteria:** "

- To protect lives and property from natural or human-induced geologic or hydrologic hazards and disasters.
- To protect lives and property from damage due to soil hazards.
- To protect lives and property from forest and brush fires.
- To avoid financial loss resulting from development in hazard areas.

Finding: These criteria are satisfied.

Details of Finding: The applicant states that development of the subject area will occur in a manner that minimizes potential hazards to safety.

Subsection 4.171 (.07) Earth Movement Hazard Areas

A71. **Review Criterion:** "No development or grading shall be allowed in areas of land movement, slump or earth flow, and mud or debris flow, except under one of the following conditions."

Finding: This criterion is satisfied.

Details of Finding: No areas of land movement, slump, earth flow, or mud or debris flow have been identified in the project area.

Subsection 4.171 (.08) Standards for Soil Hazard Areas

A72. **Review Criteria:**

- "Appropriate siting and design safeguards shall insure structural stability and proper drainage of foundation and crawl space areas for development on land with any of the following soil conditions: wet or high water table; high shrink-swell capability; compressible or organic; and shallow depth-to-bedrock.
- The principal source of information for determining soil hazards is the State DOGAMI Bulletin 99 and any subsequent bulleting and accompanying maps. Approved site-specific

soil studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the soil hazards database accordingly.

Finding: These criteria are satisfied.

Details of Finding: No soil hazard areas have been identified within the subject area.

Subsection 4.171 (.09) Historic Protection

A73. **Review Criteria:** This subsection establishes requirements for protection of historic resources.

Finding: This criterion is satisfied.

Details of Finding: A Historic/ Cultural Resource Inventory was previously conducted for the property identified as SAP – North. No inventoried items are on the subject property.

Section 4.176 Landscaping, Screening, and Buffering

A74. **Review Criteria:** This section establishes landscape, screening, and buffering requirements for development within the City.

Finding: These criteria are satisfied.

Details of Finding: Landscaping will be provided in accordance with the standards in Section 4.176. The Street Tree/Lighting Plan depicts street trees along rights-of-way within the subject Preliminary Development Plan area. The plan has been developed in conformance with the *Community Elements Book* and the applicable standards of Section 4.176. Landscaping in the parks and linear green areas will be reviewed with Request G, Final Development Plan.

Section 4.177 Street Improvement Standards

A75. **Review Criteria:** This section establishes street improvements standards for development within the City.

Finding: These criteria are satisfied.

Details of Finding: The rights-of-way proposed within the subject PDP are shown on the sheets 7.1 and 7.2 of Exhibit B2. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with the final plat. The plan sheets demonstrate that all proposed access drives (alleys) within the PDP area will have a minimum improvement width of 16 feet and will provide two-way travel. All access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by TVF&R. All access drives will be designed to provide a clear travel lane free from any obstructions. Clear vision areas will be maintained in accordance with the standards of Subsection 4.177(.01)(I). Vertical clearance will be maintained over all streets and access drives in accordance with Subsection 4.177(.01)(J).

Section 4.178 Sidewalk and Pathway Standards

A76. **Review Criteria:**

- "Sidewalks. All sidewalks shall be concrete and a minimum of five (5) feet in width, except where the walk is adjacent to commercial storefronts. In such cases, they shall be increased to a minimum of ten (10) feet in width.
- Pathways

- Bicycle facilities shall be provided using a bicycle lane as the preferred facility design. The other facility designs listed will only be used if the bike lane standard cannot be constructed due to physical or financial constraints. The alternative standards are listed in order of preference.
- Bike lane. This design includes 12-foot minimum travel lanes for autos and paved shoulders, 5-6 feet wide for bikes that are striped and marked as bicycle lanes. This shall be the basic standard applied to bike lanes on all arterial and collector streets in the City, with the exception of minor residential collectors with less than 1,500 (existing or anticipated) vehicle trips per day."

Finding: These criteria are satisfied.

Details of Finding: The applicant's sheet 7.3, see Exhibit B2, depicts cross-sections of the proposed sidewalks and pathways in compliance with the above standards and Specific Area Plan – North.

REQUEST B: DB13-0021 SAP-NORTH REFINEMENTS

The applicant's findings in Section IIA of their notebook, Exhibit B1, specifically pages 19-28, respond to the majority of the applicable criteria.

Refinements Generally

Subsection 4.125 (.18) J. 1. Refinement Process

B1. **Review Criteria:** "In the process of reviewing a PDP for consistency with the approved Specific Area Plan, the DRB may approve refinements, but not amendments, to the SAP. Refinements to the SAP may be approved by the Development Review Board, upon the applicant's detailed graphic demonstration of compliance with the criteria set forth in Section (.18)(J)(2), below."
Finding: These criteria are satisfied.
Details of Finding: The applicant is requesting a number of refinements as listed below. The applicant has provided plan sheets showing sufficient information to demonstrate compliance with the applicable criteria. As can be seen in the Findings below the criteria set forth in Subsection 4.125 (.18) J. 2. are satisfied for each requested refinement.

Refinement Request "a": Street Network

Subsection 4.125 (.18) J. 1. a. i. SAP Refinements: Street Network and Functional Classification

B2. **Review Criteria:** "Changes to the street network or functional classification of streets that do not significantly reduce circulation system function or connectivity for vehicles, bicycles or pedestrians."
Finding: These criteria are satisfied.
Details of Finding: The Villebois Village Master Plan shows two road connections from Stockholm Avenue and Geneva Loop between Villebois Drive North and Cherbourg Lane (formerly Coffee Lake Drive). See Figure 7 of the Villebois Village Master Plan. One of these connections runs on the northwest side of Neighborhood Park 5 "Fir Park." The other continues Verdun Loop to the proposed intersection of Dundee Lane and Geneva Loop. In the SAP Request (DB07-0054) the applicant requested the two intermediate road connections be removed and Stockholm be realigned to intersect Geneva Loop at what is proposed as Dundee Lane. A new street was proposed to connect Stockholm and Verdun Loop between Cherbourg Lane (formerly Coffee Lake Drive) and the SAP boundary. This change is not listed as one of the circulation refinements in the adopted Staff Report for the SAP, but neither is it explicitly not approved. Both the Master Plan and SAP proposed circulation will not work in this area due to topographic restraints. The applicant proposes keeping an orientation of Stockholm and Geneva similar to the Villebois Village Master Plan and removing the two intermediate streets due to topography restraints. Topographic restraints is an allowed reason in Subsection 4.125 (.05) A. to exceed the maximum block perimeter and street spacing. See sheet 7.2 of Exhibit B2, "Exhibit C" of Exhibit B6, Exhibit B7, and Exhibit B9. As stated in Findings B3 through B5 below the proposed changes to the street network do not significantly reduce circulation system or function or connectivity either quantifiably or qualitatively.

Subsection 4.125 (.18) J. 1. b. i. Defining "Significant" for SAP Refinements: Quantifiable

B3. **Review Criteria:** "As used herein, "significant" means: More than ten percent of any quantifiable matter, requirement, or performance measure, as specified in (.18)(J)(1)(a), above,"
Finding: These criteria are satisfied.
Details of Finding: Quantifiable measures related to this refinement request include circulation system function and connectivity. Level of Service (LOS) is the quantifiable performance measure related to circulation system function for vehicles. No data is available nor practical to obtain regarding the circulation system function for bicycles and pedestrians. In addition, pedestrian connections will be maintained where shown in the master plan by paths. Bicycles connections will also be allowed on these paths, but topography may require stairs. While the traffic study did not compare LOS as various intersections with and without the proposed refinements, LOS of service continues to be met with the proposed changes. The quantifiable measure of connectivity is number of connecting routes. To connecting routes for vehicles are lost, which is less than 10 percent of the overall number of vehicle connections provided in the SAP and PDP.

Subsection 4.125 (.18) J. 1. b. ii. Defining "Significant" for SAP Refinements: Qualitative

B4. **Review Criteria:** "As used herein, "significant" means: That which negatively affects an important, qualitative feature of the subject, as specified in (.18)(J)(1)(a), above."
Finding: These criteria are satisfied.
Details of Finding: This subsection does not provide clear definition of what an important qualitative feature might be. Absent details in this subsection, staff interprets the primary qualitative factors to consider being the three guiding design principles of the Villebois Village Master Plan: Connectivity, Diversity, and Sustainability. The three guiding design principles are further defined by the goals, policies, and implementation measures of the Master Plan. By virtue of better or equally implementing the goals, policies, and implementation measures of the Villebois Village Master Plan, as described in Finding B5 below, the proposed refinements do not negatively affect qualitative features of the street network.

Subsection 4.125 (.18) J. 2. a. SAP Refinement Review Criteria: Better or Equally Implementing Villebois Village Master Plan

B5. **Review Criterion:** "The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The following are the relevant goals and policies from the Villebois Village Master Plan followed by discussion of how the refinements better or equally meet them:

Circulation System Goal: The Villebois Village shall provide for a circulation system that is designed to reflect the principles of smart growth.

Pedestrian connections are being maintained as shown in the Master Plan supporting the Smart Growth principle of creating walkable neighborhoods.

Circulations System Policy 1: The Villebois Village shall encourage alternatives to the automobile, while accommodating all travel modes, including passenger cars, trucks, buses, bicycles and pedestrians.

As demonstrated in the traffic report adequate vehicle circulation will be maintained. In addition bicycle and pedestrian connections are maintained as shown in the Villebois Village Master Plan.

Subsection 4.125 (.18) J. 2. b. SAP Refinement Review Criteria: Impact on Natural and Scenic Resources

B6. **Review Criterion:** "The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area"
Finding: These criteria are satisfied.
Details of Finding: As stated in Finding B5 below, the proposed grading reflecting the natural contours of the site are not supportive of through mid-block vehicle connections in the locations where streets are proposed to be removed.

Subsection 4.125 (.18) J. 2. c. SAP Refinement Review Criteria: Effect on Subsequent PDP's and SAP's

B7. **Review Criterion:** "The refinement will not preclude an adjoining or subsequent PDP or SAP areas from development consistent with the approved SAP or the Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The proposed changes still allow the area of SAP North to the north of the circulation changes to develop in a manner consistent with the Master Plan and relevant SAP approvals.

Refinement Request "b":Parks, Trails,and Open Space

Subsection 4.125 (.18) J. 1. a. ii. SAP Refinements: Parks, Trails, and Open Space

B8. **Review Criteria:** "Changes to the nature or location of park type, trails, or open space that do not significantly reduce function, usability, connectivity, or overall distribution or availability of these uses in the Preliminary Development Plan."
Finding: These criteria are satisfied.
Details of Finding: The changes from previous approvals include a number larger and new linear greens and pocket parks of different sizes between homes. The Regional Parks and Open Space are substantially consistent with the Villebois Village Master Plan. Only an amenity (horseshoe pit) is being removed as it is provided in previously constructed Regional Park 3. A number of amenities are being added.

Subsection 4.125 (.18) J. 1. b. i. Defining "Significant" for SAP Refinements: Quantifiable

B9. **Review Criteria:** "As used herein, "significant" means: More than ten percent of any quantifiable matter, requirement, or performance measure, as specified in (.18)(J)(1)(a), above,"
Finding: These criteria are satisfied.

Details of Finding: The performance measures, etc. being measured for the purpose of this refinement are the reduction of function, usability, connectivity, or overall distribution or availability of park uses in the Preliminary Development Plan. Park amenities are being added, creating no reduction in any measurable aspect of the parks. The only amenity being removed is provided nearby in another park not part of this application.

Subsection 4.125 (.18) J. 1. b. ii. Defining "Significant" for SAP Refinements: Qualitative

B10. **Review Criteria:** "As used herein, "significant" means: That which negatively affects an important, qualitative feature of the subject, as specified in (.18)(J)(1)(a), above."
Finding: These criteria are satisfied.
Details of Finding: This subsection does not provide clear definition of what an important qualitative feature might be. Absent details in this subsection, staff interprets the primary qualitative factors to consider to be the three guiding design principles of the Villebois Village Master Plan: Connectivity, Diversity, and Sustainability. The three guiding design principles are further defined by the goals, policies, and implementation measures of the Master Plan. By virtue of better or equally implementing the goals, policies, and implementation measures of the Villebois Village Master Plan, as described in Finding B11 below, the proposed refinements do not negatively affect qualitative features of the parks.

Subsection 4.125 (.18) J. 2. a. SAP Refinement Review Criteria: Better or Equally Implementing Villebois Village Master Plan

B11. **Review Criterion:** "The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The following are the relevant goals and policies from the Villebois Village Master Plan followed by discussion of how the refinements better or equally meet them:

Goal stated in paragraph one under 3.1 Introduction/Proposal for Parks and Open Space: Offer a variety of opportunities that are engaging to all senses, through the provision of programming elements that allow for a wide variety of experiences.

3.3 Parks Goal: The Parks system within Villebois Village shall create a range of experiences for its residents and visitors through an interconnected network of pathways, parks, trails, open space and other public spaces that protect and enhance the site's natural resources and connect Villebois to the larger regional park/open space system.

Policy 2: An interconnected trail system shall be created linking the park and open spaces and key destination points within Villebois and to the surrounding neighborhoods. The trails system shall also provide loops of varying lengths to accommodate various activities such as walking, running, and rollerblading.

Policy 3: Parks shall encourage the juxtaposition of various age-oriented facilities and activities, while maintaining adequate areas of calm.

Policy 4: Park designs shall encourage opportunities for wildlife habitat, such as plantings for wildlife foraging and/or habitat, bird and/or bat boxes and other like elements.

Policy 5: Gathering spaces in parks shall generate social interaction by adding layers of activity (Power of Ten).

Policy 6: Build-out of the Villebois Village Master Plan shall comply with the City of Wilsonville SROZ regulations. Any encroachment into the SROZ will be reviewed for compliance or exemption as more detailed information is provided that will affect the SROZ areas. Adjustments in plan, street alignments, and intersections as well as rainwater facilities and pathways shall be made to comply with SROZ regulations.

Policy 9: Parks and recreation spaces shall provide for flexibility over time to allow for adaptation to the future community's park, recreation and open space needs.

Implementation Measure 1: Future and pending development applications within Villebois (Specific Area Plans, Preliminary Development Plans and Final Development Plans) shall comply with the park, trail, open space system proposed in Figure 5 – Parks and Open Space Plan, Figure 5A – Recreational Experiences Plan, and Table 1: Parks Programming. Refinements may be approved

Implementation Measure 3: Parks and open spaces shall be designed to incorporate native vegetation, landforms and hydrology to the fullest extent possible.

Implementation Measure 12: Through time, the Developers shall have a responsibility to participate in planning, implementing and securing funding sources for a wetland naturalization and enhancement plan for the Coffee Lake wetland complex. These wetlands are adjacent to Coffee Creek and within the boundary of Villebois. The wetland naturalization and enhancement plan shall be initiated and completed with the phased development of the Village.

Implementation Measure 15: Each child play area shall include uses suitable for a range of age groups.

The refinements maintain all the amenities and their related variety shown in the Master Plan for the PDP area.

Subsection 4.125 (.18) J. 2. b. SAP Refinement Review Criteria: Impact on Natural and Scenic Resources

B12. **Review Criterion:** "The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area"
Finding: These criteria are satisfied.
Details of Finding: The additional green space will not result in detrimental impacts to the environment or natural or scenic resources.

Subsection 4.125 (.18) J. 2. c. SAP Refinement Review Criteria: Effect on Subsequent PDP's and SAP's

B13. **Review Criterion:** "The refinement will not preclude an adjoining or subsequent PDP or SAP areas from development consistent with the approved SAP or the Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The proposed park refinements do not preclude an adjoining or subsequent PDP or SAP area from developing consistent with the approved SAP or Master Plan.

Refinement Request "c": Utilities and Storm Water Facilities

Subsection 4.125 (.18) J. 1. a. iii. SAP Refinements: Utilities and Storm Water Facilities

B14. **Review Criteria:** "Changes to the nature or location of utilities or storm water facilities that do not significantly reduce the service or function of the utility or facility."
Finding: These criteria are satisfied.
Details of Finding: As stated by the applicant, "the proposed PDP includes changes to utility lines that correspond with the changes in the street network. The proposed changes to utilities do not reduce the service or function in any way."

Refinement Request "d": Location and Mix of Land Uses

Subsection 4.125 (.18) J. 1. a. iv. SAP Refinements: Location and Mix of Land Uses

B15. **Review Criteria:** "Changes to the location or mix of land uses that do not significantly alter the overall distribution or availability of uses in the Preliminary Development Plan. For purposes of this subsection, "land uses" or "uses" are defined in the aggregate, with specialty condos, mixed use condos, urban apartments, condos, village apartments, neighborhood apartments, row houses and small detached uses comprising a land use group and medium detached, standard detached, large and estate uses comprising another."
Finding: These criteria are satisfied.
Details of Finding: The changes to the location and mix of land uses are illustrated in the following table. Overall, as shown in the findings below, the changes do not significantly alter the distribution or availability of uses in the PDP.

Description of Block (bounded by:)	SAP Plan	Proposed PDP Plan
SW Palermo St. SW Grahams Ferry Rd.	10 Standard Detached 10 Total	10 Standard Detached 10 Total
SW Costa Circle West SW Dundee Lane Alley north of SW Costa Circle West SW Ravenna Loop	31 Attached Row Houses 31 Total	22 Small Cottage Detached 22 Total
Alley north of SW Costa Circle West SW Dundee Lane SW Geneva Loop	20 Small Detached 12 Medium Detached 32 Total	26 Small Detached 6 Medium Detached 32 Total

SW Ravenna Loop		
SW Geneva Loop SAP Boundary PDP Boundary SW Cherboug Lane (does not include future development tracts)	18 Small Detached 6 Medium Detached 24 Total	11 Small Detached 15 Small Cottage 26 Total

Subsection 4.125 (.18) J. 1. b. i. Defining "Significant" for SAP Refinements: Quantifiable

B16. **Review Criteria:** "As used herein, "significant" means: More than ten percent of any quantifiable matter, requirement, or performance measure, as specified in (.18)(J)(1)(a), above,"
Finding: These criteria are satisfied.
Details of Finding: For the purpose of this refinement the quantifiable requirement is the number of lots/units under an aggregated land use category on the SAP level. The first land use category small detached, small cottage detached, and all attached housing types. The second land use category includes medium, standard, and larger single-family unit types. The table below shows the proposed changes affect the SAP North Land Use Mix. Proposed is a 6.8 percent decrease in the larger land use category, and a 1.6 percent increase in the smaller and attached land use category. Both of these are well within the ten percent allowance.

	Current SAP N Unit Count	Proposed SAP N Unit Count	% Change
Medium/ Standard/ Large/ Estate	174	162	-6.8%
Small Detached/ Small Attached/ Cottage/ Row Houses/ Neighborhood Apartment	297	302	1.6%
Total	471	464	-1.5%

Subsection 4.125 (.18) J. 1. b. ii. Defining "Significant" for SAP Refinements: Qualitative

B17. **Review Criteria:** "As used herein, "significant" means: That which negatively affects an important, qualitative feature of the subject, as specified in (.18)(J)(1)(a), above."
Finding: These criteria are satisfied.
Details of Finding: This subsection does not provide clear definition of what an important qualitative feature might be. Absent details in this subsection, staff interprets the primary qualitative factors to consider being the three guiding design principles of the Villebois Village Master Plan: Connectivity, Diversity, and Sustainability. The three guiding design principles are further defined by the goals, policies, and implementation measures of the Master Plan. By virtue of better or equally implementing the goals, policies, and implementation measures of the Villebois Village Master Plan, as described in Finding C23 below, the proposed refinements do not negatively affect qualitative features for location and mix of land uses.

Subsection 4.125 (.18) J. 2. a. SAP Refinement Review Criteria: Better or Equally Implementing Villebois Village Master Plan

B18. **Review Criterion:** "The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan."
Finding: These criteria are satisfied.

Details of Finding: The following are the relevant goals and policies from the Villebois Village Master Plan followed by discussion of how the refinements better or equally meet them:

Land Use Policy 1: The Villebois Village shall be a complete community with a wide range of living choices, transportation choices, and working and shopping choices. Housing shall be provided in a mix of types and densities resulting in a minimum of 2,300 dwelling units within the Villebois Village Master Plan area.

Land Use Policy 2: Future development applications within the Villebois Village area shall provide land uses and other major components of the Plan such as roadways and parks and open space in general compliance with their configuration as illustrated on Figure 1 – Land Use Plan or as refined by Specific Area Plans.

Residential Neighborhood Housing Goal: The Villebois Village shall provide neighborhoods consisting of a mix of homes for sale, apartments for rent, row homes, and single-family homes on a variety of lot sizes, as well as providing housing for individuals with special needs. The Villebois Village shall provide housing choices for people of a wide range of economic levels and stages of life through diversity in product type.

Residential Neighborhood Housing Policy 1: Each of the Villebois Village's neighborhoods shall include a wide variety of housing options and shall provide home ownership options ranging from affordable housing to estate lots.

Residential Neighborhood Housing Policy 5: The Villebois Village shall provide a mix of housing types within each neighborhood and on each street to the greatest extent practicable.

Residential Neighborhood Housing Policy 10: Natural features shall be incorporated into the design of each neighborhood to maximize their aesthetic character while minimizing impacts to said natural features.

As stated by the applicant "In summary, the proposed refinements will better integrate green spaces throughout the PDP and expand the range of housing options in the subject area. As the proposed refinements will not compromise the project's ability to comply with all other Goals, Policies and Implementation Measures of the Villebois Village Master Plan, they will equally meet all other Goals, Policies and Implementation Measures of the Villebois Village Master Plan." See the applicant's more detailed response on page 26 of their compliance report in Section IIA of the applicant's notebook, Exhibit B1.

Subsection 4.125 (.18) J. 2. b. SAP Refinement Review Criteria: Impact on Natural and Scenic Resources

B19. **Review Criterion:** "The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area"
Finding: These criteria are satisfied.
Details of Finding: The proposed refinements add green space having a positive impact on the natural and scenic resources and amenities in the development.

Subsection 4.125 (.18) J. 2. c. SAP Refinement Review Criteria: Effect on Subsequent PDP's and SAP's

B20. **Review Criterion:** "The refinement will not preclude an adjoining or subsequent PDP or SAP areas from development consistent with the approved SAP or the Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The proposed refinements will not preclude any other SAP's or PDP's from developing consistent with the approved SAP or the Master Plan.

Refinement Request "e": Density

Subsection 4.125 (.18) J. 1. a. v. SAP Refinements: Density

B21. **Review Criteria:** "A change in density that does not exceed ten percent, provided such density change has not already been approved as a refinement to the underlying SAP or PDP, and does not result in fewer than 2,300 dwelling units in the Village."
Finding: These criteria are satisfied.
Details of Finding: The proposed PDP, as proposed, would result in a density decrease (change in the number of overall units) in the SAP of 1.5 percent, which is well below the ten percent (10%) allowance. The proposal results in a total of 2532 units within Villebois.

Subsection 4.125 (.18) J. 2. a. SAP Refinement Review Criteria: Better or Equally Implementing Villebois Village Master Plan

B22. **Review Criteria:** "The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan."
Finding: These criteria are satisfied.
Details of Finding: The following is policy from the Villebois Village Master Plan followed by discussion of how the refinements better or equally meet it:

Residential Neighborhood Housing Policy 3: The mix of housing shall be such that the Village development provides an overall average density of at least 10 dwelling units per net residential acre.

The change of density is small decrease and continues to meet the density requirement for the Village Zone.

Subsection 4.125 (.18) J. 2. b. SAP Refinement Review Criteria: Impact on Natural and Scenic Resources

B23. **Review Criterion:** "The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area"
Finding: This criterion is satisfied.
Details of Finding: The proposed minor decrease in density does not create any sort of impact that can be seen being detrimental to any of the resources mentioned in this subsection.

Subsection 4.125 (.18) J. 2. c. SAP Refinement Review Criteria: Effect on Subsequent PDP's and SAP's

B24. **Review Criterion:** "The refinement will not preclude an adjoining or subsequent PDP or SAP areas from development consistent with the approved SAP or the Master Plan."
Finding: This criterion is satisfied.
Details of Finding: The proposed minor change in density does not affect any adjoining PDP's or SAP's.

REQUEST C: DB13-0022 SAP-NORTH AMENDMENT

The applicant's findings in Section IIA (page 28) and Section VIIA of their notebook, Exhibit B1, respond to the majority of the applicable criteria.

Amendment Request: SAP Phasing

Subsection 4.125 (.18) J. 4. SAP Phasing Amendment to be Processed as Class II Review

C1. **Review Criteria:** "Amendments to the SAP for phasing will be processed as a Class II administrative review proposal."
Finding: These criteria are satisfied.
Details of Finding: While the SAP Phasing Amendment is eligible to be processed as a Class II Review, the Planning Director is allowing it to be reviewed by the DRB as a component of the broader application for PDP 2 North, as authorized by Section 4.030.

Subsection 4.125 (.18) E. 1. b. ii. SAP Phasing Reasonable

C2. **Review Criterion:** "If the SAP is to be phased, as enabled by Sections 4.125(.18)(D)(2)(g) and (h), that the phasing sequence is reasonable."
Finding: This criterion is satisfied.
Details of Finding: The SAP North phasing is being realigned based on current property ownership and ability to develop the property. The phasing is reasonable as it allows development of the subject property on the timeline desired by the developer while not negatively impacting the ability of future phases of SAP North to develop as shown previous in approved phasing plans.

REQUEST D: DB13-0023 ZONE MAP AMENDMENT

The applicant's findings in Section IVA of their notebook, Exhibit B1, respond to the majority of the applicable criteria.

Comprehensive Plan

Compact Urban Development-Implementation Measures

Implementation Measure 4.1.6.a

D1. **Review Criteria:** "Development in the "Residential-Village" Map area shall be directed by the Villebois Village Concept Plan (depicting the general character of proposed land uses, transportation, natural resources, public facilities, and infrastructure strategies), and subject to relevant Policies and Implementation Measures in the Comprehensive Plan; and implemented in accordance with the Villebois Village Master Plan, the "Village" Zone District, and any other provisions of the Wilsonville Planning and Land Development Ordinance that may be applicable."
Finding: These criteria are satisfied.
Details of Finding: The subject area is within SAP-North, which was previously approved as part of case file DB05-0047 and found to be in accordance with the Villebois Village Master Plan and the Wilsonville Planning and Land Development Ordinance.

Implementation Measure 4.1.6.b.

D2. **Review Criteria:** This implementation measure identifies the elements the Villebois Village Master Plan must contain.
Finding: These criteria are not applicable
Details of Finding: The current proposal is for a preliminary development plan implementing the procedures as outlined by the Villebois Village Master Plan, as previously approved.

Implementation Measure 4.1.6.c.

D3. **Review Criterion:** "The "Village" Zone District shall be applied in all areas that carry the Residential-Village Plan Map Designation."
Finding: This criterion is satisfied.
Details of Finding: The Village Zone zoning district is being applied to an area designated as Residential-Village in the Comprehensive Plan.

Implementation Measure 4.1.6.d.

D4. **Review Criterion:** "The "Village" Zone District shall allow a wide range of uses that befit and support an "urban village," including conversion of existing structures in the core area to provide flexibility for changing needs of service, institutional, governmental and employment uses."
Finding: This criterion is satisfied.
Details of Finding: The area covered by the proposed zone change is proposed for residential uses, parks, and open space as shown in the Villebois Village Master Plan.

Planning and Land Development Ordinance

Section 4.029 Zoning to be Consistent with Comprehensive Plan

D5. **Review Criterion:** "If a development, other than a short-term temporary use, is proposed on a parcel or lot which is not zoned in accordance with the Comprehensive Plan, the applicant must receive approval of a zone change prior to, or concurrently with the approval of an application for a Planned Development."
Finding: This criterion is satisfied.
Details of Finding: The applicant is applying for a zone change concurrently with other land use applications for the development as required by this section.

Subsection 4.110 (.01) Base Zones

D6. **Review Criterion:** This subsection identifies the base zones established for the City, including the Village Zone.
Finding: This criterion is satisfied.
Details of Finding: The requested zoning designation of Village "V" is among the base zones identified in this subsection.

Subsection 4.125 (.01) Village Zone Purpose

D7. **Review Criteria:** "The Village (V) zone is applied to lands within the Residential Village Comprehensive Plan Map designation. The Village zone is the principal implementing tool for the Residential Village Comprehensive Plan designation. It is applied in accordance with the Villebois Village Master Plan and the Residential Village Comprehensive Plan Map designation as described in the Comprehensive Plan."
Finding: These criteria are satisfied.
Details of Finding: The subject lands are designated Residential-Village on the Comprehensive Plan map and our within the Villebois Village Master Plan area and the zoning designation thus being applied is the Village "V".

Subsection 4.125 (.02) Village Zone Permitted Uses

D8. **Review Criteria:** This subsection lists the uses permitted in the Village Zone.
Finding: These criteria are satisfied.
Details of Finding: The proposed residential, park, and open space uses are consistent with the Village Zone designation and Villebois Village Master Plan.

Subsection 4.125 (.18) B. 2. Zone Change Concurrent with PDP Approval

D9. **Review Criterion:** "… Application for a zone change shall be made concurrently with an application for PDP approval…"
Finding: This criterion is satisfied.
Details of Finding: A zone map amendment is being requested concurrently with a request for PDP approval. See Request. A.

Subsection 4.197 (.02) Zone Change Review

Subsection 4.197 (.02) A. Zone Change Procedures

D10. **Review Criteria:** "That the application before the Commission or Board was submitted in accordance with the procedures set forth in Section 4.008, Section 4.125(.18)(B)(2), or, in the case of a Planned Development, Section 4.140;"
Finding: These criteria are satisfied.
Details of Finding: The request for a zone map amendment has been submitted as set forth in the applicable code sections.

Subsection 4.197 (.02) B. Zone Change: Conformance with Comprehensive Plan Map, etc.

D11. **Review Criteria:** "That the proposed amendment is consistent with the Comprehensive Plan map designation and substantially complies with the applicable goals, policies and objectives, set forth in the Comprehensive Plan text;"
Finding: These criteria are satisfied.
Details of Finding: The proposed zone map amendment is consistent with the Comprehensive Map designation of Residential-Village and as shown in Findings D1 through D4 substantially comply with applicable Comprehensive Plan text.

Subsection 4.197 (.02) C. Zone Change: Specific Findings Regarding Residential Designated Lands

D12. **Review Criteria:** "In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with Implementation Measure 4.1.4.b, d, e, q, and x of Wilsonville's Comprehensive Plan text;"
Finding: These criteria are satisfied.
Details of Finding: Implementation Measure 4.1.6.c. states the "Village" Zone District shall be applied in all areas that carry the Residential-Village Plan Map Designation. Since the Village Zone must be applied to areas designated "Residential Village" on the Comprehensive Plan Map and is the only zone that may be applied to these areas, its application is consistent with the Comprehensive Plan.

Subsection 4.197 (.02) D. Zone Change: Public Facility Concurrency

D13. **Review Criteria:** "That the existing primary public facilities, i.e., roads and sidewalks, water, sewer and storm sewer are available and are of adequate size to serve the proposed development; or, that adequate facilities can be provided in conjunction with project development. The Planning Commission and Development Review Board shall utilize any and all means to insure that all primary facilities are available and are adequately sized."
Finding: These criteria are satisfied.
Details of Finding: The Preliminary Development Plan compliance report and the plan sheets demonstrate that the existing primary public facilities are available or can be provided in conjunction with the project. Section IIC of the applicant's notebook, Exhibit B1, includes supporting utility and drainage reports. In addition, the applicant has provided a Traffic Impact Analysis, which is in Section IID of the applicant's notebook, Exhibit B1.

Subsection 4.197 (.02) E. Zone Change: Impact on SROZ Areas

D14. **Review Criteria:** "That the proposed development does not have a significant adverse effect upon Significant Resource Overlay Zone areas, an identified natural hazard, or an identified geologic hazard. When Significant Resource Overlay Zone areas or natural hazard, and/ or geologic hazard are located on or about the proposed development, the Planning Commission or Development Review Board shall use appropriate measures to mitigate and significantly reduce conflicts between the development and identified hazard or Significant Resource Overlay Zone;"
Finding: These criteria are satisfied.
Details of Finding: The western portions of the property include areas within the Significant Resource Overlay Zone. The PDP Supporting Compliance Report, section IIA of the applicant's notebook, Exhibit B1, demonstrates that the proposed development does not have a significant adverse effect on the SROZ. Any impacts from trail features within the SROZ are being appropriately mitigated. See also Request G, SRIR Review.

Subsection 4.197 (.02) F. Zone Change: Development within 2 Years

D15. **Review Criterion:** "That the applicant is committed to a development schedule demonstrating that the development of the property is reasonably expected to commence within two (2) years of the initial approval of the zone change."
Finding: This criterion is satisfied.
Details of Finding: The applicant has provided information stating they reasonably expect to commence development within two (2) years of the approval of the zone change. However, in the scenario where the applicant or their successors due not commence development within two (2) years allow related land use approvals to expire, the zone change shall remain in effect.

Subsection 4.197 (.02) G. Zone Change: Development Standards and Conditions of Approval

D16. **Review Criteria:** "That the proposed development and use(s) can be developed in compliance with the applicable development standards or appropriate conditions are attached to insure that the project development substantially conforms to the applicable development standards."
Finding: These criteria are satisfied.
Details of Finding: As can be found in the findings for the accompanying requests, the applicable development standards will be met either as proposed or as a condition of approval.

REQUEST E: DB13-0024 TENTATIVE SUBDIVISION PLAT

The applicant's findings in Section IIIA of their notebook, Exhibit B1, respond to the majority of the applicable criteria.

Subsection 4.125 (.02) Permitted Uses in the Village Zone

E1. **Review Criteria:** This subsection lists the permitted uses in the Village Zone.
Finding: These criteria are satisfied.
Details of Finding: The proposed subdivision is for uses including single family homes and row homes, parks, and open space permitted in the Village Zone.

Subsection 4.125 (.05) Development Standards Applying to All Development in Village Zone

Subsection 4.125 (.05) A. Block, Alley, Pedestrian, and Bicycle Standards

E2. **Review Criteria:** This subsection lists the block, alley, pedestrian, and bicycle standards applicable in the Village Zone.
Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows blocks, alleys, pedestrian, and bicycle paths consistent with this subsection and the proposed PDP.

Subsection 4.125 (.05) B. Access Standards

E3. **Review Criterion:** "All lots with access to a public street, and an alley, shall take vehicular access from the alley to a garage or parking area, except as determined by the City Engineer."
Finding: This criterion will be satisfied by Condition of Approval PDE 7.
Details of Finding: Condition of Approval PDE 7 requires a non-access reservation strip on the street side of lots with street access helping to ensure this criterion is met.

Table V-1: Development Standards in the Village Zone

E4. **Review Criteria:** This table shows the development standards, including setback for different uses in the Village Zone. See full table under Finding A4.
Finding: These criteria are satisfied.
Details of Finding: As been consistently interpreted for PDP approvals in Villebois, lot dimensions in the Architectural Pattern Book can govern such things as lot width and size even when it is not consistent with the table. The proposed lots facilitate the construction that meets relevant standards of the table.

Subsection 4.125 (.07) Off-Street Parking, Loading and Bicycle Parking

E5. **Review Criteria:** "Except as required by Subsections (A) through (D), below, the requirements of Section 4.155 shall apply within the Village zone."
Finding: These criteria are satisfied.
Details of Finding: Nothing concerning the tentative subdivision would prevent the required parking from being built.

Subsection 4.125 (.08) Open Space Requirements

E6. **Review Criteria:** This subsection establishes the open space requirements for the Village Zone.
Finding: These criteria are satisfied or will be satisfied by a Condition of Approval.
Details of Finding: The tentative subdivision plat shows open space consistent with the requirements of the Village Zone and the proposed PDP. Consistent with the requirements of (.08) C. Conditions of approval require the City Attorney to review and approve pertinent bylaws, covenants, or agreements prior to recordation. See Conditions of Approval PDA 4.

Subsection 4.125 (.09) A. 1. Street and Improvement Standards: General Provisions

E7. **Review Criteria:** "Except as noted below, the provisions of Section 4.177 shall apply within the Village zone:

- General Provisions:
  - All street alignment and access improvements shall conform to Figures 7, 8, 9A, and 9B of the Villebois Village Master Plan, or as refined in an approved Specific Area Plan, Preliminary Development Plan, or Final Development Plan, and the following standards:
  - All street improvements shall conform to the Public Works Standards and the Transportation Systems Plan, and shall provide for the continuation of streets through proposed developments to adjoining properties or subdivisions, according to the Master Plan.
  - All streets shall be developed according to the Master Plan."

Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows street alignments, improvements, and access improvements consistent with the approved PDP and associated refinements found to be consistent with the Master Plan and Transportation Systems Plan.

Subsection 4.125 (.09) A. 2. Street and Improvement Standards: Intersection of Streets

E8. **Review Criteria:** "Intersections of streets:

- Angles: Streets shall intersect one another at angles not less than 90 degrees, unless existing development or topography makes it impractical.
- Intersections: If the intersection cannot be designed to form a right angle, then the right-of-way and paving within the acute angle shall have a minimum of a thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than ninety 90 degrees shall require approval by the City Engineer after consultation with the Fire District.
- Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections shall be separated by at least:
  - 1000 ft. for major arterials
  - 600 ft. for minor arterials
  - 100 ft. for major collector
  - 50 ft. for minor collector
- Curb Extensions:
  - Curb extensions at intersections shall be shown on the Specific Area Plans required in Subsection 4.125(.18)(C) through (F), below, and shall:
    - Not obstruct bicycle lanes on collector streets.

- Provide a minimum 20 foot wide clear distance between curb extensions at all local residential street intersections, meet minimum turning radius requirements of the Public Works Standards, and shall facilitate fire truck turning movements as required by the Fire District."

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows street intersections as proposed in the proposed PDP consistent with these standards.

Subsection 4.125 (.09) A. 3. Street and Improvement Standards: Street Grades

E9. **Review Criteria:** "Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate, grades in excess of 8%, but not more than 12%, may be permitted for short distances, as approved by the City Engineer, where topographic conditions or existing improvements warrant modification of these standards."

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows streets found to meet these standards under Request A.

Subsection 4.125 (.09) A. 4. Street and Improvement Standards: Centerline Radius Street Curves

E10. **Review Criteria:** "The minimum centerline radius street curves shall be as follows:

- Arterial streets: 600 feet, but may be reduced to 400 feet in commercial areas, as approved by the City Engineer.
- Collector streets: 600 feet, but may be reduced to conform with the Public Works Standards, as approved by the City Engineer.
- Local streets: 75 feet"

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows streets found to meet these standards under Request A.

Subsections 4.125 (.09) A. 5. and 4.177 (.01) C. Street and Improvement Standards: Rights-of-way

E11. **Review Criteria:**

- "Prior to issuance of a Certificate of Occupancy Building permits or as a part of the recordation of a final plat, the City shall require dedication of rights-of-way in accordance with the Street System Master Transportation Systems Plan. All dedications shall be recorded with the County Assessor's Office.
- The City shall also require a waiver of remonstrance against formation of a local improvement district, and all non-remonstrances shall be recorded in the County Recorder's Office as well as the City's Lien Docket, prior to issuance of a Certificate of Occupancy Building Permit or as a part of the recordation of a final plat.
- In order to allow for potential future widening, a special setback requirement shall be maintained adjacent to all arterial streets. The minimum setback shall be 55 feet from the centerline or 25 feet from the right-of-way designated on the Master Plan, whichever is greater."

Finding: These criteria are satisfied.

Details of Finding: As stated by the applicant, "rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with recordation of a final plat in accordance with Section 4.177."

Subsections 4.125 (.09) A. 6.and 4.177 (.01) E. Street and Improvement Standards: Access Drives

E12. **Review Criteria:**

- Access drives are required to be 16 feet for two-way traffic.
- An access drive to any proposed development shall be designed to provide a clear travel lane free from any obstructions.
- Access drive travel lanes shall be constructed with a hard surface capable of carrying a 23-ton load.
- Secondary or emergency access lanes may be improved to a minimum 12 feet with an all-weather surface as approved by the Fire District. All fire lanes shall be dedicated easements.
- Minimum access requirements shall be adjusted commensurate with the intended function of the site based on vehicle types and traffic generation.
- Where access drives connect to the public right-of-way, construction within the right-of-way shall be in conformance to the Public Works Standards.

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows alleys of sufficient width to meet the width standards. The applicant states easements for fire access will be dedicated as required.

Subsections 4.125 (.09) A. 7. and 4.177 (.01) F. Street and Improvement Standards: Clear Vision Areas

E13. **Review Criteria:** "A clear vision area which meets the Public Works Standards shall be maintained on each corner of property at the intersection of any two streets, a street and a railroad or a street and a driveway. However, the following items shall be exempt from meeting this requirement:" Listed 1. a.-f.

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows streets found to meet these standards under Request A.

Subsections 4.125 (.09) A. 8.and 4.177 (.01) G. Street and Improvement Standards: Vertical Clearance

E14. **Review Criterion:** "a minimum clearance of 12 feet above the pavement surface shall be maintained over all streets and access drives."

Finding: This criterion is satisfied.

Details of Finding: Nothing shown on the tentative subdivision plat would preclude the required clearance from being provided.

Subsections 4.125 (.09) A. 9.and 4.177 (.01) H. Street and Improvement Standards: Interim Improvement Standards

E15. **Review Criteria:** "It is anticipated that all existing streets, except those in new subdivisions, will require complete reconstruction to support urban level traffic volumes. However, in most cases, existing and short-term projected traffic volumes do not warrant improvements to full Master Plan standards. Therefore, unless otherwise specified by the Planning Commission, the following interim standards shall apply.

- Arterials - 24 foot paved, with standard sub-base. Asphalt overlays are generally considered unacceptable, but may be considered as an interim improvement based on the recommendations of the City Engineer, regarding adequate structural quality to support an overlay.
- Half-streets are generally considered unacceptable. However, where the Development Review Board finds it essential to allow for reasonable development, a half-street may be approved. Whenever a half-street improvement is approved, it shall conform to the requirements in the Public Works Standards:
- When considered appropriate in conjunction with other anticipated or scheduled street improvements, the City Engineer may approve street improvements with a single asphalt lift. However, adequate provision must be made for interim storm drainage, pavement transitions at seams and the scheduling of the second lift through the Capital Improvements Plan.

Finding: These criteria are satisfied.

Details of Finding: The area covered by the tentative subdivision plat does not include any interim improvements addressed by this subsection.

Subsection 4.202 (.01) through (.03) Plats Reviewed by Planning Director or DRB

E16. **Review Criteria:** "Pursuant to ORS Chapter 92, plans and plats must be approved by the Planning Director or Development Review Board (Board), as specified in Sections 4.030 and 4.031, before a plat for any land division may be filed in the county recording office for any land within the boundaries of the City, except that the Planning Director shall have authority to approve a final plat that is found to be substantially consistent with the tentative plat approved by the Board.

The Development Review Board and Planning Director shall be given all the powers and duties with respect to procedures and action on tentative and final plans, plats and maps of land divisions specified in Oregon Revised Statutes and by this Code.

Approval by the Development Review Board or Planning Director of divisions of land within the boundaries of the City, other than statutory subdivisions, is hereby required by virtue of the authority granted to the City in ORS 92."

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat is being reviewed by the Development Review Board according to this subsection. The final plat will be reviewed by the Planning Division under the authority of the Planning Director to ensure compliance with the DRB review of the tentative subdivision plat.

Subsection 4.202 (.04) A. Lots must be Legally Created for Issuing Development Permit

E17. **Review Criterion:** "No person shall sell any lot or parcel in any condominium, subdivision, or land partition until a final condominium, subdivision or partition plat has been approved by the Planning Director as set forth in this Code and properly recorded with the appropriate county."

Finding: This criterion is satisfied.
Details of Finding: It is understood that no lots or parcels will be sold until the final plat has been approved by the Planning Director and recorded.

Subsection 4.202 (.04) B. Prohibition of Creating Undersized Lots

E18. **Review Criterion:** "It shall be a violation of this Code to divide a tract of land into a parcel smaller than the lot size required in the Zoning Sections of this Code unless specifically approved by the Development Review Board or City Council. No conveyance of any portion of a lot, for other than a public use, shall leave a structure on the remainder of the lot with less than the minimum lot size, width, depth, frontage, yard or setback requirements, unless specifically authorized through the Variance procedures of Section 4.196 or the waiver provisions of the Planned Development procedures of Section 4.118."
Finding: This criterion is satisfied.
Details of Finding: No lots will be divided into a size smaller than allowed by the proposed Village "V" zoning designation.

Subsection 4.210 (.01) Pre-Application Conference

E19. **Review Criterion:** "Prior to submission of a tentative condominium, partition, or subdivision plat, a person proposing to divide land in the City shall contact the Planning Department to arrange a pre-application conference as set forth in Section 4.010."
Finding: This criterion is satisfied.
Details of Finding: A pre-application meeting has been held. See case file PA13-0006.

Subsection 4.210 (.01) A. Preparation of Tentative Plat

E20. **Review Criterion:** "The applicant shall cause to be prepared a tentative plat, together with improvement plans and other supplementary material as specified in this Section. The Tentative Plat shall be prepared by an Oregon licensed professional land surveyor or engineer. An affidavit of the services of such surveyor or engineer shall be furnished as part of the submittal."
Finding: This criterion is satisfied.
Details of Finding: The applicant's sheets 4.1 through 4.5 of their plan set, Exhibit B2, is a tentative subdivision plat prepared in accordance with this subsection.

Subsection 4.210 (.01) B. Tentative Plat Submission

E21. **Review Criteria:** "The design and layout of this plan plat shall meet the guidelines and requirements set forth in this Code. The Tentative Plat shall be submitted to the Planning Department with the following information:" Listed 1. through 26.
Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat has been submitted with the required information.

Subsection 4.210 (.01) D. Land Division Phases to Be Shown

E22. **Review Criteria:** "Where the applicant intends to develop the land in phases, the schedule of such phasing shall be presented for review at the time of the tentative plat. In acting on an application for tentative plat approval, the Planning Director or Development Review Board may set time

limits for the completion of the phasing schedule which, if not met, shall result in an expiration of the tentative plat approval."

Finding: These criteria are satisfied.

Details of Finding: Phasing is shown on sheets 11.1 and 11.2 of the applicant's plan set, Exhibit B2.

Subsection 4.210 (.01) E. Remainder Tracts

E23. **Review Criteria:** "Remainder tracts to be shown as lots or parcels. Tentative plats shall clearly show all affected property as part of the application for land division. All remainder tracts, regardless of size, shall be shown and counted among the parcels or lots of the division."

Finding: These criteria are satisfied.

Details of Finding: All affected property has been incorporated into the tentative subdivision plat.

Subsection 4.236 (.01) Conformity to the Master Plan or Map

E24. **Review Criteria:** "Land divisions shall conform to and be in harmony with the Transportation Master Plan (Transportation Systems Plan), the Bicycle and Pedestrian Master Plan, the Parks and Recreation Master Plan, the Official Plan or Map and especially to the Master Street Plan."

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat is consistent with applicable plans including the Transportation Systems Plan and Villebois Village Master Plan.

Subsection 4.236 (.02) Relation to Adjoining Street System

E25. **Review Criteria:**

- A land division shall provide for the continuation of the principal streets existing in the adjoining area, or of their proper projection when adjoining property is not developed, and shall be of a width not less than the minimum requirements for streets set forth in these regulations. Where, in the opinion of the Planning Director or Development Review Board, topographic conditions make such continuation or conformity impractical, an exception may be made. In cases where the Board or Planning Commission has adopted a plan or plat of a neighborhood or area of which the proposed land division is a part, the subdivision shall conform to such adopted neighborhood or area plan.
- Where the plat submitted covers only a part of the applicant's tract, a sketch of the prospective future street system of the unsubmitted part shall be furnished and the street system of the part submitted shall be considered in the light of adjustments and connections with the street system of the part not submitted.
- At any time when an applicant proposes a land division and the Comprehensive Plan would allow for the proposed lots to be further divided, the city may require an arrangement of lots and streets such as to permit a later resubdivision in conformity to the street plans and other requirements specified in these regulations.

Finding: These criteria are satisfied.

Details of Finding: The tentative subdivision plat shows streets meeting these standards consistent with the proposed PDP and refinements. See Requests A and B.

Subsection 4.236 (.03) Streets: Conformity to Standards Elsewhere in the Code

E26. **Review Criteria:** "All streets shall conform to the standards set forth in Section 4.177 and the block size requirements of the zone."
Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows streets consistent with the proposed PDP under Request A which meets Section 4.177 and the block requirements of the zone.

Subsection 4.236 (.04) Creation of Easements

E27. **Review Criteria:** "The Planning Director or Development Review Board may approve an easement to be established without full compliance with these regulations, provided such an easement is the only reasonable method by which a portion of a lot large enough to allow partitioning into two (2) parcels may be provided with vehicular access and adequate utilities. If the proposed lot is large enough to divide into more than two (2) parcels, a street dedication may be required."
Finding: These criteria are satisfied.
Details of Finding: No specific easements are requested pursuant to this subsection.

Subsection 4.236 (.05) Topography

E28. **Review Criterion:** "The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of these regulations."
Finding: This criterion is satisfied.
Details of Finding: The tentative subdivision plat shows street alignments recognizing topographic conditions consistent with the requested PDP.

Subsection 4.236 (.06) Reserve Strips

E29. **Review Criteria:** "The Planning Director or Development Review Board may require the applicant to create a reserve strip controlling the access to a street. Said strip is to be placed under the jurisdiction of the City Council, when the Director or Board determine that a strip is necessary:" Reasons listed A. through D.
Finding: These criteria are satisfied.
Details of Finding: No reserve strips are being required for the reasons listed in this subsection. However, reserve strips are being required by Condition of Approval PDE 7 to prevent access to the front side of lots served by an alley. See also Findings A5 and E3.

Subsection 4.236 (.07) Future Expansion of Street

E30. **Review Criteria:** When necessary to give access to, or permit a satisfactory future division of, adjoining land, streets shall be extended to the boundary of the land division and the resulting dead-end street may be approved without a turn-around. Reserve strips and street plugs shall be required to preserve the objective of street extension.
Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows streets for future expansion consistent with this subsection.

Subsection 4.236 (.08) Additional Right-of-Way for Existing Streets

E31. **Review Criteria:** "Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall conform to the designated width in this Code or in the Transportation Systems Plan."
Finding: These criteria are satisfied.
Details of Finding: No additional right-of-way is being required for existing streets.

Subsection 4.236 (.09) Street Names

E32. **Review Criteria:** "No street names will be used which will duplicate or be confused with the names of existing streets, except for extensions of existing streets. Street names and numbers shall conform to the established name system in the City, and shall be subject to the approval of the City Engineer."
Finding: These criteria are satisfied.
Details of Finding: Street names will be reviewed by Engineering staff and be subject to approval by the City Engineer consistent with this subsection.

Subsection 4.237 (.01) Blocks

E33. **Review Criteria:**

- The length, width, and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control, and safety of pedestrian, bicycle, and motor vehicle traffic, and recognition of limitations and opportunities of topography.
- Sizes: Blocks shall not exceed the sizes and lengths specified for the zone in which they are located unless topographical conditions or other physical constraints necessitate larger blocks. Larger blocks shall only be approved where specific findings are made justifying the size, shape, and configuration.

Finding: These criteria are satisfied.
Details of Finding: The tentative subdivision plat shows blocks consistent with those proposed and reviewed as part of Request A, Preliminary Development Plan.

Subsection 4.237 (.02) Easements

E34. **Review Criteria:**

- Utility lines. Easements for sanitary or storm sewers, drainage, water mains, electrical lines or other public utilities shall be dedicated wherever necessary. Easements shall be provided consistent with the City's Public Works Standards, as specified by the City Engineer or Planning Director. All of the public utility lines within and adjacent to the site shall be installed within the public right-of-way or easement; with underground services extending to the private parcel constructed in conformance to the City's Public Works Standards. All franchise utilities shall be installed within a public utility easement. All utilities shall have appropriate easements for construction and maintenance purposes.
- Water courses. Where a land division is traversed by a water course, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the water course, and such further width as will be adequate for the purposes of conveying storm water and allowing for maintenance of the facility or channel. Streets or parkways parallel to water courses may be required.

Finding: These criteria are satisfied or will be satisfied by Conditions of Approval.
Details of Finding: As shown on the applicant's sheets 4.1 through 4.5 of their plan set, Exhibit B2, the required easements have been provided. Condition of Approval PFA 46 ensures all easements dealing with utilities are on the final plat. Condition of Approval PDE 9 ensures

Subsection 4.237 (.03) Mid-block Pedestrian and Bicycle Pathways

E35. **Review Criteria:** "An improved public pathway shall be required to transverse the block near its middle if that block exceeds the length standards of the zone in which it is located.

- Pathways shall be required to connect to cul-de-sacs or to pass through unusually shaped blocks.
- Pathways required by this subsection shall have a minimum width of ten (10) feet unless they are found to be unnecessary for bicycle traffic, in which case they are to have a minimum width of six (6) feet.

Finding: These criteria are satisfied.
Details of Finding: Pathways are being provided consistent with the Village Zone requirements and the Villebois Village Master Plan. See Finding A4.

Subsection 4.237 (.04) Tree Planting & Tree Access Easements

E36. **Review Criteria:** "Tree planting plans for a land division must be submitted to the Planning Director and receive the approval of the Director or Development Review Board before the planting is begun. Easements or other documents shall be provided, guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property."
Finding: These criteria are satisfied.
Details of Finding: The proposed street trees are within the proposed public right-of-way.

Subsection 4.237 (.05) Lot Size and Shape

E37. **Review Criteria:** "The lot size, width, shape and orientation shall be appropriate for the location of the land division and for the type of development and use contemplated. Lots shall meet the requirements of the zone where they are located."
Finding: These criteria are satisfied.
Details of Finding: Proposed lot sizes, widths, shapes and orientations are appropriate for the proposed development and are in conformance with the Village Zone requirements as discussed under Request A.

Subsection 4.237 (.06) Access

E38. **Review Criteria:** "The division of land shall be such that each lot shall have a minimum frontage on a street or private drive, as specified in the standards of the relative zoning districts. This minimum frontage requirement shall apply with the following exceptions:" Listed A. and B.
Finding: These criteria are satisfied.
Details of Finding: Each lot has the minimum frontage on a street or greenbelt, as allowed in the approved Architectural Pattern Book.

Subsection 4.237 (.07) Through Lots

E39. **Review Criteria:** "Through lots shall be avoided except where essential to provide separation of residential development from major traffic arteries or adjacent non-residential activity or to overcome specific disadvantages of topography and orientation."
Finding: These criteria are satisfied.
Details of Finding: No through lots are proposed.

Subsection 4.237 (.08) Lot Side Lines

E40. **Review Criteria:** "The side lines of lots, as far as practicable for the purpose of the proposed development, shall run at right angles to the street or tract with a private drive upon which the lots face."
Finding: These criteria are satisfied.
Details of Finding: Generally side lot lines are at right angles with the front lot line. Where they do not, they run at the closest possible angle to 90 degrees as allowed by block shape, adjacent lot shape, and required alley orientation.

Subsection 4.237 (.09) Large Lot Land Divisions

E41. **Review Criteria:** "In dividing tracts which at some future time are likely to be re-divided, the location of lot lines and other details of the layout shall be such that re-division may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of buildings within future street locations shall be made a matter of record if the Development Review Board considers it necessary."
Finding: These criteria are satisfied.
Details of Finding: No future divisions of the lots included in the tentative subdivision plat are anticipated besides the tracts set for future development as part of future PDP's.

Subsection 4.237 (.10) and (.11) Building Line and Built-to Line

E42. **Review Criteria:** The Planning Director or Development Review Board may establish special:
- building setbacks to allow for the future redivision or other development of the property or for other reasons specified in the findings supporting the decision. If special building setback lines are established for the land division, they shall be shown on the final plat.
- build-to lines for the development, as specified in the findings and conditions of approval for the decision. If special build-to lines are established for the land division, they shall be shown on the final plat.

Finding: These criteria are satisfied.
Details of Finding: No building lines or built-to lines are proposed or recommended.

Subsection 4.237 (.12) Land for Public Purposes

E43. **Review Criterion:** "The Planning Director or Development Review Board may require property to be reserved for public acquisition, or irrevocably offered for dedication, for a specified period of time."
Finding: This criterion is satisfied.
Details of Finding: No property reservation is recommended as described in this subsection.

Subsection 4.237 (.13) Corner Lots

E44. **Review Criterion:** "Lots on street intersections shall have a corner radius of not less than ten (10) feet."
Finding: This criterion is satisfied.
Details of Finding: All proposed corner lots meet the minimum corner radius of ten (10) feet.

Section 4.250 Lots of Record

E45. **Review Criteria:** "All lots of record that have been legally created prior to the adoption of this ordinance shall be considered to be legal lots. Tax lots created by the County Assessor are not necessarily legal lots of record."
Finding: These criteria are satisfied.
Details of Finding: The parcels being divided are of record, and the resulting subdivision lots will be lots of record.

Section 4.260 Improvements-Procedures

E46. **Review Criteria:** "In addition to other requirements, improvements installed by the developer, either as a requirement of these regulations or at the developer's own option, shall conform to the requirements of this Code and improvement standards and specifications of the City. The improvements shall be installed in accordance with the City's Public Works Standards."
Finding: These criteria are satisfied.
Details of Finding: The rights-of-way shown on the tentative subdivision plat are sufficient for installation of improvements to City standards. Conformance of the improvements with the City's Public Works Standards and other applicable standards will be ensured through the Engineering Division's permit and inspection process.

Section 4.262 Improvements-Requirements

E47. **Review Criteria:** This section establishes requirements for a number of different improvements including curbs, sidewalks, sanitary sewers, drainage, underground utility and service facilities, streetlight standards, street signs, monuments, and water.
Finding: These criteria are satisfied.
Details of Finding: The applicant has stated their intent to meet the requirements for all the types of improvements indicated in this subsection. Conformance with these requirements will be ensured through the Engineering Division's, and Building Division's where applicable, permit and inspection process.

REQUEST F: DB13-0025 TYPE C TREE PLAN

The applicant's findings in Section VA of their notebook, Exhibit B1, respond to the majority of the applicable criteria.

Subsection 4.600.50 (.03) A. Access to Site for Tree Related Observation

F1. **Review Criterion:** "By submission of an application, the applicant shall be deemed to have authorized City representatives to have access to applicant's property as may be needed to verify the information provided, to observe site conditions, and if a permit is granted, to verify that terms and conditions of the permit are followed."
Finding: This criterion will be satisfied by Condition of Approval PDF 2.
Details of Finding: Condition of Approval PDF 2 ensures the required access is allowed.

Subsection 4.610.00 (.03) B. Type C Tree Removal Review Authority

F2. **Review Criterion:** "Type C. Where the site is proposed for development necessitating site plan review or plat approval by the Development Review Board, the Development Review Board shall be responsible for granting or denying the application for a Tree Removal Permit, and that decision may be subject to affirmance, reversal or modification by the City Council, if subsequently reviewed by the Council."
Finding: This criterion is satisfied.
Details of Finding: The requested tree removal is connected to site plan review by the Development Review Board for the proposed development. The tree removal is thus being reviewed by the DRB.

Subsection 4.610.00 (.06) A. Conditions Attached to Type C Tree Permits

F3. **Review Criterion:** "Conditions. Attach to the granting of the permit any reasonable conditions considered necessary by the reviewing authority including, but not limited to, the recording of any plan or agreement approved under this subchapter, to ensure that the intent of this Chapter will be fulfilled and to minimize damage to, encroachment on or interference with natural resources and processes within wooded areas;"
Finding: This criterion is satisfied.
Details of Finding: No additional conditions are recommended pursuant to this subsection.

Subsection 4.610.00 (.06) B. Completion of Operation

F4. **Review Criterion:** "Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:" "Fix a reasonable time to complete tree removal operations;"
Finding: This criterion is satisfied.
Details of Finding: It is understood the tree removal will be completed by the time construction of all homes, parks, and other improvements in the PDP are completed, which is a reasonable time frame for tree removal.

Subsection 4.610.00 (.06) C. Security

F5. **Review Criterion:** "Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:" "Require the Type C permit grantee to file with the City a cash or corporate surety bond or irrevocable bank letter of credit in an amount determined necessary by the City to ensure compliance with Tree Removal Permit conditions and this Chapter. 1. This requirement may be waived by the Planning Director if the tree removal must be completed before a plat is recorded, and the applicant has complied with WC 4.264(1) of this Code."

Finding: This criterion will be satisfied by Condition of Approval PDF 3.

Details of Finding: The condition of approval ensures the security requirement of this subsection is met.

Subsection 4.610.10 (.01) Standards for Tree Removal, Relocation or Replacement

F6. **Review Criteria:** "Except where an application is exempt, or where otherwise noted, the following standards shall govern the review of an application for a Type A, B, C or D Tree Removal Permit:" Listed A. through J.

Finding: These criteria are satisfied.

Details of Finding: The standards of this subsection are met as follows:

- The proposed tree removal on the western edge of the SROZ for OS-2 is minimal.
- The applicant states tree preservation was taken into consideration the preservation of trees on the site.
- No significant wooded areas or trees would be preserved by design alternatives.
- Land clearing will not exceed the permitted areas.
- The applicant states the homes are designed to blend into the landscape as much as feasible consistent with the relevant pattern book.
- It is understood the proposed development will comply with all applicable statutes and ordinances.
- The necessary tree replacement and protection is planned according to the requirements of tree preservation and protection ordinance.
- Tree removal is limited to where it is necessary for construction or to address nuisances or where the health of the trees warrants removal.
- A tree survey has been provided. See Section V of the applicant's notebook, Exhibit B1.
- A tree maintenance and protection plan has been submitted concurrently with the request for a tentative subdivision plat.
- No utilities are proposed to be located where they would cause adverse environmental consequences.

Subsection 4.610.40 (.01) Type C Tree Plan Reviewed with Stage II Final Plan

F7. **Review Criteria:** "Approval to remove any trees on property as part of a site development application may be granted in a Type C permit. A Type C permit application shall be reviewed by the standards of this subchapter and all applicable review criteria of Chapter 4. Application of the standards of this section shall not result in a reduction of square footage or loss of density, but may require an applicant to modify plans to allow for buildings of greater height. If an applicant

proposes to remove trees and submits a landscaping plan as part of a site development application, an application for a Tree Removal Permit shall be included. The Tree Removal Permit application will be reviewed in the Stage II development review process, and any plan changes made that affect trees after Stage II review of a development application shall be subject to review by DRB. Where mitigation is required for tree removal, such mitigation may be considered as part of the landscaping requirements as set forth in this Chapter. Tree removal shall not commence until approval of the required Stage II application and the expiration of the appeal period following that decision. If a decision approving a Type C permit is appealed, no trees shall be removed until the appeal has been settled."

Finding: These criteria are satisfied.

Details of Finding: The proposed Type C Tree Plan is being reviewed concurrently with the Preliminary Development Plan, which is the equivalent of a Stage II Final Plan in the Village Zone.

Section 4.610.40 (.02) Submission of Tree Maintenance and Protection Plan

F8. **Review Criteria:** "The applicant must provide ten copies of a Tree Maintenance and Protection Plan completed by an arborist that contains the following information:" Listed A. 1. through A. 7.

Finding: These criteria are satisfied.

Details of Finding: The applicant has submitted the necessary copies of a Tree Maintenance and Protection Plan. See Section V of the applicants notebook, Exhibit B1.

Subsection 4.620.00 (.01) Tree Replacement Requirement

F9. **Review Criterion:** "A Type B or C Tree Removal Permit grantee shall replace or relocate each removed tree having six (6) inches or greater d.b.h. within one year of removal."

Finding: This criterion is satisfied.

Details of Finding: The tree mitigation requirements will be more than exceeded by the planned street tree and trees in parks and linear greens.

Subsection 4.620.00 (.02) Basis for Determining Replacement

F10. **Review Criteria:** "The permit grantee shall replace removed trees on a basis of one (1) tree replanted for each tree removed. All replacement trees must measure two inches (2") or more in diameter."

Finding: These criteria are satisfied.

Details of Finding: More trees are planned to be planted that proposed to be removed. Each tree, including street trees and trees in parks and linear greens will meet the minimum diameter requirement.

Subsection 4.620.00 (.03) Replacement Tree Requirements

F11. **Review Criteria:** "A mitigation or replacement tree plan shall be reviewed by the City prior to planting and according to the standards of this subsection.

A. Replacement trees shall have shade potential or other characteristics comparable to the removed trees, shall be appropriately chosen for the site from an approved tree species list supplied by the City, and shall be state Department of Agriculture Nursery Grade No. 1 or better.

B. Replacement trees must be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date.

C. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced.

D. Diversity of tree species shall be encouraged where trees will be replaced, and diversity of species shall also be maintained where essential to preserving a wooded area or habitat."

Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDF 4.

Details of Finding: The condition of approval will ensure the relevant requirements of this subsection are met.

Subsection 4.620.00 (.04) Replacement Tree Stock Requirements

F12. **Review Criteria:** "All trees to be planted shall consist of nursery stock that meets requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade."

Finding: These criteria will be satisfied by Condition of Approval PDF 4.

Details of Finding: Condition of Approval PDF 4 assures this is met.

Subsection 4.620.00 (.05) Replacement Trees Locations

F13. **Review Criteria:** "The City shall review tree relocation or replacement plans in order to provide optimum enhancement, preservation and protection of wooded areas. To the extent feasible and desirable, trees shall be relocated or replaced on-site and within the same general area as trees removed."

Finding: These criteria are satisfied.

Details of Finding: The applicant proposes to mitigate for all removed trees on site and in the appropriate locations for the proposed development.

Section 4.620.10 Tree Protection During Construction

F14. **Review Criteria:** "Where tree protection is required by a condition of development under Chapter 4 or by a Tree Maintenance and Protection Plan approved under this subchapter, the following standards apply:" Listed A. through D.

Finding: These criteria are satisfied or will be satisfied by Condition of Approvals PDF 5 and PDF 6.

Details of Finding: The conditions of approval assure the applicable requirements of this Section will be met.

REQUEST G: DB13-0026 FINAL DEVELOPMENT PLAN FOR PARKS AND OPEN SPACE

The applicant's findings in Section VIA of their notebook, Exhibit B1, respond to the majority of the applicable criteria.

Subsection 4.125 (.02) Permitted Uses in the Village Zone

G1. **Review Criteria:** This subsection lists the uses typically permitted in the Village Zone including "Non-commercial parks, plazas, playgrounds, recreational facilities, community buildings and grounds, tennis courts, and other similar recreational and community uses owned and operated either publicly or by an owners association."
Finding: These criteria are satisfied.
Details of Finding: The requested Final Development Plan is for parks and open space allowed within the Village Zone.

Subsection 4.125 (.08) A. Parks and Open Space in the Village Zone-Amount Required

G2. **Review Criteria:** "In all residential developments and in mixed-use developments where the majority of the developed square footage is to be in residential use, at least twenty-five percent (25%) of the area shall be open space, excluding street pavement and surface parking. In multi-phased developments, individual phases are not required to meet the 25% standard as long as an approved Specific Area Plan demonstrates that the overall development shall provide a minimum of 25% open space. Required yard areas shall not be counted towards the required open space area."
Finding: These criteria are satisfied.
Details of Finding: The parks master plan for Villebois provides for approximately 33% of the area to be parks and open space. The subject area includes the parks shown in the Villebois Village Master Plan plus additional pocket parks and linear greens.

Subsection 4.125 (.08) B. Parks and Open Space in the Village Zone-Ownership

G3. **Review Criteria:** "Open space area required by this Section may, at the discretion of the Development Review Board, be protected by a conservation easement or dedicated to the City, either rights in fee or easement, without altering the density or other development standards of the proposed development. Provided that, if the dedication is for public park purposes, the size and amount of the proposed dedication shall meet the criteria of the City of Wilsonville standards. The square footage of any land, whether dedicated or not, which is used for open space shall be deemed a part of the development site for the purpose of computing density or allowable lot coverage."
Finding: These criteria are satisfied.
Details of Finding: This discretion of the DRB is understood. Ownership will be according to agreements reached between the developer and the City.

Subsection 4.125 (.08) C. Parks and Open Space in the Village Zone-Protection and Maintenance

G4. **Review Criteria:** "The Development Review Board may specify the method of assuring the long-term protection and maintenance of open space and/or recreational areas. Where such protection or

maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review and approve any pertinent bylaws, covenants, or agreements prior to recordation."
Finding: These criteria are satisfied.
Details of Finding: Protection and maintenance of the open space and recreational areas are covered in the CCR's being reviewed by the City, and Operation and Maintenance Agreements between the developer and the City.

Subsection 4.125 (.09) Street and Access Improvement Standards

G5. **Review Criteria:** This section lists street and access improvement standards for the Village Zone including vision clearance standards.
Finding: These criteria are satisfied.
Details of Finding: This code section does not apply to the proposed parks and open space, except for vision clearance for vegetation which is met.

Subsection 4.125 (.10) Sidewalk and Pathway Improvement Standards

G6. **Review Criteria:** "The provisions of Section 4.178 shall apply within the Village zone."
Finding: These criteria are satisfied.
Details of Finding: Findings regarding Compliance with the standards of Section 4.178 can be found in Finding A77.

Subsection 4.125 (.11) Landscaping Screening and Buffering

G7. **Review Criteria:** "Except as noted below, the provisions of Section 4.176 shall apply in the Village zone:" "Streets in the Village zone shall be developed with street trees as described in the Community Elements Book."
Finding: These criteria are satisfied.
Details of Finding: Findings G18 through G29 pertain to Section 4.176. Street trees are proposed consistent with the Community Elements Book.

Section 4.125 (.12) A. Signs Compliance with Master Sign and Wayfinding Plan for SAP

G8. **Review Criterion:** "All signage and wayfinding elements within the Village Zone shall be in compliance with the adopted Signage and wayfinding Master Plan for the appropriate SAP."
Finding: This criterion does not apply.
Details of Finding: No signs requiring permitting are proposed in the PDP area. It is understood wayfinding and regulatory signs will meeting the Master Sign and Wayfinding program.

Subsection 4.125 (.14) Design Standards Applying to the Village Zone

The following Design Standards implement the Design Principles found in Section 4.125(.13), above, and enumerate the architectural details and design requirements applicable to buildings and other features within the Village (V) zone. The Design Standards are based primarily on the features, types, and details of the residential traditions in the Northwest, but are not intended to mandate a particular style or fashion. All development within the Village zone shall incorporate the following:

Subsection 4.125 (.14) A. 2. b. Details to Match Architectural Pattern Book and Community Elements Book

G9. **Review Criteria:** "Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Architectural Pattern Book, Community Elements Book or approved Village Center Architectural Standards."
Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDG 2.
Details of Finding: The park furnishings, benches and tables, shown match the Community Elements Book for SAP North. The applicant has provided sufficient information to show that playground equipment meeting the Community Elements Book can be provided. However, Condition of Approval PDG 2 requires additional technical details and ensures the detailed requirements on page 15 of the Community Elements Book are met. The FDP also includes the mail kiosks. Elevations of the kiosks have been provided which are consistent with previous approvals.

Subsection 4.125 (.14) A. 2. f. Protection of Significant Trees

G10. **Review Criterion:** "The protection of existing significant trees as identified in an approved Community Elements Book."
Finding: This criterion is satisfied.
Details of Finding: Significant trees are being protected.

Subsection 4.125 (.14) A. 2. g. Landscape Plan

G11. **Review Criterion:** "A landscape plan in compliance with Sections 4.125(.07) and (.11), above."
Finding: This criterion is satisfied.
Details of Finding: Landscape plans have been provided in compliance with the referenced sections.

Subsection 4.125 (.14) C. Lighting and Site Furnishings

G12. **Review Criteria:** "Lighting and site furnishings shall be in compliance with the approved Architectural Pattern Book, Community Elements Book, or approved Village Center Architectural Standards."
Finding: These criteria are satisfied.
Details of Finding: The lighting and site furnishings shown by the applicant match the Community Elements Book for SAP North.

Subsection 4.125 (.18) L. Final Development Plan Approval Procedures

G13. **Review Criteria:** This subsection establishes the approval procedures for Final Development Plans.
Finding: These criteria are satisfied.
Details of Finding: The applicant has followed the applicable procedures set out in this subsection for approval of a FDP.

Subsection 4.125 (.18) M. Final Development Plan Submittal Requirements

G14. **Review Criteria:** "An application for approval of a FDP shall be subject to the provisions of Section 4.034."
Finding: These criteria are satisfied.
Details of Finding: The necessary materials have been submitted for review of the FDP.

Subsections 4.125 (.18) N. and P. 1. Final Development Plans Subject to Site Design Review Criteria

G15. **Review Criteria:** "An application for approval of a FDP shall be subject to the provisions of Section 4.421"
Finding: These criteria are satisfied.
Details of Finding: The provisions of Section 4.421 are being used as criteria in the review of the FDP. See Findings G30 through G37.

Subsection 4.125 (.18) O. Refinements to Preliminary Development Plan as part of Final Development Plan

G16. **Review Criteria:** This subsection identifies the process and requirements for refinements to a preliminary development plan as party of a final development plan.
Finding: These criteria are satisfied.
Details of Finding: No refinements are proposed as part of the requested FDP, as park and open space refinements were requested as part of the PDP approval request. See Request B.

Subsection 4.125 (.18) P.2. Final Development Plan Compliance with Architectural Pattern Book, Community Elements Book, and PDP Conditions of Approval

G17. **Review Criteria:** "An application for an FDP shall demonstrate that the proposal conforms to the applicable Architectural Pattern Book, Community Elements Book, Village Center Architectural Standards and any conditions of a previously approved PDP."
Finding: These criteria are satisfied or will be satisfied by a Condition of Approval PDG 2.
Details of Finding: Overall, as demonstrated by Finding G7 through G9 above, the FDP demonstrates compliance with the SAP North Community Elements Book. The applicant has provided sufficient information to show that playground equipment meeting the Community Elements Book can be provided. However, Condition of Approval PDG 2 ensures the detailed requirements on page 15 of the Community Elements Book are met. There are no relevant portions of the Architectural Pattern Book, or Conditions of Approval for a previously approved PDP to which to demonstrate compliance.

Landscape Standards Section 4.176

Subsection 4.176 (.02) B. Landscape Standards and Compliance with Code

G18. **Review Criterion:** "All landscaping and screening required by this Code must comply with all of the provisions of this Section, unless specifically waived or granted a Variance as otherwise

provided in the Code. The landscaping standards are minimum requirements; higher standards can be substituted as long as fence and vegetation-height limitations are met. Where the standards set a minimum based on square footage or linear footage, they shall be interpreted as applying to each complete or partial increment of area or length"

Finding: This criterion is satisfied.

Details of Finding: No waivers or variances to landscape standards have been requested. Thus all landscaping and screening must comply with standards of this section.

Subsection 4.176 (.03) Landscape Area and Locations

G19. **Review Criteria:** "Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable."

Finding: These criteria are satisfied.

Details of Finding: The proposed parks are predominantly covered with vegetative plant materials other than areas for walkways, play structures, benches, tables, etc. The plantings are in a variety of areas.

Subsection 4.176 (.04) Buffering and Screening

G20. **Review Criteria:** "Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.

C. All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties.

D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit.

E. In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking.

F. In any zone any fence over six (6) feet high measured from soil surface at the outside of fenceline shall require Development Review Board approval."

Finding: These criteria are satisfied.

Details of Finding: No conditions requiring buffering and screening are within the area covered by the subject FDP request.

Subsection 4.176 (.06) A. Plant Materials-Shrubs and Groundcover

G21. **Review Criteria:** This subsection establishes plant material and planting requirements for shrubs and ground cover.

Finding: These criteria are satisfied.

Details of Finding: Applicant's sheets L 1.0 through L 6.0 in their plan set, Exhibit B3, indicates the requirements established by this subsection will be met by the proposed plantings.

Subsection 4.176 (.06) B. Plant Materials-Trees

G22. **Review Criteria:** This subsection establishes plant material requirements for trees.
Finding: These criteria are satisfied.
Details of Finding: Applicant's sheets L 1.0 through L 6.0 in their plan set, Exhibit B3, indicates the requirements established by this subsection will be met by the proposed plantings.

Subsection 4.176 (.06) D. Plant Materials-Street Trees

G23. **Review Criteria:** This subsection establishes plant material requirements for street trees.
Finding: These criteria are satisfied.
Details of Finding: Applicant's sheets L 1.0 through L 6.0 of their plan set, Exhibit B3, indicates the requirements established by this subsection as well as the Community Elements Book will be met by the proposed plantings.

Subsection 4.176 (.06) E. Types of Plant Species

G24. **Review Criteria:** This subsection discusses use of existing landscaping or native vegetation, selection of plant materials, and prohibited plant materials.
Finding: These criteria are satisfied.
Details of Finding: The allowed plant materials are governed by the Community Elements Book. All proposed plant materials are consistent with the SAP North Community Elements Book.

Subsection 4.176 (.06) F. Tree Credit

G25. **Review Criteria:** "Existing trees that are in good health as certified by an arborist and are not disturbed during construction may count for landscaping tree credit as follows: Existing trunk diameter Number of Tree Credits

18 to 24 inches in diameter	3 tree credits
25 to 31 inches in diameter	4 tree credits
32 inches or greater	5 tree credits:"

Maintenance requirements listed 1. through 2.
Finding: These criteria are satisfied.
Details of Finding: The applicant is not requesting any of the preserved trees be counted as tree credits pursuant to this subsection.

Subsection 4.176 (.06) G. Exceeding Plant Material Standards

G26. **Review Criterion:** "Landscape materials that exceed the minimum standards of this Section are encouraged, provided that height and vision clearance requirements are met."
Finding: This criterion is satisfied.
Details of Finding: The selected landscape materials do not violate any height or visions clearance requirements.

Subsection 4.176 (.07) Installation and Maintenance of Landscaping

G27. **Review Criteria:** This subsection establishes installation and maintenance standards for landscaping.

Finding: These criteria are satisfied or will be satisfied by Condition of Approval PDG 3.

Details of Finding: The installation and maintenance standards are or will be met as follows:

- Plant materials are required to be installed to current industry standards and be properly staked to ensure survival
- Plants that die are required to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City.
- A note on the applicant's sheet L2.0 in their plan set, Exhibit B3, indicates "project is to be irrigated by an automatic underground system, which will provide full coverage for all plant material. System is to be design/build by landscape contractor."

Subsection 4.176 (.09) Landscape Plans

G28. **Review Criterion:** "Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated."

Finding: This criterion is satisfied.

Details of Finding: Landscape plans have been submitted with the required information. See applicant's sheets L1.0 through L6.0 in their plan set, Exhibit B3.

Subsection 4.176 (.10) Completion of Landscaping

G29. **Review Criterion:** "The installation of plant materials may be deferred for a period of time specified by the Board or Planning Director acting on an application, in order to avoid hot summer or cold winter periods, or in response to water shortages. In these cases, a temporary permit shall be issued, following the same procedures specified in subsection (.07)(C)(3), above, regarding temporary irrigation systems. No final Certificate of Occupancy shall be granted until an adequate bond or other security is posted for the completion of the landscaping, and the City is given written authorization to enter the property and install the required landscaping, in the event that the required landscaping has not been installed. The form of such written authorization shall be submitted to the City Attorney for review."

Finding: This criterion is satisfied.

Details of Finding: As a condition of PDP approval the parks for the PDP or PDP phase must be completed prior to fifty percent (50%) of the homes being occupied unless certain conditions exist, similar to what is described in this subsection, in which case a bond can be posted. See Finding A61 in Request A and Condition of Approval PDA 3.

Site Design Review

Subsection 4.400 (.01) Excessive Uniformity, Inappropriateness of Design, Etc.

G30. **Review Criteria:** "Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefor."
Finding: These criteria are satisfied.
Details of Finding: It is staff's professional opinion that the proposed development will not result in excessive uniformity, inappropriateness or poor design, and the proper attention has been paid to site development and landscaping.

Subsection 4.400 (.02) Purposes of Objectives of Site Design Review

G31. **Review Criterion:** "The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:" Listed A through J.
Finding: These criteria are satisfied.
Details of Finding: It is staff's professional opinion that the applicant has provided sufficient information demonstrating compliance with the purposes and objectives of site design review. Among the information provided is a written response to these purposes and objectives on pages 16 through 18 in Section VI of the applicant's notebook, Exhibit B1.

Section 4.420 Site Design Review-Jurisdiction and Power of the Board

G32. **Review Criteria:** The section states the jurisdiction and power of the Development Review Board in relation to site design review including the application of the section, that development is required in accord with plans, and variance information.
Finding: These criteria will be satisfied by Condition of Approval PDG 4.
Details of Finding: A condition of approval has been included to ensure construction, site development, and landscaping are carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. No grading or other permits will be granted prior to development review board approval. No variances are requested from site development requirements.

Subsection 4.421 (.01) Site Design Review-Design Standards

G33. **Review Criteria:** "The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation.

The specifications of one or more particular architectural styles is not included in these standards." Listed A through G.

Finding: These criteria are satisfied.

Details of Finding: The applicant has provided sufficient information demonstrating compliance with the standards of this subsection. Among the information provided is a written response to these standards on pages 18 through 20 of Section VI of the applicant's notebook, Exhibit B1.

Subsection 4.421 (.02) Applicability of Design Standards to Various Site Features

G34. **Review Criteria:** "The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures."

Finding: These criteria are satisfied.

Details of Finding: Design standards have been applied to all site features.

Subsection 4.421 (.03) Objectives of Section 4.400 Serve as Additional Criteria and Standards

G35. **Review Criteria:** "The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards."

Finding: These criteria are satisfied.

Details of Finding: The purposes and objectives in Section 4.400 are being used as additional criteria and standards. See Finding G31 above.

Subsection 4.421 (.05) Site Design Review-Conditions of Approval

G36. **Review Criterion:** "The Board may attach certain development or use conditions in granting an approval that are determined necessary to insure the proper and efficient functioning of the development, consistent with the intent of the Comprehensive Plan, allowed densities and the requirements of this Code."

Finding: This criterion is satisfied.

Details of Finding: No additional conditions of approval are recommended.

Subsection 4.421 (.06) Color or Materials Requirements

G37. **Review Criterion:** "The Board or Planning Director may require that certain paints or colors of materials be used in approving applications. Such requirements shall only be applied when site development or other land use applications are being reviewed by the City."

Finding: This criterion will be satisfied by Condition of Approvals PDG 5 and PDG 6.

Details of Finding: Condition of Approval PDG 5 requires all retaining walls within the public view shed, be a decorative stone or brick construction or veneer. This does not include the temporary retaining wall along the north property line. Final design of retaining walls in the public view shed will be approved by the Planning Division through the Class I Administrative Review process. Further, while staff realizes the design of stairs within the parks and open space are such to avoid the need of hand rails, if they are required Condition of Approval PDG 6 ensures they are of a design mirroring that for courtyard fences shown in the Architectural Pattern Book. Final design of any handrails in parks and

open space will be approved by the Planning Division through the Class I Administrative Review process.

Section 4.440 Site Design Review-Procedures

G38. **Review Criteria:** "A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:" Listed A through F.
Finding: These criteria are satisfied.
Details of Finding: The applicant has submitted the required additional materials, as applicable.

Section 4.442 Time Limit on Approval

G39. **Review Criterion:** "Site design review approval shall be void after two (2) years unless a building permit has been issued and substantial development pursuant thereto has taken place; or an extension is granted by motion of the Board.
Finding: This criterion is satisfied.
Details of Finding: It is understood that the approval will expire after 2 years if a building permit hasn't been issued unless an extension has been granted by the board.

Subsection 4.450 (.01) Landscape Installation or Bonding

G40. **Review Criterion:** "All landscaping required by this section and approved by the Board shall be installed prior to issuance of occupancy permits, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned to the applicant."
Finding: This criterion is satisfied.
Details of Finding: As a condition of PDP approval the parks for the PDP or PDP phase must be completed prior to fifty percent (50%) of the homes being occupied. See Finding A61 in Request A and Condition of Approval PDA 3.

Subsection 4.450 (.02) Approved Landscape Plan Binding

G41. **Review Criterion:** "Action by the City approving a proposed landscape plan shall be binding upon the applicant. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, as specified in this Code."
Finding: This criterion will be satisfied by Condition of Approval PDG 7.
Details of Finding: The condition of approval shall provide ongoing assurance this criterion is met.

Subsection 4.450 (.03) Landscape Maintenance and Watering

G42. **Review Criterion:** "All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered with Board approval."
Finding: This criterion will be satisfied by Condition of Approval PDG 7.
Details of Finding: The condition of approval will ensure landscaping is continually maintained in accordance with this subsection.

Subsection 4.450 (.04) Addition and Modifications of Landscaping

G43. **Review Criterion:** "If a property owner wishes to add landscaping for an existing development, in an effort to beautify the property, the Landscape Standards set forth in Section 4.176 shall not apply and no Plan approval or permit shall be required. If the owner wishes to modify or remove landscaping that has been accepted or approved through the City's development review process, that removal or modification must first be approved through the procedures of Section 4.010."
Finding: This criterion will be satisfied by Condition of Approval PDG 7.
Details of Finding: The condition of approval shall provide ongoing assurance that this criterion is met by preventing modification or removal without the appropriate City review.

REQUEST H: SI13-0001 SRIR REVIEW

The following was prepared by Kerry Rappold, Natural Resources Program Manager

Findings of Fact:

1. The area designated Significant Resource Overlay Zone (SROZ) within Phase 2 North is upland wildlife habitat (Site ID Number URA#41. The delineated wetland is not considered locally significant, and was not protected within the SROZ. However, any impacts to the wetland are regulated by the Oregon Department of State Lands and the Army Corps of Engineers.

2. The upland wildlife habitat (i.e., mixed coniferous/deciduous forest) is 9.76 acres, and has a mature Douglas fir/Oregon white oak canopy. The understory has been disturbed in the past, and the shrub and herbaceous layers have been impacted by non-native invasive plant species. Native tree species include Oregon white oak, Douglas fir, vine maple, and Indian plum. Non-native invasive plant species include Himalayan blackberry, English ivy, and domestic cheery trees. The forest provides habitat for birds, but due to the lack of connectivity to other habitat, it does not provide many opportunities for other species, such as mammals.

3. The Significant Resource Overlay Zone ordinance prescribes regulations for development within the SROZ and its associated 25 foot Impact Area. Setbacks from significant natural resources implement the requirements of Metro Title 3 Water Quality Resource Areas, Metro Title 13 Nature in Neighborhoods, and Statewide Planning Goal 5. Wetlands, streams and riparian corridors shall have at least a minimum 50-foot buffer, but buffers may extend to the top of the slope for riparian corridors. All significant natural resources

have a 25 foot Impact Area. Development or other alteration activities may be permitted within the SROZ and its associated 25 foot Impact Area through the review of a Significant Resource Impact Report (SRIR).

4. Pursuant to the city's SROZ ordinance, development is only allowed within the Area of Limited Conflicting Use (ALCU). The ALCU is located between the riparian corridor boundary, riparian impact area or the Metro Title 3 Water Quality Resource Area boundary, whichever is furthest from the wetland or stream, and the outside edge of the SROZ, or an isolated significant wildlife habitat (upland forest) resource site.

5. The applicant's Significant Resource Impact Report delineated specific resource boundaries and analyzed the impacts of development within the SROZ. The applicant's SRIR contained most of the required information, including an analysis and development recommendations for mitigating impacts, but is lacking some of the required mitigation elements (e.g., plant densities or spacing). A condition of approval requires the submittal of an updated mitigation plan.

Description of Request:

The applicant is requesting approval of a Significant Resource Impact Report (SRIR) for non-exempt development that is located within the Significant Resource Overlay Zone and its associated 25 foot Impact Area in Phase 2 North.

Summary of Issues/Background:

The proposed non-exempt development will encroach into the Significant Resource Overlay Zone and its associated 25 foot Impact Area. All non-exempt development will occur within the Area of Limited Conflicting Use of the isolated significant wildlife habitat (i.e., upland forest). The impacted area totals 16,255 square feet and is situated within and along the edge of the upland forest. The impact to the SROZ is necessary to accommodate street improvements, a paved pedestrian trail, and encroachments related to a future PDP.

The proposed par course fitness stations and leaf identification creative play areas have not been addressed in the SRIR and are not approved as part of the SRIR review. In addition, the applicant is required to relocate a picnic table area (situated along the eastern edge of the forest) outside the SROZ. A condition of approval requires the applicant to modify the site plan.

Proposed exempt development in the SROZ and its associated 25 foot Impact Area includes the following:

1) Soft surface pedestrian pathway within forest.

<u>Conclusionary Findings:</u>

Section 4.139.04 Use and Activities Exempt from These Regulations

Proposed exempt development in the SROZ and its associated 25 foot Impact Area comply with the following exemptions:

(.08) The construction of new roads, pedestrian or bike paths into the SROZ in order to provide access to the sensitive area or across the sensitive area, provided the location of the crossing is consistent with the intent of the Wilsonville Comprehensive Plan. Roads and paths shall be constructed so as minimize and repair disturbance to existing vegetation and slope stability.

H1. The construction of the soft surface pedestrian path will have minimal impacts to the resource area, and is consistent with the requirements of this exemption.

Section 4.139.06.03 SRIR Review Criteria:

In addition to the normal Site Development Permit Application requirements as stated in the Planning and Land Development Ordinance, the following standards shall apply to the issuance of permits requiring an SRIR. The SRIR must demonstrate how these standards are met in a manner that meets the purposes of this Section.

A. Except as specifically authorized by this code, development shall be permitted only within the Area of Limited Conflicting Use (see definition) found within the SROZ*;*

H2. The proposed non-exempt development is located within the Area of Limited Conflicting Use found within the SROZ. The total area of all other encroachments within the SROZ or its associated Impact Area has been deemed exempt or proposed only within the Impact Area.

B. Except as specifically authorized by this code, no development is permitted within Metro's Urban Growth Management Functional Plan Title 3 Water Quality Resource Areas boundary;

H3. The proposed development for Phase 2 North will not be located within Metro's Title 3 Water Quality Resource Areas boundary.

C. No more than five (5) percent of the Area of Limited Conflicting Use (see definition) located on a property may be impacted by a development proposal. On properties that are large enough to include Areas of Limited Conflicting Use on both sides of a waterway, no more than five (5) percent of the Area of Limited Conflicting Use on each side of the riparian corridor may be impacted by a development proposal. This condition is cumulative to any successive development proposals on the subject property such that the total impact on the property shall not exceed five (5) percent;

H4. The applicant has identified the proposed development within the Area of Limited Conflicting Use, and calculated the percentage for this development. The following information has been provided on the Area of Limited Conflicting Use (ALCU):

Total ALCU	=	425,149 square feet
Allowed Impact (5%)	=	21,257 square feet
Proposed Impact	=	16,255 square feet (3.8%)

D. Mitigation of the area to be impacted shall be consistent with Section 4.139.06 of this code and shall occur in accordance with the provisions of this Section;

H5. The applicant has identified the mitigation area necessary to offset impacts to the SROZ, and proposed to enhance 46,212 square feet. Based on the required mitigation ratio of 2.5:1, only 40,638 square feet is required. The mitigation plan is missing some required elements, such as planting densities and spacing. A condition of approval requires the applicant to submit an updated mitigation plan containing all the required information.

E. The impact on the Significant Resource is minimized by limiting the degree or magnitude of the action, by using appropriate technology or by taking affirmative steps to avoid, reduce or mitigate impacts;

H6. The impacts to the SROZ will be from the encroachment of street improvements, a paved pedestrian trail, and encroachments related to a future PDP. The impacts to the SROZ provide a paved trail connection within the upland forest, future play area, and constructing improvements adjacent to the SROZ. The applicant has minimized permanent impacts to very mature trees, and other native vegetation. The grading and erosion control plan will ensure areas within the SROZ are protected during construction activities. No stormwater runoff will discharge into the SROZ.

F. The impacts to the Significant Resources will be rectified by restoring, rehabilitating, or creating enhanced resource values within the "replacement area" (see definitions) on the site or, where mitigation is not practical on-site, mitigation may occur in another location approved by the City;

H7. Impacts to the SROZ will be mitigated for on-site and will satisfy the mitigation ratios and other requirements of Section 4.139.07. A condition of approval requires the applicant to submit an updated mitigation plan containing all the required information.

G. Non-structural fill used within the SROZ area shall primarily consist of natural materials similar to the soil types found on the site;

H8. Non-structural fill will consist of natural materials similar to the soil types found on the site.

H. The amount of fill used shall be the minimum required to practically achieve the project purpose;

H9. No fill is proposed to be placed within the SROZ.

I. Other than measures taken to minimize turbidity during construction, stream turbidity shall not be significantly increased by any proposed development or alteration of the site;

H10. All proposed grading activities on-site will be managed pursuant to guidelines established and identified in the applicant's approved erosion control plan and a 1200-C Erosion Control Permit issued by the Oregon Department of Environmental Quality. Stream

turbidity is regulated under the City's Grading and Erosion Control Permit and the DEQ's 1200-C Erosion Control Permit.

J. Appropriate federal and state permits shall be obtained prior to the initiation of any activities regulated by the U.S. Army Corps of Engineers and the Oregon Division [Department] of State Lands in any jurisdictional wetlands or water of the United States or State of Oregon, respectively.

H11. No in-water impacts (i.e., jurisdictional wetlands or waters of the U.S. or State of Oregon) are proposed for Phase 2 - North.

Section 4.139.07 Mitigation Standards

(.01) The applicant shall review the appropriate Goal 5 Inventory Summary Sheets for wildlife habitat (i.e. upland) contained in the *City of Wilsonville Natural Resource Inventory and Goal 5/Title 3/ESA Compliance and Protection Plan* ("Compliance and Protection Plan"- May 2000) to determine the resource function ratings at the time the inventory was conducted.

H12. The applicant has reviewed the appropriate Upland Summary Sheet (Site ID Number 2.14U) to determine the resource function ratings at the time the inventory was conducted.

(.02) The applicant shall prepare a Mitigation Plan document containing the following elements:

A. The Mitigation Plan shall contain an assessment of the existing natural resource function ratings at the time of the proposed encroachment for the site compared to the function ratings recorded in the Compliance and Protection Plan.

H13. The applicant has addressed the resource function ratings for the impact area and also correctly documented the resource function ratings in the Compliance and Protection Plan. The impact area has a low to medium function rating due to non-native invasive plant species, and the lack of habitat connectivity.

B. The Mitigation Plan shall contain an assessment of the anticipated adverse impacts to significant wildlife habitat resources. The impact assessment shall discuss impacts by resource functions (as listed in the Compliance and Protection Plan, May 2000) for each resource type, and shall map the area of impact (square feet or acres) for each function.

H14. The applicant has determined the impact to the significant resource area based on the resource functions. The applicant has calculated the square feet of the impact to the Significant Resource. The applicant's site plan in the SRIR depicts the area of impact.

C. The Mitigation Plan shall present a proposed mitigation action designed to replace the lost or impacted resource functions described in Subsection B, above. The mitigation plan shall be designed to replace lost or impacted functions by enhancement of existing resources on, or off the impact site, or creation of new resource areas.

H15. The applicant has not submitted a mitigation plan consistent with the requirements in Section 4.139.07. The mitigation will occur on-site, and within close proximity to the areas of impact. A condition of approval requires the applicant to submit an updated mitigation plan containing all the required information.

D. For mitigation projects based on resource function enhancement, the area ratios presented in Table NR - 2 shall be applied. These ratios are based on the resource function ratings at the time of the proposed action, as described in Subsection A, above. The mitigation action shall be conducted on the appropriate size area as determined by the ratios in Table NR - 2.

H16. The applicant has estimated the resource function ratings for the "existing rating at mitigation site" and "proposed rating at mitigation site."

(.03) Proposals for mitigation action where new natural resource functions and values are created (i.e. creating wetland or wildlife habitat where it does not presently exist) will be reviewed and may be approved by the Development Review Board or Planning Director if it is determined that the proposed action will create natural resource functions and values that are equal to or greater than those lost by the proposed impact activity.

H17. No new habitat would be created as part of the mitigation plan. The proposed mitigation will enhance existing habitat.

(.04) Mitigation actions shall be implemented prior to or at the same time as the impact activity is conducted.

H18. A condition of approval requires the mitigation actions to be implemented prior to or at the same time as the impact activity is conducted.

(.05) Mitigation plans shall have clearly stated goals and measurable performance standards.

H19. The applicant has submitted a mitigation plan with goals and measurable performance standards.

(.06) All mitigation plans shall contain a monitoring and maintenance plan to be conducted for a period of five years following mitigation implementation. The applicant shall be responsible for ongoing maintenance and management activities, and shall submit an annual report to the Planning Director documenting such activities, and reporting progress towards the mitigation goals. The report shall contain, at a minimum, photographs from established photo points, quantitative measure of success criteria, including plant survival and vigor if these are appropriate data. The Year 1 annual report shall be submitted one year following mitigation action implementation. The final annual report (Year 5 report) shall document successful satisfaction of mitigation goals, as per the stated performance standards. If the ownership of the

mitigation site property changes, the new owners will have the continued responsibilities established by this section.

H20. The applicant has not submitted information regarding monitoring and maintenance of the proposed mitigation. A condition of approval requires the applicant to submit a monitoring and maintenance report to be conducted for a period of five years following mitigation implementation.

(.07) The Mitigation Plan document shall be prepared by a natural resource professional.

H21. The applicant's team has the necessary credentials to implement a mitigation plan for the proposed impacts.

(.08) Prior to any site clearing, grading or construction, the SROZ area shall be staked, and fenced per approved plan. During construction, the SROZ area shall remain fenced and undisturbed except as allowed by an approved development permit.

H22. A condition of approval requires the SROZ to be fenced and undisturbed.

(.09) For any development which creates multiple parcels intended for separate ownership, the City shall require that the SROZ areas on the site be encumbered with a conservation easement or tract.

H23. A conservation easement is required for the SROZ areas on the site. A condition of approval requires a conservation easement to be recorded.

(.10) The City may require a conservation easement over the SROZ that would prevent the owner from activities and uses inconsistent with the purpose of this Section and any easements therein. The purpose of the conservation easement is to conserve and protect resources as well as to prohibit certain activities that are inconsistent with the purposes of this section. Such conservation easements do not exclude the installation of utilities.

H24. A conservation easement is required for the SROZ areas on the site. A condition of approval requires a conservation easement to be recorded.

(.11) At the Planning Directors discretion, mitigation requirements may be modified based on minimization of impacts at the impact activity site. Where such modifications are granted by the Planning Director, the Director shall clearly indicate the reasons for doing so in the record, citing the relevant information relied upon in reaching the decision.

H25. The applicant has not requested a modification of mitigation requirements.

(.12) The Director may study the possibility of a payment-in-lieu-of system for natural resource impact mitigation. This process would involve the public acquisition and management of natural resource properties partially funded by these payments.

H26. The applicant has not requested a payment-in-lieu.

City of Wilsonville
EXHIBIT A2 DB13-0020 et al

RESOLUTION NO. 124

VILLEBOIS SPECIFIC AREA PLAN NORTH (SAP NORTH)

A RESOLUTION ADOPTING FINDINGS AND CONDITIONS APPROVING THE **SPECIFIC AREA PLAN-NORTH** (SAP-NORTH) WITHIN THE VILLEBOIS VILLAGE, INCLUDING THE 1) ARCHITECTURAL PATTERN BOOK, 2) RAINWATER MANAGEMENT PROGRAM, 3) COMMUNITY ELEMENTS BOOK, 4) MASTER SIGNAGE AND WAYFINDING PLAN, 5) AND SIGNIFICANT RESOURCE IMPACT REPORT, 6) SEVERAL REFINEMENTS TO LAND USE, LOTTING AND CIRCULATION AS DEFINED BY THE VILLEBOIS VILLAGE MASTER PLAN. THE PROPERTY IS 108 ACRES LOCATED ON TAX LOTS 700, 800, 900, 1000, 1001, 1091, 1100, 1101, 1200, 1202, 1203, 1205, 1591, 2906, 2996 TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15, CLACKAMAS COUNTY, OREGON. VILLEBOIS, LLC/COSTA PACIFIC COMMUNITIES ON BEHALF OF ARBOR VILLEBOIS, LLC/WEST HILLS DEVELOPMENT, APPLICANTS FOR PROPERTY OWNERS: VICTOR CHANG, CITY OF WILSONVILLE, SHARON LUND, STEPHEN RUMPF, TRUSTEE, CHARLES AND CAROLYN TABER, JAY AND THERESA NIMS, JAMES KLIENSTUBER, DB07-0054 SAP NORTH and SI07-0001 CLASS III SIGNIFICANT RESOURCE IMPACT REPORT.

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared report on the above-captioned subject dated February 4, 2008, and

WHEREAS, said planning exhibits and staff reports were duly considered by the Development Review Board at regularly scheduled meetings conducted on February 11, 2008, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report attached hereto as Exhibit A1 with findings and recommendations contained therein, with amendments reflected in Exhibit A4, as read into the record, and recognizing that PFA16, PFA19 and PFA23 are in consultation with Engineering Staff, subject to modification at the PDP level, and approves case files DB07-0054 and SI07-0001 for development of 108 acres for ***Villebois Village Specific Area Plan-North (SAP-North)*** including the Architectural Pattern Book,

Master Signage and Wayfinding Plan, Community Elements Book, a Rainwater Management Program, and Significant Resources Impact Report (SRIR), consistent with said recommendations.

ADOPTED by Panel A of the Development Review Board of the City of Wilsonville at a regular meeting thereof this 11th day of February 2008, and filed with the Planning Project Coordinator on February 14, 2008. This resolution is final on the 15th calendar date after the postmarked date of the written notice of decision unless appealed or called up for review by the council in accordance with WC Sec 4.022(.09).

Eric Postma, Chair Panel A
Wilsonville Development Review Board

Attest:

Sally Hartill, Planning Project Coordinator

Exhibit A1
STAFF REPORT
WILSONVILLE PLANNING DIVISION
SAP-North
DEVELOPMENT REVIEW BOARD PANEL 'A'
QUASI-JUDICIAL PUBLIC HEARING

(AMENDED AND ADOPTED FEBRUARY 11, 2008)
*(Note: additional language in **bold, italic** text; deleted language struck through)*

HEARING DATE: **February 11, 2008**
DATE OF REPORT: **February 4, 2008**

APPLICATION NO.:
A. DB07-0054: SAP-North
B. SI07-0001: SRIR Class III

APPLICANT:
Villebois, LLC/Costa Pacific Communities
Contact: Rudy Kadlub

On behalf of:
Arbor Villebois, LLC/West Hills Development
Contact: Terry Kinney

OWNERS:
Refer to Table on page 5

REQUEST:
Case File #DB07-0054: *Villebois SAP and SAP Amendment:* including the Architectural Pattern Book; the Rainwater Management Program; Community Elements Book; Master Signage and Wayfinding Plan; Wetland Determination; Tree Preservation; Significant Resource Impact Report; and several refinements to land use, lotting and circulation as defined by the Villebois Village Master Plan.

Case File # SI07-0001: *Significant Resource Impact Report (SRIR) Class III:* Approve Significant Resource Impact Report for future development within the Significant Resource Overlay Zone.

LOCATION:
Approximately 108-acres located in the northern portion of Villebois Village, south of Tooze Road, east of Grahams Ferry Road, north of SAP-South and west of SW 110th Avenue. The entire site is located within the Wilsonville City Limits.

LEGAL DESCRIPTION: Tax Lots 700, 800, 900, 1000, 1001, 1091, 1100, 1101, 1200, 1202, 1203, 1205, 1591, 2906, 2996 in Section 15; T3S R1W; Clackamas County, Oregon.

LAND USE DESIGNATIONS: Wilsonville Comprehensive Plan Map Designation: *Residential-Village*

ZONING DESIGNATIONS: Wilsonville Zone Map Classification: *Public Facility* and Clackamas County *Exclusive Farm Use (EFU)*. The submittal is reviewed under the applicable criteria for the *Village* Zone.

STAFF REVIEWERS: Kristy Lacy, Blaise Edmonds, Steve Adams, Don Walters, Kerry Rappold and Steve Allen

Tax-lot #	Owner	Size (Acres)	Mailing Address
	Township 3 South, Range 1 West, Section 15		
700	Victor Cheng	4.76	3181 Wembley Park Road Lake Oswego, OR 97034
800	Victor Cheng	8.70	3181 Wembley Park Road Lake Oswego, OR 97034
900	Victor Cheng	2.99	3181 Wembley Park Road Lake Oswego, OR 97034
1000	Victor Cheng	5.87	3181 Wembley Park Road Lake Oswego, OR 97034
1001	City of Wilsonville	1.70	29799 SW Town Center Loop E Wilsonville, OR 97070
1091	City of Wilsonville	0.55	29799 SW Town Center Loop E Wilsonville, OR 97070
1100	Sharon Lund	7.64	11650 SW Tooze Road Wilsonville, OR 97070
1101	Sharon Lund	2.17	11650 SW Tooze Road Wilsonville, OR 97070
1200	Stephen Rumpf, trustee	7.61	28100 SW Grahams Ferry Rd. Wilsonville, OR 97070
1202	Charles and Carolyn Taber	1.00	11800 SW Tooze Rd Wilsonville, OR 97070
1203	Jay and Theresa Nuns	1.00	11700 SW Tooze Rd Wilsonville, OR 97070
1205	Stephen Rumpf, trustee	6.93	28100 SW Grahams Ferry Rd. Wilsonville, OR 97070
1591	James Kliensmber	0.33	28333 SW Grahams Ferry Rd. Wilsonville, OR 97070
2906	Villebois, LLC c/o Costa Pacific Communities	46.45	4274 SW Macadam Ave. Portland, OR 97239
2996	Villebois, LLC c/o Costa Pacific Communities	10.26	4274 SW Macadam Ave. Portland, OR 97239

APPLICABLE CRITERIA:

Planning and Land Development Ordinance: Sections 4.008-4.035; 4.113; 4.125; 4.139; 4.155; 4.156; 4.167; 4.171; 4.172; 4.175; 4.176; 4.177; 4.178; 4.179; 4.300; 4.600. **Other Planning Documents**: Comprehensive Plan; Transportation Systems Plan; Storm Water Master Plan; Villebois Village Master Plan.

REQUESTED ACTIONS:

The Development Review Board is being asked to review concurrent applications proposing development of SAP-North. The Applicant is submitting requests for:

A. DB07-0054: SAP-North
B. SI07-0001: SRIR Class 3

SUMMARY / BACKGROUND:

The Applicant is requesting approval of the fourth Specific Area Plan (SAP - North) within Villebois Village as prescribed by the Villebois Village Master Plan (approved by the City as part of their Comprehensive Plan). Development agreements have been established between the City and Villebois, LLC for Master Planning of the Village and West Hills Development as developer of SAP – North. SAP – North generally lies south of Tooze Road, east of Grahams Ferry Road, north of SAP-South and west of SW 110th Avenue.

SAP-North envisions a residential development including approximately 397 dwellings (town houses and single-family), which is approximately 16% of the housing in Villebois, 39.6 acres of parks and open space and the only site for a public school. Development is required to be integrated with surrounding existing neighborhoods while retaining the vision of a European-inspired complete community. Among the elements the Master Plan for Villebois addresses are: connectivity within the Village as well as with surrounding areas of the City; diversity in single family housing styles and row houses; and a sustainable environment through efficient design, protection of natural resources, rainwater management, and energy conservation.

A portion of the SAP-North site is mapped as being within the Significant Natural Resource Overlay Zone (SROZ). This area is an upland forest wildlife habitat area in the central portion of the SAP on tax lot 2996. The request for approval of SAP-North includes a request to impact a small portion of the SROZ designated area through the future construction of public roads adjacent to the resources and through the future construction of wood ship trails, a short area of paved ADA accessible trail, and small play areas within the wooded area. The Development Review Board (DRB) and City Council will have further opportunity to review these amenities in future Preliminary Development Plan (PDP) applications. A Significant Resource Impact Report (SRIR) has been prepared by Pacific Habitat Services assessing the proposed impacts and proposing mitigation for the impacts. The SRIR is included as Exhibit B2 – Volume II, Section II-E.

DEVELOPMENT PROCESS:

The Master Plan divides Villebois Village into five sub-regions each requiring their own Specific Area Plan. Each SAP is to advance and refine the planning demonstrated by the Master Plan. Applications for development in each sub-region will require a Preliminary Development Plan, approval of a Zone Map Amendment, and a tentative subdivision plat, followed by a Final Development Plan and final subdivision plat for each phase of development within the SAP.

This SAP application must include:

- a set of plans for the proposed SAP,
- a written narrative describing the proposal,
- findings that the Master Plan and other applicable City requirements are met,
- an Architectural Pattern Book,
- a Master Fencing Plan,
- a Signage and Wayfinding Plan,
- a Community Elements Book, and
- a Rainwater Management Program.

This application also includes requests for a Map Refinement of the SROZ boundary, a request for review of a Minor Alternative to the Transportation Systems Plan to allow placement of curb extensions and a request for review of a Major Alternative to the Transportation System Plan for intersection spacing. The application also includes several refinements to the land use and lotting patterns and circulation plan. A Minor Alteration may be approved administratively if it is consistent with the TSP, but it also must be reviewed by the DRB under Section 4.125(.18)(F)(2) of the Planning and Land Development Ordinance for consistency with the Village zoning requirements and the Villebois Village Master Plan. This Staff report will first review and develop Findings of Fact for the request for approval of SAP – North in Section A (Findings will be identified by the letter "A" in numerical order). The request for an SROZ Refinement will follow in Section B (Findings will be identified by the letter "B").

ISSUES:

1. Phasing

The City and West Hills have agreed that the Villebois Master Plan contains a plan showing a conceptual Wilsonville-West Linn school site. Unfortunately, the area shown in the Master Plan does not match the area purchased by the City for the future ten-acre school site. West Hills, the City, and the Wilsonville-West Linn School District are actively coordinating to assure that the school site is appropriately located and that its location does not affect trails, park areas or roads.

In order to facilitate the development of the remainder of Specific Area Plan – North (SAP-North), the City and West Hills agreed that West Hills would amend the SAP North map by dividing the SAP North area into two (2) phases: Area 1 and Area 2. Area 1 will include principally the area to be developed as Planned Development Plan – 1 (PDP-1N). Area 2 will be the remainder of SAP North. Area 2 will include the area in and around the ten acre school site. This approach will allow West Hills to proceed on development of Phase 1 of Area 1 of SAP-North while continue to resolve outstanding site planning issues within Area 2. The DRB

approval of the Architectural Pattern Book, Rainwater Management Program, Community Elements Book, Master Signage and Wayfinding Plan, will be accomplished for the entire SAP-North with this subject application.

2. Traffic

At the request of Staff, DKS completed a traffic analysis specific to the impact on the Wilsonville Road Interchange Area dated September 12, 2007 (Exhibit C1). The resulting report provided an analysis of the SAP as a whole and PDP1-N. The Traffic Study was conducted prior to the SAP being divided into Areas. Based upon the new strategy, Staff is requesting that upon application for Area, the applicant provide a revised Traffic Study specific to Area 2 as included in condition of approval PFA31.

3. Parks Board

On December 13, 2007, Staff met with the Parks Board to review Area 1 of SAP-North. The Board's discussion centered on the Pocket Park in Area 1 as well as Regional Park 3, Linear Green 5 and Neighborhood Park 7. The Board has provided a recommendation to the DRB in their minutes to apply the following changes to Regional Park 3:

1. Open play area in the northern park bigger by realigning the trail in favor of saving trees.
2. The creative play area and volleyball court moved closer to the middle of the park in consideration of safety issues.
3. Consideration giving to switching the volleyball court to where the horseshoe pit is proposed and putting the horseshoe pit where the volleyball court is proposed.
4. Include a creative play area in the Pocket Park, e.g. boulders, consistent with the Villebois Village Technical Appendix.

4. Neighborhood Apartments

Figure 1 of the Villebois Village Master Plan (VVMP) identifies "Neighborhood Apartments" as an additional land use for SAP-North. In Staff's research of the plan it was determined that this land use category was intended for affordable housing. These locations were conceptual and meant only to graphically represent that affordable housing would be available. Staff understands that several other sites equal to the aggregate amount have been chosen throughout Villebois. Staff is supportive of not including Village Apartments as a proposed land use for SAP-North as affordable housing can, and has, taken the form of other land uses such as row houses, large single family homes intended for more than one family, and Apartments.

CONCLUSIONS AND RECOMMENDATIONS:

Staff has reviewed the Applicant's analysis of compliance with the applicable criteria (Section II of the submittal book). In most cases, the analysis adequately demonstrates compliance with the City's Comprehensive Plan (*Villebois Village Master Plan* and Specific Area Plan-South) and the Planning & Land Development Ordinance. The Staff report adopts the Applicant's responses as Findings of Fact except as noted in the Findings and modified by proposed Conditions of Approval. Based on the Findings of Fact and information included in this Staff Report, and information received from a duly advertised public hearing, Staff recommends that the Development Review Board approve the proposed applications (DB07-0054 and SI07-0001) and with the following conditions:

CONDITIONS OF APPROVAL FOR REQUESTS 'A' & 'B':

The application and supporting documents are hereby adopted for approval with the following conditions:

PD = Planning Division Conditions **BD = Building Division Conditions** **PF = Engineering Conditions** **NR = Natural Resources Conditions** **TR = SMART/Transit Conditions** **FD = Tualatin Valley Fire and Rescue Conditions**	**A. DB07-0054:** SAP-North, Area 1 including: • Architectural Pattern Book • Master Signage and Wayfinding Book • Community Elements Book • Rainwater Management Program **B. SI07-0001:** SRIR Class III, Area 1

Planning Division Conditions:	
Request A - DB07-0054: Specific Area Plan – North, Area 1	
PDA1.	A SAP amendment to the Architectural Pattern Book and Community Elements Book must be made prior to approval of the preliminary development plan for the school site. See Finding A28.
PDA2.	The applicant/owner must demonstrate coordination with the City and West Linn/Wilsonville School District and supply a more refined conceptual site plan for the school site at the time of application for Area 2 of SAP-North. The site plan must include at a minimum Community Park 1 as identified in the Villebois Village Technical Appendix or a refinement as necessary. See FindingA35.
PDA3.	The applicant/owner shall submit a more detailed site plan of Neighborhood Park 5, Fir Park, with the submission of SAP-North, Area 2. The plan must demonstrate the relationship of those areas of the park within SAP-North and those areas of the park with SAP-East. See FindingA29.
PDA4.	The applicant/owner shall submit a more detailed site plan of Pocket Park 9, and linear greens 15 and 16, with the submittal for SAP-North, Area 2. The plan shall include proposed uses and community elements. Pursuant to the Villebois Village

	Technical Appendix, Fir Park and the Villebois Greenway shall preserve an existing oak tree as well as provide creative play, benches and a pathway. See Finding A31.
PDA5.	The Pocket Park within the block defined by Monte Carlo Avenue, Barber Street, Surrey Street in PDP5-S and Lausanne Street must include a creative play structure, such as large boulders, consistent with the Villebois Village Technical Appendix. See Finding A33.
PDA6.	As a part of the Area 2 submittal package, and pursuant to Figure 7 of the Villebois Village Master Plan, the applicant must provide a minor pathway that bisects Regional Park 4 creating a walkway from Grimaldi Street to Ravenna Loop. See Finding A42.
PDA7.	The applicant/owner must submit a more detailed Tree Preservation Plan and Tree Removal Permit, as necessary, with Preliminary Development Plan-1 (PDP-1N). In addition, the applicant must provide an arborist report consistent with Section 4.610.30(.02)C. See Finding A44.
PDA8.	The applicant/owner must submit a Landscape Plan with the Preliminary Development Plan-1 (PDP-1N). Consistent with the policies and objectives of the Villebois Village Master Plan, the plan must place emphasis on large shade trees within Regional Park 3 and the pocket park such as oaks, elms and ash. See Finding A64.
PDA9.	Prior to Development Review Board approval of Preliminary Development Plan 1 of Area 1, SAP-North, the applicant/owner shall submit a parks plan to the Parks Board for review and approval. Parks Plan must be consistent with the Villebois Village Technical Appendix or the appropriate refinement requested. See Finding A61.
PDA10.	The applicant/owner must provide an Arborist Report and more detailed tree inventory with the submittal of Area 2. See Finding A63.
PDA11.	The applicant/owner must submit a lighting plan for PDP1-N. The lighting plan must be consistent with Appendix H of the Villebois Village Master Plan. See Finding A68.
PDA12.	The applicant/owner must submit a revised lighting plan for PDP1-N. Lighting on Grimaldi Street shall be moved from the north to the south side of the street to reduce impact on the Upland Forest. See Finding A68.
PDA13.	Area 2 of SAP-North shall include provisions, ***i.e. a structure,*** for storage of seasonal activity equipment in Regional Park 5. See Finding A70.
PDA14.	Proposed street tree plantings for Salzburg and San Remo are not consistent with the approved plantings for a primary residential street, but rather a Secondary Residential Street. Street trees for Salzburg and San Remo shall be amended in the subsequent PDP1-N application to include street trees consistent with Primary Residential Streets. See Finding A133.
PDA15.	Page G7.0 of the Master Signage and Wayfinding Plan includes a reference to Site Plan G3.0. Site Plan G3.0 shall be labeled or inserted accordingly. See Finding A142.

PDA16.	The submitted Community Elements Book shall be revised to include street lighting on those portions of the right-of-way opposite the Upland Forest. See Finding A152.
PDA17.	The Land use Patterns, Lot Diagram, Small Lot Subsection of the Architectural Pattern Book shall be amended to require that lots be a minimum of 70 feet in depth for single-family dwellings with an accessory dwelling unit. See Finding A154.
PDA18.	An application for Area 2 of SAP-North is required, ***to proceed with the furtherance and platting of subsequent Preliminary Development Plans/phases in Area 2.*** See Finding A168.
PDA19.	Upon submittal of Area 2 of SAP-North, the applicant shall provide a revised total unit count for Villebois and a request for a refinement to density, if applicable. See Finding A183.
PDA20.	An application for a comprehensive plan map amendment and zone change to Village (V) zone shall be submitted prior to development within Area 1 and concurrent with an application for PDP1-N. See Finding A188.
PDA21.	The Architectural Pattern Book shall be revised to include requirements for site plans submitted for building permit review. All site plans shall include at a minimum site coverage calculations, easements, utilities and street trees.
Request B - SI07-0001: SRIR Class III, Area 1	
PDB1.	Future application for Area 2 of SAP-North shall include an updated Significant Resource Impact Report specific to Area 2. Calculation and mitigation of the encroachment within Area 1 shall be included in that request. See Finding B2.

Building Division Conditions:	
Request A - DB07-0054: Specific Area Plan – North, ~~Area 1~~	
BDA1.	CONDITION. LOTS SHALL BE GRADED so that all sheet drainage drains to the street and/or alley unless the City approves an alternate drainage design.
BDA2.	ADVISORY. TREE SELECTION. The Fire Code requires that required fire apparatus access roads have an unobstructed vertical clearance of 13'6". (Oregon Fire Code 503.2.1) This should be taken into account when choosing street trees that may encroach into this space as they mature.
BDA3.	ADVISORY. FIRE HYDRANT CLEARANCES. Hydrants shall be placed at least two feet from the driving surface unless specific approval is otherwise given by the City. A three-foot radius circle measured from the circumference of the hydrant shall constitute a clear working area. Streetlights, transformers, pole signs, mailboxes, trees or other plantings, and all other similar items shall not encroach into this area. (Grass or other low growing ground cover that does not constitute an inherent trip hazard is excepted) When placing landscaping, the mature size of plant material shall be taken into account.
BDA4.	ADVISORY. STRUCTURE IDENTIFICATION. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. (505.1) Where buildings are not readily visible from the

A167. A Master Signage and Wayfinding Plan is part of the application (see Volume IV). It includes information addressing the above items as applicable to Specific Area Plan – North. **This requirement is met**.

7. ***SAP Narrative Statement – A narrative statement shall be submitted addressing the following:***

   a. ***A description, approximate location and timing of each proposed phase of development within the SAP.***

A168. SAP-North will be reviewed in two phases; Area 1 and Area 2 (See Exhibit B4). The application materials were submitted prior to the applicant's request to submit the SAP application is two separate phases. The Introductory Narrative in Vol. 1 of the application for Specific Area Plan – North includes a description and timing of the proposed development phasing for the subject area as a whole. Area 1 will consist only of Phase 1, or PDP-1N. Condition of approval PDA18 will require that the applicant submit a subsequent application for Area 2 which contains phases 2 through 5. The phasing of the SAP as a whole is shown on *Sheet P30 – Comparative Phasing Plan* of the Specific Area Plan – North Drawings (see Volume II). The purpose behind the phasing is to allow the applicant to further define the school site and to address circulation issues.

   b. ***An explanation of how the proposed development complies with the applicable standards of this section.***

A169. Section II of Vol. I of the application provides the Applicant's explanation of how the proposed development is consistent with the standards of the Village zone. **This requirement is met**.

   c. ***A statement describing the impacts of the proposed development on natural resources within the SAP and how the proposed development complies with the applicable requirements of Chapter 4.***

A170. The Introductory Narrative in Vol. 1 of the application for Specific Area Plan – North provides a description of the impacts of the proposed development on natural resources within Specific Area Plan – North. An assessment of compliance with the applicable requirements of Chapter 4 is proposed in Volume I, Section II-A, and Section specifically within the attached Significant Resource Impact Report (see Section II-E). This requirement is met.

   d. ***Includes a description of the goals and objectives of the Villebois Village Master Plan and the Design Principles of the V Zone, and how they will be met for the specified land use area.***

A171. Section II of Vol. I, more specifically Section II-A of the application provides an explanation of how the proposed development is consistent with the *Villebois Village Master Plan*. The next sub-section discusses the Wilsonville Planning & Development Ordinance and provides an explanation of how the proposed development is expected to meet the Design Principles of the Village zone. This requirement is met.

e. Includes information demonstrating how the Architectural Pattern Book satisfies the goals and concepts of the Villebois Village Master Plan, the Design Principles and Design Standards of the Village zone.

A172. Sections I-A and II-A, Vol. I, of the application provide an explanation of how the Architectural Pattern Book satisfies the goals and concepts of the Villebois Village Master Plan. The next sub-section provides an explanation of how the proposed Pattern Book will meet the Design Principles and Design Standards of the Village zone. This requirement is met.

f. Where applicable, a written description of the proposal's conformance with the Village Center Design Principles and Standards.

A173. Specific Area Plan – North does not include areas within the Village Center. Therefore, the above requirement is not applicable to this application.

E. SAP Approval Process and Review Criteria

1. An application for SAP approval shall be reviewed using the following procedures:

a. Notice of a public hearing before the Development Review Board regarding a proposed SAP shall be made in accordance with the procedures contained in Section 4.012.

A174. In accordance with the procedures contained in Section 4.012, the City has provided notice of a public hearing before the Development Review Board on the proposed Specific Area Plan – East. This criterion is met.

b. The Development Review Board may approve an application for SAP approval only upon finding the following approval criteria are met:

i. That the proposed SAP:

- ***Is consistent with the standards identified in this section.***
- ***Complies with the applicable standards of the Planning and Land Development Ordinance, and***
- ***Is consistent with the Villebois Village Master Plan. Those elements of the Village Master Plan with which the SAP must be***

A182. This relates to the second refinement request which is a request to change the mix of uses. The applicant has provided findings that the request is a result of market forces that are recommending greater affordability in single-family homes. The applicant has separated the request into two categories; the combined category of condominiums, apartments, row houses, and small detached single family homes; and the combined category of medium, standard, large and estate. It is the professional opinion of Staff based upon building permits from SAP-South that the market is demanding a more affordable product. Staff is supportive of the changes in Area 1 of SAP-North; however, Staff is not supportive of all of the changes within Area 2. Because this application is limited to Area 1 of SAP-North, Staff is recommending approval of the refinement for Area 1. Condition of approval PDA18 will require that the applicant submit a secondary application for Area 2 of SAP-North. The applicant should note that the block of homes created by were identified in the Master Plan as Estate lots in favor of saving trees; therefore, the request for a refinement to the land use type will not be approved.

> ***v. A change in density that does not exceed ten percent, provided such density change does not result in fewer than 2,300 dwelling units in the Village.***
>
> ***vi. Changes that are significant under the above definitions, but necessary to protect an important community resource or substantially improve the function of collector or minor arterial roadways.***

A183. The applicant is requesting a change in density equal to 1.7 percent; therefore not exceeding the ten percent threshold resulting in a "significant" change. According to the applicant, the Villebois Village approved a total of 2,493 units. The applicant is requesting a total of 397 units for SAP-North. Based upon this calculation, the applicant is speculating that the Villebois Village at full built-out will include 2,535 units. Condition of approval PDA19 will require that the applicant provide a revised unit count and request for refinement for a change in density if applicable.

> ***2. Refinements meeting the above definition may be approved by the DRB upon the demonstration and finding that:***
>
> ***a. The refinements will equally or better meet the Goals, Policies and Implementation Measures of the Villebois Village Master Plan***

A184. The Applicant has provided summary findings with regard to each Goal, Policy and Implementation Measure of the Villebois Village Master Plan. A discussion of which can be found in Section of Exhibit B2 and throughout this report. **Staff is satisfied that this criterion has been adequately met.**

> ***b. The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the SAP and Village area, and***

A185. Area 1 of SAP-North contains a small portion of SROZ and Impact Area at the southwest corner of TL 2906, which contains the upland forest. The impact is limited to the introduction of roadways consistent with the VVMP. Pursuant to Section 4.139.08, public utilities are

specifically exempt. The applicant has submitted a Significant Resource Impact Report (SRIR) describing the impact and proposed mitigation. Staff has found that the SRIR is for SAP-North in its entirety and not specifically Area 1 of SAP-North. Pursuant to Section 4.139, impact of development is cumulative; therefore, it is appropriate to estimate the impact as a whole. Staff is recommending approval of the SRIR with Conditions of Approval. Staff finds the proposed refinements will not result in significant detrimental impacts to the environment or natural or scenic resources of Specific Area Plan – North or the Village area. This criterion will be met upon approval of the SRIR.

c. The refinement will not preclude an adjoining or subsequent SAP area from development consistent with the Master Plan.

A186. Several of the proposed refinements to the circulation system and land use patterns are complement applications to refinements approved as part of PDP5-S. PDP5-S saw the introduction of the right-of-way which seeks to improve overall north-south circulation. Approval of a refinement to the circulation system will allow, not preclude, the orderly development of lots between PDP5-S and PDP1-N, and moreover Area 1 of SAP-North.

3. Amendments are defined as changes to elements of the Master Plan not constituting a refinement. Amendments to the Master Plan must follow the same procedures applicable to adoption of the Master Plan itself.

A187. The proposal does not include changes that constitute an amendment to the VVMP; therefore, this provision is not applicable.

SECTION 4.136 - PF – PUBLIC FACILITY ZONE (.01)

(.01) Purpose:

The PF zone is intended to be applied to existing public lands and facilities; including quasi-public lands and facilities, which serve and benefit the community and its citizens. Typical uses permitted in the PF zone are schools, churches, public buildings, hospitals, parks and public utilities. Not all of the uses permitted in this zone are expected to be publicly owned.

A188. The subject property is currently zoned Public Facilities (PF) and Exclusive Farm Use (EFU). The property's most recent use was the F.H. Dammasch State Hospital, single family homes and agriculture. Future development within Area 1 of SAP-North will require a comprehensive plan map amendment and zone change to Village (V) zone, consistent with the Comprehensive Plan. Condition of approval PDA20 will guarantee compliance with this provision.

Area 1 Approved

LEGEND:

- NEIGHBORHOOD CENTER
- RESIDENTIAL
- PARK/OPEN SPACE
- PUBLIC ROADS, PRIVATE ALLEYS
- SCHOOL SITE AND APPROX. 3 AC COMMUNITY PARK
- SAP BOUNDARY
- PLAN AREA LINE

Land Use Table

LAND USE	SAP NORTH	SAP SOUTH	SAP EAST	SAP CENTRAL	TOTAL UNITS
ESTATE	17				17
LARGE	19	71	15		105
STANDARD	26	47	60		133
MEDIUM	68	66	151		303
SUBTOTAL	130	184	254		568
SMALL DETACHED	133	152	101	9	395
SMALL ATTACHED			200		200
TOWNHOUSE	114	139	94	145	492
MIXED APARTMENTS		10			10
VILLAGE APARTMENTS				411	411
CONDOS				124	124
URBAN APTS				90	90
MIXED USE CONDOS				104	104
SPECIALTY CONDOS				127	127
SUBTOTAL	247	295	395	1010	1947
TOTAL UNITS *	397	479 **	649	1010	2535

* APPROVED TOTAL UNIT COUNT BASED ON AMENDED MASTER PLAN IS 2,600 UNITS

* * APPROVED UNIT COUNT BASED ON APPROVED PDP 1 OF SAP SOUTH

Villebois

ARBOR VILLEBOIS

SPECIFIC AREA PLAN – NORTH

LAND USE KEY

otak Incorporated

17355 SW Boones Ferry Rd.
Lake Oswego, OR 97035-5817
Phone: (503) 635-3618
FAX: (503) 635-5045
Internet: www.otak.com

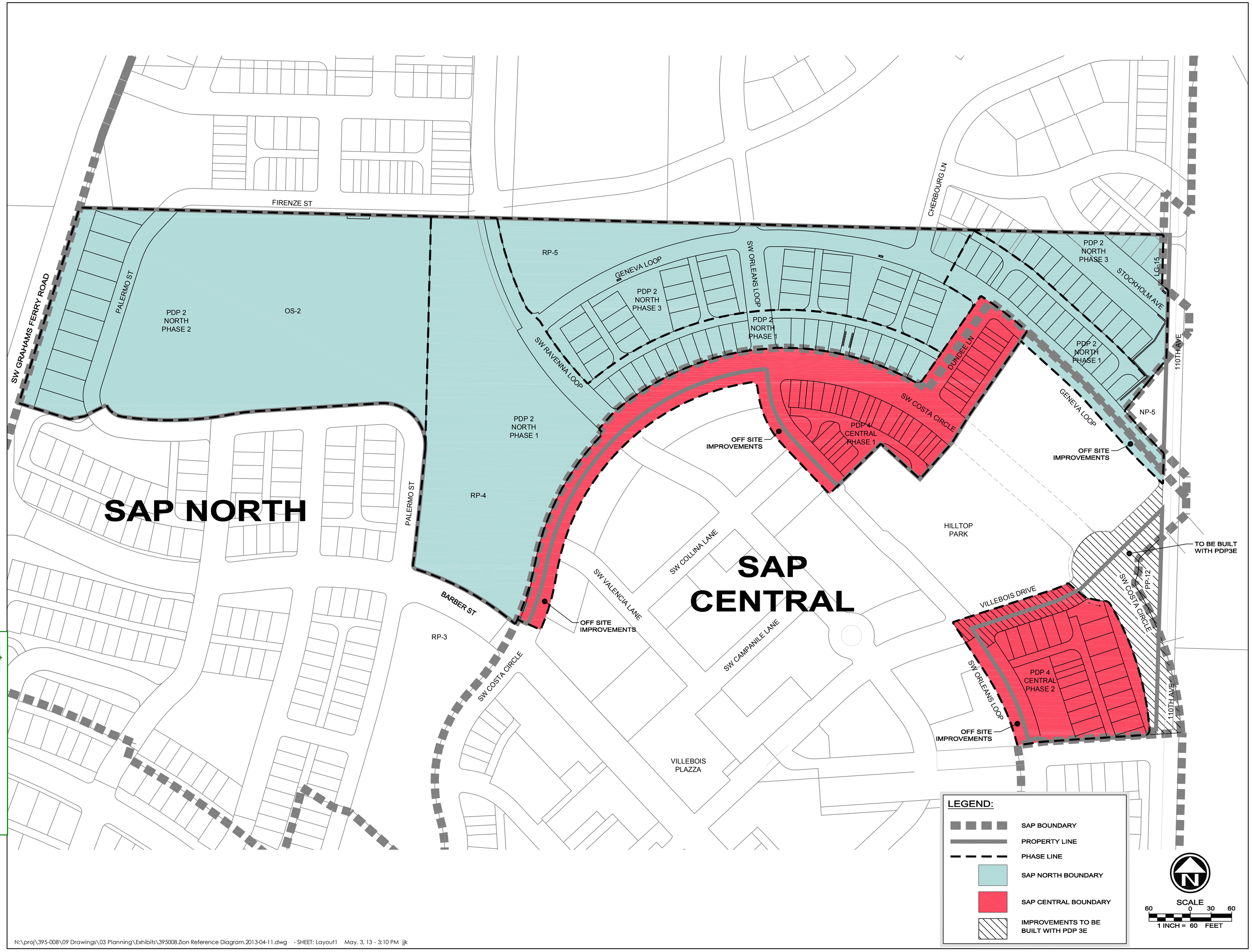
13356 C356CP04
Project No. Drawing No.

P4
Sheet No.

Copyright 2007 ©

NO.	DATE	BY	REVISION REMARKS

Design Drawn Checked Date Issued Sheet Dwg.
B.H MSH MAP



N:\proj\395-008\09 Drawings\03 Planning\Exhibits\395008.Zion Reference Diagram.2013-04-11.dwg - SHEET: Layout1 May. 3, 13 - 3:10 PM jjk

City of Wilsonville
EXHIBIT B4 DB13-0020 et al

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4
CENTRAL
&
PHASE 2
NORTH

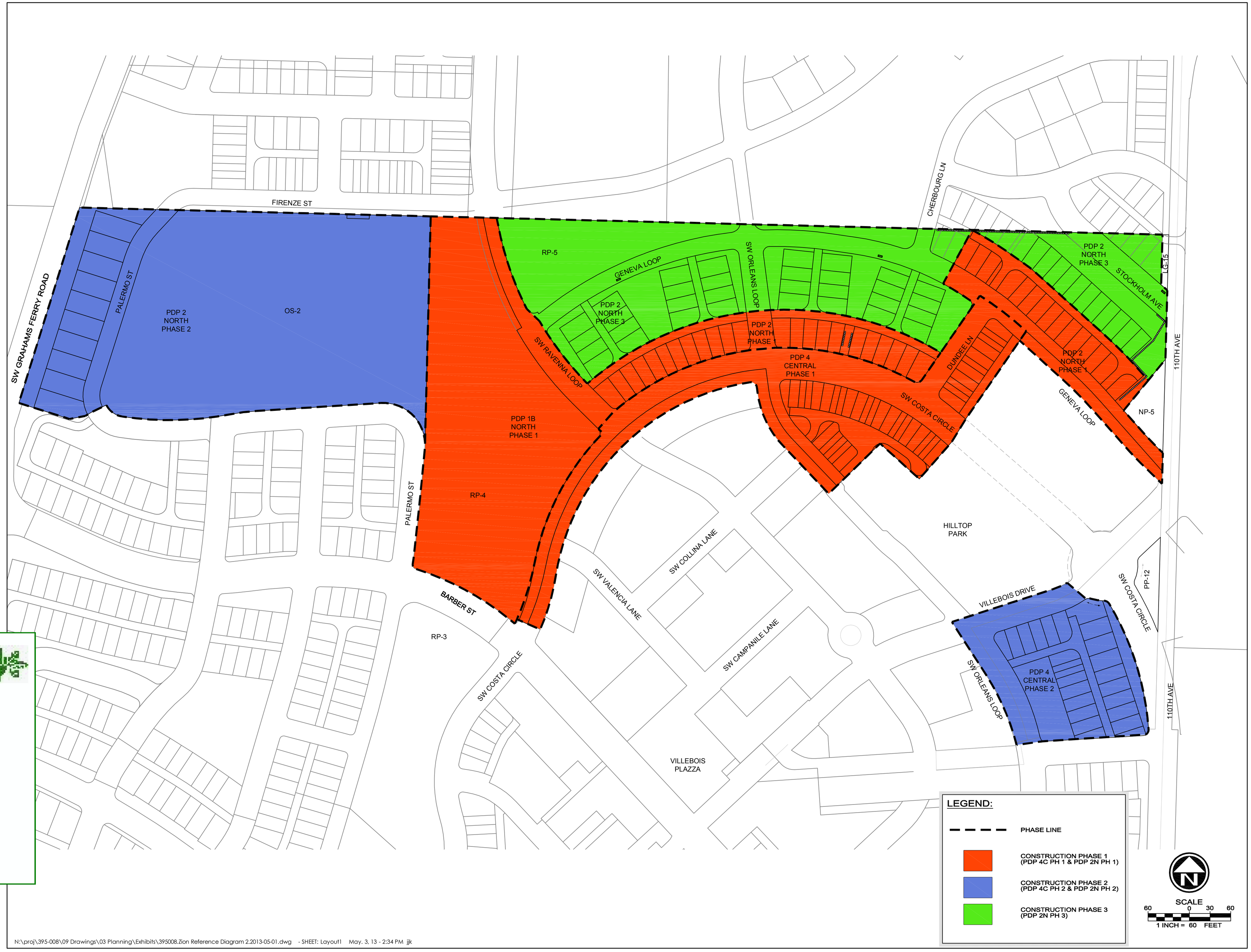
VILLEBOIS

PLANNING
EXHIBIT

Reference
Diagram

DATE 04/15/2013

EX1



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City of Wilsonville
EXHIBIT B5 DB13-0020 et al

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 4 CENTRAL & PHASE 2 NORTH

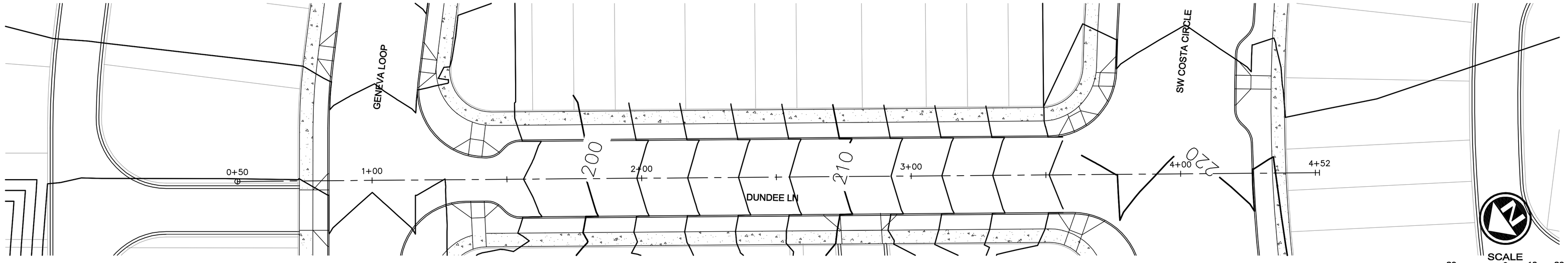
VILLEBOIS

PLANNING EXHIBIT

Phasing Diagram

DATE 04/15/2013

EX2



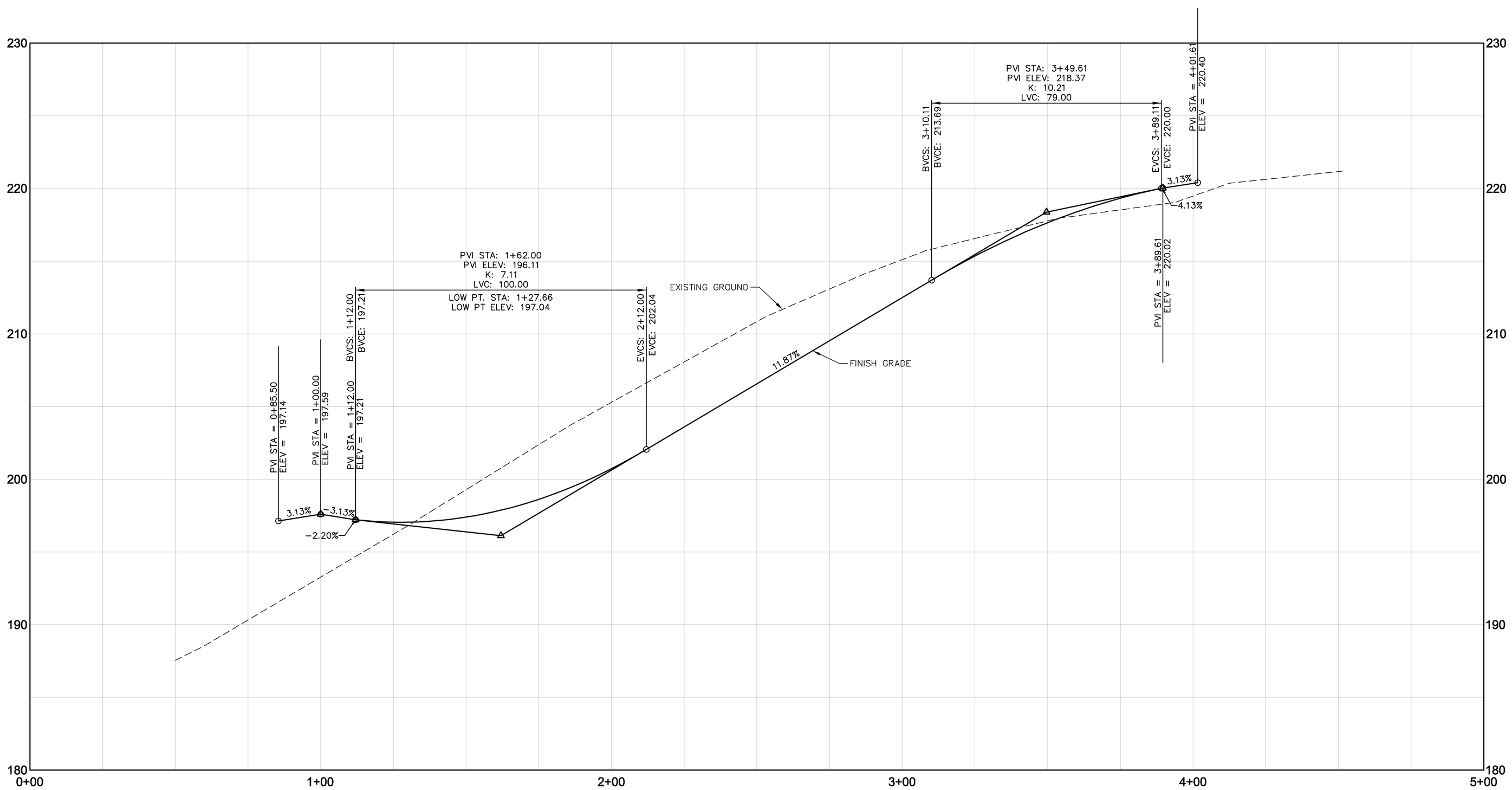
DUNDEE LANE - PRELIMINARY PLAN

SCALE: 1" = 20'

LEGEND:

—222— PROPOSED 2-FT CONTOUR

—220— PROPOSED 10-FT CONTOUR



DUNDEE LANE - PRELIMINARY PROFILE

HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 4'

N:\proj\395-008\09 Drawings\03 Planning\Exhibits\395008.(A)PDUNDEE.dwg - SHEET: PP DUNDEE May. 3, 13 - 11:15 AM jjk

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

PHASE 4 CENTRAL VILLEBOIS

Preliminary Development Plan

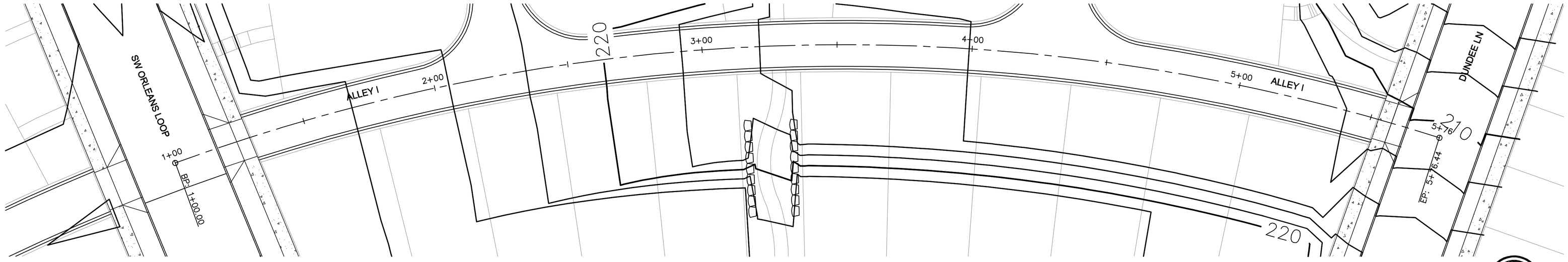
Preliminary Plan & Profile Dundee Lane

DATE 04/15/2013

A

City of Wilsonville

EXHIBIT B6 DB13-0020 et al



ALLEY I - PRELIMINARY PLAN

SCALE: 1" = 20'

LEGEND:

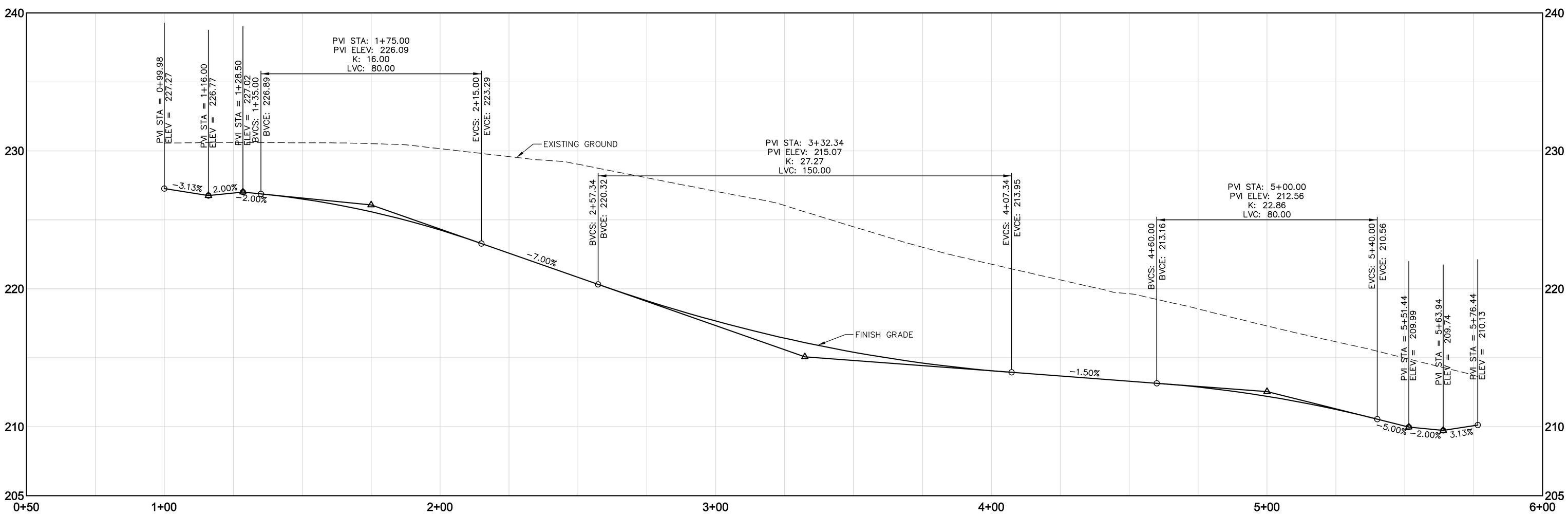
—222— PROPOSED 2-FT CONTOUR

—220— PROPOSED 10-FT CONTOUR

SCALE

20 0 10 20

1 INCH = 20 FEET



ALLEY I - PRELIMINARY PROFILE

HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 4'

N:\proj\395-008\09 Drawings\03 Planning\Exhibits\395008.(B)PALLY I.dwg - SHEET: PP DUNDEE May. 3, 13 - 11:32 AM jjk

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

PHASE 4
CENTRAL
VILLEBOIS

Preliminary
Development Plan

Preliminary
Plan & Profile
ALLEY I

DATE 04/15/2013

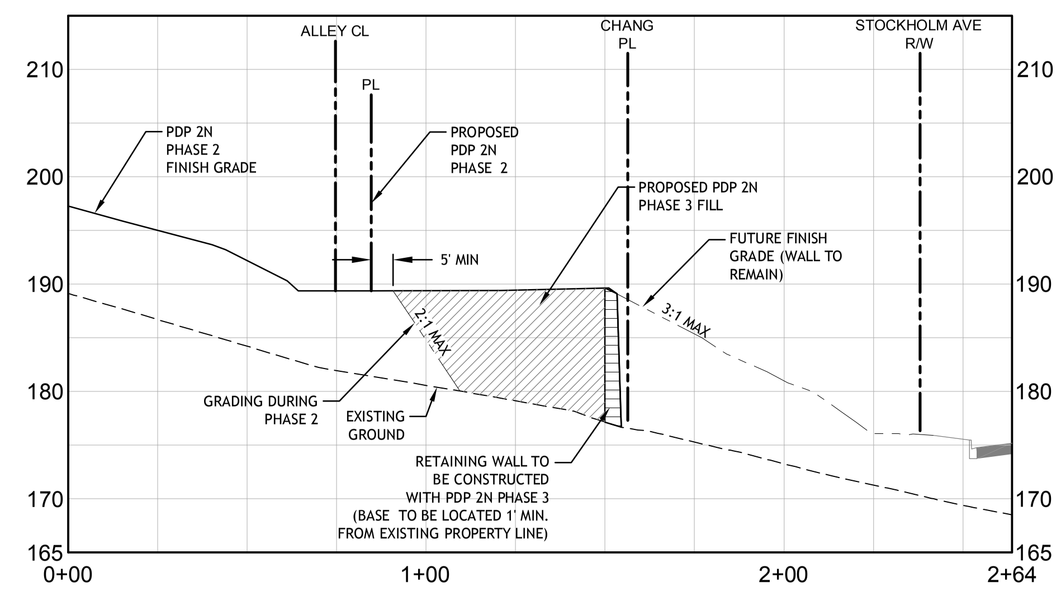
B

PRELIMINARY GRADING PLAN - FUTURE CHANG PROPERTY GRADING

SCALE: 1" = 40'

LEGEND

- 324 — FUTURE 5-FT CONTOUR
- 324 — FG 2-FT CONTOUR
- 320 — FG 10-FT CONTOUR
- PROPOSED LOCK N' LOAD RETAINING WALL



SECTION A-A

HORIZ SCALE: 1" = 30', VERT SCALE: 1" = 10'

SCALE
40 0 20 40
1 INCH = 40 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

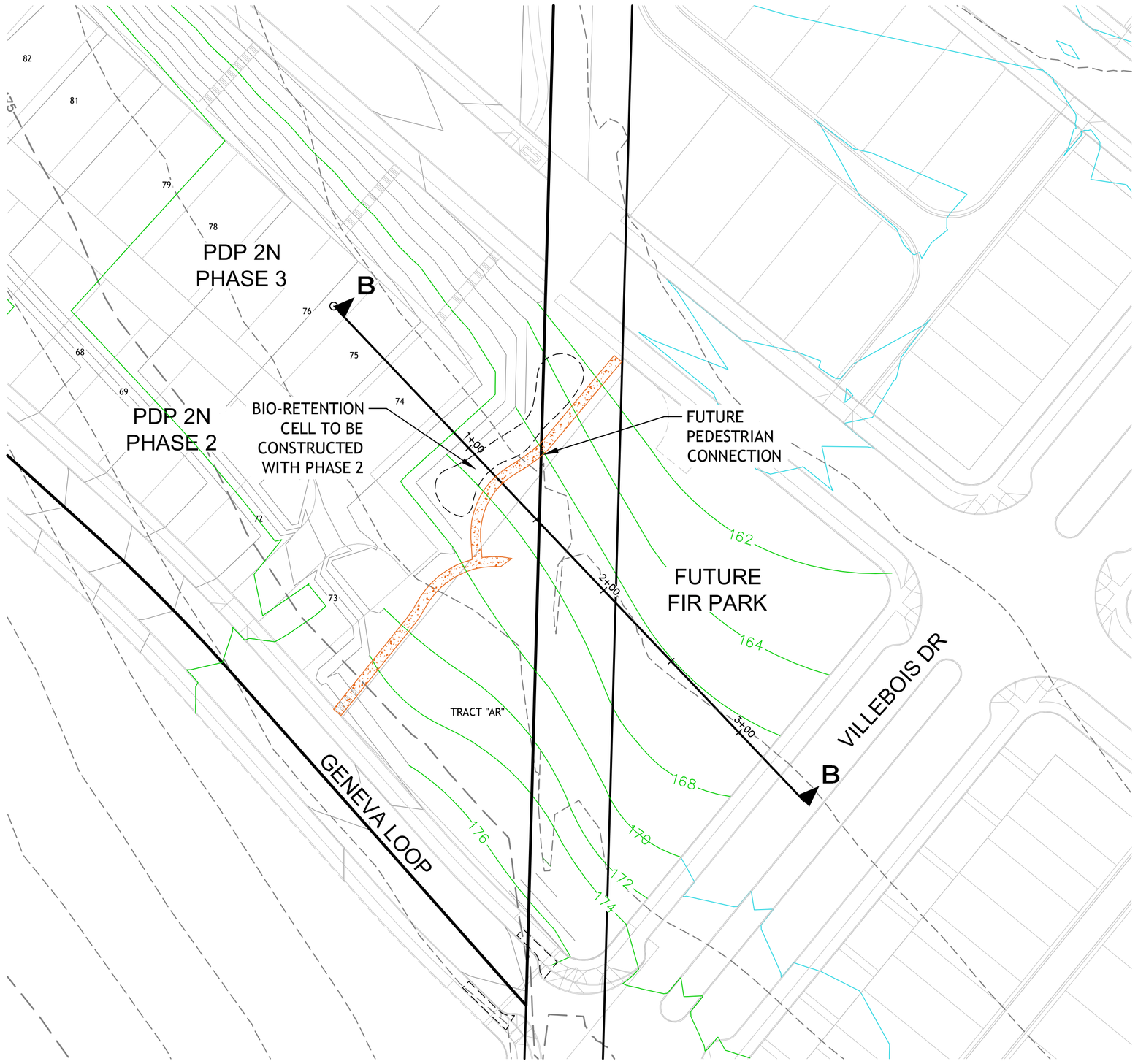
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Future Grading Exhibit
Chang Property

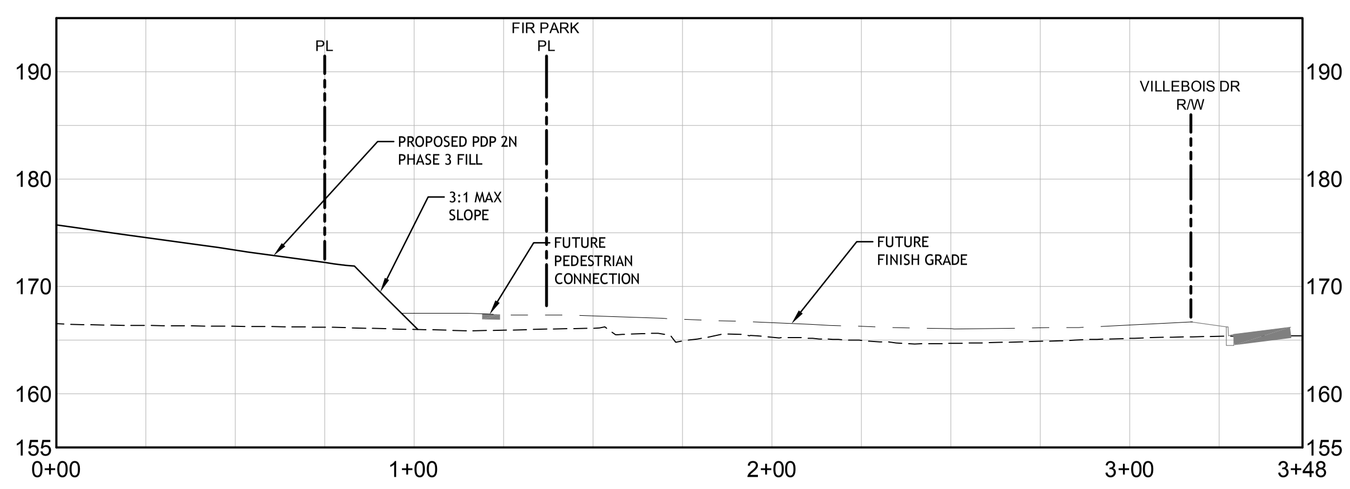
DATE 5/7/2013

C



PRELIMINARY GRADING PLAN - FUTURE FIR PARK

SCALE: 1" = 40'



SECTION B-B

HORIZ SCALE: 1" = 30', VERT SCALE: 1" = 10'

LEGEND

324	FUTURE 2-FT CONTOUR
324	FG 2-FT CONTOUR
320	FG 10-FT CONTOUR
324	PDP 3E FG 2-FT CONTOUR
320	PDP 3E FG 10-FT CONTOUR
	PROPOSED LOCK N' LOAD RETAINING WALL

SCALE
40 0 20 40
1 INCH = 40 FEET

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Future Grading
Exhibit
Fir Park

DATE 5/7/2013

D

N:\proj\395-008\09 Drawings\03 Planning\Exhibits\395008.Future Grading Exhibit.dwg - SHEET: Fir Park Grading May. 7, 13 - 10:28 AM pre

Pacific Community Design

M E M O R A N D U M

DATE: May 15, 2013

TO: Dan Pauly, City of Wilsonville

FROM: Stacy Connery

RE: PDP 2N

This Memo provides additional findings to address the street circulation in the northeast portion of PDP 2N, specifically in regards to Wilsonville Development Code Sections 4.125(.05)A., 4.125(.18)F.1.a.i, and 4.125(.18)J.1.a.i.

Within the northeast portion of PDP 2N, the Villebois Village Master Plan shows the area defined by Stockholm Avenue on the north, Villebois Drive to the east, Geneva Loop to the south, and Cherbourg Loop to the west, to be divided by two (2) streets (Verdun Loop and Dundee Lane). The SAP North plans show a change in the alignments of Stockholm Avenue and Verdun Loop and elimination of Dundee Lane. The circulation proposed with PDP 2N alters the alignment of Stockholm Avenue from that shown in SAP North to an alignment more similar to that shown in the Master Plan which works better with the topography in the area. The PDP 2N plan does not include any intervening streets connecting Stockholm Avenue to Geneva Loop in between Villebois Drive and Cherbourg Lane. The road south of Geneva Loop connecting to Costa Circle has been renamed Dundee Lane.

The intervening streets noted above have been eliminated due to grade differences. This area is sloping steeply down from southwest to north east. Costa Circle, Geneva Loop and Stockholm Avenue run along the slope, in an effort to work with the topography. The elevation at Costa Circle and Dundee Lane is 220 feet and the elevation at Dundee Lane and Geneva Loop is 198 feet, for a 22 foot difference. Engineering approval has been requested for Dundee Lane to exceed an 8% grade. The elevation at Stockholm Avenue across the block from Dundee Lane is 164 feet, which is a 34 foot difference from the 198 feet at Dundee Lane and Geneva Loop. The elevation differences between these two streets make it infeasible for a connecting street with sufficient room for vertical curves that provide adequate sight distances. It is not possible to provide a street connection between Stockholm Avenue and Geneva Loop in this area due to the steep grades. The proposed refinement is not significant as it will provide for a safer street circulation system and minimizes impact to natural features

City of Wilsonville
EXHIBIT B7 DB13-0020 et al

12564 SW Main Street, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485

(i.e., topography), which is consistent with Residential Housing Policy #10 of the Villebois Village Master Plan. The proposed circulation system is also in compliance with Circulation Implementing Measure #7 through provision of multiple pedestrian and bicycle connections from Geneva Loop to Stockholm Avenue in place of street connections.

Plans have been provided to show a potential scenario for intervening street connections from those proposed in PDP 2N and those approved in PDP 3E. This information demonstrates that it will still be feasible to develop the property north of PDP 2N and west of PDP 3E. The resulting block bounded by Geneva Loop, Villebois Drive, Stockholm Avenue and Cherbourg Lane will exceed block perimeter and street spacing standards, but will include multiple accessways for pedestrians and bicycles. The block perimeter and street spacing standards must be exceeded due to the steep grades in this area as described in the paragraph above. The eastern portion of this block includes NP-5 (Fir Park) which has multiple pathway connections through the park connecting Geneva Loop with Stockholm Avenue. Additionally, an accessway is planned across from Dundee Lane running through the block from Geneva Loop to Stockholm Avenue. A segment of this accessway will be temporarily provided until the property to the north develops in order to provide the connection with the first phase of development of this block.

Clackamas County Official Records
Sherry Hall, County Clerk
2013-026883
04/19/2013 01:48:59 PM
D-DED Cnt=1 Stn=6 KARLYNWUN
$45.00 $16.00 $10.00 $17.00
$88.00

After recording, return to:
City of Wilsonville
Attn: City Recorder
29799 SW Town Center Loop E.
Wilsonville OR 97070

City of Wilsonville
EXHIBIT B8 DB13-0020 et al

88

STREET DEDICATION

KNOW ALL BY THESE PRESENTS, that **Polygon at Villebois III, L.L.C.**, a Washington limited liability company, hereinafter referred to as "Grantor," as legal owner of that certain real property legally described below ("Property"), does hereby dedicate, grant, transfer, and convey to the **City of Wilsonville**, a municipal corporation of the State of Oregon, and its assigns, hereinafter referred to as "Grantee," for the use of the public as public way, street, and road ("Street Dedication"), forever, running with the land, certain real property legally described as follows, to-wit:

> See **Exhibit A**, Legal Description, and **Exhibit B**, Locational Map, attached hereto, and incorporated by reference as if fully set forth herein.

TO HAVE AND TO HOLD the above-described Street Dedication unto Grantee for the public uses and purposes hereinabove mentioned; provided, however, in the event said Property is not used or ceases to be used for public purpose, the Street Dedication may be vacated.

The true and actual consideration paid for the transfer, stated in terms of dollars, is Zero Dollars. However, the actual consideration consists of or includes other property or value given or promised which is the whole consideration.

This Street Dedication shall be subject to and construed pursuant to the laws of the State of Oregon, and venue shall be in the County of Clackamas.

No modifications may be made to this Dedication, except in writing, signed by both parties.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE

This instrument filed for record by LEX Fidelity National Title as an accommodation only. It has not been examined as to its execution or as to its effect upon the title.
2119CCO

After recording, return to:
City of Wilsonville
Attn: City Recorder
29799 SW Town Center Loop E.
Wilsonville OR 97070

8C

STREET DEDICATION

KNOW ALL BY THESE PRESENTS, that **Polygon at Villebois III, L.L.C.**, a Washington limited liability company, hereinafter referred to as "Grantor," as legal owner of that certain real property legally described below ("Property"), does hereby dedicate, grant, transfer, and convey to the **City of Wilsonville**, a municipal corporation of the State of Oregon, and its assigns, hereinafter referred to as "Grantee," for the use of the public as public way, street, and road ("Street Dedication"), forever, running with the land, certain real property legally described as follows, to-wit:

> See **Exhibit A**, Legal Description, and **Exhibit B**, Locational Map, attached hereto, and incorporated by reference as if fully set forth herein.

TO HAVE AND TO HOLD the above-described Street Dedication unto Grantee for the public uses and purposes hereinabove mentioned; provided, however, in the event said Property is not used or ceases to be used for public purpose, the Street Dedication may be vacated.

The true and actual consideration paid for the transfer, stated in terms of dollars, is Zero Dollars. However, the actual consideration consists of or includes other property or value given or promised which is the whole consideration.

This Street Dedication shall be subject to and construed pursuant to the laws of the State of Oregon, and venue shall be in the County of Clackamas.

No modifications may be made to this Dedication, except in writing, signed by both parties.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE

This instrument filed for record by LEX Fidelity National Title as an accommodation only. It has not been examined as to its execution or as to its effect upon the title.

APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

IN WITNESS WHEREOF, the undersigned have executed this Street Dedication this 22 day of March, 2013.

GRANTOR:

POLYGON AT VILLEBOIS III, L.L.C.,
a Washington limited liability company

By: PNW HOME BUILDERS SOUTH, L.L.C.,
a Washington limited liability company
Its: Manager

By: PNW HOME BUILDERS, L.L.C.,
a Washington limited liability company
Its: Sole Member

By: PNW HOME BUILDERS GROUP, INC.,
a Washington corporation
Its: Managing Member

By: [signature]
Printed Name: FRED GAST
As Its: ASST. V.P.

STATE OF Washington)
) ss.
County of Clark)

This instrument was acknowledged before me on March 22nd, 2013, by Fred Gast, as Assistant Vice President of Polygon at Villebois III, LLC.

[signature]
Notary Public – State of Washington

LATASHA R NIX
NOTARY PUBLIC
STATE OF WASHINGTON
My Comm. Expires July 6, 2015

GRANTEE:

ACCEPTED on behalf of the City of Wilsonville, Oregon
this 5 day of April, 2013.

Bryan Cosgrove, City Manager

OFFICIAL SEAL
ANGELA MARIE HANDRAN
NOTARY PUBLIC - OREGON
COMMISSION NO. 471206
MY COMMISSION EXPIRES AUGUST 28, 2016

STATE OF OREGON)
) ss.
County of Clackamas)

This instrument was acknowledged before me on April 5, 2013, by Bryan Cosgrove, as the City Manager of the City of Wilsonville.

Angela M. Handran
Notary Public – State of Oregon

ATTESTED TO:

Sandra C. King, MMC, City Recorder

APPROVED AS TO FORM:

Barbara A. Jacobson, Assistant City Attorney
City of Wilsonville, Oregon

APPROVED AS TO LEGAL DESCRIPTION:

04/02/2013
Nancy J.T. Kraushaar, P.E., City Engineer/
Community Development Director
City of Wilsonville, Oregon

I:\villebois\villebois central\esmt street row dedic polygon-zion

Pacific Community Design

EXHIBIT "A"

March 1, 2013

LEGAL DESCRIPTION Job No. 395-008
Street Dedication

Three tracts of land, being portions of Parcel 3, Partition Plat No. 2007-127, and Parcel 2, Partition Plat No. 2010-046, Clackamas County Plat Records, situated in the Northwest and Northeast Quarters of Section 15, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, more particularly described as follows:

Tract 1 - Street Dedication

BEGINNING at the southwest corner of said Parcel 3, Partition Plat No. 2007-127;

thence along the southerly boundary line of said Parcel 3, on a 590.00 foot radius curve, concave southerly, with a radius point bearing South 45°42'28" East, arc length of 423.74 feet, central angle of 41°09'00", chord bearing of North 64°52'02" East, and chord distance of 414.69 feet;

thence continuing along said southerly boundary line, South 07°28'09" East, a distance of 53.01 feet;

thence continuing along said southerly boundary line, on a 207.00 foot radius tangential curve to the left, arc length of 128.16 feet, central angle of 35°28'22", chord bearing of South 25°12'21" East, and chord distance of 126.12 feet;

thence continuing along said southerly boundary line, South 43°36'51" East, a distance of 160.98 feet;

thence continuing along said southerly boundary line, North 45°36'51" East, a distance of 27.50 feet;

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the said southerly boundary line of Parcel 3, North 43°36'51" West, a distance of 158.20 feet;

thence leaving said parallel line, along a 179.50 foot radius tangential curve to the right, arc length of 113.24 feet, central angle of 36°08'42", chord bearing of North 25°32'30" West, and chord distance of 111.37 feet;

13500 SW Pacific Highway PMB #519, Tigard, OR 97223 • [T] 503-941-9484 [F] 503-941-9485

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the said southerly boundary line of Parcel 3, North 07°28'09" West, a distance of 99.16 feet;

thence along a line being parallel to and measuring 48.00 feet at right angle distances to the said southerly boundary line of Parcel 3, on a 638.00 foot radius non-tangential curve, concave southeasterly, with a radius point bearing South 02°18'04" East, arc length of 482.98 feet, central angle of 43°22'27", chord bearing of South 66°00'42" West, and chord distance of 471.53 feet to a point on the westerly boundary line of said Parcel 3;

thence along said westerly boundary line, South 45°16'40" East, a distance of 48.00 feet to the POINT OF BEGINNING.

Containing 0.725 acres, more or less.

Tract 2 - Street Dedication

BEGINNING at the most northerly corner of Parcel 3, Partition Plat No. 2007-128;

thence along the northerly boundary line of said Parcel 3, South 47°51'53" East, a distance of 147.24 feet;

thence continuing along said northerly boundary line, on a 900.00 foot radius tangential curve to the right, arc length of 99.96 feet, central angle of 06°21'49", chord bearing of South 44°40'59" East, and chord distance of 99.91 feet;

thence continuing along said northerly boundary line, South 41°30'04" East, a distance of 226.09 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence along said westerly right-of-way line, North 01°35'01" East, a distance of 44.72 feet;

thence leaving said westerly right-of-way line, North 45°46'32" West, a distance of 22.14 feet;

thence along a 500.00 foot radius tangential curve to the right, arc length of 37.30 feet, central angle of 04°16'28", chord bearing of North 43°38'18" West, and chord distance of 37.29 feet;

thence along a line being parallel to and measuring 27.50 feet at right angle distances to the said northerly boundary line of Parcel 3, thence North 41°30'04" West, a distance of 134.05 feet;

thence continuing along said parallel line, on a 927.50 foot radius tangential curve to the left, arc length of 103.02 feet, central angle of 06°21'49", chord bearing of North 44°40'58" West, and chord distance of 102.96 feet;

Pacific Community Design, Inc
13500 SW Pacific Highway PMB #519, Tigard, OR 97223 • [T] 503-941-9484 [F] 503-941-9485

thence continuing along said parallel line, North 47°51'53" West, a distance of 147.28 feet;

thence leaving said parallel line, South 42°08'07" West, a distance of 27.50 feet to the POINT OF BEGINNING.

Containing 0.292 acres, more or less.

Tract 3 - Street Dedication

BEGINNING at the most northerly corner of Parcel 2, Partition Plat No. 2010-046;

thence along the northerly boundary line of said Parcel 2, South 45°34'29" West, a distance of 278.00 feet;

thence continuing along said northerly boundary line, South 63°29'14" West, a distance of 61.38 feet;

thence continuing along said northerly boundary line, South 72°02'29" West, a distance of 217.00 feet to the northwest corner of said Parcel 2;

thence along the westerly boundary line of said Parcel 2, South 32°57'13" East, a distance of 117.17 feet;

thence continuing along the said westerly boundary line, on a 535.50 foot radius tangential curve to the right, arc length of 187.86 feet, central angle of 20°06'00", chord bearing of South 22°54'13" East, and chord distance of 186.90 feet to the southwest corner of said Parcel 2;

thence along the southerly boundary line of said Parcel 2, North 77°08'47" East, a distance of 31.36 feet to an angle point in said Parcel 2;

thence leaving said line, along a 568.00 foot radius non-tangential curve, concave southwesterly, with a radius point bearing South 77°01'16" West, arc length of 198.02 feet, central angle of 19°58'30", chord bearing of North 22°57'59" West, and chord distance of 197.02 feet;

thence North 32°57'14" West, a distance of 79.87 feet;

thence along a line being parallel to and measuring 28.75 feet at right angle distances to the said northerly boundary line of Parcel 2, North 72°02'29" East, a distance of 177.44 feet;

thence leaving said parallel line, along a 233.50 foot radius tangential curve to the left, arc length of 67.83 feet, central angle of 16°38'43", chord bearing of North 63°43'08" East, and chord distance of 67.60 feet;

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thence along a 15.00 foot radius reverse curve to the right, arc length of 14.18 feet, central angle of 54°09'29", chord bearing of North 82°28'31" East, and chord distance of 13.66 feet;

thence along a 85.00 foot radius reverse curve to the left, arc length of 170.97 feet, central angle of 115°14'42", chord bearing of North 51°55'54" East, and chord distance of 143.57 feet;

thence along a 15.00 foot radius reverse curve to the right, arc length of 13.72 feet, central angle of 52°24'38", chord bearing of North 20°30'51" East, and chord distance of 13.25 feet;

thence North 46°43'10" East, a distance of 69.57 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence along said westerly right-of-way line, North 01°35'01" East, a distance of 68.95 feet to the POINT OF BEGINNING.

Containing 0.741 acres, more or less.

Basis of bearings per Partition Plat No. 2007-128, Clackamas County Plat Records.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

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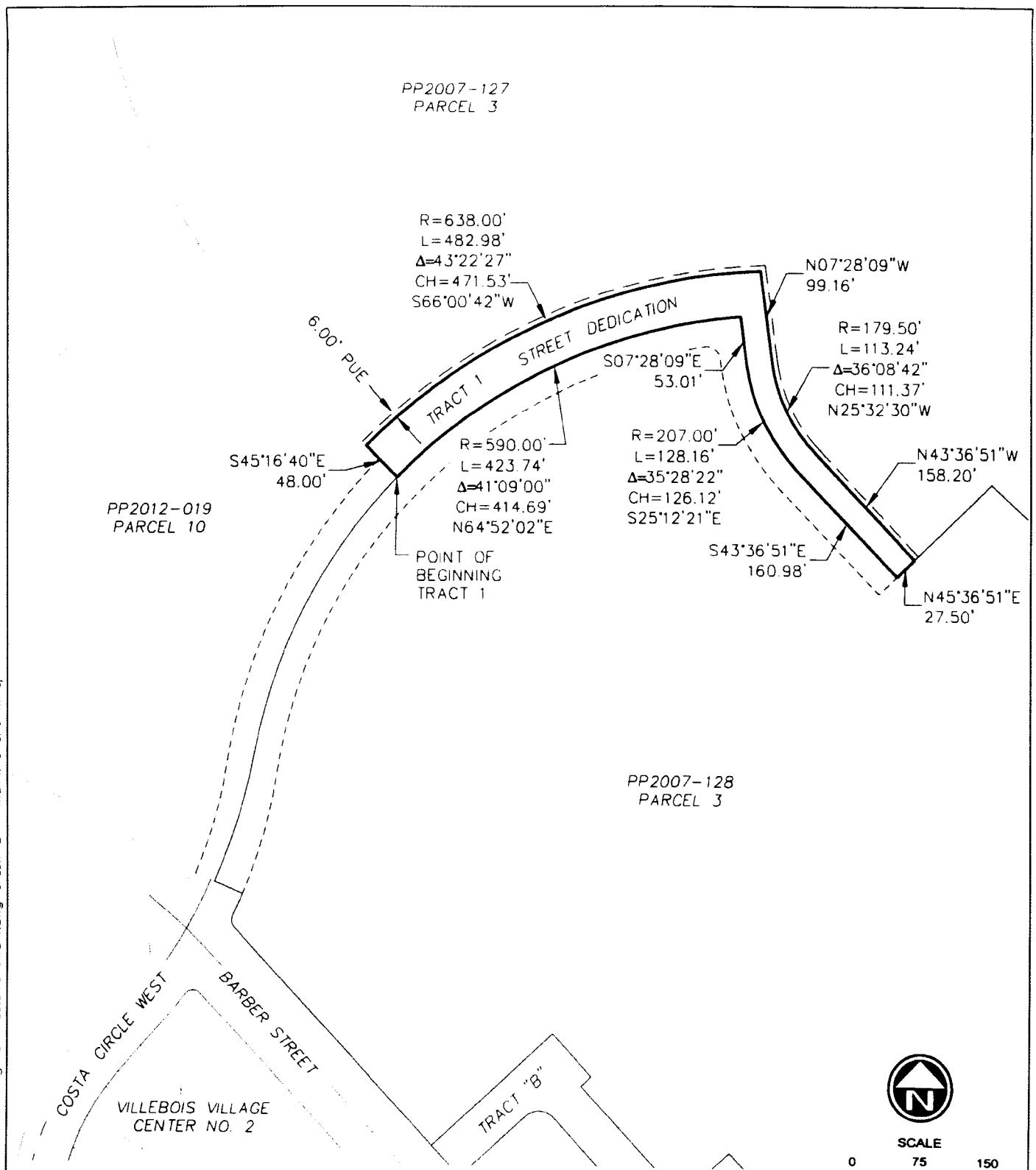

EXHIBIT "B"
STREET DEDICATION

DRAWN BY: T2 DATE: 3/1/13
REVIEWED BY: TCJ DATE: 3/1/13
PROJECT NO.: 395-008
SCALE: 1"=150'
PAGE 1 OF 2

Pacific Community Design

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[F] 503-941-9485

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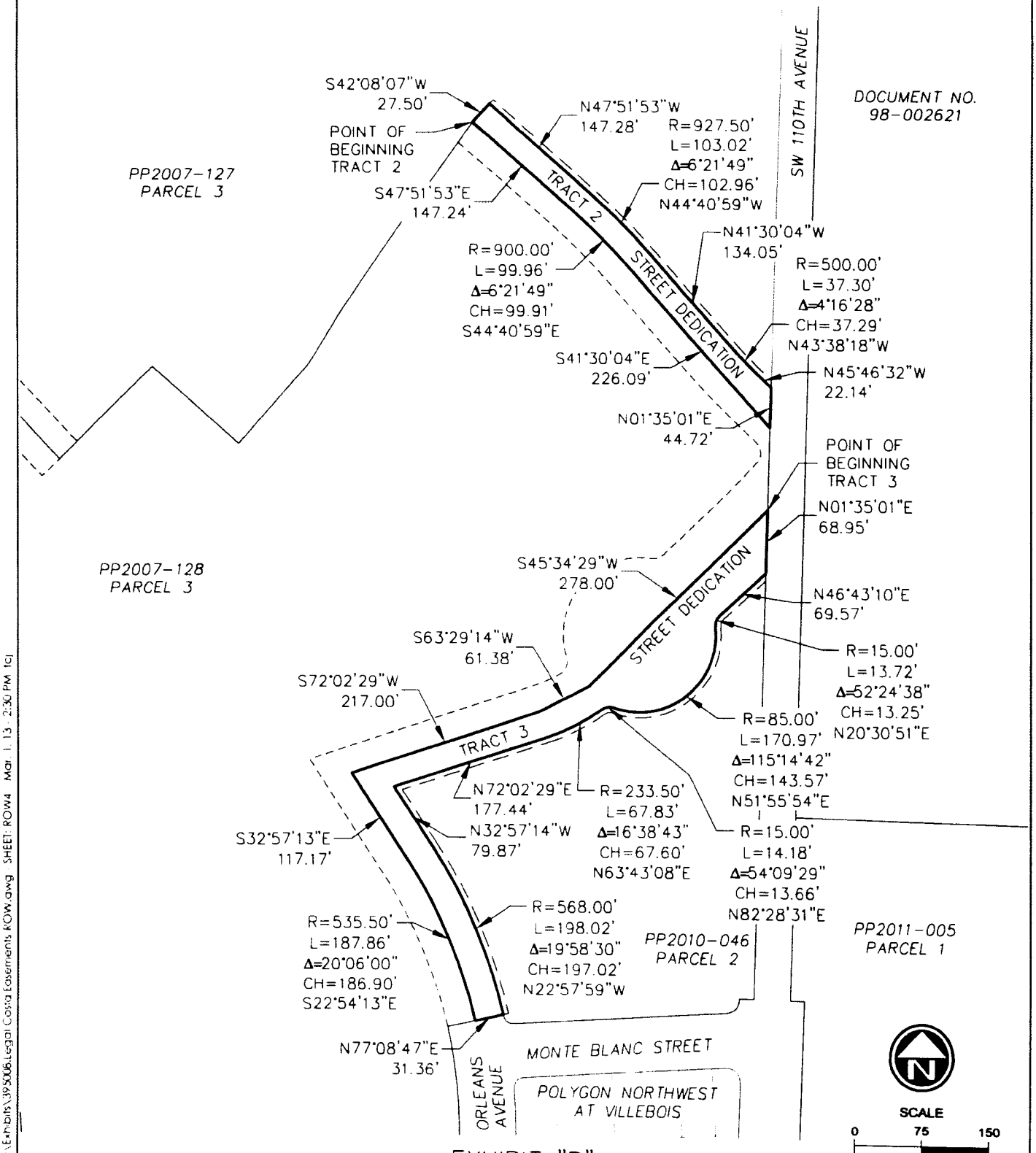

EXHIBIT "B"
STREET DEDICATION

DRAWN BY: T2 DATE: 3/1/13
REVIEWED BY: TCJ DATE: 3/1/13
PROJECT NO.: 395-008
SCALE: 1"=150'
PAGE 2 OF 2

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

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Pacific Community Design

M E M O R A N D U M

City of Wilsonville
EXHIBIT B10 DB13-0020 et al

DATE: May 20, 2013

TO: Dan Pauly, City of Wilsonville

FROM: Stacy Connery

RE: PDP 2N/ FDP 2N – Regional Park 4 & Open Space 2

Regional Park 4 (RP-4) and Open Space 2 (OS-2) are shown on Feasibility Plan 16 of the *Villebois Village Master Plan* Technical Appendix F with the following elements.

Regional Park 4 (RP-4)

- Stormwater/rainwater feature: swale
- Benches
- Picnic tables
- Drinking fountain: 1
- BBQ: 1
- Shelter: 1
- Child Creative Play: 1
- Sports Courts: ½ court Basketball, Multipurpose Court, Horseshoe Pit
- Lawn Play: 1.10 acres (160' x 300')

The updated FDP plans show the following elements within RP-4:

- A rainwater swale.
- Multiple benches throughout the park
- Multiple picnic tables adjacent to the SROZ and the shelter
- One (1) drinking fountain near the Sports Courts
- One (1) BBQ near the shelter
- A 16' x 32' shelter (Note: This shelter is sized in consideration of the shelter planned for Regional Park 5 which is designated as the Neighborhood Commons and is east of RP-4 across Ravenna Loop, in addition to the number of picnic tables within RP-4)
- Child Creative/Structure Play areas, including a compacted ¼ minus gravel kiddy bike track with acorn seats and precast climbing rocks and ropes on engineered wood fiber
- Sports Courts, including two (2) ½ court basketball areas, four (4) square, hop scotch, and shuffleboard
- Lawn Play: 0.69 acres (150' x 200')

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Open Space 2 (OS-2)

- Benches
- Picnic Tables
- Child Play Structure: 1

The updated FDP plans show the following elements within OS-2:

- Multiple benches throughout the park adjacent to the nature trails
- Picnic Tables along the east edge of the SROZ adjacent to the Tonquin Trail
- A par course with fitness stations along the nature trails
- A leaf identification creative play course within the forest adjacent to the creative play in RP-4
- (NOTE: A child play structure was planned for the north side of OS-2, which is being deferred until development of the property to the north occurs in order to assure a visible and safe environment for children)

The proposed park designs will implement Villebois Master Plan Parks policies and implementation measures as follows.

Policy 1: *Parks and open space areas shall incorporate existing trees where feasible and large shade trees shall be planted in appropriate locations in parks and open spaces.*

RESPONSE: The FDP plans show the incorporation of existing trees into the park and open space areas. Trees that are in poor condition are proposed for removal with the PDP Tree Preservation Plan. The park planting plans include planting of large shade trees where appropriate.

Policy 2: *An interconnected trail system shall be created linking the park and open spaces and key destination points within Villebois and to the surrounding neighborhoods. The trails system shall also provide loops of varying length to accommodate various activities such as walking, running and rollerblading.*

RESPONSE: The design for RP-4 and OS-2 continues the Tonquin Trail from Regional Park 3 to the south to Regional Park 5 to the northeast. In addition to the Tonquin Trail, an internal system of nature trails is planned within OS-2 with minor pathways in RP-4 and a minor pathway connection from Ravenna Loop to Palermo Street. The proposed trails contribute to the overall trail system in Villebois by adding loops of varying length and accommodating various activities.

Policy 3: *Parks shall encourage the juxtaposition of various age-oriented facilities and activities, while maintaining adequate areas of calm.*

RESPONSE: The proposed design for RP-4 and OS-2 will encourage the juxtaposition of age-oriented facilities and activities while maintaining adequate areas of calm. This is achieved through the location of the shelter in relation to the child play areas and sports courts, as well as the trails that lead into the forested area in OS-2 with picnic

tables and benches along the edges of the forest and benches along the nature trails internal to the forest.

Policy 4: *Park designs shall encourage opportunities for wildlife habitat, such as plantings for wildlife foraging and/or habitat, bird and/or bat boxes and other like elements.*

RESPONSE: The design for OS-2 and RP-4 encourages opportunities for wildlife through the preservation of the forested SROZ and the planned mitigation area extending south along the western edge of RP-4.

Policy 5: *Gathering spaces in parks shall generate social interaction by adding layers of activity (Power of Ten).*

RESPONSE: A plaza area with a shelter is planned within RP-4 which will include many layers of activities. The shelter includes a BBQ and multiple picnic tables near two child play areas for younger children, two ½ court basketball areas, additional sport court areas including 4-square, hopscotch and shuffleboard, trail connections to the forested SROZ, and seating areas slightly removed from the more active areas for viewing wildlife or other park activities from a distance, all with the Tonquin Trail passing through connecting park users to the park system to the north and east and to the south.

Policy 6: *Build-out of the Villebois Village Master Plan shall comply with the City of Wilsonville SROZ regulations. Any encroachment into the SROZ will be reviewed for compliance or exemption as more detailed information is provided that will affect the SROZ areas. Adjustments in plan, street alignments, and intersections as well as rainwater facilities and pathways shall be made to comply with SROZ regulations.*

RESPONSE: The design for OS-2 and RP-4 protects the forested SROZ and provides mitigation in excess of the proposed encroachments. Compliance with SROZ requirements is reviewed in detail in the SRIR prepared by SWCA with the PDP application.

Policy 9: *Parks and recreation spaces shall provide for flexibility over time to allow for adaptation to the future community's park, recreation and open space needs.*

RESPONSE: The proposed parks and open space areas are designed to be flexible overtime allowing for adaptation to future needs for parks, recreation and open space. The proposed designs will not inhibit change or addition of activities to the subject areas over time.

Policy 11: *On-street parking will not be allowed along the frontages of parks and open spaces where views into and out of the park spaces should be protected. Parking will be allowed along parks and open spaces in circumstances where it is necessary for the function of the park and will not obstruct the views into and out of the park area.*

RESPONSE: On-street parking is not allowed on the park street frontages, so views into and out of the park spaces are protected. On-street parking is allowed on the opposite side of streets surrounding the park areas. The proposed parks are designed to be accessible by pedestrians and bicyclists. Proposed park uses do not warrant off-street parking areas.

Implementation Measure 3: *Parks and open spaces shall be designed to incorporate native vegetation, landforms and hydrology to the fullest extent possible.*

RESPONSE: As shown on the attached FDP plans, proposed parks and open spaces are designed to incorporate native vegetation and landforms to the fullest extent possible.

Implementation Measure 7: *The ability to recreate year round shall be preserved through measures such as: the provision of some hard surfaces that function in the wet season; areas shaded from the sun; areas protected from the rain; safely lit areas and indoor recreation opportunities.*

RESPONSE: RP-4 includes provision of hard surfaces within the plaza area and with the sports courts, all of which will function in the wet season. Areas shaded from the sun and protected from the rain are provided with the proposed shelter, as well as seating areas protected within the trees. The attached plans show proposed trail lighting.

Implementation Measure 9: *The design of Villebois shall retain the maximum number of existing trees practicable that are six inches or more DBH in the "Important" and "Good" tree rating categories, which are defined in the Community Elements Books. Trees rated "Moderate" shall be evaluated on an individual basis as regards retention. Native species of trees and trees with historical importance shall be given special consideration for retention.*

RESPONSE: The FDP plans show the incorporation of the maximum number of existing trees practicable that are 6" DBH or greater that are designated as 'Important' or 'Good' into the park and open space areas. Trees that are in poor or moderate condition are proposed for removal with the PDP Tree Preservation Plan.

Implementation Measure 10: *Each Specific Area Plan, Preliminary Development Plan and Final Development Plan shall include tree preservation plans and planting plans to indicate proposed tree planting within parks and along streets and descriptions of the size of trees when planted and upon maturity.*

RESPONSE: The attached FDP plans show tree preservation and planting plans for park and open space areas, as well as along streets, which include descriptions of the size of trees.

Implementation Measure 13: *The Villebois Master Plan shall comply with the Significant Resource Overlay Zone (SROZ) regulations. Proposed encroachments into the SROZ for exempt or non-exempt development shall be reviewed for compliance with the requirements of Section 4.139 of the Wilsonville Code.*

RESPONSE: The design for OS-2 and RP-4 protects the forested SROZ and provides mitigation in excess of the proposed encroachments. Compliance with SROZ requirements is reviewed in detail in the SRIR prepared by SWCA with the PDP application.

Implementation Measure 14: *A conceptual plan for the lighting of park spaces throughout Villebois is provided on the plan included in Appendix H. Future development applications shall comply with the lighting system proposed in Appendix H. Refinements may be approved in accordance with Village Zone Section 4.125(.18)(F).*

RESPONSE: The attached FDP plans include proposed lighting along the Tonquin Trail and at the shelter and sports courts for RP-4 consistent with that shown in Appendix H of the Villebois Village Master Plan Technical Appendix.

Implementation Measure 15: *Each child play area shall include uses suitable for a range of age groups.*

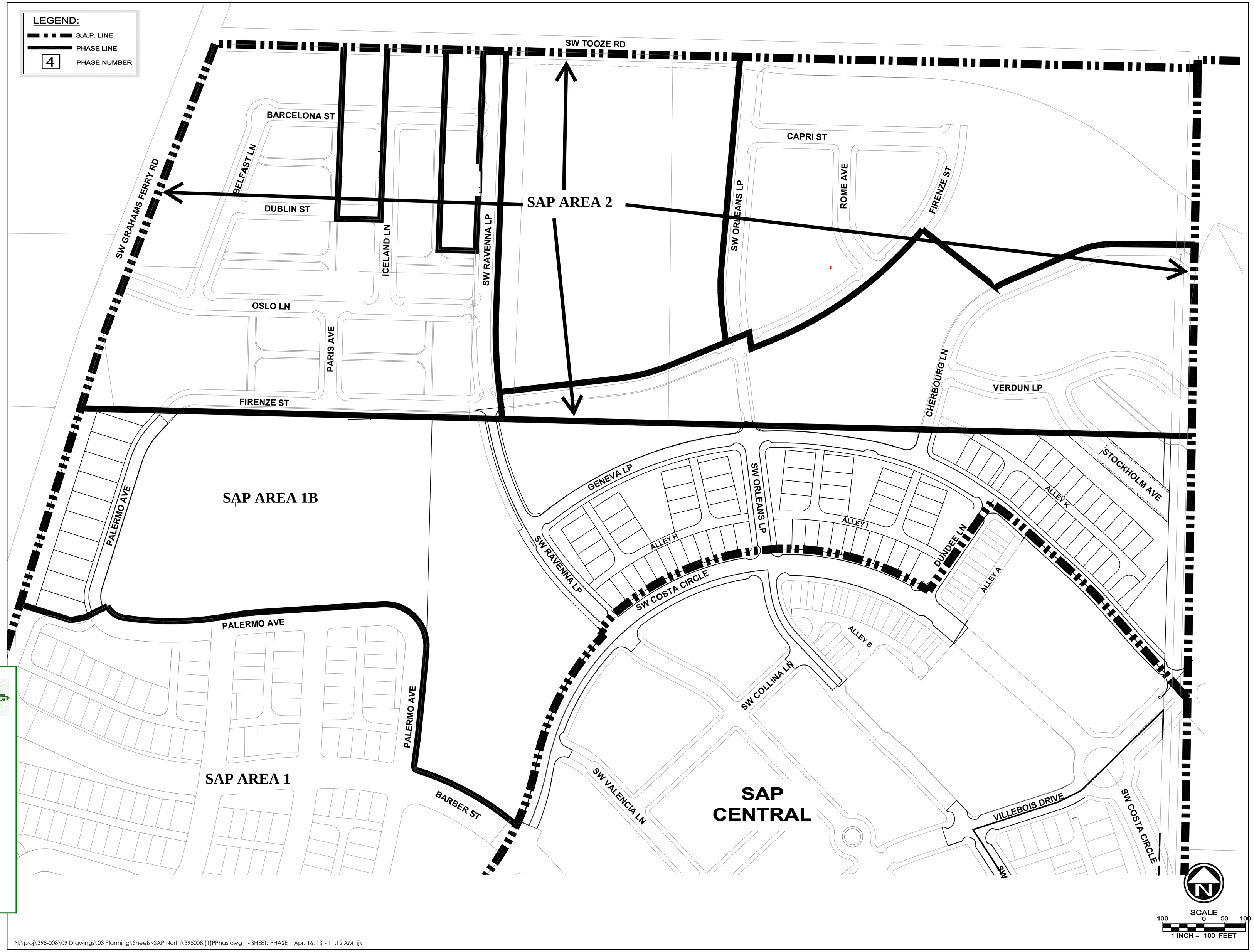
RESPONSE: RP-4 includes child play areas that provide uses suitable for a range of age groups. The child play areas include a compacted ¼ minus gravel kiddy bike track with acorn seats and precast climbing rocks and ropes on engineered wood fiber. Additionally, sports courts are provided, including two (2) ½ court basketball areas, 4-square, hop scotch, and shuffleboard. These uses are located around a plaza area with a shelter. Trails from the plaza lead into the forested area in Open Space 2 and to the lawn play area within RP-4. A wide range of age groups can be served by this concentration of uses surrounding the plaza area.

Implementation Measure 16: *Storage for seasonal activity equipment, as appropriate to the HOA, will be located with the Community Center, Homeowners Association buildings, or with restroom facilities in or near the Neighborhood Commons.*

RESPONSE: The FDP plans for RP-4 identify the potential location for equipment storage, if this should become necessary in the future. However, Regional Park 5 which is situated northeast of RP-4 will include the Neighborhood Commons to be designed and developed at a later date. The future Neighborhood Commons in RP-5 may be the more appropriate location for equipment storage.

Implementation Measure 20: *The adequacy, amount and location of the proposed parking (including ADA parking) necessary to serve the proposed park uses shall be evaluated in detail at the SAP and PDP level. Off-street parking may be required to serve the various park users.*

RESPONSE: Proposed park uses do not warrant off-street parking areas. On-street parking is allowed on the opposite side of streets surrounding the park areas. The proposed parks are designed to be accessible by pedestrians and bicyclists.



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

SAP NORTH

Villebois North Specific Area Plan

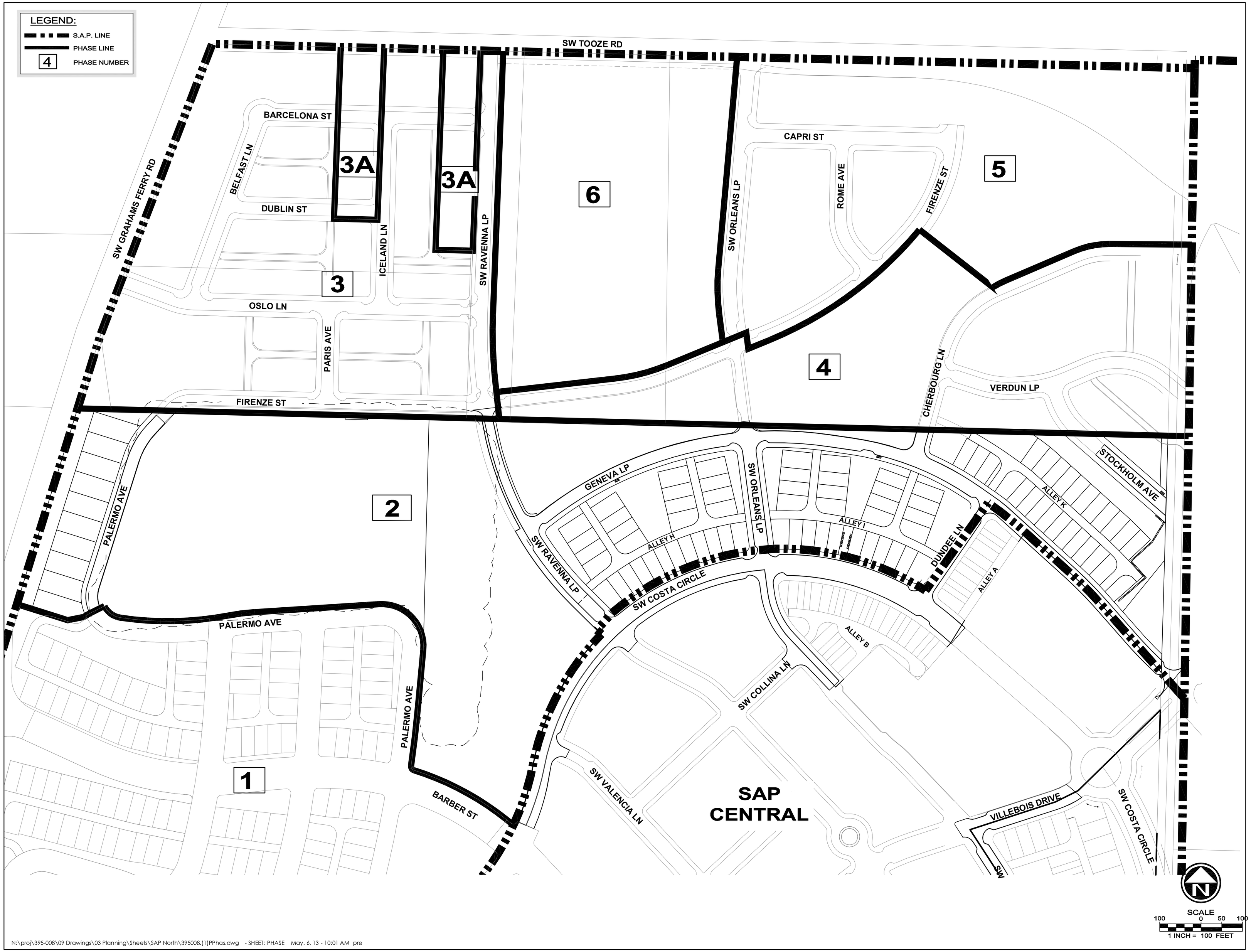
Phasing Plan Update

DATE 03/18/2013

1

City of Wilsonville

EXHIBIT B11 DB13-0020 et al



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

SAP NORTH

Villebois North

PDP's

Phasing Plan Update

DATE 03/18/2013

1

EXHIBIT A
PLANNING DIVISION
STAFF REPORT

VILLEBOIS PHASE 2 NORTH

DEVELOPMENT REVIEW BOARD PANEL '___'
QUASI JUDICIAL HEARING

Public Hearing Date:
Date of Report:
Application Numbers:

Request A: DB13-0020 SAP-North Preliminary Development Plan
Request B: DB13-0021 SAP-North Refinements
Request C: DB13-0022 SAP-North Amendments
Request D: DB13-0023 Zone Map Amendment
Request E: DB13-0024 Tentative Subdivision Plat
Request F: DB13-0025 Type C Tree Plan
Request G: DB13-0026 Final Development Plan for Parks and Open Space
SII3-0001 Significant Resource Impact Report (SRIP) Review

Property Owners/Applicants:

PD = Planning Division conditions
BD – Building Division Conditions
PF = Engineering Conditions.
NR = Natural Resources Conditions
TR = SMART/Transit Conditions
FD = Tualatin Valley Fire and Rescue Conditions

City of Wilsonville
EXHIBIT C1 DB13-0020 et al

Standard Comments:	
PFA 1.	All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards.
PFA 2.	Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:

Coverage (Aggregate, accept where noted)	*Limit*
Commercial General Liability	
General Aggregate (per project)	$ 2,000,000
Fire Damage (any one fire)	$ 50,000
Medical Expense (any one person)	$ 10,000
Business Automobile Liability Insurance	
Each Occurrence	$ 1,000,000
Aggregate	$ 2,000,000
Workers Compensation Insurance	$ 500,000

PFA 3.	No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved by Staff, all fees have been paid, all necessary permits, right-of-way and easements have been obtained and Staff is notified a minimum of 24 hours in advance.
PFA 4.	All public utility/improvement plans submitted for review shall be based upon a 22”x 34” format and shall be prepared in accordance with the City of Wilsonville Public Work’s Standards.
PFA 5.	Plans submitted for review shall meet the following general criteria:

a. Utility improvements that shall be maintained by the public and are not contained within a public right-of-way shall be provided a maintenance access acceptable to the City. The public utility improvements shall be centered in a minimum 15-ft. wide public easement for single utilities and a minimum 20-ft wide public easement for two parallel utilities and shall be conveyed to the City on its dedication forms.
b. Design of any public utility improvements shall be approved at the time of the issuance of a Public Works Permit. Private utility improvements are subject to review and approval by the City Building Department.
c. In the plan set for the PW Permit, existing utilities and features, and proposed new private utilities shall be shown in a lighter, grey print. Proposed public improvements shall be shown in bolder, black print.
d. All elevations on design plans and record drawings shall be based on NAVD 88 Datum.
e. All proposed on and off-site public/private utility improvements shall comply with the State of Oregon and the City of Wilsonville requirements and any other applicable codes.
f. Design plans shall identify locations for street lighting, gas service, power lines, telephone poles, cable television, mailboxes and any other public or private

utility within the general construction area.

g. As per City of Wilsonville Ordinance No. 615, all new gas, telephone, cable, fiber-optic and electric improvements etc. shall be installed underground. Existing overhead utilities shall be undergrounded wherever reasonably possible.
h. Any final site landscaping and signing shall not impede any proposed or existing driveway or interior maneuvering sight distance.
i. Erosion Control Plan that conforms to City of Wilsonville Ordinance No. 482.
j. Existing/proposed right-of-way, easements and adjacent driveways shall be identified.
k. All engineering plans shall be stamped by a Professional Engineer registered in the State of Oregon.

PFA 6. Submit plans in the following general format and order for all public works construction to be maintained by the City:

a. Cover sheet
b. City of Wilsonville construction note sheet
c. General construction note sheet
d. Existing conditions plan.
e. Erosion control and tree protection plan.
f. Site plan. Include property line boundaries, water quality pond boundaries, sidewalk improvements, right-of-way (existing/proposed), easements (existing/proposed), and sidewalk and road connections to adjoining properties.
g. Grading plan, with 1-foot contours.
h. Composite utility plan; identify storm, sanitary, and water lines; identify storm and sanitary manholes.
i. Detailed plans; show plan view and either profile view or provide i.e.'s at all utility crossings; include laterals in profile view or provide table with i.e.'s at crossings; vertical scale 1"= 5', horizontal scale 1"= 20' or 1"= 30'.
j. Street plans.
k. Storm sewer/drainage plans; number all lines, manholes, catch basins, and cleanouts for easier reference
l. Water and sanitary sewer plans; plan; number all lines, manholes, and cleanouts for easier reference.
m. Detailed plan for storm water detention facility (both plan and profile views), including water quality orifice diameter and manhole rim elevations. Provide detail of inlet structure and energy dissipation device. Provide details of drain inlets, structures, and piping for outfall structure. Note that although storm water detention facilities are typically privately maintained they will be inspected by engineering, and the plans must be part of the Public Works Permit set.
n. Detailed plan for water quality facility (both plan and profile views). Note that although storm water quality facilities are typically privately maintained they will be inspected by Natural Resources, and the plans must be part of the Public Works Permit set.
o. Composite franchise utility plan.
p. City of Wilsonville detail drawings.
q. Illumination plan.
r. Striping and signage plan.
s. Landscape plan.

PFA 7. Prior to manhole and sewer line testing, design engineer shall coordinate with the City and update the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to the updated numbering system. Design engineer shall also show the updated numbering system on As-Built drawings submitted to the City.

PFA 8.	The applicant shall install, operate and maintain adequate erosion control measures in conformance with the standards adopted by the City of Wilsonville Ordinance No. 482 during the construction of any public/private utility and building improvements until such time as approved permanent vegetative materials have been installed.
PFA 9.	Applicant shall work with City's Natural Resources office before disturbing any soil on the respective site. If 5 or more acres of the site will be disturbed applicant shall obtain a 1200-C permit from the Oregon Department of Environmental Quality. If 1 to less than 5 acres of the site will be disturbed a 1200-CN permit from the City of Wilsonville is required.
PFA 10.	To lessen the impact of the proposed project on the downstream storm drain system, and adjacent properties, project run-off from the site shall be detained and limited to the difference between a developed 25-year storm and an undeveloped 25-year storm. The detention and outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
PFA 11.	A storm water analysis prepared by a Professional Engineer registered in the State of Oregon shall be submitted for review and approval by the City to address appropriate pipe and detention facility sizing.
PFA 12.	The applicant shall be in conformance with all water quality requirements for the proposed development per the Public Works Standards. If a mechanical water quality system is used, prior to City acceptance of the project the applicant shall provide a letter from the system manufacturer stating that the system was installed per specifications and is functioning as designed.
PFA 13.	Storm water quality facilities shall have approved landscape planted and/or some other erosion control method installed and approved by the City of Wilsonville prior to streets and/or alleys being paved.
PFA 14.	The applicant shall provide the City with a Stormwater Maintenance and Access Easement (on City approved forms) for City inspection of those portions of the storm system to be privately maintained. Applicant shall maintain all LID storm water components and private conventional storm water facilities located within medians and from the back of curb onto and including the project site.
PFA 15.	Fire hydrants shall be located in compliance with TVF&R fire prevention ordinance and approval of TVF&R.
PFA 16.	The applicant shall contact the Oregon Water Resources Department and inform them of any existing wells located on the subject site. Any existing well shall be limited to irrigation purposes only. Proper separation, in conformance with applicable State standards, shall be maintained between irrigation systems, public water systems, and public sanitary systems. Should the project abandon any existing wells, they shall be properly

	abandoned in conformance with State standards.
PFA 17.	All survey monuments on the subject site, or that may be subject to disturbance within the construction area, or the construction of any off-site improvements shall be adequately referenced and protected prior to commencement of any construction activity. If the survey monuments are disturbed, moved, relocated or destroyed as a result of any construction, the project shall, at its cost, retain the services of a registered professional land surveyor in the State of Oregon to restore the monument to its original condition and file the necessary surveys as required by Oregon State law. A copy of any recorded survey shall be submitted to Staff.
PFA 18.	Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
PFA 19.	No surcharging of sanitary or storm water manholes is allowed.
PFA 20.	The project shall connect to an existing manhole or install a manhole at each connection point to the public storm system and sanitary sewer system.
PFA 21.	A City approved energy dissipation device shall be installed at all proposed storm system outfalls. Storm outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
PFA 22.	The applicant shall provide a 'stamped' engineering plan and supporting information that shows the proposed street light locations meet the appropriate AASHTO lighting standards for all proposed streets and pedestrian alleyways.
PFA 23.	All required pavement markings, in conformance with the Transportation Systems Plan and the Bike and Pedestrian Master Plan, shall be completed in conjunction with any conditioned street improvements.
PFA 24.	Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
PFA 25.	The applicant shall provide adequate sight distance at all project driveways by driveway placement or vegetation control. Specific designs to be submitted and approved by the City Engineer. Coordinate and align proposed driveways with driveways on the opposite side of the proposed project site.
PFA 26.	Access requirements, including sight distance, shall conform to the City's Transportation Systems Plan (TSP) or as approved by the City Engineer. Landscaping plantings shall be low enough to provide adequate sight distance at all street intersections and alley/street intersections.
PFA 27.	Applicant shall design interior streets and alleys to meet specifications of Tualatin Valley Fire & Rescue and Allied Waste Management (United Disposal) for access and use of their vehicles.
PFA 28.	Applicant shall prepare an Ownership and Maintenance agreement

	between the City and the Owner. Stormwater or rainwater facilities may be located within the public right-of-way upon approval of the City Engineer. The Ownership and Maintenance agreement shall specify that the rainwater and stormwater facilities shall be privately maintained by the Applicant; maintenance shall transfer to the respective homeowners association when it is formed.
PFA 29.	The applicant shall "loop" proposed waterlines by connecting to the existing City waterlines where applicable.
PFA 30.	All water lines that are to be temporary dead-end lines due to the phasing of construction shall have a valved tee with fire-hydrant assembly installed at the end of the line.
PFA 31.	Applicant shall provide a minimum 6-foot Public Utility Easement on lot frontages to all public right-of-ways. An 8-foot PUE shall be provided along Minor and Major Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
PFA 32.	For any new public easements created with the project the Applicant shall be required to produce the specific survey exhibits establishing the easement and shall provide the City with the appropriate Easement document (on City approved forms).
PFA 33.	Mylar Record Drawings: At the completion of the installation of any required public improvements, and before a 'punch list' inspection is scheduled, the Engineer shall perform a record survey. Said survey shall be the basis for the preparation of 'record drawings' which will serve as the physical record of those changes made to the plans and/or specifications, originally approved by Staff, that occurred during construction. Using the record survey as a guide, the appropriate changes will be made to the construction plans and/or specifications and a complete revised 'set' shall be submitted. The 'set' shall consist of drawings on 3 mil. Mylar and an electronic copy in AutoCAD, current version, and a digitally signed PDF.
PFA 34.	Subdivision or Partition Plats: Paper copies of all proposed subdivision/partition plats shall be provided to the City for review. Once the subdivision/partition plat is approved, applicant shall have the documents recorded at the appropriate County office. Once recording is completed by the County, the applicant shall be required to provide the City with a 3 mil Mylar copy of the recorded subdivision/partition plat.
PFA 35.	Subdivision or Partition Plats: All newly created easements shown on a subdivision or partition plat shall also be accompanied by the City's appropriate Easement document (on City approved forms) with accompanying survey exhibits that shall be recorded immediately after the subdivision or partition plat.
PFA 36.	The applicant shall work with the other developers of Villebois and the City

	to develop an equitable storm water and parks maintenance fee or a maintenance memorandum of understanding prior to any final plat approval.
Specific Comments:	
PFA 37.	At the request of Staff, DKS Associates completed a Transportation Review dated May 31, 2013. The project is hereby limited to no more than the following impacts. Estimated New PM Peak Hour Trips 91 Estimated Weekday PM Peak Hour Trips 29 Through Wilsonville Road Interchange Area
PFA 38.	All construction traffic shall access the site via Grahams Ferry Road to Barber Street or via 110th Avenue. No construction traffic will be allowed on Brown Road or Barber Street east of Costa Circle West.
PFA 39.	Applicant shall be required to complete full design and construction through the far right-of-way and to the far extent of the approved project and all intersections through the far corner radii of all planned streets bordering the development. Streets shall be designed in conformance to the applicable street type as shown in the Villebois Village Master Plan.
PFA 40.	The applicant shall provide 'stamped' engineering details with dimensions for intersection sight distance verification and AutoTURN layouts for all proposed intersections, including alley/street connections. Adequate clearance shall be provided at all intersections and alleyways. The sight distance point for exiting vehicles shall be located 14.4 feet from the edge of the traveled way. At a minimum, the applicant shall provide 'stamped' engineering AutoTURN layouts for fire trucks and buses (WB-60) that show the overhang and/or mirrors of the vehicle as opposed to the wheel paths. Turning vehicles may use the width of the minor street to start the appropriate turn. The vehicle must however, stay within the appropriate receiving (inside) lane of the major street. Additionally, the turning vehicle must not intrude onto the wheel chair ramp on the inside of the turning movement.
PFA 41.	The proposed subdivision lacks direct sidewalk access to Villebois SAP South PDP 6 or SAP East PDP 1 and to the Lowrie Primary School. Applicant shall construct a temporary sidewalk, and provide the necessary easements, linking the proposed development to existing sidewalks and/or crosswalks to provide a safe route to Lowrie Primary School.
PFA 42.	The Villebois Village Master Plan identifies a major path, the Tonquin Trail, in a portion of this development. Applicant shall construct a minimum 12-foot wide paved major pathway with 12-ft wide ADA ramps in compliance

	with the Villebois Master Plan. Enhanced trail crossing treatment, such as a painted crosswalk, street lighting and/or median treatment, shall be installed at the location along the proposed Tonquin Trail system where it crosses the right-of-way.
PFA 43.	The Villebois Village Master Plan identifies a minor pedestrian path in a portion of the development. Applicant shall construct a minimum 8-foot wide paved minor pathway with 8-ft wide ADA ramps in compliance with the Villebois Master Plan.
PFA 44.	Alleys that are identified by Tualatin Valley Fire and Rescue (TVF&R) as possible routes for medical and/or fire emergencies shall meet TVF&R's design requirements.
PFA 45.	At the time of plan submittal for a Public Works Permit, the applicant shall provide to the City a copy of correspondence showing that the plans have also been distributed to the franchise utilities. Prior to issuance of a Public Works Permit, the applicant shall have coordinated the proposed locations and associated infrastructure design for the franchise utilities. Should permanent/construction easements or right-of-way be required to construct the public improvements or to relocate a franchised utility, the applicant shall provide a copy of the recorded documents. Should the construction of public improvements impact existing utilities within the general area, the applicant shall obtain written approval from the appropriate utility prior to commencing any construction.
PFA 46.	All streets shall be lighted with approved Westbrooke style street lights.
PFA 47.	Applicant shall provide sufficient mail box units for the proposed phasing plan; applicant shall construct mail kiosk at locations coordinated with City staff and the Wilsonville U.S. Postmaster.
PFA 48.	Plans show several water, storm and sanitary lines lying outside of the project boundaries or not shown connected. Applicant shall construct SAP Central PDP 4 concurrently with SAP North PDP 2. Applicant shall provide a complete utility system capable of servicing all proposed lots in compliance with Public Works Standards. For proposed lines lying outside of planned right-of-ways, applicant shall provide the City with construction easement(s) and permanent pipeline easement(s) prior to the City issuing a Public Works Permit for their construction. Pipeline easements lying within planned street right-of-ways shall expire at time of future street dedication.
PFA 49.	Applicant shall connect to existing water, storm and sanitary line at north end of Palermo Street.
PFA 50.	The project site appears to straddle the Arrowhead Creek basin, the Mill Creek basin and the Coffee Lake Creek basin. Applicant shall direct stormwater runoff to the correct basin; no interbasin transfer of stormwater is allowed.

PFA 51.	Detention of stormwater flows within the Arrowhead Creek basin have already been accounted for in existing stormwater detention features. No additional detention is required.
PFA 52.	Detention of stormwater flows within the Mill Creek basin have already been accounted for in existing stormwater detention features. No additional detention is required.
PFA 53.	Much of the proposed development lies within the Coffee Lake Creek basin. Per City Ord. 608, detention is not required for areas of Villebois that drain directly to the Coffee Lake Wetlands; however, until the stormwater system is completed east of 110th Avenue (Costa Circle), applicant shall be in conformance with PFA 10 and PFA 11 for this portion of the development.
PFA 54.	Applicant shall be required to build the off-site sanitary sewer line prior to or concurrently with this project. This off-site line runs from near the intersection of 110th Ave. and Stockholm Ave. to the existing main line in the future Coffee Lake Drive.
PFA 55.	Applicant shall be required to build the off-site sanitary sewer line prior to or concurrently with this project. This off-site line runs from near the intersection of 110th Ave. and Stockholm Ave. to the existing main line in the future Coffee Lake Drive.
PFA 56.	In accordance with the Public Works Standards, sewer lines entering manholes must be greater than 90 degrees from the line out to minimize turbidity within the manhole.
PFA 57.	Both Northwest Natural Gas line and Kinder Morgan have existing gas/fuel lines located on the west side of the existing 110th Avenue right-of-way. No obstruction can be placed within, adjacent or across the pipelines that will impede access to the pipelines or easement. Applicant's contractor shall contact representatives from both Northwest Natural Gas line and Kinder Morgan prior to commencing any work within 10 feet of the lines.
PFA 58.	Applicant shall be required to reimburse the City for their share of a sanitary sewer reimbursement fee established per Res. 2350 for their corresponding share of tax lot 31W15 02916 at time of issuance of a PW Permit.
PFA 59.	SAP North PDP 2 consists of 90 lots. All construction work in association with the Public Works Permit and Project Corrections List shall be completed prior to the City Building Division issuing a certificate of occupancy, or a building permit for the housing unit(s) in excess of 50% of total (46th lot).

<u>Engineering Division Conditions:</u>

PFB 1.
PFB 2.

Development Review Template

DATE: **5/29/13**
TO: **DAN PAULY AICP, ASSOCIATE PLANNER**
FROM: **DON WALTERS**
SUBJECT: **DEVELOPMENT REVIEW # DB13-0020 -26**

WORK DESCRIPTION: VILLEBOIS PHASE 2 NORTH PRELIMINARY DEVELOPMENT REVIEW.

****

Building Division Conditions:	
BD 1.	PREMISES IDENTIFICATION. Buildings shall have approved address numbers, building numbers or approved building identification placed on a position that is plainly visible from the street or road fronting the property. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means [approved by the fire marshal] shall be used to identify the structure. (OFC 505.1) This applies to all situations such as the homes facing Tract "V" and Tract "S" but not Tract "I" or "U". The sign shall be located in an easement or on common land that shall be maintained available for maintenance. If a walkway adjoins the front of the homes, locating the signs in the common area adjacent to the walkway as close as possible to the right-of-way would be ideal. Placing the signs at the mouth of the adjacent alley mouth would also be acceptable.
BD 2.	FIRE HYDRANTS shall be provided along required fire apparatus access roads and adjacent public streets with locations approved by the fire marshal. (2010 OFC C102.1)
BD 3.	STOCKHOLM AVENUE appears to temporarily end near proposed lot 74, and Palermo Street near proposed Lot 126. Dead-end fire apparatus access roads in excess of 150' [or a little longer because of the sprinkler systems] shall be provided with width and turn-around provisions in accordance with Table D103.4 of the fire code. (OFC D103.4) An approved fire department turn-around or temporary roadway meeting fire access roadway requirements allowing fire vehicles to access adjacent streets, or other means meeting the approval of the fire marshal shall be provided.

City of Wilsonville
EXHIBIT C2 DB13-0020 et al

Villebois Phase 2 North – SRIR Review

Findings of Fact:

1. The area designated Significant Resource Overlay Zone (SROZ) within Phase 2 North is upland wildlife habitat (Site ID Number URA#41. The delineated wetland is not considered locally significant, and was not protected within the SROZ. However, any impacts to the wetland are regulated by the Oregon Department of State Lands and the Army Corps of Engineers.

2. The upland wildlife habitat (i.e., mixed coniferous/deciduous forest) is 9.76 acres, and has a mature Douglas fir/Oregon white oak canopy. The understory has been disturbed in the past, and the shrub and herbaceous layers have been impacted by non-native invasive plant species. Native tree species include Oregon white oak, Douglas fir, vine maple, and Indian plum. Non-native invasive plant species include Himalayan blackberry, English ivy, and domestic cheery trees. The forest provides habitat for birds, but due to the lack of connectivity to other habitat, it does not provide many opportunities for other species, such as mammals.

3. The Significant Resource Overlay Zone ordinance prescribes regulations for development within the SROZ and its associated 25 foot Impact Area. Setbacks from significant natural resources implement the requirements of Metro Title 3 Water Quality Resource Areas, Metro Title 13 Nature in Neighborhoods, and Statewide Planning Goal 5. Wetlands, streams and riparian corridors shall have at least a minimum 50-foot buffer, but buffers may extend to the top of the slope for riparian corridors. All significant natural resources have a 25 foot Impact Area. Development or other alteration activities may be permitted within the SROZ and its associated 25 foot Impact Area through the review of a Significant Resource Impact Report (SRIR).

4. Pursuant to the city's SROZ ordinance, development is only allowed within the Area of Limited Conflicting Use (ALCU). The ALCU is located between the riparian corridor boundary, riparian impact area or the Metro Title 3 Water Quality Resource Area boundary, whichever is furthest from the wetland or stream, and the outside edge of the SROZ, or an isolated significant wildlife habitat (upland forest) resource site.

5. The applicant's Significant Resource Impact Report delineated specific resource boundaries and analyzed the impacts of development within the SROZ. The applicant's SRIR contained most of the required information, including an analysis and development recommendations for mitigating impacts, but is lacking some of the required mitigation elements (e.g., plant densities or spacing). A condition of approval requires the submittal of an updated mitigation plan.

Description of Request:
The applicant is requesting approval of a Significant Resource Impact Report (SRIR) for non-exempt development that is located within the Significant Resource Overlay Zone and its associated 25 foot Impact Area in Phase 2 North.

Summary of Issues/Background:
The proposed non-exempt development will encroach into the Significant Resource Overlay Zone and its associated 25 foot Impact Area. All non-exempt development will occur within the Area of Limited Conflicting Use of the isolated significant wildlife habitat (i.e., upland forest). The impacted area totals 16,255 square feet and is situated within and along the edge of the upland forest. The impact to the SROZ is necessary to accommodate street improvements, a paved pedestrian trail, and encroachments related to a future PDP.

The proposed par course fitness stations and leaf identification creative play areas have not been addressed in the SRIR and are not approved as part of the SRIR review. In addition, the applicant is required to relocate a picnic table area (situated along the eastern edge of the forest) outside the SROZ. A condition of approval requires the applicant to modify the site plan.

Proposed exempt development in the SROZ and its associated 25 foot Impact Area includes the following:

1) Soft surface pedestrian pathway within forest.

Section 4.139.04 Use and Activities Exempt from These Regulations

Proposed exempt development in the SROZ and its associated 25 foot Impact Area comply with the following exemptions:

(.08) The construction of new roads, pedestrian or bike paths into the SROZ in order to provide access to the sensitive area or across the sensitive area, provided the location of the crossing is consistent with the intent of the Wilsonville Comprehensive Plan. Roads and paths shall be constructed so as minimize and repair disturbance to existing vegetation and slope stability.

1. The construction of the soft surface pedestrian path will have minimal impacts to the resource area, and is consistent with the requirements of this exemption.

Section 4.139.06.03 SRIR Review Criteria:

In addition to the normal Site Development Permit Application requirements as stated in the Planning and Land Development Ordinance, the following standards shall apply to the issuance of permits requiring an SRIR. The SRIR must

demonstrate how these standards are met in a manner that meets the purposes of this Section.

A. Except as specifically authorized by this code, development shall be permitted only within the Area of Limited Conflicting Use (see definition) found within the SROZ*;*

2. The proposed non-exempt development is located within the Area of Limited Conflicting Use found within the SROZ. The total area of all other encroachments within the SROZ or its associated Impact Area has been deemed exempt or proposed only within the Impact Area.

B. Except as specifically authorized by this code, no development is permitted within Metro's Urban Growth Management Functional Plan Title 3 Water Quality Resource Areas boundary;

3. The proposed development for Phase 2 North will not be located within Metro's Title 3 Water Quality Resource Areas boundary.

C. No more than five (5) percent of the Area of Limited Conflicting Use (see definition) located on a property may be impacted by a development proposal. On properties that are large enough to include Areas of Limited Conflicting Use on both sides of a waterway, no more than five (5) percent of the Area of Limited Conflicting Use on each side of the riparian corridor may be impacted by a development proposal. This condition is cumulative to any successive development proposals on the subject property such that the total impact on the property shall not exceed five (5) percent;

4. The applicant has identified the proposed development within the Area of Limited Conflicting Use, and calculated the percentage for this development. The following information has been provided on the Area of Limited Conflicting Use (ALCU):

Total ALCU	=	425,149 square feet
Allowed Impact (5%)	=	21,257 square feet
Proposed Impact	=	16,255 square feet (3.8%)

D. Mitigation of the area to be impacted shall be consistent with Section 4.139.06 of this code and shall occur in accordance with the provisions of this Section;

5. The applicant has identified the mitigation area necessary to offset impacts to the SROZ, and proposed to enhance 46,212 square feet. Based on the required mitigation ratio of 2.5:1, only 40,638 square feet is required. The mitigation plan is missing some required elements, such as planting densities and spacing. A condition of approval requires the applicant to submit an updated mitigation plan containing all the required information.

E. The impact on the Significant Resource is minimized by limiting the degree or magnitude of the action, by using appropriate technology or by taking affirmative steps to avoid, reduce or mitigate impacts;

6. The impacts to the SROZ will be from the encroachment of street improvements, a paved pedestrian trail, and encroachments related to a future PDP. The impacts to the SROZ provide a paved trail connection within the upland forest, future play area, and constructing improvements adjacent to the SROZ. The applicant has minimized permanent impacts to very mature trees, and other native vegetation. The grading and erosion control plan will ensure areas within the SROZ are protected during construction activities. No stormwater runoff will discharge into the SROZ.

F. The impacts to the Significant Resources will be rectified by restoring, rehabilitating, or creating enhanced resource values within the "replacement area" (see definitions) on the site or, where mitigation is not practical on-site, mitigation may occur in another location approved by the City;

7. Impacts to the SROZ will be mitigated for on-site and will satisfy the mitigation ratios and other requirements of Section 4.139.07. A condition of approval requires the applicant to submit an updated mitigation plan containing all the required information.

G. Non-structural fill used within the SROZ area shall primarily consist of natural materials similar to the soil types found on the site;

8. Non-structural fill will consist of natural materials similar to the soil types found on the site.

H. The amount of fill used shall be the minimum required to practically achieve the project purpose;

9. No fill is proposed to be placed within the SROZ.

I. Other than measures taken to minimize turbidity during construction, stream turbidity shall not be significantly increased by any proposed development or alteration of the site;

10. All proposed grading activities on-site will be managed pursuant to guidelines established and identified in the applicant's approved erosion control plan and a 1200-C Erosion Control Permit issued by the Oregon Department of Environmental Quality. Stream turbidity is regulated under the City's Grading and Erosion Control Permit and the DEQ's 1200-C Erosion Control Permit.

J. Appropriate federal and state permits shall be obtained prior to the initiation of any activities regulated by the U.S. Army Corps of Engineers and the Oregon

Division [Department] of State Lands in any jurisdictional wetlands or water of the United States or State of Oregon, respectively.

11. No in-water impacts (i.e., jurisdictional wetlands or waters of the U.S. or State of Oregon) are proposed for Phase 2 - North.

Section 4.139.07 Mitigation Standards

(.01) The applicant shall review the appropriate Goal 5 Inventory Summary Sheets for wildlife habitat (i.e. upland) contained in the *City of Wilsonville Natural Resource Inventory and Goal 5/Title 3/ESA Compliance and Protection Plan* ("Compliance and Protection Plan"- May 2000) to determine the resource function ratings at the time the inventory was conducted.

12. The applicant has reviewed the appropriate Upland Summary Sheet (Site ID Number 2.14U) to determine the resource function ratings at the time the inventory was conducted.

(.02) The applicant shall prepare a Mitigation Plan document containing the following elements:

A. The Mitigation Plan shall contain an assessment of the existing natural resource function ratings at the time of the proposed encroachment for the site compared to the function ratings recorded in the Compliance and Protection Plan.

13. The applicant has addressed the resource function ratings for the impact area and also correctly documented the resource function ratings in the Compliance and Protection Plan. The impact area has a low to medium function rating due to non-native invasive plant species, and the lack of habitat connectivity.

B. The Mitigation Plan shall contain an assessment of the anticipated adverse impacts to significant wildlife habitat resources. The impact assessment shall discuss impacts by resource functions (as listed in the Compliance and Protection Plan, May 2000) for each resource type, and shall map the area of impact (square feet or acres) for each function.

14. The applicant has determined the impact to the significant resource area based on the resource functions. The applicant has calculated the square feet of the impact to the Significant Resource. The applicant's site plan in the SRIR depicts the area of impact.

C. The Mitigation Plan shall present a proposed mitigation action designed to replace the lost or impacted resource functions described in Subsection B, above. The mitigation plan shall be designed to replace lost or impacted functions by enhancement of existing resources on, or off the impact site, or creation of new resource areas.

15. The applicant has not submitted a mitigation plan consistent with the requirements in Section 4.139.07. The mitigation will occur on-site, and within close proximity to the areas of impact. A condition of approval requires the applicant to submit an updated mitigation plan containing all the required information.

D. For mitigation projects based on resource function enhancement, the area ratios presented in Table NR - 2 shall be applied. These ratios are based on the resource function ratings at the time of the proposed action, as described in Subsection A, above. The mitigation action shall be conducted on the appropriate size area as determined by the ratios in Table NR - 2.

16. The applicant has estimated the resource function ratings for the "existing rating at mitigation site" and "proposed rating at mitigation site."

(.03) Proposals for mitigation action where new natural resource functions and values are created (i.e. creating wetland or wildlife habitat where it does not presently exist) will be reviewed and may be approved by the Development Review Board or Planning Director if it is determined that the proposed action will create natural resource functions and values that are equal to or greater than those lost by the proposed impact activity.

17. No new habitat would be created as part of the mitigation plan. The proposed mitigation will enhance existing habitat.

(.04) Mitigation actions shall be implemented prior to or at the same time as the impact activity is conducted.

18. A condition of approval requires the mitigation actions to be implemented prior to or at the same time as the impact activity is conducted.

(.05) Mitigation plans shall have clearly stated goals and measurable performance standards.

19. The applicant has submitted a mitigation plan with goals and measurable performance standards.

(.06) All mitigation plans shall contain a monitoring and maintenance plan to be conducted for a period of five years following mitigation

implementation. The applicant shall be responsible for ongoing maintenance and management activities, and shall submit an annual report to the Planning Director documenting such activities, and reporting progress towards the mitigation goals. The report shall contain, at a minimum, photographs from established photo points, quantitative measure of success criteria, including plant survival and vigor if these are appropriate data. The Year 1 annual report shall be submitted one year following mitigation action implementation. The final annual report (Year 5 report) shall document successful satisfaction of mitigation goals, as per the stated performance standards. If the ownership of the mitigation site property changes, the new owners will have the continued responsibilities established by this section.

20. The applicant has not submitted information regarding monitoring and maintenance of the proposed mitigation. A condition of approval requires the applicant to submit a monitoring and maintenance report to be conducted for a period of five years following mitigation implementation.

(.07) The Mitigation Plan document shall be prepared by a natural resource professional.

21. The applicant's team has the necessary credentials to implement a mitigation plan for the proposed impacts.

(.08) Prior to any site clearing, grading or construction, the SROZ area shall be staked, and fenced per approved plan. During construction, the SROZ area shall remain fenced and undisturbed except as allowed by an approved development permit.

22. A condition of approval requires the SROZ to be fenced and undisturbed.

(.09) For any development which creates multiple parcels intended for separate ownership, the City shall require that the SROZ areas on the site be encumbered with a conservation easement or tract.

23. A conservation easement is required for the SROZ areas on the site. A condition of approval requires a conservation easement to be recorded.

(.10) The City may require a conservation easement over the SROZ that would prevent the owner from activities and uses inconsistent with the purpose of this Section and any easements therein. The purpose of the conservation easement is to conserve and protect resources as well as to prohibit certain activities that are inconsistent with the purposes of this section. Such conservation easements do not exclude the installation of utilities.

24. A conservation easement is required for the SROZ areas on the site. A condition of approval requires a conservation easement to be recorded.

(.11) At the Planning Directors discretion, mitigation requirements may be modified based on minimization of impacts at the impact activity site. Where such modifications are granted by the Planning Director, the Director shall clearly indicate the reasons for doing so in the record, citing the relevant information relied upon in reaching the decision.

25. The applicant has not requested a modification of mitigation requirements.

(.12) The Director may study the possibility of a payment-in-lieu-of system for natural resource impact mitigation. This process would involve the public acquisition and management of natural resource properties partially funded by these payments.

26. The applicant has not requested a payment-in-lieu.

COMMUNITY DEVELOPMENT MEMORANDUM

To: Daniel Pauly, Associate Planner

From: Kerry Rappold, Natural Resources Program Manager

Date: May 30, 2013

RE: Villebois Village SAP North, PDP 2 (DB13-0020/0026 and SI13-0001)

This memorandum includes staff conditions of approval. The conditions are based on the preliminary and final development plans for PDP 2, and the SRIR review. The conditions of approval apply to the applicant's submittal of construction plans (i.e. engineering drawings).

Significant Resource Overlay Zone

NR1. All landscaping, including herbicides used to eradicate invasive plant species and existing vegetation, in the SROZ shall be reviewed and approved by the Natural Resources Program Manager. Native plants are required for landscaping in the SROZ.

NR2. Prior to any site grading or ground disturbance, the applicant is required to delineate the boundary of the SROZ. Six-foot (6') tall cyclone fences with metal posts pounded into the ground at 6'-8' centers shall be used to protect the significant natural resource area where development encroaches into the 25-foot Impact Area.

NR3. Pursuant to Section 4.139.03(C), the applicant shall revise the proposed site plan to remove some of the proposed impacts to the Area of Limited Conflicting Use. The proposed par course fitness stations and leaf identification creative play areas have not been addressed in the SRIR and are not approved as part of the SRIR review. In addition, the applicant is required to relocate a picnic table area (situated along the eastern edge of the forest) outside the SROZ.

NR4. Pursuant to Section 4.139.04, the applicant shall demonstrate proposed development (i.e. soft surface pedestrian trail) within the 25-foot Impact Area and the Significant Resource Overlay Zone has been designed to avoid, minimize and mitigate impact to the significant natural resources.

NR5. Mitigation actions shall be implemented prior to or at the same time as the impact activity is conducted.

NR6. The applicant shall submit a mitigation plan that addresses the requirements of Section 4.139.07.

NR7. Pursuant to Section 4.139.03 (.05) of the Wilsonville Code, the applicant is required to use habitat-friendly development practices (Table NR-2) to the extent practicable for any encroachment into the Significant Resource Overlay Zone and the 25-foot Impact Area.

NR8. The applicant shall submit a monitoring and maintenance plan to be conducted for a period of five years following mitigation implementation. The applicant shall be responsible for ongoing maintenance and management activities, and shall submit an annual report to the Planning Director documenting such activities, and reporting progress towards the mitigation goals. The report shall contain, at a minimum, photographs from established photo points, quantitative measure of success criteria, including plant survival and vigor if these are appropriate data. The Year 1 annual report shall be submitted one year following mitigation action implementation. The final annual report (Year 5 report) shall document successful satisfaction of mitigation goals, as per the stated performance standards. If the ownership of the mitigation site property changes, the new owners will have the continued responsibilities established by this section.

NR9. The Significant Resource Overlay Zone (SROZ) and mitigation area depicted on the SRIR mapping for the site shall be identified in a conservation easement. The applicant shall record the conservation easement with Clackamas Court Clerk's office. The conservation easement shall include language prohibiting any disturbance of natural vegetation without first obtaining approval from the City Planning Division and the Natural Resources Program Manager. The conservation easement shall be reviewed by the City Attorney prior to recording.

Rainwater Management Plan:

NR10. The applicant shall submit a detailed operations and maintenance manual for the rainwater management components that has been reviewed and approved by city staff before 50% of the units are occupied in **PDP 1, SAP North**.

NR11. Pursuant to the City of Wilsonville Public Works Standards, access should be provided for the entire perimeter of the rainwater management components. At a minimum, at least one access shall be provided for maintenance and inspection.

NR12. All Rainwater Management Components and associated infrastructure located in public areas shall be designed to the Public Works Standards. Rainwater Management Components in private areas shall comply with the plumbing code.

NR13. Plantings in Rainwater Management Components located in public areas shall comply with the Public Works Standards. Plantings in Rainwater Management Components located in private areas shall comply with the Plant List in the Rainwater Management Program or Community Elements Plan.

NR14. The rainwater management components shall comply with the requirements of the Oregon DEQ UIC (Underground Injection Control) Program.

Stormwater Management:

NR15. Provide profiles, plan views and specifications for the proposed water quality treatment facilities consistent with the requirements of the City of Wilsonville's Public Works Standards.

NR16. Pursuant to the Public Works Standards, the applicant shall submit a maintenance plan (including the City's stormwater maintenance covenant) for the proposed stormwater facilities, inclusive of the rainwater management components, prior to approval for occupancy of the associated development.

NR17. Pursuant to the City of Wilsonville's Public Works Standards, access shall be provided to all areas of the proposed water quality treatment facilities. At a minimum, at least one access shall be provided for maintenance and inspection.

Other:

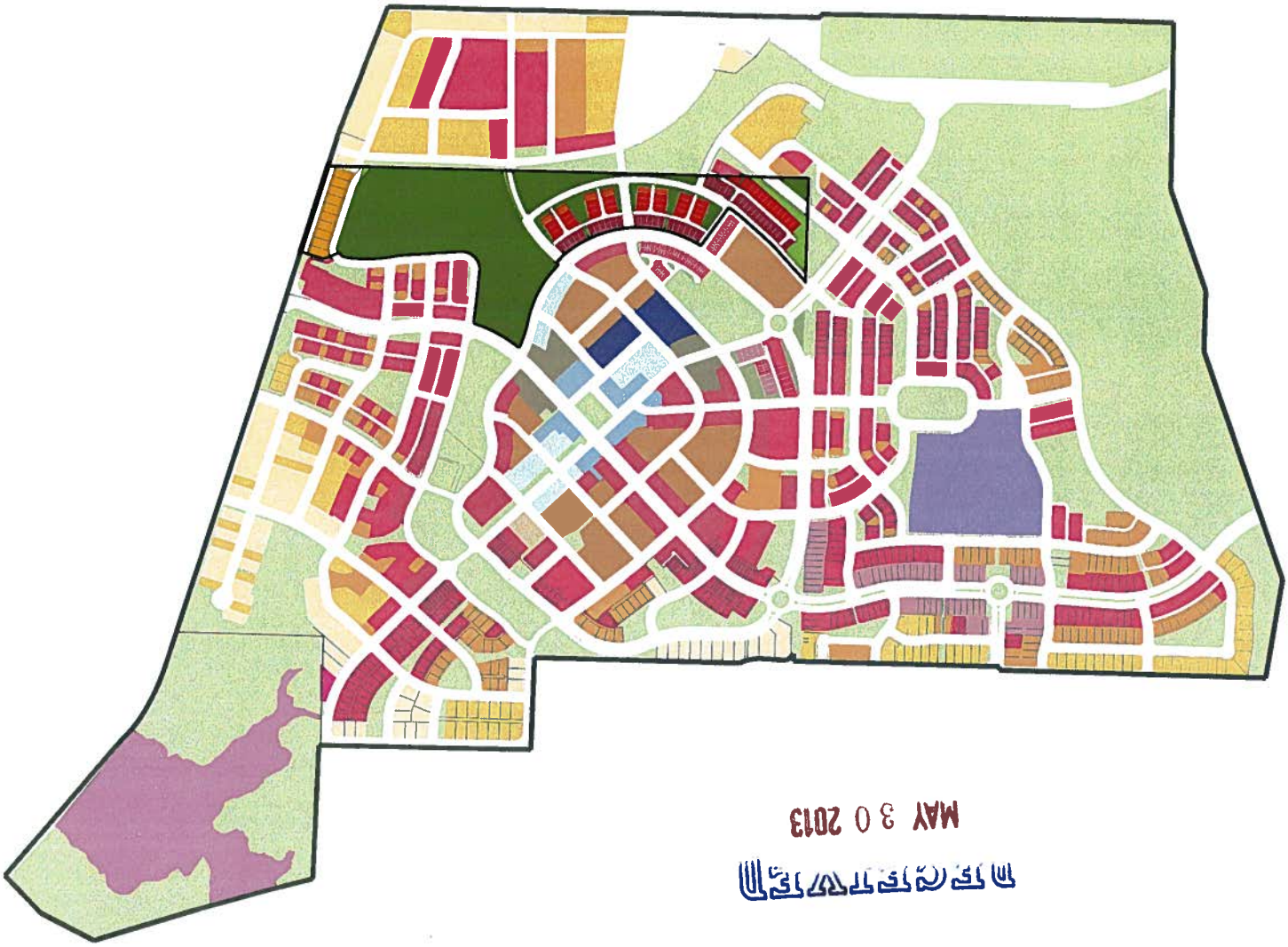
NR18. The applicant shall comply with all applicable state and federal requirements for the proposed construction activities and proposed facilities (e.g. DEQ NPDES #1200–C permit).

Public Works Plan Review Comment Form

Plans for Review: Villebois Phase II North
Return All Comments To: Dan Pauly
Due Date: May 30, 2013

Name	Page No.	Comments	Engineering's Response
Kurt Budlong			
Randy Watson			
Steve Munsterman			
House/Gering		No comments on water. Will there be irrigation plans submitted for cross connection?	
Folz/Havens			
Matt Baker			
Arnie Gray			

City of Wilsonville
EXHIBIT C4 DB13-0020 et al



MAY 30 2013
RECEIVED

Phase 2 of SAP North

Preliminary Development Plan, Tentative Plat, Zone Change, Tree Removal Plan, Final Development Plan & SAP Amendment for Phasing

"Tonquin Woods at Villebois No. 4"

Submitted to City of Wilsonville, Oregon May 3, 2013

POLYGON NORTHWEST COMPANY

Pacific Community Design

City of Wilsonville
EXHIBIT B1 DB13-0020 et al

INTRODUCTORY NARRATIVE

PHASE 2N

INCLUDING:

PRELIMINARY DEVELOPMENT PLAN (REFINEMENTS & SAP AMENDMENTS), TENTATIVE PLAT, ZONE CHANGE, TREE REMOVAL PLAN, & FINAL DEVELOPMENT PLAN

SECTION IA

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I. GENERAL INFORMATION

Applicant/Property Owner:	**Polygon Northwest Company** 109 E. 13th Street Vancouver, WA 98660 Tel: (360) 695-7700 Fax: (425) 455-0462 **Contact: Fred Gast**
Design Team:	
Primary Contact:	**Stacy Connery** **Pacific Community Design, Inc.** Tel: (503) 941-9484 Fax: (503) 941-9485 Email: stacy@pacific-community.com
Process Planner/Civil Engineer/Surveyor:	**Pacific Community Design, Inc.** PMB #519, 13500 SW Pacific HWY, STE 58 Tigard, OR 97223 Tel: (503) 941-9484 Fax: (503) 941-9485 **Contact: Stacy Connery, AICP** **Jim Lange, PE** **Patrick Espinosa, PE** **Travis Jansen, PLS/PE**
Landscape Architect:	**Otten Landscape Architects, Inc.** 3933 SW Kelly Ave., Suite B Portland, Oregon 97239 Tel: (503) 972-0311 **Contact: Janet Otten, ASLA** **Erin Holsonback**
Arborist:	**Walter H. Knapp & Associates, LLC** 7615 SW Dunsmuir Lane Beaverton, OR 97007 Tel: (503) 646-4349 Fax: (503) 265-8117 **Contact: Walt Knapp** **Morgan Holan**

Site and Proposal Information:

Site:	3S 1W 15, Tax Lots 2915, 2922, 2991, 2992, 2995, 2996 & part of 2916
Size:	28.91 gross acres
Comprehensive Plan Designation:	City - Residential – Village (R-V)
Specific Area Plan:	SAP – North
Proposal:	Preliminary Development Plan (includes refinements & SAP Amendments) Tentative Plat Zone Change to Village (V) Tree Removal Plan Final Development Plan
Unit Count:	90 dwelling units
Net Residential Density:	13.45 units/net acre
Project Name:	Villebois PDP 2N "Tonquin Woods at Villebois No. 4"

II. REQUEST

This application requests approval of the following five (5) applications for the Phase 1B area of SAP North.

- Preliminary Development Plan (PDP 2N), including refinements & SAP Amendments for Phasing & Circulation – Section II of Notebook
- Tentative Plat Approval (PDP 2N) – Section III of Notebook
- Zone Change to Village (V) for PDP 2N area – Section IV of Notebook
- Tree Preservation/Removal Plan for PDP 2N area – Section V of Notebook
- Final Development Plan for PDP 2N area – Section VI of Notebook

III. PLANNING CONTEXT

VILLEBOIS VILLAGE MASTER PLAN & SAP NORTH

The proposed PDP 2N area is located within the northwestern portion of the *Villebois Village Master Plan* as illustrated on the Notebook Cover. The *Master Plan* and SAP North show Standard, Medium, Small, and Row House Land Use Types for the subject area. The *Master Plan* and SAP North show the following parks and open space areas and pathways on the subject property.

- Regional Park 4 (RP-4), north of Barber Street between Palermo Street and Costa Circle West
- A portion of Regional Park 5 (RP-5), north of Geneva Loop between Ravenna Loop and Cherbourg Lane
- Open Space 2 (OS-2), north and east of Palermo Street
- A portion of Neighborhood Park 5 (NP-5) (also known as Fir Park) and Linear Green 15 (LG-15), along the existing 110th Street Right-of-way and transmission lines (these parks have been addressed in PDP 3E and are shown consistent with that approval in these plans for reference)
- Multiple linear greens in the blocks south of Geneva Loop between Ravenna Loop and Dundee Lane
- Segments of the Tonquin Trail in RP-4 and RP-5

IV. PROPOSAL DESCRIPTION

Phase 1B of Specific Area Plan North (also known as PDP 2N) includes approximately 28.91 gross acres. PDP 2N is located generally north of PDP 1N, the second phase of which is under construction and north of SAP Central. PDP 2N proposes 90 single family homes, 19.12 acres of park/open space areas, and associated infrastructure improvements.

LAND USES

PDP 2N proposes 10 Standard, 6 Medium, 37 Small and 37 Small Cottage lots. The proposed distribution in units provides for a mix of unit types within blocks that is compatible with adjacent land uses. The table below lists the proposed residential units broken down by development phase for all of SAP North. PDP 1N is approved, with the first phase in home construction and the second phase in site construction.

Product Type	PDP 1N	PDP 1B N	2N	2A N	3N	4N	5N	Total
Estate	0	0	0	0	2	15	5	22
Large	0	0	2	1	8	8	3	22
Standard	2	10	14	2	0	0	5	33
Medium	30	6	18	8	6	0	17	85
Small	98	37	30	4	7	0	36	212
Small Cottage	12	37	0	0	0	0	0	49
Row House	0	0	31	0	0	0	0	31
Nbhd Apartment	0	0	0	0	0	0	10	10
Total	**142**	**90**	**95**	**15**	**23**	**23**	**76**	**464**

NOTE: The unit counts for SAP North reflect the adjusted unit counts resulting from the *Villebois Village Master Plan* Amendment approved by City Council on 8/2/10 that eliminated units in SAP East for the school relocation and added units to SAP North, and the approved unit counts for the PDP 1N Modifications as approved by DRB in 2011 and 2013.

PARKS & OPEN SPACE

PDP 2N includes a total of 19.12 acres of park, open spaces and linear greens. The concurrent Final Development Plan (FDP) for Phase 1B North includes the parks and linear greens within PDP 2N. Partial park improvements are shown for OS-2 and RP-5 since these parks are partly located in this phase and partly located within future SAP North phases. Park improvements for NP-5 and LG-15 are shown were approved with and are conditioned to occur with PDP 3E.

UTILITIES

Sanitary Sewer

The sanitary sewer system for Phase 1B North is shown on the *Composite Utility Plan* in Section IIB of this Notebook. The sanitary sewer will be a gravity system that will ultimately discharge to the Tooze main. This main will then discharge to the Kinsman main via the connection installed in 2006. Sanitary sewer service can adequately be provided to this area in compliance with the *Villebois Village Master Plan* and the City's Wastewater Collection System Master Plan, as demonstrated in the attached Sanitary Sewer Capacity Memorandum prepared by Patrick Espinosa, PE (see Exhibit IIC).

Water

The proposed water system for Phase 1B North is shown on the Composite Utility Plan in Section IIB of this Notebook. The proposed public water system will be primarily an 8" system with some 6" lines. The system will be looped throughout the development to maximize flows. Water service can adequately be provided to this area in compliance with the *Villebois Village Master Plan* and the City's Water System Master Plan.

Stormwater

The proposed site drains to the east to the Coffee Lake Creek drainage basin (CLC Basin). The City's Stormwater Master Plan for Coffee Lake Creek specifies that detention will not be required for the portion of Villebois Village that drains to the CLC Basin. Stormwater runoff will be collected by a series of catch basins leading to an underground piping system to be constructed with the PDP 2N infrastructure. As shown within the attached plans (see Section IIB of this Notebook), the system will ultimately connect with the system in PDP 3E. A Water Quality and Detention Analysis prepared by Patrick Espinosa, PE (see Exhibit IIC), demonstrates that the proposed system will provide adequate sizing and treatment.

Rainwater

A Rainwater Management Plan is included with the Supporting Utility Reports in Section IIC of this Notebook. Rainwater management within PDP 2N will be provided through street trees and bio-retention cells or swales located in landscape tracts and planter strips in rights-of-way, as shown within the attached plans (Section IIB of this Notebook).

CIRCULATION

The transportation infrastructure proposed for PDP 2N will provide convenient neighborhood circulation and a range of transportation options. The *Circulation Plan* (see Exhibit IIB) illustrates the circulation system within this Preliminary Development Plan area including public streets, alleys, and major and minor pathways and sidewalks within parks/open space.

PHASING

Construction of PDP 2N is proposed to be phased as shown on the *Phasing Plan* (see Exhibit IIB). Proposed PDP phases may be constructed individually in sequence or may be combined. The first phase is planned to be built summer/fall of 2013, the second phase is planned to be built in 2014-2015, and the third phase is planned to be built in 2015-2016.

The attached plans (see Section IIB) show ultimate improvements that are consistent with the *Master Plan* and SAP North. The eastern edge of PDP 2N abuts the existing 110th Avenue right-of-way and PDP 3E on the east side of the 110th Avenue right-of-way. PDP 3E received planning approval in November 2012. A Development Agreement (Addendum No. 4, Resolution No. 2385) has been approved in conjunction with PDP 3E which addresses improvements related to the Villebois Drive/Costa Circle roundabout and street extensions, parks and the 18" water line in Villebois Drive along this edge.

Phase 1 of this PDP is currently planned to be constructed a year before the initial phases of PDP 3E at which time the 110th Avenue right-of-way will be vacated and the Villebois Drive/Costa Circle roundabout and street extensions will be constructed. Subsequent construction plans for this first phase will include a temporary road connection to 110th Avenue to serve the subject area until the ultimate improvements can occur. Interim storm facilities will also be established with phase 1 construction in the area designated for phase 3 (2015-2016 construction). These facilities will be removed following construction of the initial PDP 3E phases. The design of interim storm improvements will be coordinated with the City during construction plan review for phase 1.

Neighborhood Park 5 (NP-5) (also known as Fir Park) and Linear Green 15 (LG-15), both of which are planned along this eastern edge of PDP 2N, were added into the boundary of PDP 3E. These parks were approved and are conditioned to be constructed with PDP 3E.

V. AMENDMENTS TO SAP NORTH

The PDP includes a request to amend the SAP North Phasing Plan. The current SAP North Phasing Plan includes 6 phases. The proposed Phasing Plan combines and renumbers the remaining areas for a total of 5 phases within SAP North. The proposed SAP North Phasing Plan and corresponding unit counts by phase are included in Section IE of this Notebook. Additionally, this request includes an amendment of SAP North to address circulation changes in the street network between the approved refinements of PDP 3E and the proposed refinements of PDP 2N. The proposed circulation changes are shown on the Title Page of the PDP plan

set (see Exhibit IIB) and are discussed in greater detail within the PDP Supporting Compliance Report in Exhibit IIA).

VI. REFINEMENTS TO SAP NORTH

The following sections of this Narrative describe the proposed refinements to SAP North that are included in the PDP application. Detailed findings regarding the requested refinements can be found in the PDP Supporting Compliance Report in Section IIA of this Notebook.

CIRCULATION

A comparison of the *Circulation Plan* from the proposed PDP 2N (see Exhibit IIB) and *Circulation Plan* from SAP North (Volume II) shows that the proposed circulation system is generally consistent, with the following refinements.

- Coffee Lake Avenue / Stockholm Avenue / Crete Street. The alignment of these three (3) streets as shown in the SAP North plans is proposed to be refined with this PDP. The adjacent PDP 3E approval included street refinements to retain an isolated wetland, which necessitate modifications to the streets in the northeast corner of this PDP. The proposed PDP plan provides a street stub to the adjacent property to the north in the same location as Coffee Lake Avenue shown in the SAP; however, the street is renamed Cherbourg Lane (it is shown as Cherbourg Loop in the *Street Name Master Plan*). Additionally, it is known that this street will no longer connect with Villebois Drive as shown in the SAP due to the wetland retention in PDP 3E. The alignment of Stockholm Avenue is modified so it no longer intersects with Geneva Loop and the segment of this street south of Geneva Loop is renamed Dundee Lane (included in *Street Name Master Plan* in different location, but was eliminated with PDP 3E refinements). The afore-mentioned changes to the street network also eliminate the small street segment of Crete Street shown in the SAP as it would now be unnecessary given the new street configuration.

The proposed changes alter the circulation pattern in this area; however, the changes do not significantly reduce the circulation system function or connectivity for vehicles, bicycles or pedestrians. Vehicular connection continues to be provided north-south through the Villebois Drive, Orleans Avenue and Cherbourg Lane, and east-west through Geneva Loop and Stockholm Avenue. Bicycle and pedestrian circulation is provided on all streets and along all alleyways within the subject block and surrounding blocks. Additionally, major trail connections through the Regional Parks are still provided and the minor trail connections through Fir Park and the linear greens along the transmission lines are still provided.

LAND USES

PDP 2N refines the subject area beyond what was described in SAP North. The total density shown for the subject area in SAP North is 97 units. The total number of units in the larger land use group in the PDP 2N area is 28, including 10 Standard and 18 Medium lots. The summation of the smaller land use group within the PDP 1B

area from the SAP North plan is a total of 69, which includes 38 Small and 31 Row House lots. Under the SAP plan for this area, there is a predominance of the uses that are in the smaller land use category. PDP 2N proposes the following refinements to the location and mix of units within the same area of SAP North.

- The block west of Palermo Street and east of Grahams Ferry Road shows 10 Standard lots on both the SAP North plan and the proposed PDP plan.
- The SAP North plans shows 31 Row Houses along the north side of Costa Circle West. The PDP plan proposes to replace the Row Houses with 22 Small Cottages.
- The portion of the above mentioned blocks north of the area described above shows 20 Small and 12 Medium lots in the SAP plan. Within this area, the PDP plan proposes 26 Small and 6 Medium lots. The same number of units is proposed; only 6 Medium lots are replaced with Small lots in the proposed PDP plan.
- The block in the northeast corner of the site included 18 Small and 6 Medium lots in the SAP plan. The proposed PDP plan shows 11 Smalls and 15 Small Cottages.

The PDP proposes a total of 90 units, including 10 Standard, 6 Medium, 37 Small and 37 Small Cottage lots. The proposed refinements result in fewer mediums and the replacement of Row Houses with Small Cottages (Note: Concurrent PDP 4C includes 38 Row Houses directly to the south of this area).

The table below shows the number of units in each land use category currently within SAP North and the number of units in the SAP with the proposed refinement as well as the percent change in each aggregate land use category.

	Current Unit Count in SAP N	Proposed Unit Count in SAP N	% Change
Medium/Standard/ Large/Estate	174	162	-6.8%
Small / Small Cottage/ Row Houses/ Neighborhood Apt.	297	302	+1.6%
Total	471	464	-1.5%

NOTE: The Current Unit Count for SAP North reflects the adjusted unit counts resulting from the *Villebois Village Master Plan* Amendment approved by City Council on 8/2/10 that eliminated units in SAP East for the school relocation and added units to SAP North, and the approved unit counts for the PDP 1N Modifications as approved by DRB in 2011 and 2013.

The proposed refinements do not exceed the 10% standard. This proposal (combined with the concurrent proposal for PDP 4C) results in a total of 2,532 units within Villebois. This is above the density of 2,300 units required to be obtained across Villebois, meeting the refinement criteria.

None of the conditions of approval for SAP North are specific to the proposed refinements. As the proposed refinements will not compromise the project's ability to comply with SAP conditions of approval, they will equally meet the conditions of approval of SAP North.

The proposed refinements will better meet the following Goals, Policies and Implementation Measures of the *Villebois Village Master Plan* than the SAP North plan.

- ***Land Use, General Land Use Plan Goal*** *– Villebois Village shall be a complete community that integrates land use, transportation, and natural resource elements to foster a unique sense of place and cohesiveness.*

  The proposed PDP 2N plan better integrates natural resource elements with land uses and transportation through additional area for linear greens providing more areas for recreational and community uses.

- ***Land Use, Residential Neighborhood Housing Policy 1*** *– Each of the Villebois Village's neighborhoods shall include a wide variety of housing options and shall provide home ownership options ranging from affordable housing to estate lots.*

  Since the majority of the subject PDP is adjacent to SAP Central, this area will provide a level of transition as densities in housing options increase from the edges of the project to the Village Center. By adding Small Cottages to the mix, the proposed PDP plan increases to the variety of housing options and the range of affordability options within the subject area, while still meeting a transition function.

- ***Land Use, Residential Neighborhood Housing Policy 10*** *– Natural features shall be incorporated into the design of each neighborhood to maximize their aesthetic character while minimizing impacts to said natural features.*

  The addition of linear green area better incorporates the design of the subject area which enhances the aesthetic character of the neighborhood.

In summary, the proposed refinements will better integrate green spaces throughout the PDP and expand the range of housing options in the subject area. As the proposed refinements will not compromise the project's ability to comply with all other Goals, Policies and Implementation Measures of the *Villebois Village Master Plan*, they will equally meet all other Goals, Policies and Implementation Measures of the *Villebois Village Master Plan*.

PARKS & OPEN SPACE

A comparison of the proposed plan for PDP 2N and the original SAP North plan for this area shows a slight increase in the areas planned for linear greens. All other park/open space areas and features are consistent with that shown in the SAP. The additional areas for linear greens provide enhanced pedestrian connectivity and direct access to green space for more of the homes in the PDP area. The proposed plan distributes green space through the PDP area, with green spaces now located on every block of the development. A detailed description and analysis of the parks and open space refinements can be found in the PDP Supporting Compliance Report in Exhibit IIA of the Notebook.

UTILITIES

A comparison of the *Composite Utility Plan* of the proposed PDP (see Section IIB of this Notebook) with *Utility Plan* in SAP North (Volume II) shows that the proposed utility system is generally consistent, with the only refinements occurring in correlation with the refinements to the street network. A detailed description and analysis of the utility refinements can be found in the PDP Supporting Compliance Report in Exhibit IIA of the Notebook.

VI. PROPOSAL SUMMARY & CONCLUSION

This 'Introductory Narrative,' in conjunction with the referenced sections, describes the proposed Preliminary Development Plan, Tentative Plat, Zone Change, Tree Preservation/Removal Plan, Final Development Plan, and SAP Amendment. The Supporting Compliance Reports located in Sections II through VII, respectively, support these requests for approval of the subject applications and demonstrate compliance with the applicable standards of the Wilsonville Planning and Land Development Ordinance.

SUPPORTING COMPLIANCE REPORT
PRELIMINARY DEVELOPMENT PLAN 2 - NORTH

SECTION IIA

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II. PROPOSAL SUMMARY & CONCLUSION 37

I. WILSONVILLE PLANNING & LAND DEVELOPMENT ORDINANCE

SECTION 4.125 VILLAGE (V) ZONE

(.02) PERMITTED USES

Examples of principle uses that are typically permitted:

A. Single Family Dwellings

H. Non-commercial parks, plazas, playgrounds, recreational facilities, community buildings and grounds, tennis courts, and other similar recreational and community uses owned and operated either publicly or by an owners association.

Response: This Preliminary Development Plan (PDP) application proposes to create 90 lots for development of detached single family dwellings, as well as numerous tracts for linear greens, parks, and open space areas. All proposed uses within the subject PDP are permitted pursuant to this section.

(.05) DEVELOPMENT STANDARDS APPLYING TO ALL DEVELOPMENTS IN THE VILLAGE ZONE

All development in this zone shall be subject to the V Zone and the applicable provisions of the Wilsonville Planning and Land Development Ordinance. If there is a conflict, then the standards of this section shall apply. The following standards shall apply to all development in the V zone:

A. Block, Alley, Pedestrian and Bicycle Standards:

1. Maximum Block Perimeter: 1,800 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent a block perimeter from meeting this standard.

Response: Blocks within the proposed PDP plan meet the maximum 1,800-foot block perimeter, except as follows.

- The block bounded by Palermo Street, Barber Street, Costa Circle West, Ravenna Loop, and the north property line will exceed the maximum 1,800-foot block perimeter. This block includes Open Space 2 and Regional Park 4. Open Space 2 includes a large forested area that is designated as a Significant Resource Overlay Zone (SROZ). The SROZ prevents this block from meeting the block perimeter standard; however, this block includes trails throughout both parks.
- The remaining blocks along the northern portion of the PDP can only be developed to the property line. Compliance of these blocks with the 1,800-foot block perimeter standard cannot be fully determined until the abutting property to the north develops. However, the proposed blocks include provisions for pedestrian/bicycle connections or trails where feasible.

2. Maximum spacing between streets for local access: 530 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic

variations, or designated Significant Resource Overlay Zone areas will prevent street extensions from meeting this standard.

Response: Streets within the proposed PDP plan meet the maximum 530-foot spacing standard, except as follows.

- The block bounded by Geneva Loop, Villebois Drive, Stockholm Avenue and Cherbourg Lane will exceed the maximum 530-foot spacing standard. The eastern portion of this block is crossed by transmission lines running along the existing 110th Avenue right-of-way, which is shown in the *Master Plan* and the adjacent PDP 3E plan as a Neighborhood Park (Fir Park). The relationship of the park and the transmission lines with the surrounding street pattern as planned (Villebois Drive, Geneva Loop, Stockholm Avenue) and the triangular configuration of the subject property in this area prevent this block from complying with the 530-foot spacing standard. Pedestrian/bicycle pathways will be provided to mitigate the block length.
- The block bounded by Palermo Street, Barber Street, Costa Circle West, Ravenna Loop, and the north property line will exceed the maximum 530-foot spacing standard. This block includes Open Space 2 and Regional Park 4. Open Space 2 includes a large forested area that is designated as a Significant Resource Overlay Zone (SROZ). The SROZ prevents this block from meeting the block spacing standard; however, this block includes trails throughout both parks.
- The block including the 10 Standard lots along Palermo Street will also exceed the 530-foot spacing standard due to the fact that it abuts Grahams Ferry Road to the west, which is a minor arterial with access spacing limitations.

As described above, barriers exist that prevent three (3) blocks in PDP 2N from meeting the maximum street spacing. Bike/pedestrian connections are provided, where feasible.

3. If the maximum spacing for streets for local access exceeds 530 feet, intervening pedestrian and bicycle access shall be provided, with a maximum spacing of 330 feet from those local streets, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions from meeting this standard.

Response: As described above, there are three (3) blocks within the PDP 2N area that cannot meet the 530-foot maximum street spacing. Bike/pedestrian connections are provided, where feasible. The proposed PDP complies with this standard to the extent feasible, as described above.

B. Access: All lots with access to a public street, and an alley, shall take vehicular access from the alley to a garage or parking area, except as determined by the City Engineer.

Response: All of the lots within the proposed PDP that have frontage on a public street and an alley will take vehicular access from an alley to a garage or parking area.

C. Trailers, travel trailers, mobile coaches, or any altered variation thereof shall not be used for the purpose of conducting a trade or calling, or for storage of material, unless approved for such purpose as a temporary use.

Response: No trailers, travel trailers, mobile coaches, or such vehicles will be used for the purpose of conducting a trade or calling or for the storage of material unless approved as a temporary use.

D. Fences:

1. General Provisions:

a. Fencing within the Village Zone shall be in compliance with the Master Fencing Program in the adopted Architectural Pattern Book for the appropriate SAP.

b. When two or more properties with different setbacks abut, the property with the largest front yard setback requirement shall be used to determine the length and height of the shard side yard fence, as required by section 4.125 above.

c. The development Review Board may, in their discretion, require such fencing as deemed necessary to promote and provide traffic safety, noise mitigation, and nuisance abatement, and the compatibility of different uses permitted on adjacent lots of the same zone and on adjacent lots of different zones.

2. Residential:

a. The maximum height of any fence located in the required front yard of a residential development shall not exceed three (3) feet.

b. Fences on residential lots shall not include chain link, barbed wire, razor wire, electrically charged wire, or be constructed of sheathing material such as plywood or flake board. Fences in residential areas that protect wetlands, or other sensitive areas, may be chain link.

Response: The SAP North Master Fencing Plan does not indicate any required community fencing within the subject PDP. Residential lot fencing occurs when each home is constructed, details of which are provided with Building Permit review. Residential lot fencing will occur in compliance with the fencing specified for the specific lot type and style in accordance with the SAP North Master Fencing Plan.

E. Recreational Area in Multi-Family Residential and Mixed Use Developments

Response: The proposed PDP includes lots for the development of single family residential homes; therefore this standard does not apply.

F. Fire Protection:

1. All structures shall include a rated fire suppression system (i.e., sprinklers), as approved by the Fire Marshal

Response: All of the homes within the proposed PDP area will include appropriate fire suppression systems. This will be verified with review of future building permit applications.

Table V-1 Development Standards

Response: The *Tentative Plat* (see Section IIB in this Notebook) depicts proposed lot sizes and dimensions. All of the lots will be developed with single family detached dwelling units. All of the lots meet applicable requirements, as addressed below. No buildings are proposed with this application. Final compliance with these standards will be reviewed at building permit submittal.

Single-Family Dwellings

Minimum lot size: 2,250 square feet

Minimum lot width: 35 feet

Minimum lot depth: 50 feet

Response: All of the lots within the proposed tentative plat meet the minimum lot size requirement and meet the minimum lot width and depth specified for Small Cottage, Small, Medium and Standard lots in the approved SAP North *Architectural Pattern Book*, with allowed variations for road curvatures.

(.07) GENERAL REGULATIONS – OFF-STREET PARKING, LOADING & BICYCLE PARKING

Except as required by Subsections (A) through (D), below, the requirements of Section 4.155 shall apply within the village zone.

A. General Provisions:

1. The provision and maintenance of off-street parking spaces is a continuing obligation of the property owner. The standards set forth herein shall be considered by the Development Review Board as minimum criteria.

2. The Board shall have the authority to grant variances or refinements to these standards in keeping with the purposes and objectives set forth in this zone.

Response: The applicant acknowledges that the provision and maintenance of off-street parking is the continuing obligation of the property owner. There are no variances or refinements to the standards of this section proposed with this application.

B. Minimum and Maximum Off-Street Parking Requirements:

1. Table V-2, Off-Street Parking Requirements, below, shall be used to determine the minimum and maximum parking standards for noted land uses. The number of required parking spaces shown in Table V-2 shall be determined by rounding to the nearest whole parking space…

Table V-2: Off-Street Parking Requirements

Category	Min. Vehicle Spaces	Max. Vehicle Spaces	Bicycle Short Term	Bicycle Long Term
Single Family Detached Dwelling Units	1.0 / DU	NR	NR	NR
Row Houses	1.0 / DU	NR	NR	NR

Response: Each of the homes will provide a minimum of a one-car garage in compliance with this standard.

C. Minimum Off-Street Loading Requirements:

Response: The proposed PDP includes lots for development of single family homes; therefore no loading areas are required.

D. Bicycle Parking Requirements:

Response: The proposed PDP includes single family detached residential units. There is no bicycle parking requirement for these unit types, as noted in *Table V-2* above, therefore these standards do not apply.

(.08) OPEN SPACE

Open space shall be provided as follows:

A. In all residential developments and in mixed-use developments where the majority of the developed square footage is to be in residential use, at least twenty-five percent (25%) of the area shall be open space, excluding street pavement and surface parking. In multi-phased developments, individual phases are not required to meet the 25% standard as long as an approved Specific Area Plan demonstrates that the overall development shall provide a minimum of 25% open space. Required front yard areas shall not be counted towards the required open space area. Required rear yard areas and other landscaped areas that are not within required front or side yards may be counted as part of the required open space.

B. Open space area required by this Section may, at the discretion of the Development Review Board, be protected by a conservation easement or dedicated to the City, either rights in fee or easement, without altering the density or other development

standards of the proposed development. Provided that, if the dedication is for public park purposes, the size and amount of the proposed dedication shall meet the criteria of the City of Wilsonville standards. The square footage of any land, whether dedicated or not, which is used for open space shall be deemed a part of the development site for the purpose of computing density or allowable lot coverage. See SROZ provisions, Section 4.139.10.

C. The Development Review Board may specify the method of assuring the long-term protection and maintenance of open space and/or recreational areas. Where such protection or maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review and approve any pertinent bylaws, covenants, or agreements prior to recordation.

Response: The Parks *Master Plan* for Villebois states that there are 57.87 acres of parks and 101.46 acres of open space for a total of 159.33 acres within Villebois, approximately 33%. SAP North includes parks and open space areas consistent with the *Master Plan*. The proposed PDP includes the parks and open space areas shown in the *Villebois Village Master Plan* and SAP North for this area. Therefore, this proposal is consistent with the park and open space areas originally planned for this area.

(.09) STREET & ACCESS IMPROVEMENT STANDARDS

A. Except as noted below, the provisions of Section 4.177 apply within the Village zone:

1. Generally:

a) All street alignment and access improvements shall conform to the Villebois Village Master Plan, or as refined in the Specific Area Plan, Preliminary Development Plan, or Final Development Plan and the following standards:

Response: The street alignments and access improvements within this PDP are generally consistent with those approved in the *Villebois Village Master Plan* and SAP North, as refined by this PDP application.

i. All street improvements shall conform to the Public Works Standards and shall provide for the continuation of streets through proposed developments to adjoining properties or subdivisions, according to the Master Plan.

Response: All street improvements within this PDP will comply with the applicable Public Works Standards. The street system within this PDP is designed to provide for the continuation of streets within Villebois and to adjoining properties or subdivisions according to the *Master Plan*. The street system is illustrated on the *Circulation Plan* (see Section IIB of this Notebook).

ii. **All streets shall be developed with curbs, landscape strips, bikeways or pedestrian pathways, according to the Master Plan.**

Response: All streets within this PDP will be developed with curbs, landscape strips, sidewalks, and bikeways or pedestrian pathways as depicted on the *Circulation Plan* (Section IIB of this Notebook) and in accordance with the *Master Plan*.

2. **Intersections of streets**

a) **Angles: Streets shall intersect one another at angles not less than 90 degrees, unless existing development or topography makes it impractical.**

b) **Intersections: If the intersection cannot be designed to form a right angle, then the right-of-way and paving within the acute angle shall have a minimum of thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than ninety (90) degrees shall require approval by the City Engineer after consultation with the Fire District.**

Response: The plan sheets located in Section IIB of this Notebook demonstrate that all proposed streets will intersect at angles consistent with the above standards (see the *Tentative Plat* in Section IIB).

c) **Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections shall be separated by at least:**

i. **1000 ft. for major arterials**
ii. **600 ft. for minor arterials**
iii. **100 ft. for major collector**
iv. **50 ft. for minor collector**

Response: The plan sheets located in Section IIB of this Notebook demonstrate that opposing intersections on public streets are offset, as appropriate, so that no danger to the traveling public is created (see the *Tentative Plat* in Section IIB).

d) **Curb Extensions:**

i. **Curb extensions at intersections shall be shown on the Specific Area Plans required in subsection 4.125(.18)(C) through (F) below, and shall:**

- **Not obstruct bicycle lanes on collector streets.**
- **Provide a minimum 20 foot wide clear distance between curb extensions all local residential street intersections shall have, shall meet minimum turning radius**

requirements of the Public Works Standards, and shall facilitate fire truck turning movements as required by the Fire District.

Response: Curb extensions are shown on the *Circulation Plan* (see Section IIB). Curb extensions will not obstruct bicycle lanes on collector streets (Costa Circle). The attached drawings illustrate that all street intersections will have a minimum 20 foot wide clear distance between curb extensions on all local residential street intersections.

3. Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate, grades in excess of 8%, but not more than 12%, may be permitted for short distances, as approved by the City Engineer, where topographic conditions or existing improvements warrant modification of these standards.

Response: The *Grading & Erosion Control Plan* located in Section IIB, demonstrates that proposed streets can comply with this standard.

4. Centerline Radius Street Curves:

The minimum centerline radius street curves shall be as follows:

a) Arterial streets: 600 feet, but may be reduced to 400 feet in commercial areas, as approved by City Engineer.

b) Collector streets: 600 feet, but may be reduced to conform with the Public Works Standards, as approved by the City Engineer.

c) Local streets: 75 feet

Response: The *Tentative Plat* (see Section IIB) demonstrates that all streets will comply with the above standards.

5. Rights-of-way:

a) See (.09) (A), above.

Response: Proposed rights-of-way are shown on the plan sheets located in Section IIB of this Notebook. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with recordation of a final plat in accordance with Section 4.177.

6. Access drives.

a) See (.09) (A), above.

b) 16 feet for two-way traffic.

Response: Access drives (alleys) will be paved at least 16-feet in width within a 20-foot tract, as shown on the *Circulation Plan*. In accordance with Section 4.177, all access drives will be constructed with a hard surface capable of carrying a 23-ton

load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions

7. Clear Vision Areas

a) See (.09) (A), above.

Response: Clear vision areas will be provided and maintained in compliance with the Section 4.177.

8. Vertical clearance:

a) See (.09) (A), above.

Response: Vertical clearance will be provided and maintained in compliance with the Section 4.177.

9. Interim Improvement Standard:

a) See (.09) (A), above.

Response: Subsequent construction documents will include interim improvements as needed to provide for adequate street access until the future vacation of 110th Avenue, construction of the roundabout at Villebois Drive and Costa Circle, and the corresponding street connections/extensions can be built with adjacent phases in PDP 3E.

(.10) SIDEWALK AND PATHWAY IMPROVEMENT STANDARDS

A. The provisions of Section 4.178 shall apply within the Village zone.

Response: All sidewalks and pathways within SAP North will be constructed in accordance with the standards of Section 4.178 and the *Villebois Village Master Plan*. Sidewalks and pathways are shown in the street cross-sections on the *Circulation Plan* (see Section IIB of this notebook).

(.11) LANDSCAPING, SCREENING AND BUFFERING

A. Except as noted below, the provisions of Section 4.176 shall apply in the Village zone:

1. Streets in the Village zone shall be developed with street trees as described in the Community Elements Book.

Response: The *Street Tree/Lighting Plan* shows the street trees proposed within this PDP. The trees are in conformance with the Community Elements Book.

(.12) MASTER SIGNAGE AND WAYFINDING

Response: The SAP North Signage & Wayfinding Plan does not require any signage or monumentation on the subject property.

(.14) DESIGN STANDARDS APPLYING TO THE VILLAGE ZONE

A. The following design standards implement the Design Principles found in (.13), above, and enumerate the architectural details and design requirements applicable to buildings and other features within the Village (V) zone. The Design Standards are based primarily on the features, types, and details of the residential traditions in the Northwest, but are not intended to mandate a particular style or fashion. All development within the Village zone shall incorporate the following:

1. Generally:

a. Flag lots are not permitted.

Response: No flag lots are proposed (see the *Tentative Plat* in Section IIB of this Notebook).

b. Dwellings on lots without alley access shall be at least 36 feet wide.

Response: Standard lots are proposed in the western portion of the PDP that do not have alley access. All standard lots will be more than 36 feet wide.

c. The minimum lot depth for a single-family dwelling with an accessory dwelling unit shall be 70 feet.

Response: None of the lots include accessory dwellings; therefore this standard does not apply.

d. For Village Center lots facing two or more streets, two of the facades shall be subject to the minimum frontage width requirement. Where multiple buildings are located on one lot, the facades of all buildings shall be used to calculate the Minimum Building Frontage Width.

Response: The proposed PDP is not located in the Village Center; therefore this standard does not apply.

2. Building and site design shall include:

a. Proportions and massing of architectural elements consistent with those established in an approved Pattern Book or Village Center Design.

b. Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Pattern Book, Community Elements Book or approved Village Center Architectural Standards.

c. Protective overhangs or recesses at windows and doors.

d. Raised stoops, terraces or porches at single-family dwellings.

e. Exposed gutters, scuppers, and downspouts.

f. The protection of existing significant trees as identified in an approved Community Elements Book.

g. A landscape plan in compliance with Section (.11), above.

h. Building elevations of block complexes shall not repeat an elevation found on an adjacent block.

i. Building elevations of detached buildings shall not repeat an elevation found on buildings on adjacent lots.

j. A porch shall have no more than three walls.

k. A garage shall provide enclosure for the storage of no more than three vehicles.

Response: This application requests PDP approval for single family detached lots. No buildings are proposed at this time. Conformance with the Pattern Book and Community Elements Book will assure consistency with the Design Standards of subsection (.14). Subsequent Building Permit applications will review building and site design for consistency with the Pattern Book.

The *Street Tree/Lighting Plan* shows the street trees proposed within this PDP in compliance with Section (.11), above. The trees have been selected in conformance with the Community Elements Book.

Protection of existing trees is shown on the *Tree Preservation Plan*, in accordance with the Community Elements Book. The *Street Tree/Lighting Plan* (see Section IIB) depicts street trees along rights-of-way within the subject Preliminary Development Plan area. The *Street Tree/Lighting Plan* has been developed in conformance with the Community Elements Book and the applicable standards of Section 4.176.

3. Lighting and site furnishings shall be in compliance with the approved Community Elements Book.

Response: The FDP application in Section VI of the Notebook shows site furnishings within the parks. The *Street Tree/Lighting Plan* (see Section IIB) shows proposed street trees and lighting for this Preliminary Development Plan. These plans illustrate that lighting and site furnishings will be provided in compliance with the Community Elements Book.

4. Building systems, as noted in Tables V-3 and V-4 (Permitted Materials and Configurations), below, shall comply with the materials, applications and configurations required therein.

Response: The PDP does not propose any buildings. Subsequent Building Permit applications will review proposed buildings for consistency with the criteria of *Table V-3* and the *Architectural Pattern Book*.

(.18) VILLAGE ZONE DEVELOPMENT PERMIT PROCESS

B. Unique Features and Processes of the Village (V) Zone. To be developed, there are three (3) phases of project approval. Some of these phases may be combined, but generally the approvals move from the conceptual stage through to detailed architectural,

landscape and site plan review in stages. All development within the Village zone shall be subject to the following processes:

2. Preliminary Development Plan (PDP) approval by the Development Review Board, as set forth in Section 4.125(.18)(G) through (K) (Stage II equivalent), below. Following SAP approval, an applicant may file applications for Preliminary Development Plan approval (Stage II equivalent) for an approved phase in accordance with the approved SAP, and any conditions attached thereto. Land divisions may also be preliminarily approved at this stage. Except for land within the Central SAP or multi-family dwellings outside the Central SAP, application for a zone change and Final Development Plan (FDP) shall be made concurrently with an application for PDP approval. The SAP and PDP/FDP may be reviewed simultaneously when a common ownership exists.

Final Development (FDP) approval by the Development Review Board or the Planning Director, as set forth in Sections 4.125(.18)(L) through (P) (Site Design Review equivalent), below, may occur as a separate phase for lands in the Central SAP or multi-family dwellings outside the Central SAP.

Response: The Applicant is requesting approval of a Preliminary Development Plan (PDP). Compliance with Sections 4.125(.18)(G) through (K) is demonstrated in the following sections of this report. This PDP addresses Phase 1B on the amended SAP North Phasing Plan, as shown in Exhibit IE of this Notebook. This PDP includes a request to amend the SAP North Phasing as shown in Exhibit IE.

A request for preliminary approval of a tentative subdivision plat is submitted concurrent with this PDP application (see Section III of this Notebook). A request for a zone change to Village (V) zone is also submitted concurrent with this PDP application (see Section IV of this Notebook). A Final Development Plan is also submitted concurrent with this PDP (see Section VI of this Notebook).

F. Refinements to Approved Villebois Village Master Plan

1. In the process of reviewing a SAP for consistency with the Villebois Village Master Plan, the Development Review Board may approve refinements, but not amendments, to the Master Plan. Refinements to the Villebois Village Master Plan may be approved by the Development Review Board, upon the applicant's detailed graphic demonstration of compliance with the criteria set forth in Section 4.125(.18)(F)(2), below. Amendments to the Villebois Village Master Plan may be approved by the Planning Commission as set forth in Section 4.032(.01)(B).

a. Refinements to the Master Plan are defined as:

i. Changes to the street network or functional classification of streets that do not significantly reduce circulation

system function or connectivity for vehicles, bicycles or pedestrians.

vi. Changes that are significant under the above definitions, but necessary to protect an important community resource or improve the function of collector or minor arterial roadways.

b. As used herein, "significant" means:

i. More than ten percent of any quantifiable matter, requirement, or performance measure, as specified in (.18)(F)(1)(a), above, or,

ii. That which negatively affects an important, qualitative feature of the subject, as specified in (.18)(F)(1)(a), above.

Response: This application includes an SAP North amendment to refine the street network shown in the Master Plan for the area north of SW Geneva Loop and west of the SAP East boundary. Refinements to the street network were approved with PDP 3E and are proposed with PDP 2N that necessitate an amendment to the SAP North street network in between these two areas. The refinement approved with PDP 3E resulted from the retention of an isolated wetland directly east of the SAP North boundary which eliminated some street segments, refining the street circulation in said area. In order to provide for a consistent transition from the PDP 3E approved circulation network and the proposed circulation network with PDP 2N, the intervening streets, including Cherbourg Lane, Verdun Loop and Stockholm Avenue are proposed to be refined as shown on the Title Page of the PDP plan set (See Exhibit IIB). Cherbourg Lane will continue north from its alignment in PDP 2N and curve east to terminate past its intersection with an alley near the east boundary of SAP North. The alignments of Verdun Loop and Stockholm Avenue are modified so that Verdun Loop now intersects Cherbourg Lane and does not extend all the way to Costa Circle as shown in the Master Plan and Stockholm Avenue will end at its intersection with Verdun Loop instead of extending to Cherbourg Lane as shown in the Master Plan. These changes will not alter the functional classification of these streets, nor will it significantly reduce circulation system function or connectivity for vehicles, bicycles or pedestrians. Street connections to the east continue to be provided with Verdun Loop and Stockholm Avenue. Street connections to the south continue to be provided with Cherbourg Lane. Bicycle and pedestrian connections are maintained along the afore-mentioned streets, as well as with mid-block connections and through the minor pathway in the future linear greens along the 110th Avenue / transmission line corridor.

2. Refinements meeting the above definition may be approved by the DRB upon the demonstration and finding that:

a. The refinements will equally or better meet the Goals, Policies and Implementation Measures of the Villebois Village Master Plan,

b. The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the SAP and Village area, and

c. The refinement will not preclude an adjoining or subsequent SAP area from development consistent with the Master Plan.

Response: The proposed refinement of the circulation network will equally meet the Goals, Policies and Implementation Measures of the Villebois Village Master Plan The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of SAP North or the Village area. Since the proposed refinement corrects the intervening street network between that which has been approved with PDP 3E and that which is proposed with this PDP 2N application, it will not preclude an adjoining or subsequent SAP area from development consistent with the Master Plan.

G. Preliminary Development Plan Approval Process:

1. An application for approval of a Preliminary Development Plan for a development in an approved SAP shall:

a) Be filed with the City Planning Division for the entire SAP, or when submission of the SAP in phases has been authorized by the Development Review Board, for a phase in the approved sequence.

Response: This PDP addresses Phase 1B on the amended SAP North Phasing Plan, as shown in Exhibit IE of this Notebook. This PDP includes a request to amend the SAP North Phasing as shown in Exhibit IE.

b) Be made by the owner of all affected property or the owner's authorized agent; and.

Response: This application is made by Polygon Northwest Company, who is also the property owner. The application form can be found in Exhibit IB along with a copy of the vesting deed.

c) Be filed on a form prescribed by the City Planning Division and filed with said division and accompanied by such fee as the City Council may prescribe by resolution; and.

Response: The appropriate application form and fee have been filed with this submittal. A copy of the form and fee are included in Sections IB and IC, respectively.

d) Set forth the professional coordinator and professional design team for the project; and.

Response: The professional coordinator and professional design team are set forth in the Introductory Narrative, located in Section IA of this Notebook.

e) State whether the development will include mixed land uses, and if so, what uses and in what proportions and locations.

Response: This PDP does not include mixed land uses. The proposed land uses are shown on the *Site/Land Use Plan,* in Section IIB of this Notebook.

f) Include a preliminary land division (concurrently) per Section 4.400, as applicable.

Response: This application includes a request for preliminary land division approval. This request for approval of a Tentative Plat can be seen in Section III of this Notebook. This section includes a Supporting Compliance Report, the proposed Tentative Plat, draft CC&R's, a copy of the certification of liens & assessments form, and the subdivision name approval from the County Surveyor's Office.

g) Include a concurrent application for a Zone Map Amendment (i.e., Zone Change) for the subject phase.

Response: This application includes a request for a zone map amendment to zone the subject Preliminary Development Plan area Village (V). This zone change request can be seen in Section IV of this Notebook. This section includes a Supporting Compliance Report, a Zone Change Map, and a legal description & sketch of the proposed zone change area.

2. The application for Preliminary Development Plan approval shall include conceptual and quantitatively accurate representations of the entire development sufficient to demonstrate conformance with the approved SAP and to judge the scope, size and impact of the development on the community and shall be accompanied by the following information:

a) A boundary survey or a certified boundary description by a surveyor licensed in the State of Oregon.

b) Topographic information sufficient to determine direction and percentage of slopes, drainage patterns, and in environmentally sensitive areas, (e.g., flood plain, wetlands, forested areas, steep slopes or adjacent to stream banks). Contour lines shall relate to North American Vertical Datum of 1988 and be at minimum intervals as follows:

i) One (1) foot contours for slopes of up to five percent (5%);

ii) Two (2) foot contours for slopes from six percent (6%) to twelve (12%);

iii) Five (5) foot contours for slopes from twelve percent (12%) to twenty percent (20%). These slopes shall be clearly identified, and

iv) Ten (10) foot contours for slopes exceeding twenty percent (20%).

c) The location of areas designated Significant Resource Overlay Zone (SROZ), and associated 25-foot Impact Areas, within the PDP and within 50 feet of the PDP boundary, as required by Section 4.139.

Response: A certified boundary description by a surveyor licensed in the State of Oregon is provided as the legal description and sketch for the zone map amendment (see Section IVC of this Notebook). Topographic information and SROZ information in accordance with Sections 4.125(.18)G.2.b. & c. is shown on the *Existing Conditions*, located in Section IIB of this Notebook.

d) A tabulation of the land area to be devoted to various uses, and a calculation of the average residential density per net acre.

Response: Following is a tabulation of land area devoted to the various uses and a calculation of net residential density:

Gross Acreage	28.91 Acres
Parks	19.12 Acres
Public Streets	3.10 Acres
Lots and Alleys	6.69 Acres

Net Residential Density: 90 lots / 6.69 Acres = 13.45 units per net acre

e) The location, dimensions and names, as appropriate, of existing and platted streets and alleys on and within 50 feet of the perimeter of the PDP, together with the location of existing and planned easements, sidewalks, bike routes and bikeways, trails, and the location of other important features such as section lines, section corners, and City boundary lines. The plan shall also identify all trees 6 inches and greater d.b.h. on the project site only.

Response: The above information is shown on the *Existing Conditions,* the *Tentative Plat,* and the *Circulation Plan*. The *Tree Preservation Plan* identifies all trees 6 inches and greater diameter at breast height (d.b.h.) within or adjacent to developed areas on the project site. Tree numbers are identified on the Tree Preservation Plan Sheets which correspond with the Tree Inventory in the Tree Report (see Section VB). The plan sheets mentioned above can be found in Section IIB of this Notebook.

f) Conceptual drawings, illustrations and building elevations for each of the listed housing products and typical non-residential and mixed-use buildings to be constructed within the Preliminary Development Plan boundary, as identified in the approved SAP, and where required, the approved Village Center Design.

Response: The proposed PDP includes Small Cottage, Small, Medium, and Standard lot types, which are all detached single-family homes. Conceptual elevations for the homes are included in Section IIF of this Notebook.

g) A composite utility plan illustrating existing and proposed water, sanitary sewer, and storm drainage facilities necessary to serve the SAP.

Response: Proposed storm drainage facilities, and water and sanitary lines are shown on the *Composite Utility Plan* (see Section IIB in this Notebook).

h) If it is proposed that the Preliminary Development Plan will be executed in Phases, the sequence thereof shall be provided.

Response: The PDP is proposed to be executed in one to four phases. The proposed phases of the subject PDP are shown on the *PDP Phasing Plan* (see Section IIB of this Notebook).

i) A commitment by the applicant to provide a performance bond or other acceptable security for the capital improvements required by the project.

Response: The applicant will provide a performance bond or other acceptable security for the capital improvements required by the project.

j) At the applicant's expense, the City shall have a Traffic Impact Analysis prepared, as required by Section 4.030(.02)(B), to review the anticipated traffic impacts of the proposed development. This traffic report shall include an analysis of the impact of the SAP on the local street and road network, and shall specify the maximum projected average daily trips and maximum parking demand associated with buildout of the entire SAP, and it shall meet Subsection 4.140(.09)(J)(2).

Response: A copy of the Traffic Impact Analysis is provided in Section IID of this Notebook.

H. PDP Application Submittal Requirements:

1. The Preliminary Development Plan shall conform with the approved Specific Area Plan, and shall include all information required by (.18)(D)(1) and (2), plus the following:

a) The location of water, sewerage and drainage facilities;
b) Conceptual building and landscape plans and elevations, sufficient to indicate the general character of the development;
c) The general type and location of signs;
d) Topographic information as set forth in Section 4.035;

e) A map indicating the types and locations of all proposed uses; and

f) A grading and erosion control plan illustrating existing and proposed contours as prescribed previously in this section.

Response: The proposed PDP generally conforms to the approved SAP North, with the proposed refinements described in the following sections of this report. As demonstrated above, the PDP application includes all information required by 4.125(.18)(D)(1) and (2), as applicable to a PDP.

The *Existing Conditions* shows the existing site features, including topographic features. Proposed lots to be created for development are shown on the *Tentative Plat)*. The *Grading and Erosion Control Plan* shows the location of drainage facilities, topographic information, and a grading and erosion control facilities. The *Composite Utility Plan* indicates the proposed location of water and sanitary sewer lines and drainage facilities. The *Site/Land Use Plan* indicates the types and locations of all proposed uses in the Preliminary Development Plan. The plan sheets mentioned above can be found in Section IIB of this Notebook.

Landscape plans for the park areas are located with the FDP application materials in Section VI of the Notebook. No signage is proposed or required within the subject area.

The proposed PDP includes Small Cottage, Small, Medium and Standard lot types, which are all detached single-family homes. Conceptual elevations for the homes within the PDP will be provided for review by the City's Architectural consultant prior to building permit submittal and will be available prior to DRB hearing on this request. Future proposed homes will be designed to be consistent with the conceptual elevations in the *Architectural Pattern Book*.

2. In addition to this information, and unless waived by the City's Community Development Director as enabled by Section 4.008(.02))B), at the applicant's expense, the City shall have a Traffic Impact Analysis prepared, as required by Section 4.030(.02)(B), to review the anticipated traffic impacts of the proposed development. This traffic report shall include an analysis of the impact of the PDP on the local street and road network, and shall specify the maximum projected average daily trips and maximum parking demand associated with buildout of the entire PDP, and it shall meet Subsection 4.140(.09)(J)(2) for the full development of all five SAPs.

Response: A copy of the Traffic Impact Analysis is provided in Section IID.

3. The Preliminary Development Plan shall be sufficiently detailed to indicate fully the ultimate operation and appearance of the phase of development. However, approval of a Final Development Plan is a separate and more detailed review of proposed design features, subject to the standards of Section 4.125(.18)(L) through (P), and Section 4.400 through Section 4.450.

Response: The plan sheets for the proposed Preliminary Development Plan provide sufficient detail to show the ultimate operation and appearance of the subject phase of development. The FDP application for design of the included park areas within the PDP area is submitted concurrent with this application (see Section VI of this Notebook).

4. Copies of legal documents required by the Development Review Board for dedication or reservation of public facilities, or for the creation of a non-profit homeowner's association, shall also be submitted.

Response: Copies of legal documents will be provided as appropriate and required by the Development Review Board.

I. PDP Approval Procedures

1. An application for PDP approval shall be reviewed using the following procedures:

a) Notice of a public hearing before the Development Review Board regarding a proposed PDP shall be made in accordance with the procedures contained in Section 4.012.

b) A public hearing shall be held on each such application as provided in Section 4.013.

c) After such hearing, the Development Review Board shall determine whether the proposal conforms to the permit criteria set forth in this Code, and shall approve, conditionally approve, or disapprove the application.

Response: In accordance with the procedures contained in Section 4.012, the City shall provide notice of a public hearing before the Development Review Board on the proposed Preliminary Development Plan. This report, in conjunction with all submitted information, demonstrates that the proposal conforms to the applicable permit criteria set forth in the City's Code.

J. PDP Refinements to Approved Specific Area Plan

1. In the process of reviewing a PDP for consistency with the approved Specific Area Plan, the Development Review Board may approve refinements, but not amendments, to the SAP. Refinements to the SAP may be approved by the Development Review Board as set forth in Section (.18)(J)(2), below.

a) Refinements to the SAP are defined as:

i. Changes to the street network or functional classification of streets that do not significantly reduce circulation system function or connectivity for vehicles, bicycles or pedestrians.

Response: The PDP design proposes the following refinements to the street network. None of the following refinements result in a change in the functional classification of the subject streets.

- Coffee Lake Avenue / Stockholm Avenue / Crete Street. The alignment of these three (3) streets as shown in the SAP North plans is proposed to be refined with this PDP. The adjacent PDP 3E approval included street refinements to retain an isolated wetland, which necessitate modifications to the streets in the northeast corner of this PDP. The proposed PDP plan provides a street stub to the adjacent property to the north in the same location as Coffee Lake Avenue shown in the SAP; however, the street is renamed Cherbourg Lane (it is shown as Cherbourg Loop in the *Street Name Master Plan*). Additionally, it is known that this street will no longer connect with Villebois Drive as shown in the SAP due to the wetland retention in PDP 3E. The alignment of Stockholm Avenue is modified so it no longer intersects with Geneva Loop and the segment of this street south of Geneva Loop is renamed Dundee Lane (included in *Street Name Master Plan* in different location, but was eliminated with PDP 3E refinements). The afore-mentioned changes to the street network also eliminate the small street segment of Crete Street shown in the SAP as it would now be unnecessary given the new street configuration.

The proposed changes alter the circulation pattern in this area; however, the changes do not significantly reduce the circulation system function or connectivity for vehicles, bicycles or pedestrians. Vehicular connection continues to be provided north-south through Villebois Drive, Orleans Avenue and Cherbourg Lane, and east-west through Geneva Loop and Stockholm Avenue. Bicycle and pedestrian circulation is provided on all streets and along all alleyways within the subject block and surrounding blocks. Additionally, major trail connections through the Regional Parks are still provided and the minor trail connections through Fir Park and the linear greens along the transmission lines are still provided.

ii. Changes to the nature or location of parks types, trails or open space that to not significantly reduce function, usability, connectivity, or overall distribution or availability of these uses in the Preliminary Development Plan.

Response: The *Villebois Village Master Plan* and SAP North show the following parks, linear greens, open space and pathways within the proposed PDP area.

- Regional Park 4 (RP-4), north of Barber Street between Palermo Street and Costa Circle West
- A portion of Regional Park 5 (RP-5), north of Geneva Loop between Ravenna Loop and Cherbourg Lane
- Open Space 2 (OS-2), north and east of Palermo Street
- A portion of Neighborhood Park 5 (NP-5) (also known as Fir Park) and Linear Green 15 (LG-15), along the existing 110th Street right-of-way and transmission lines (these parks have been addressed in PDP 3E and are shown consistent with that approval in these plans for reference)

- Multiple linear greens in the blocks south of Geneva Loop between Ravenna Loop and Dundee Lane
- Segments of the Tonquin Trail in RP-4 and RP-5

The *Villebois Village Master Plan* Technical Appendix F includes feasibility designs for RP-4, RP-5 and OS-2. The SAP North plans include refined designs for these areas plus the linear greens. For purposes of the following analysis, the SAP North plans are compared with the proposed PDP plans in evaluation of refinements. As noted above NP-5 and LG-15 were evaluated with PDP/FDP 3E and are not reviewed here.

The SAP North plans show RP-4 as 6.14 acres in size and including the following features: stormwater/rainwater features, benches, picnic tables, drinking fountain, BBQ, shelter, sport court with full court basketball, multipurpose court and horseshoe pit, a child creative play area and lawn play. The *Villebois Parks Master Plan* – Feasibility Plan 16 characterizes the lawn play area as 1.10 acres in size or 160' x 300'. The proposed PDP plans show RP-4 as generally the same size and configuration as SAP North. RP-4 will include all of the same features shown within the SAP plans (see FDP plans in Section VIB of this Notebook).

The SAP North plans show RP-5 as 2.24 acres is size and including the following features: stormwater/rainwater features, a minor water feature, benches, picnic tables, a drinking fountain, BBQ, restroom, transit stop, shelter, overlook, sport court: Skate Plaza, child play structure, and lawn play. The *Villebois Parks Master Plan* – Feasibility Plan 2 characterizes the lawn play area as 1.55 acres in size or 100' x 500'. RP-5 is located on three (3) different properties, only one (1) of which is included in this PDP area. The portion of RP-5 on the subject property is the majority of the lawn play area; two (2) picnic tables, a portion of the Tonquin Trail and a rainwater cell are also shown on the subject property. The proposed PDP plans show the area of the portion of RP-5 on the subject property. The FDP plans (see Section VIB of this Notebook) show the same features within the SAP plans for this portion of RP-5 (lawn play, picnic tables, and a rainwater cell). The remaining features of this park will be designed and established with development of the two (2) abutting properties to the north. The provision of lawn play in the subject portion of RP-5 allows for potential redesign when the remaining portions of the park become available for development.

The SAP North plans show OS-2 as 10.6 acres in size and including smaller soft surface nature trails meandering through the forest, as well as benches, picnic tables and a child play structure sited to avoid significant trees in the SROZ. The SAP North plans and the *Villebois Parks Master Plan* – Feasibility Plan 16 both show a strip along the northern boundary of OS-2 extending onto the adjacent property to the north. The child play structure is shown adjacent to the property to the north. The proposed PDP plans show the size of the portion of OS-2 on the subject property. The FDP plans (see Section VIB of this Notebook) show inclusion of the same trail system, bench and picnic table features as the SAP plans for this portion OS-2. Since the adjacent property to the north is not proposed for development at this time, establishing a child play structure in the planned location would be isolated from view and, therefore, unsafe to establish until future development of the abutting property to the north occurs.

The SAP North plans characterize the multiple linear greens as buffers between minor pathways and surrounding houses that serve as important linkages in the overall parks system and contribute to the Villebois vision of an interconnected

system of mobility. The linear greens are shown as lawn areas with rainwater plantings in appropriate locations. The proposed PDP plans continue the SAP designs for the multiple linear greens, with slight increases in size.

The proposed parks and open space areas are consistent with those shown in the SAP North plans. The linear greens increase slightly in size. Therefore, there is no reduction in function, usability, connectivity, or overall distribution or availability of parks, trails or open space.

iii. Changes to the nature or location of utilities or storm water facilities that do not significantly reduce the service or function of the utility or facility.

Response: The proposed PDP includes changes to utility lines that correspond with the changes in the street network described above. The proposed utility/street refinements do not reduce the service or function of utilities in any way.

iv. Changes to the location or mix of land uses that do not significantly alter the overall distribution or availability of uses in the Preliminary Development Plan. For the purposes of this subsection, "land uses" or "uses" are defined in the aggregate, with specialty condos, mixed use condos, urban apartments, condos, village apartments, neighborhood apartments, row houses and small detached uses comprising a land use group and medium detached, standard detached, large and estate uses comprising another.

v. A change in density that does not exceed ten percent, provided such density change has not already been approved as a refinement to the underlying SAP or PDP, and does not result in fewer than 2,300 dwelling units in the Village.

Response: SAP North was approved in 2008. Since the approval of SAP North, the *Villebois Village Master Plan* was amended in 2010 to move the Elementary School from SAP North to SAP East which resulted in a corresponding residential density shift from SAP East to SAP North. Since these changes occurred as *Master Plan* amendments, they do not fall into the category of refinements, but must be reflected, as applicable, in applications following their adoption. Thus, the following analysis reflects the preceding *Master Plan* amendment as it affected unit counts in SAP North. Additionally, PDP 1N was approved for modifications in 2011 and 2013. The following analysis also reflects the final approved unit counts in PDP 1N, after these modifications.

For purposes of this analysis, it is important to keep in mind that changes to the mix/location of "land uses" are to be evaluated as described by the code – in the aggregate. The code defines one land use group as condos, apartments, row houses, and small detached uses – which will be referred to as the 'smaller land use group'

in the following analysis. The recent Planning Director's Interpretation approved under Case File AR12-0021 found small attached uses to be included in this smaller land use group. Recent approvals of PDP 3E and PDP 4E, as well as modifications in PDP 5S and PDP 1N, have approved Small Cottages as a replacement for the Small Attached and Row House uses. The code defines the second land use group as mediums, standards, large and estate uses – which will be referred to as the 'larger land use group' in the following analysis.

The total density shown for the subject area in SAP North is 97 units. The total number of units in the larger land use group in the PDP 2N area is 28, including 10 Standard and 18 Medium lots. The summation of the smaller land use group within the PDP 2N area from the SAP North plan is a total of 69, which includes 38 Small and 31 Row House lots. Under the SAP plan for this area, there is a predominance of the uses that are in the smaller land use category.

PDP 2N proposes the following refinements to the location and mix of units within the same area of SAP North.

- The block west of Palermo Street and east of Grahams Ferry Road shows 10 Standard lots on both the SAP North plan and the proposed PDP plan.
- The SAP North plans shows 31 Row Houses along the north side of Costa Circle West. The PDP plan proposes to replace the Row Houses with 22 Small Cottages.
- The portion of the above mentioned blocks north of the area described above shows 20 Small and 12 Medium lots in the SAP plan. Within this area, the PDP plan proposes 26 Small and 6 Medium lots. The same number of units is proposed; only 6 Medium lots are replaced with Small lots in the proposed PDP plan.
- The block in the northeast corner of the site included 18 Small and 6 Medium lots in the SAP plan. The proposed PDP plan shows 11 Smalls and 15 Small Cottages.

The PDP proposes a total of 90 units, including 10 Standard, 6 Medium, 37 Small and 37 Small Cottage lots. The proposed refinements result in fewer mediums and the replacement of Row Houses with Small Cottages (Note: Concurrent PDP 4C includes 38 Row Houses directly to the south of this area). The table below shows the number of units in each land use category currently within SAP North and the number of units in the SAP with the proposed refinement as well as the percent change in each aggregate land use category.

	Current Unit Count in SAP N	Proposed Unit Count in SAP N	% Change
Medium/Standard/ Large/Estate	174	162	-6.8%
Small / Small Cottage/ Row Houses/ Neighborhood Apt.	297	302	+1.6%
Total	471	464	-1.5%

NOTE: The Current Unit Count for SAP North reflects the adjusted unit counts resulting from the *Villebois Village Master Plan* Amendment approved by City Council on 8/2/10 that eliminated units in SAP East for the school relocation and added units to SAP North, and the approved unit counts for the PDP 1N Modifications as approved by DRB in 2011 and 2013.

The proposed refinements do not exceed the 10% standard. This proposal (combined with the concurrent proposal for PDP 4C) results in a total of 2,532 units within Villebois. This is above the density of 2,300 units required to be obtained across Villebois, meeting the refinement criteria.

vi. Changes that are significant under the above definitions, but necessary to protect an important community resource or improve the function of collector or minor arterial roadways.

Response: The PDP does not include changes that are significant under the above definitions.

2. Refinements meeting the above definition may be approved by the DRB upon the demonstration and finding that:

a) **The refinements will equally or better meet the conditions of the approved SAP, and the Goals, Policies and Implementation Measures of the Villebois Village Master Plan.**

Response: None of the conditions of approval for SAP North are specific to the proposed refinements. As the proposed refinements will not compromise the project's ability to comply with SAP conditions of approval, they will equally meet the conditions of approval of SAP North.

The proposed refinements will better meet the following Goals, Policies and Implementation Measures of the *Villebois Village Master Plan* than the SAP North plan.

- ***Land Use, General Land Use Plan Goal*** *– Villebois Village shall be a complete community that integrates land use, transportation, and natural resource elements to foster a unique sense of place and cohesiveness.*

  The proposed PDP 2N plan better integrates natural resource elements with land uses and transportation through additional area for linear greens providing more areas for recreational and community uses.

- ***Land Use, Residential Neighborhood Housing Policy 1*** *– Each of the Villebois Village's neighborhoods shall include a wide variety of housing options and shall provide home ownership options ranging from affordable housing to estate lots.*

  Since the majority of the subject PDP is adjacent to SAP Central, this area will provide a level of transition as densities in housing options increase from the edges of the project to the Village Center. By adding Small Cottages to the mix, the proposed PDP plan increases to the variety of housing options and the range of affordability options within the subject area, while still meeting a transition function.

- ***Land Use, Residential Neighborhood Housing Policy 10*** *– Natural features shall be incorporated into the design of each neighborhood to maximize their aesthetic character while minimizing impacts to said natural features.*

The addition of linear green area better incorporates the design of the subject area which enhances the aesthetic character of the neighborhood.

In summary, the proposed refinements will better integrate green spaces throughout the PDP and expand the range of housing options in the subject area. As the proposed refinements will not compromise the project's ability to comply with all other Goals, Policies and Implementation Measures of the *Villebois Village Master Plan*, they will equally meet all other Goals, Policies and Implementation Measures of the *Villebois Village Master Plan*.

b) **The refinement will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area, and**

Response: As described throughout this report, the proposed refinements will not result in significant detrimental impacts to the environment or natural or scenic resources of the PDP and Village area. Natural resources of the PDP are preserved and are not impacted by the proposed refinements.

c) **The refinement will not preclude an adjoining or subsequent PDP or SAP from development consistent with the approved SAP or Master Plan.**

Response: The refinements proposed with PDP 2N involve the replacement of Row Houses and some Mediums with Small Cottages, a decrease in the overall unit count by seven (7) units, the addition of linear green areas into the subject PDP area, and changes in the street network to accommodate street refinements approved with PDP 3E to allow for retention of a wetland. The proposed refinements do not affect the development potential of an adjoining or subsequent PDP. The proposed street network refinements will require some corresponding street network refinements in the abutting phases that remain to be planned at a PDP level. However, the approval of PDP 3E included a conceptual plan for how this could occur. The proposed street refinements with PDP 2N continue to support the concept shown within PDP 3E. Therefore, these refinements will not preclude an adjoining or subsequent PDP or SAP from developing consistent with the approved SAP or *Master Plan*.

3. **Amendments to the SAP, not including SAP amendments for phasing, must follow the same procedures applicable to adoption of the SAP itself. Amendments are defined as changes to elements of the SAP not constituting a refinement.**
4. **Amendments to the SAP for phasing will be processed as a Class II administrative review proposal.**

Response: The Applicant proposes an amendment of SAP North to modify the SAP phasing plan. The SAP phasing amendment has been added to the PDP request, which raises its review to the same level as the PDP. The requested amendment of the SAP North phasing plan is included in Exhibit IE of this Notebook.

K. PDP Approval Criteria

The Development Review Board may approve an application for a PDP only upon finding that the following approval criteria are met:

1. That the proposed PDP:

a. Is consistent with the standards identified in this section.

Response: This Supporting Compliance Report provides an explanation of how the proposed development is consistent with the standards of the Village zone.

b. Complies with the applicable standards of the Planning and Land Development Ordinance, including Section 4.140(.09)(J)(1)-(3).

Response: This Supporting Compliance Report provides an explanation of how the proposed development is consistent with the applicable standards of the Planning and Land Development Ordinance. A description of how the proposed development complies with Section 4.140(.09)J.1-3 is included in the subsequent pages of this report.

c. Is consistent with the approved Specific Area Plan in which it is located.

Response: The proposed Preliminary Development Plan is consistent with Specific Area Plan – North, as demonstrated by the plan sheets located in Section IIB and this report, and as refined and described earlier in this report.

d. Is consistent with the approved Pattern Book and, where required, the approved Village Center Architectural Standards

Response: No buildings are proposed with this Preliminary Development Plan. Subsequent Building Permit applications for residential buildings in this Preliminary Development Plan will document compliance with the *Architectural Pattern Book*. However, proposed lots are sized to accommodate proposed uses in a manner consistent with *Table V-1* and the *Architectural Pattern Book*.

COMMUNITY ELEMENTS BOOK

Lighting Master Plan

Response: This PDP application includes plans for street lighting within PDP 2N as illustrated on the *Street Tree/Lighting Plan*. The proposed lighting is consistent with the Community Elements Book.

Curb Extensions

Response: As shown on the *Tentative Plat*, curb extensions are proposed at a number of intersections in the PDP area. The location of these curb extensions is consistent with the Curb Extension Concept Plan Diagram in the Community Elements Book.

Street Tree Master Plan

Response: As shown on the *Street Tree/Lighting Plan*, street trees proposed along the streets in the PDP area are consistent with the respective designated street tree lists.

Site Furnishings

Response: No site furnishings are proposed with this PDP application; however, the concurrent FDP application for the proposed park and linear greens includes details regarding site furnishings in these areas (see Section VI of this Notebook).

Play Structures

Response: No play structures are proposed with this PDP application; however, the concurrent FDP application for the proposed park and areas includes details regarding these areas (see Section VI of this Notebook).

Tree Protection

Response: The Tree Protection component of the Community Elements Book for SAP – North (page 18) describes the goal, policies, and implementation measures that were used to promote the protection of existing trees in the design of the PDP area. The *Tree Preservation Plan* shows the trees that are proposed for preservation. A *Tree Protection Plan* has been prepared for this PDP, consistent with Implementation Measures 1 and 2 of the Tree Protection component of the *Community Elements Book*. The *Tree Protection Plans* were based on a Tree Report prepared by Morgan E. Holan, a certified arborist with Walter E. Knapp & Associates, LLC (see Section V of this notebook).

Plant List

Response: The *Community Elements Book* approved with SAP – North contains a Plant List (pages 19-21) of non-native and native trees, shrubs, and groundcovers, ferns, herbs, vines, perennials, grasses, and bulbs for species to plant throughout Villebois. Within the rights-of-way in this PDP, only street trees and rainwater components are proposed. Additional landscaping details are provided with the FDP application which is submitted concurrent with this PDP (see Section VI of this Notebook).

MASTER SIGNAGE AND WAYFINDING PLAN

Response: The SAP North *Signage & Wayfinding Plan* does not indicate any signage or monumentation within the subject PDP area.

RAINWATER PROGRAM

Response: A rainwater management plan is included with the supporting utility reports located in Section IIC of this Notebook. Rainwater will be treated through several components proposed within the rights-of-way as shown on the attached plans. The rainwater components within rights-of-way will be detailed within

subsequent construction drawings. The rainwater management plan included in this application is consistent with the rainwater program for SAP North.

2. **If the PDP is to be phased, that the phasing schedule is reasonable and does not exceed two years between commencement of development of the first, and completion of the last phase, unless otherwise authorized by the Development Review Board.**

Response: The PDP is proposed to be executed in one to three phases. Construction of PDP 2N is proposed to be phased as shown on the *Phasing Plan* (see Exhibit IIB). Proposed PDP phases may be constructed individually in sequence or may be combined. The first phase is planned to be built summer/fall of 2013, the second phase is planned to be built in 2014-2015, and the third phase is planned to be built in 2015-2016. The second and third phases will not be constructed until the Villebois/Costa Circle roundabout and extensions are built in conjunction with PDP 3E.

The attached plans (see Section IIB) show ultimate improvements that are consistent with the *Master Plan* and SAP North. The eastern edge of PDP 2N abuts the existing 110th Avenue right-of-way and PDP 3E on the east side of the 110th Avenue right-of-way. PDP 3E received planning approval in November 2012. A Development Agreement (Addendum No. 4, Resolution No. 2385) has been approved in conjunction with PDP 3E which addresses improvements related to the Villebois Drive/Costa Circle roundabout and street extensions, parks and the 18" water line in Villebois Drive along this edge.

Phase 1 of PDP 2N is currently planned to be constructed a year before the initial phases of PDP 3E at which time the 110th Avenue right-of-way will be vacated and the Villebois Drive/Costa Circle roundabout and street extensions will be constructed. Subsequent construction plans for this first phase will include a temporary road connection to 110th Avenue to serve the subject area until the ultimate improvements can occur. Interim storm facilities will also be established with phase 1 construction in the area designated for phase 3 (2015-2016 construction). These facilities will be removed following construction of the initial PDP 3E phases. The design of interim storm improvements will be coordinated with the City during construction plan review for phase 1.

Proposed phasing will exceed two years due to the dependence upon PDP 3E construction for the completion of the last phase of PDP 2N. The Applicant requests approval of five (5) years between the commencement of development of the first phase and completion of the last phase.

3. **Parks within each PDP or PDP phase shall be constructed prior to occupancy of 50% of the dwelling units in the PDP or PDP phase, unless weather or special circumstances prohibit completion, in which case bonding for the improvements shall be permitted.**

Response: The parks within PDP 2N will be completed prior to occupancy of 50% of the housing units, as required. Bonding will be provided if special circumstances prohibit completion.

4. **In the Central SAP, parks shall be constructed within each PDP as provided above, and that pro-rata portion of the estimated cost of Central SAP parks not within the PDP, calculated on a dwelling unit basis, shall be bonded or otherwise secured to the satisfaction of the city.**

Response: The proposed PDP is within SAP North and is not within the Central SAP Area, therefore this standard does not apply.

5. **The Development Review Board may require modifications to the PDP, or otherwise impose such conditions as it may deem necessary to ensure conformance with the approved SAP, the Villebois Village Master Plan, and compliance with applicable requirements and standards of the Planning and Land Development Ordinance, and the standards of this section.**

Response: This report demonstrates that the proposed Preliminary Development Plan is in conformance with Specific Area Plan – North, and thus, the *Villebois Village Master Plan* as well as the applicable requirements and standards of the Planning and Land Development Ordinance.

SECTION 4.139 SIGNIFICANT RESOURCE OVERLAY ZONE (SROZ) ORDINANCE

Response: Encroachments into the Upland Forest Preserve (OS-2) SROZ area at the east and west sides of the SROZ have been previously reviewed and approved with SAP North. The encroachment on the west side of the SROZ is for Palermo Street (previously Grimaldi Street). The encroachment on the east side of the SROZ is for portions of the Tonquin Trail (major pathway). Copies of the exhibit detailing these approved encroachments are included in Exhibit IIG. Additionally, mitigation for the SROZ encroachments approved with SAP North is planned in the southeastern portion of OS-2, adjacent to Regional Park 4 (RP-4). Exhibit IIG includes copies of the mitigation plan approved with SAP North. The proposed PDP plan is consistent with the encroachments and the mitigation approved at the SAP level.

SECTION 4.140 PLANNED DEVELOPMENT REGULATIONS

(.09) FINAL APPROVAL (STAGE TWO)

J. **A planned development permit may be granted by the Development Review Board only if it is found that the development conforms to all the following criteria, as well as to the Planned Development Regulations in Section 4.140:**

1. **The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council.**

Response: This Supporting Compliance Report demonstrates that the location, design, size, and uses proposed with the PDP are both separately and as a whole consistent with SAP North, and thus the *Villebois Village Master Plan*, the City's

Comprehensive Plan designation of Residential – Village for the area, and the City's Planning and Land Development Ordinance.

2. That the location, design, size and uses are such that traffic generated by the development at the most probable used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D, as defined in the Highway Capacity manual published by the National Highway Research Board, on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets. Immediately planned arterial and collector streets are those listed in the City's adopted Capital Improvement Program, for which funding has been approved or committed, and that are scheduled for completion within two years of occupancy of the development or four year if they are an associated crossing, interchange, or approach street improvement to Interstate 5.

Response: The location, design, size and uses are such that traffic generated within the PDP at the most heavily used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D. The proposed uses and the circulation system are consistent with the SAP – North application, which included an Internal Circulation Evaluation including an assessment of intersection performance by DKS Associates. A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

a. In determining levels of Service D, the City shall hire a traffic engineer at the applicant's expense who shall prepare a written report containing the following minimum information for consideration by the Development Review Board:

i. An estimate of the amount of traffic generated by the proposed development, the likely routes of travel of the estimated generated traffic, and the source(s) of information of the estimate of the traffic generated and the likely routes of travel; (Amended by Ord 561, adopted 12/15/03.)

ii. What impact the estimate generated traffic will have on existing level of service including traffic generated by (1) the development itself, (2) all existing developments, (3) Stage II developments approved but not yet built, and (4) all developments that have vested traffic generation rights under section 4.140(.10), through the most probable used intersection(s), including state and county intersections, at the time of peak level of traffic. This analysis shall be conducted for

each direction of travel if backup from other intersections will interfere with intersection operations. (Amended by Ord 561, adopted 12/15/03.).

Response: The traffic generated by the PDP and its impact on the existing LOS will be consistent with the SAP – North application. A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

b. The following are exempt from meeting the Level of Service D criteria standard:

i. A planned development or expansion thereof which generates three (3) new p.m. peak hour traffic trips or less;

ii. A planned development or expansion thereof which provides an essential governmental service.

Response: This PDP does not request an exemption from meeting the Level of Service D; therefore this criterion does not apply to this project.

c. Traffic generated by development exempted under this subsection on or after Ordinance No. 463 was enacted shall not be counted in determining levels of service for any future applicant. (Added by Ord 561, adopted 12/15/03.)

Response: The traffic generated by the PDP will be consistent with the SAP – North application. A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

d. Exemptions under 'b' of this subsection shall not exempt the development or expansion from payment of system development charges or other applicable regulations. (Added by Ord 561, adopted 12/15/03.)

Response: The subject PDP is not exempt from subsection 'b' and the system development charges will be provided as required.

e. In no case will development be permitted that creates an aggregate level of traffic at LOS "F". (Added by Ord 561, adopted 12/15/03.)

Response: The traffic generated by the PDP will be consistent with the SAP – North application. The DKS evaluation for SAP North showed that the development will not create an aggregate level of traffic at LOS "F". A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

3. That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services.

Response: This Supporting Compliance Report, the Utility and Drainage Reports (see Section IIC of this notebook) and the plan sheets (see *Composite Utility Plan* in Section IIB) show that the future residents of PDP 2N will be adequately served by the planned facilities and services.

SECTION 4.171 GENERAL REGULATIONS – PROTECTION OF NATURAL FEATURES & OTHER RESOURCES

(.02) General Terrain Preparation

A. All developments shall be planned designed, constructed and maintained with maximum regard to natural terrain features and topography, especially hillside areas, floodplains, and other significant land forms.

B. All grading, filling and excavating done in connection with any development shall be in accordance with the Uniform Building Code, all development shall be planned, designed, constructed and maintained so as to:

1. Limit the extent of disturbance of soils and site by grading, excavation and other land alterations.

2. Avoid substantial probabilities of: (1) accelerated erosion; (2) pollution, contamination or siltation of lakes, rivers, streams and wetlands; (3) damage to vegetation; (4) injury to wildlife and fish habitats.

3. Minimize the removal of trees and other native vegetation that stabilize hillsides, retain moisture, reduce erosion, siltation and nutrient runoff, and preserve the natural scenic character.

Response: The proposed grading plan sheets located in Section IIB show how the proposed grading will occur in consideration of the limitations that result from the natural terrain of the site in relation to property lines. Grading cannot extend onto the Chang property north of the PDP 2N area since property owner authorization cannot be obtained. For this reason, it is necessary to construct a retaining wall along the north property line of PDP 2N bordering the Chang property. Cross sections are included with the grading plan to show how grading in this area will work with fill being placed on the PDP 2N side of the retaining wall to allow the proposed lots to be built and how future development on the Chang side of the retaining wall will add fill to develop the remainder of the block. The retaining wall will be buried in place as fill on the Chang property occurs. Within this block, lots on the southwest side of the alley will be split level and lots on the northeast side of the block will be graded to be flat. There are fixed elevation points at the street and the alley which limit what can occur in between these points when building 2-story homes. The lots on the southwest side of the alley are suited to split level homes with the garage on the lower level; however, lots on the northeast side are not suitable for split level homes as it would not be practical to have the garage on the upper level. Grading in this portion of PDP 2N is planned to occur either in conjunction with or following development of the Costa Circle/Villebois Drive roundabout and extensions and PDP 3E. Proposed grading shows maximum regard to

the natural terrain and topography, and is what is necessary to establish the proposed development.

All subsequent grading, filling and excavating will be done in accordance with the Uniform Building Code. Disturbance of soils and removal of trees and other native vegetation will be limited to the extent necessary to construct the proposed development. Construction will occur in a manner that avoids substantial probabilities of accelerated erosion; pollution, contamination or siltation of lakes, rivers, streams and wetlands; damage to vegetation; and injury to wildlife and fish habitats.

(.03) Hillsides: All developments proposed on slopes greater than 25% shall be limited to the extent that:

Response: The subject Preliminary Development Plan does not include any areas of slopes in excess of 25%. Therefore, this standard does not apply to this application.

(.04) Trees and Wooded Areas.

A. All developments shall be planned, designed, constructed and maintained so that:

1. Existing vegetation is not disturbed, injured, or removed prior to site development and prior to an approved plan for circulation, parking and structure location.

2. Existing wooded areas, significant clumps/groves of trees and vegetation, and all trees with a diameter at breast height of six inches or greater shall be incorporated into the development plan and protected wherever feasible.

3. Existing trees are preserved within any right-of-way when such trees are suitably located, healthy, and when approved grading allows.

B. Trees and woodland areas to be retained shall be protected during site preparation and construction according to City Public Works design specifications, by:

1. Avoiding disturbance of the roots by grading and/or compacting activity.

2. Providing for drainage and water and air filtration to the roots of trees which will be covered with impermeable surfaces.

3. Requiring, if necessary, the advisory expertise of a registered arborist/horticulturist both during and after site preparation.

4. Requiring, if necessary, a special maintenance, management program to insure survival of specific woodland areas of specimen trees or individual heritage status trees.

Response: The *Tree Preservation Plan,* located in Section IIB, depicts existing trees within the subject area and identifies trees to be retained and to be removed.

This application includes a request for approval of a Type "C" Tree Removal Plan, which can be found in Section V of this Notebook.

Section V includes the Tree Report prepared by Morgan Holan addressing existing trees and development impacts within the subject area, a tree inventory and tree mitigation details. The information contained in Section V demonstrates that the subject Preliminary Development Plan is designed to incorporate all trees with a diameter at breast height of six inches or greater into the plan where feasible. Trees rated "Important" or "Good" have been retained to the extent feasible within the area addressed by this PDP. Trees that are retained, as identified in the *Tree Preservation Plan*, will be protected during site preparation and construction in accordance with City Public Works design specifications and Section 4.171(.04).

(.05) <u>High Voltage Power line Easements and Rights of Way and Petroleum Pipeline Easements:</u>

A. Due to the restrictions placed on these lands, no residential structures shall be allowed within high voltage powerline easements and rights of way and petroleum pipeline easements, and any development, particularly residential, adjacent to high voltage powerline easements and rights of way and petroleum pipeline easement shall be carefully reviewed.

B. Any proposed non-residential development within high voltage powerline easements and rights of way and petroleum pipeline easements shall be coordinated with and approved by the Bonneville Power Administration, Portland General Electric Company or other appropriate utility, depending on the easement or right of way ownership.

<u>Response:</u> This Preliminary Development Plan does not contain any high voltage powerline or petroleum pipeline easements or rights of way.

(.06) <u>Hazards to Safety: Purpose:</u>

A. To protect lives and property from natural or human-induced geologic or hydrologic hazards and disasters.

B. To protect lives and property from damage due to soil hazards.

C. To protect lives and property from forest and brush fires.

D. To avoid financial loss resulting from development in hazard areas.

<u>Response:</u> Development of the subject area will occur in a manner that minimizes potential hazards to safety.

(.07) <u>Standards for Earth Movement Hazard Areas:</u>

A. No development or grading shall be allowed in areas of land movement, slump or earth flow, and mud or debris flow, except under one of the following conditions.

Response: Development of the subject area will occur in a manner that minimizes potential hazards to safety. No earth movement hazard areas have been identified within the subject PDP area.

(.08) Standards for Soil Hazard Areas:

A. Appropriate siting and design safeguards shall insure structural stability and proper drainage of foundation and crawl space areas for development on land with any of the following soil conditions: wet or high water table; high shrink-swell capability; compressible or organic; and shallow depth-to-bedrock.

B. The principal source of information for determining soil hazards is the State DOGAMI Bulletin 99 and any subsequent bulleting and accompanying maps. Approved site-specific soil studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the soil hazards database accordingly.

Response: Development of the subject area will occur in a manner that minimizes potential hazards to safety. No soil hazard areas have been identified within the subject area.

(.09) Historic Protection: Purpose:

A. To preserve structures, sites, objects, and areas within the City of Wilsonville having historic, cultural, or archaeological significance.

Response: A Historic/ Cultural Resource Inventory was previously conducted for the property identified as SAP – North. The inventory shows that the subject PDP does not include any sites, objects, or areas having historic, cultural, or archaeological significance. Therefore, the standards of this section are not applicable.

SECTION 4.172 FLOOD PLAIN REGULATIONS

Response: The subject PDP does not include any flood plain areas.

SECTION 4.176 LANDSCAPING, SCREENING & BUFFERING

Response: Landscaping will be provided in accordance with the standards in Section 4.176. The *Street Tree/Lighting Plan* depicts street trees along rights-of-way within the subject Preliminary Development Plan area. The plan has been developed in conformance with the Community Elements Book and the applicable standards of Section 4.176. Landscaping in the park areas will be reviewed with the concurrent FDP application in Section VI of this Notebook.

SECTION 4.177 STREET IMPROVEMENT STANDARDS

Response: The rights-of-way proposed within the subject PDP are shown on the plan sheets in Section IIB. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with the final plat.

The plan sheets located in Section IIB demonstrate that all proposed access drives (alleys) within the PDP area will have a minimum improvement width of 16 feet and will provide two-way travel. All access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions.

Clear vision areas will be maintained in accordance with the standards of Subsection 4.177(.01)(I). Vertical clearance will be maintained over all streets and access drives in accordance with Subsection 4.177(.01)(J).

SECTION 4.178 SIDEWALK & PATHWAY STANDARDS

(.01) Sidewalks. All sidewalks shall be concrete and a minimum of five (5) feet in width, except where the walk is adjacent to commercial storefronts. In such cases, they shall be increased to a minimum of ten (10) feet in width.

(.02) Pathways

A. Bicycle facilities shall be provided using a bicycle lane as the preferred facility design. The other facility designs listed will only be used if the bike lane standard cannot be constructed due to physical or financial constraints. The alternative standards are listed in order of preference.

1. Bike lane. This design includes 12-foot minimum travel lanes for autos and paved shoulders, 5-6 feet wide for bikes, that are striped and marked as bicycle lanes. This shall be the basic standard applied to bike lanes on all arterial and collector streets in the City, with the exception of minor residential collectors with less than 1,500 (existing or anticipated) vehicle trips per day.

Response: The PDP plan sheets located in Section IIB (see the *Circulation Plan*) depict cross-sections of the proposed sidewalks and pathways in compliance with the above standards and Specific Area Plan – North.

SECTION 4.610.40 TYPE C PERMIT

A request for approval of the Tree Removal Plan for PDP 2N can be found in Section V of this Notebook.

II. PROPOSAL SUMMARY & CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable requirements of the Village Zone and other applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for the requested Preliminary Development Plan. Therefore, the applicant requests approval of this application. Concurrent applications for a Tentative Plat, Zone Change, Tree Removal Plan, and Final Development Plan are included in this notebook as Sections III, IV, V, and VI, respectively, pursuant to City requirements.

PHASE 2 NORTH
VILLEBOIS
PRELIMINARY DEVELOPMENT PLAN

TL 2915, PART OF 2916, 2922 & 2995, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

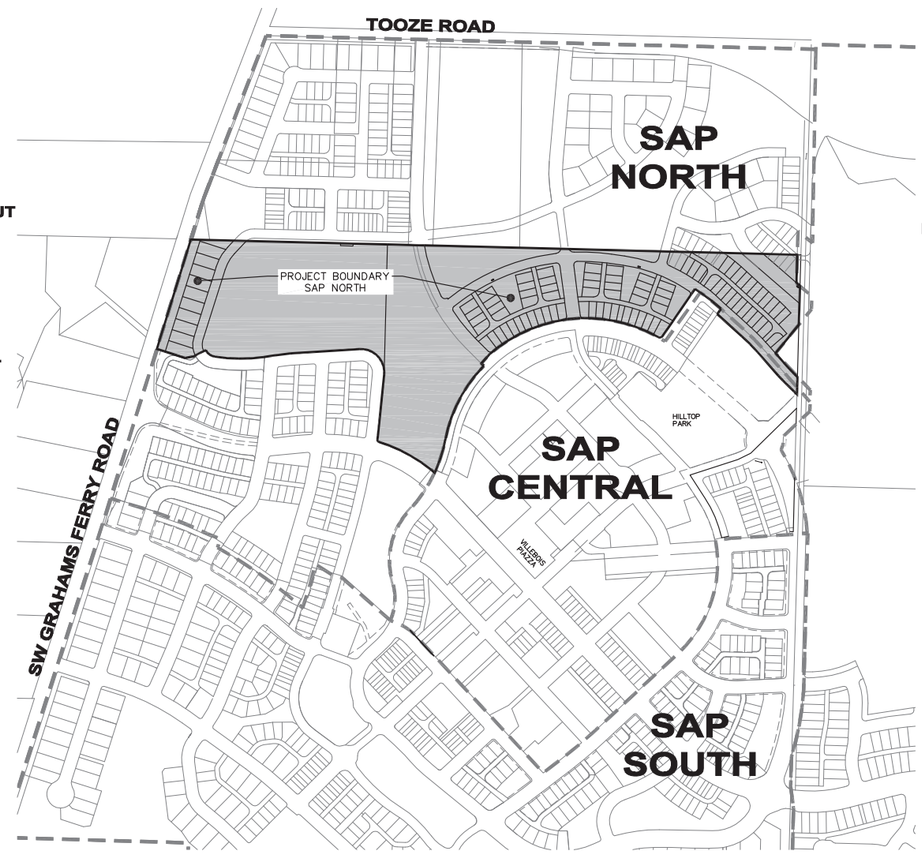
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

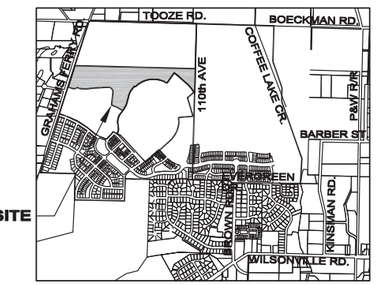
CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE





VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1	COVER SHEET
2.1	EXISTING CONDITIONS
2.2	EXISTING CONDITIONS
3.1	AERIAL PHOTOGRAPH
3.2	AERIAL PHOTOGRAPH
4.1	TENTATIVE PLAT
4.2	TENTATIVE PLAT
4.3	TENTATIVE PLAT
4.4	TENTATIVE PLAT
4.5	TENTATIVE PLAT
5.1	GRADING / EROSION CONTROL PLAN
5.2	GRADING / EROSION CONTROL PLAN
6.1	COMPOSITE UTILITY PLAN
6.2	COMPOSITE UTILITY PLAN
7.1	CIRCULATION PLAN
7.2	CIRCULATION PLAN
7.3	STREET SECTIONS
8.1	SITE / LAND USE PLAN
8.2	SITE / LAND USE PLAN
8.3	TYPICAL LOT PLAN
9.1	TREE PRESERVATION PLAN
9.2	TREE PRESERVATION PLAN
9.3	SROZ IMPACTS & MITIGATION PLAN
10.1	STREET TREE / LIGHTING PLAN
10.2	STREET TREE / LIGHTING PLAN
11.1	PHASING PLAN
11.2	PHASING PLAN

N

SCALE
300 0 150 300
1 INCH = 300 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(1)PTitle.dwg - SHEET: TITLE May. 3, 13 - 12:28 PM jjk

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

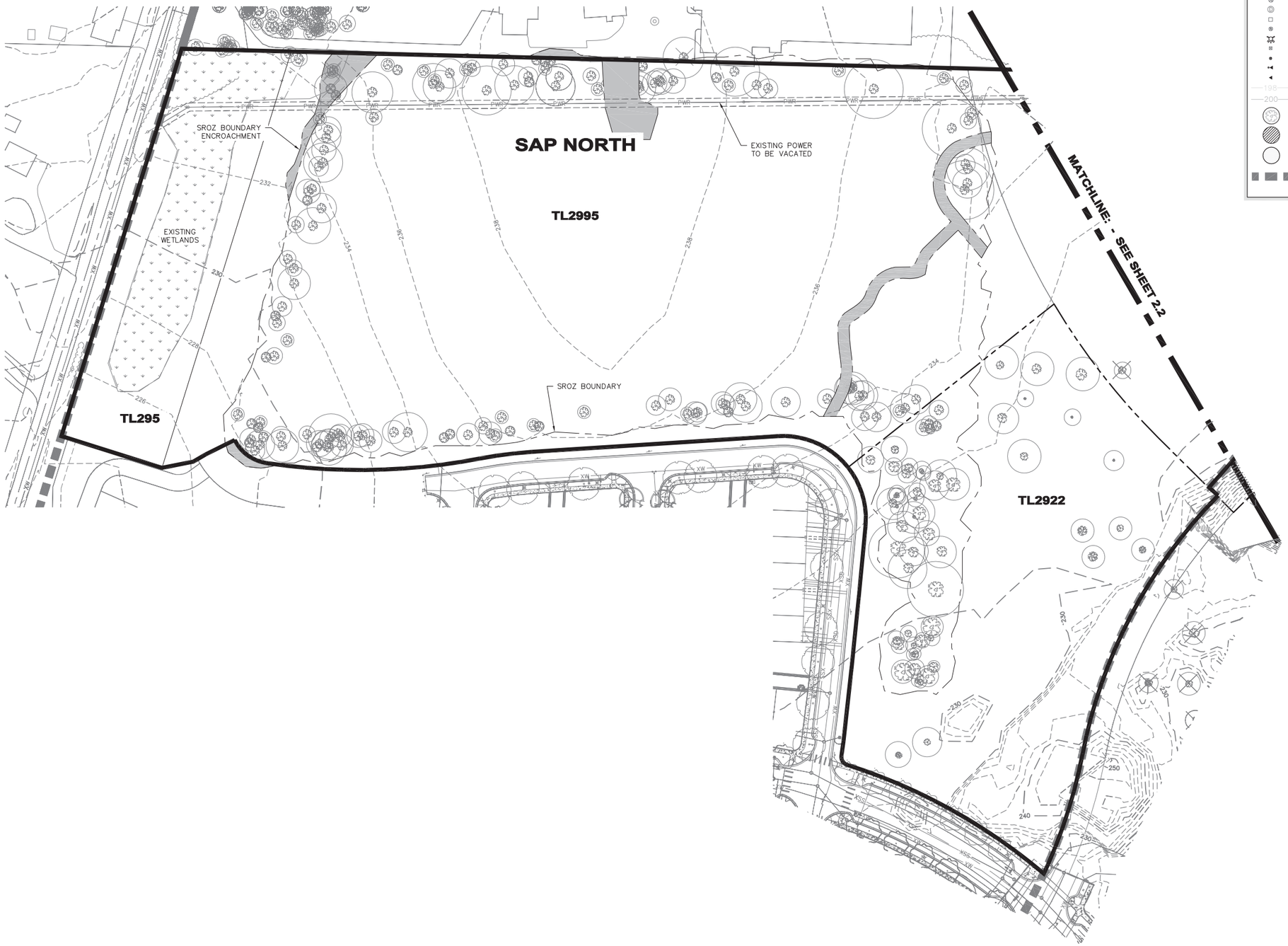
PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Cover Sheet

DATE 04/15/2013

1



LEGEND

- EASEMENT LINES
- XSS — EX SANITARY SEWER
- XSD — EX STORM DRAIN
- XW — EX WATER LINE
- GAS — EX GAS LINE
- OIL — EX FUEL LINE
- XOH — EX OVERHEAD POWER LINE
- EX SANITARY MANHOLE
- EX SANITARY CLEANOUT
- EX STORM MANHOLE
- EX CATCH BASIN
- EX STORM CLEANOUT
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX BLOW-OFF
- EX THRUST BLOCK
- 198 — EX 2-FT CONTOUR
- 200 — EX 10-FT CONTOUR
- EX TREE TO REMAIN
- EX TREE MOST LIKELY TO BE REMOVED
- EX TREE TO BE REMOVED
- SAP BOUNDARY

SCALE
100 0 50 100
1 INCH = 100 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(2)PExst.dwg - SHEET: EXISTING May. 3, 13 - 12:29 PM jjk

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

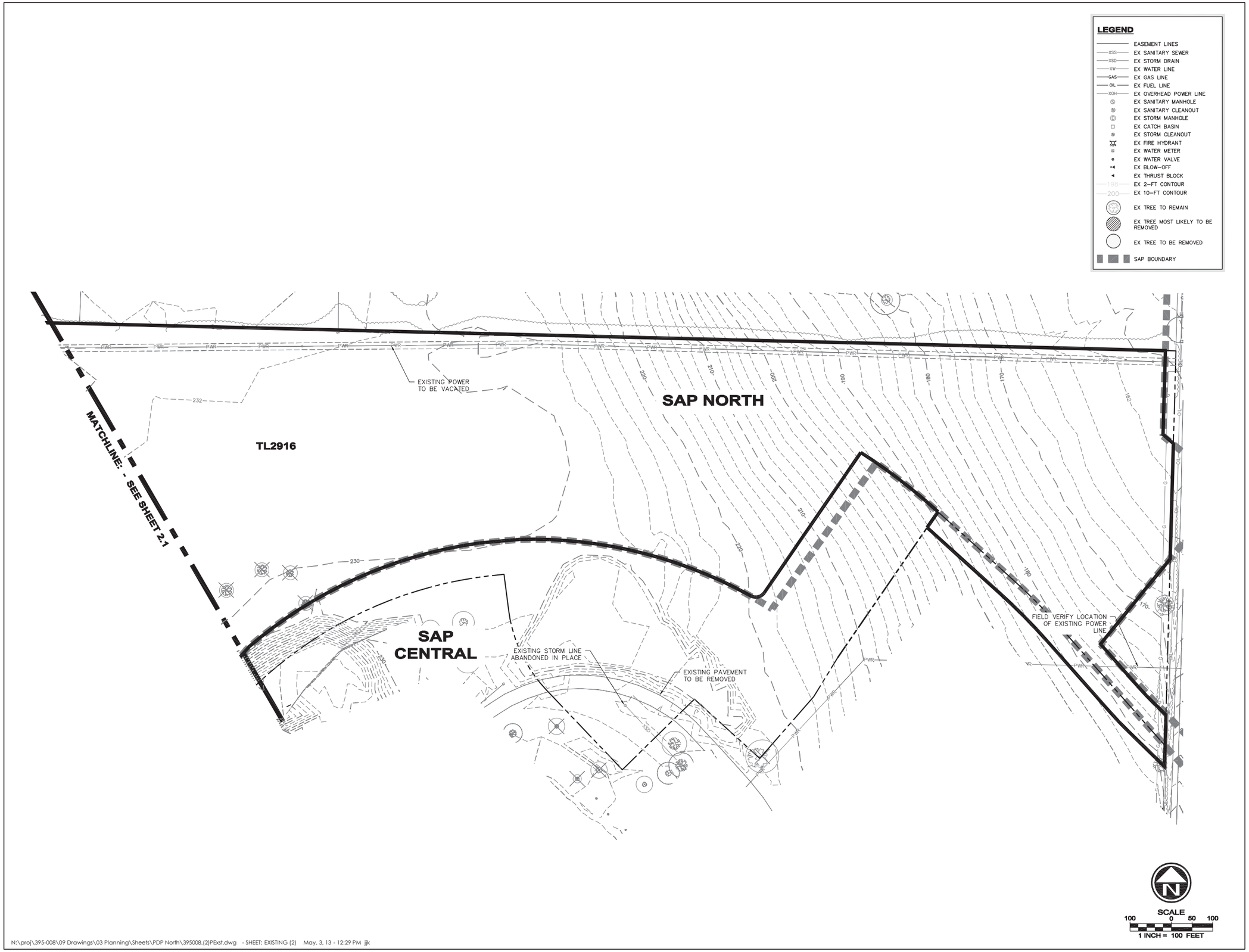
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Existing Conditions

DATE 04/15/2013

2.1



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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Existing Conditions

DATE 04/15/2013

2.2

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Aerial
Photograph

DATE 04/15/2013

3.1

SCALE
60 0 30 60
1 INCH = 60 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(3)PPhot.dwg - SHEET: PHOTO (2) May. 3, 13 - 12:30 PM jjk

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

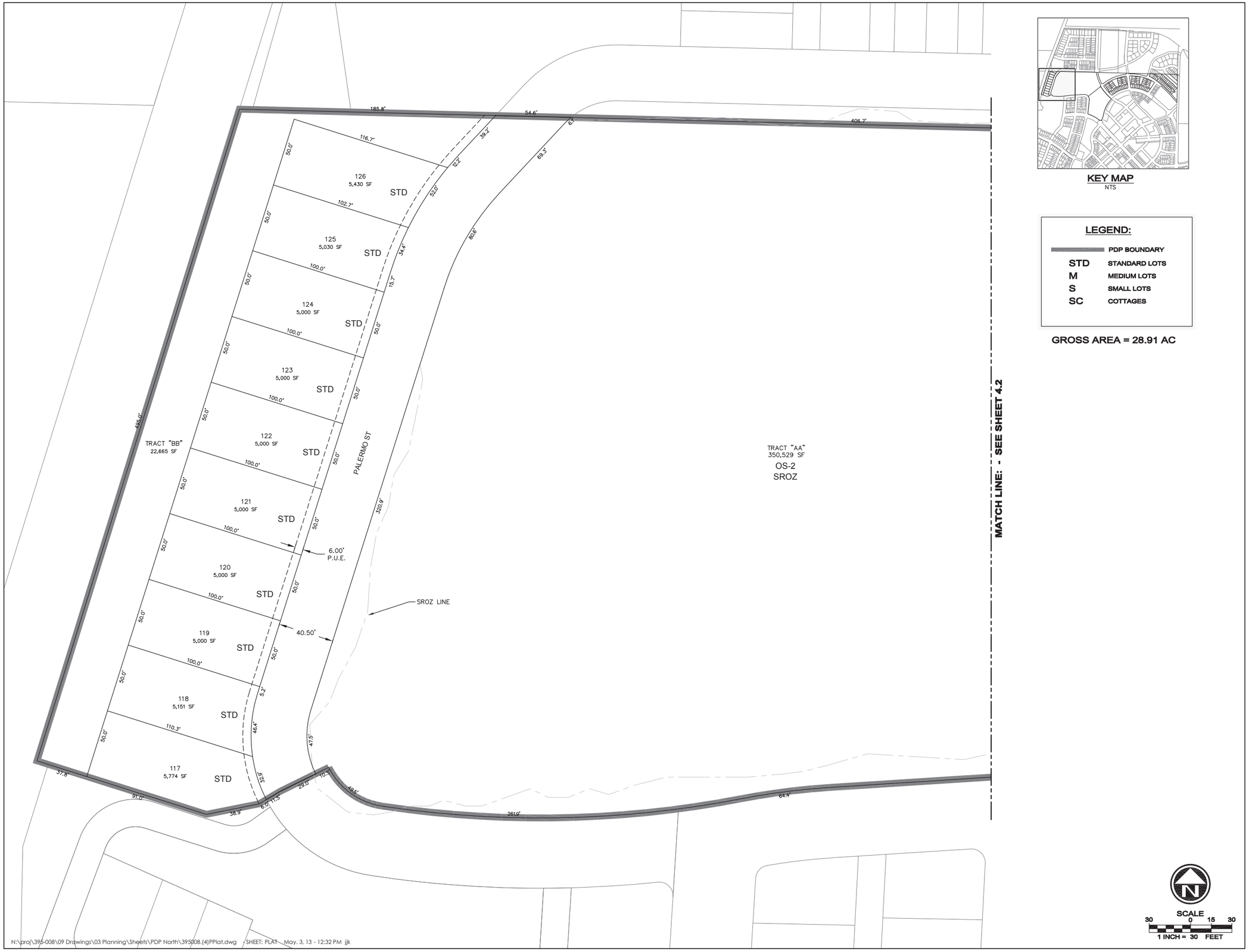
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Aerial Photograph

DATE 04/15/2013

3.2



KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.1

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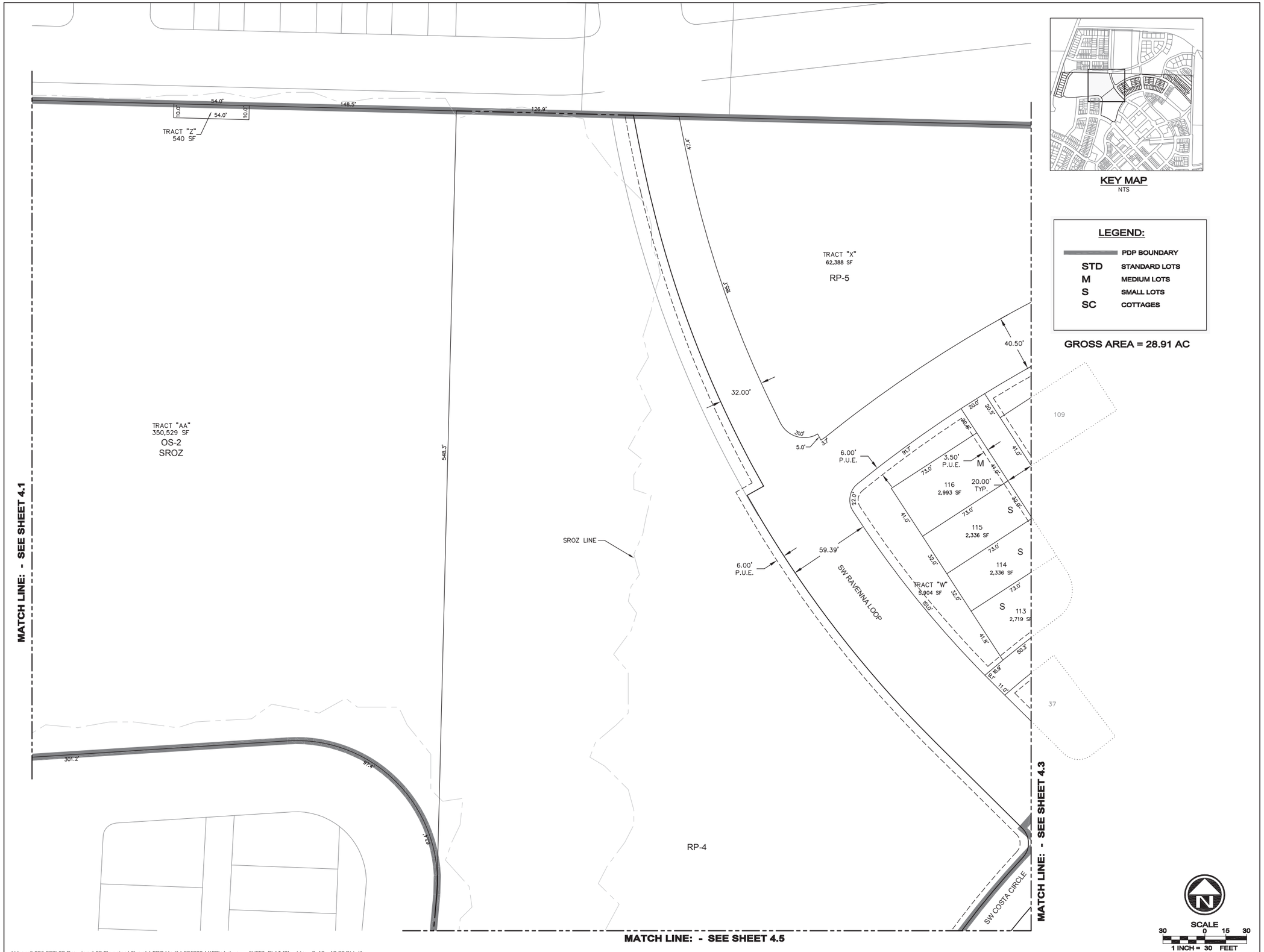

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.2

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

SCALE
30 0 15 30
1 INCH = 30 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.[4]PPlat.dwg - SHEET: PLAT (3) May. 3, 13 - 12:32 PM jjk

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.3

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.4

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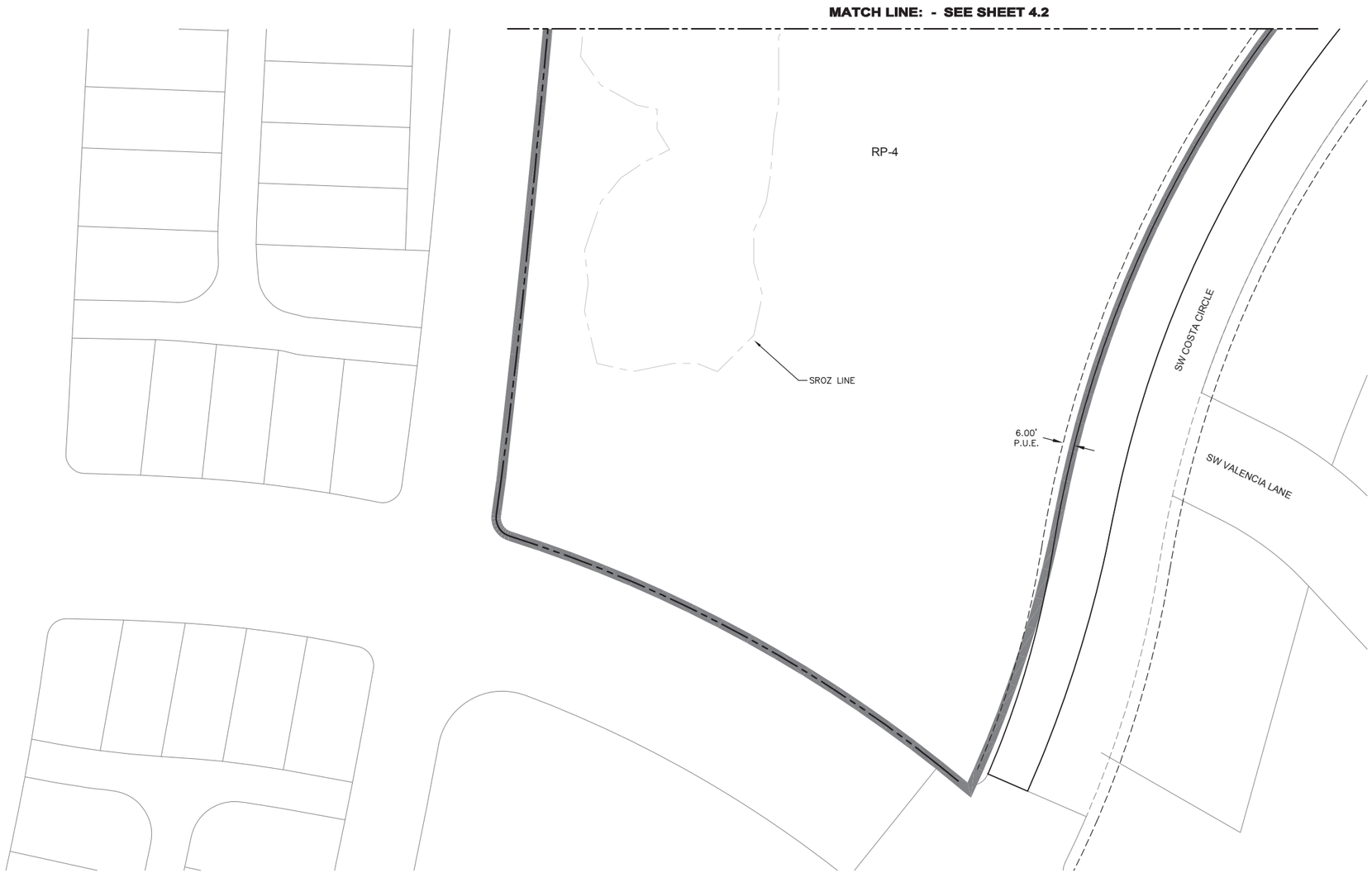

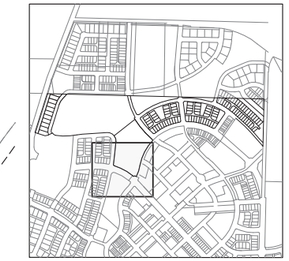

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

SCALE
30 0 15 30
1 INCH = 30 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(4)PPlat.dwg - SHEET: PLAT (5) May. 3, 13 - 12:33 PM jjk

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Tentative
Plat

DATE 04/15/2013

4.5

LEGEND:

- SD — PROPOSED STORM DRAIN
- 224 — PROPOSED 2-FT CONTOUR
- 230 — PROPOSED 10-FT CONTOUR
- TREE PROTECTION FENCE
- xx — SEDIMENT FENCE
- BIOBAG BARRIER
- GRAVEL CONSTRUCTION ENTRANCE
- RAINWATER SWALE
- RAINWATER BIO-RETENTION CELL
- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- EXISTING TREES TO BE REMOVED
- PROPOSED LOCK N' LOAD RETAINING WALL

N

SCALE
60 0 30 60
1 INCH = 60 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(5)PGrad.dwg - SHEET: GRADING May. 3, 13 - 12:34 PM jjk

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PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

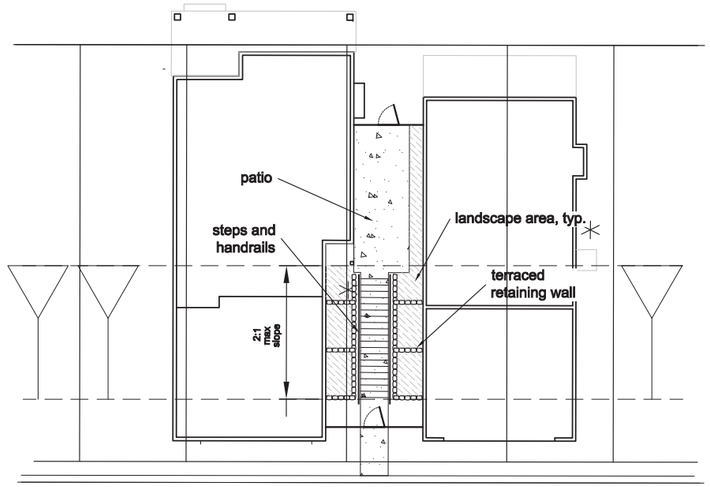
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Grading & Erosion Control Plan

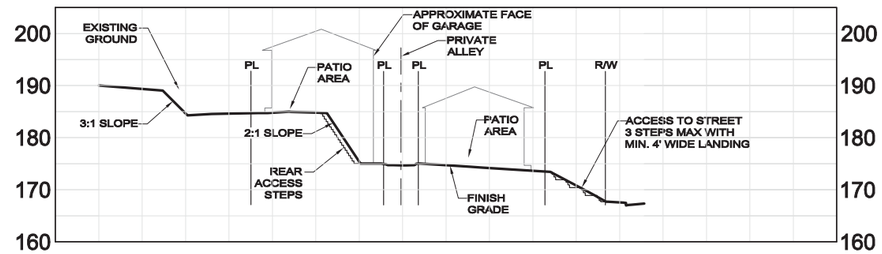
DATE 04/15/2013

5.1



SPLIT LOT - TYPICAL SHARED YARD LAYOUT

SCALE: 1" = 10'



TYPICAL SPLIT LOT CROSS SECTION

HORIZONTAL SCALE: 1"=40'; VERTICAL: N.T.S.

LEGEND:

- —SD— PROPOSED STORM DRAIN
- —224— PROPOSED 2-FT CONTOUR
- —230— PROPOSED 10-FT CONTOUR
- TREE PROTECTION FENCE
- —xx— SEDIMENT FENCE
- BIOBAG BARRIER
- GRAVEL CONSTRUCTION ENTRANCE
- RAINWATER SWALE
- RAINWATER BIO-RETENTION CELL
- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- EXISTING TREES TO BE REMOVED
- PROPOSED LOCK N' LOAD RETAINING WALL

LOCK N' LOAD RETAINING WALL

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GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Grading & Erosion Control Plan

DATE 04/15/2013

5.2

LEGEND:

- SS — PROPOSED SANITARY SEWER
- XSS — EX SANITARY SEWER
- SD — PROPOSED STORM DRAIN
- XSD — EX STORM DRAIN
- W — PROPOSED WATER LINE
- XW — EX WATER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED FIRE HYDRANT
- RAINWATER SWALE
- RAINWATER BIO-RETENTION CELL

NOTES:

1. ALL SANITARY TO BE 8" DIAMETER PIPE.
2. ALL WATER MAINS TO BE 8" DIAMETER PIPE, UNLESS OTHERWISE NOTED.
3. ALL STORM DRAIN TO BE 12" DIAMETER PIPE, UNLESS OTHERWISE NOTED.

SCALE
60 0 30 60
1 INCH = 60 FEET

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Villebois

POLYGON NW COMPANY

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GEODESIGN, INC

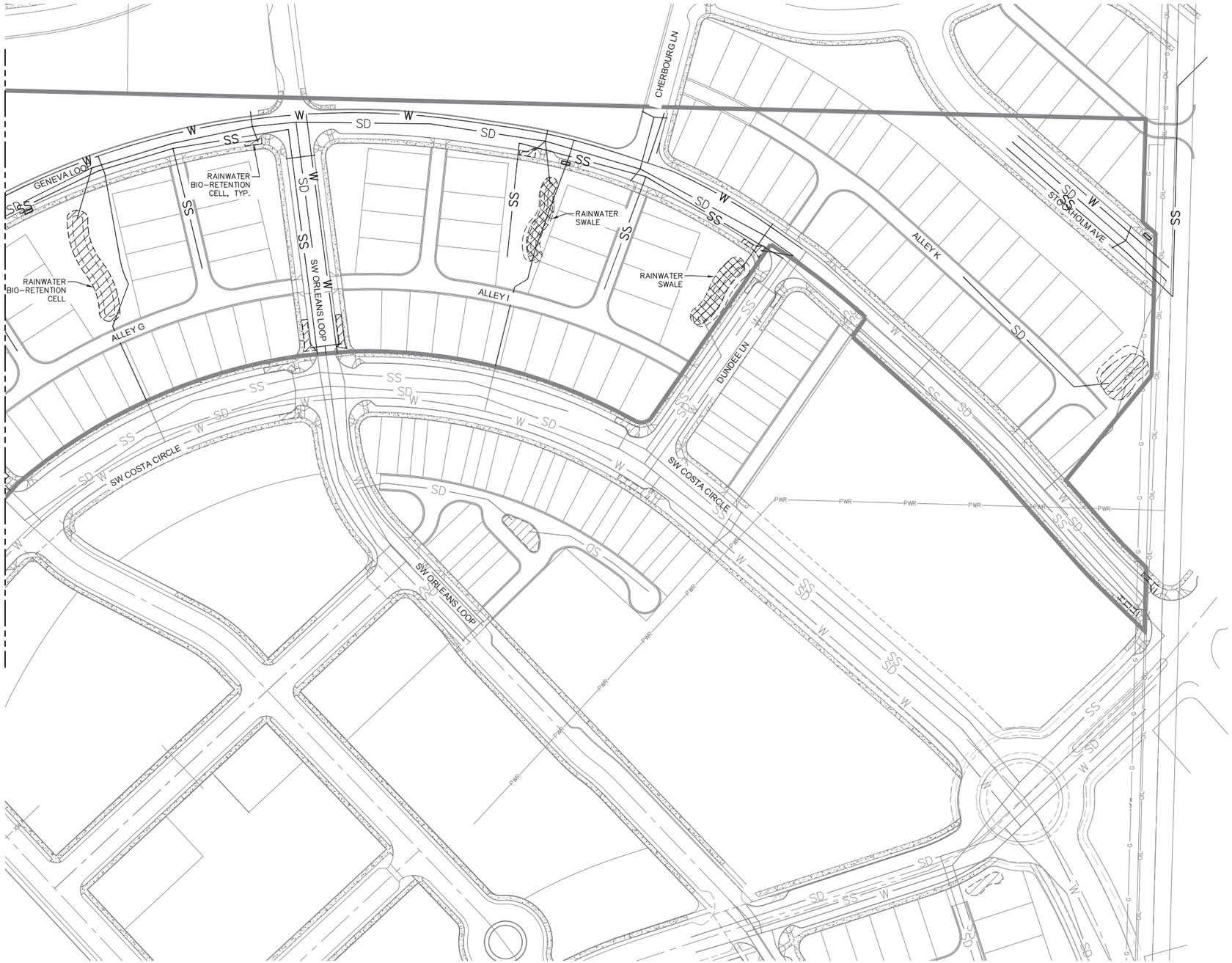
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Composite Utility Plan

DATE 04/15/2013

6.1



LEGEND:

- SS — PROPOSED SANITARY SEWER
- XSS — EX SANITARY SEWER
- SD — PROPOSED STORM DRAIN
- XSD — EX STORM DRAIN
- W — PROPOSED WATER LINE
- XW — EX WATER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED FIRE HYDRANT
- RAINWATER SWALE
- RAINWATER BIO-RETENTION CELL

NOTES:

1. ALL SANITARY TO BE 8" DIAMETER PIPE.
2. ALL WATER MAINS TO BE 8" DIAMETER PIPE, UNLESS OTHERWISE NOTED.
3. ALL STORM DRAIN TO BE 12" DIAMETER PIPE, UNLESS OTHERWISE NOTED.

SCALE
60 0 30 60
1 INCH = 60 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Composite Utility Plan

DATE 04/15/2013

6.2

LEGEND:

E1 ROAD SECTION TYPE SEE SHEET 7.3 FOR DETAILS

PROJECT BOUNDARY LINE

SCALE 60 0 30 60
1 INCH = 60 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GIODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Circulation
Plan

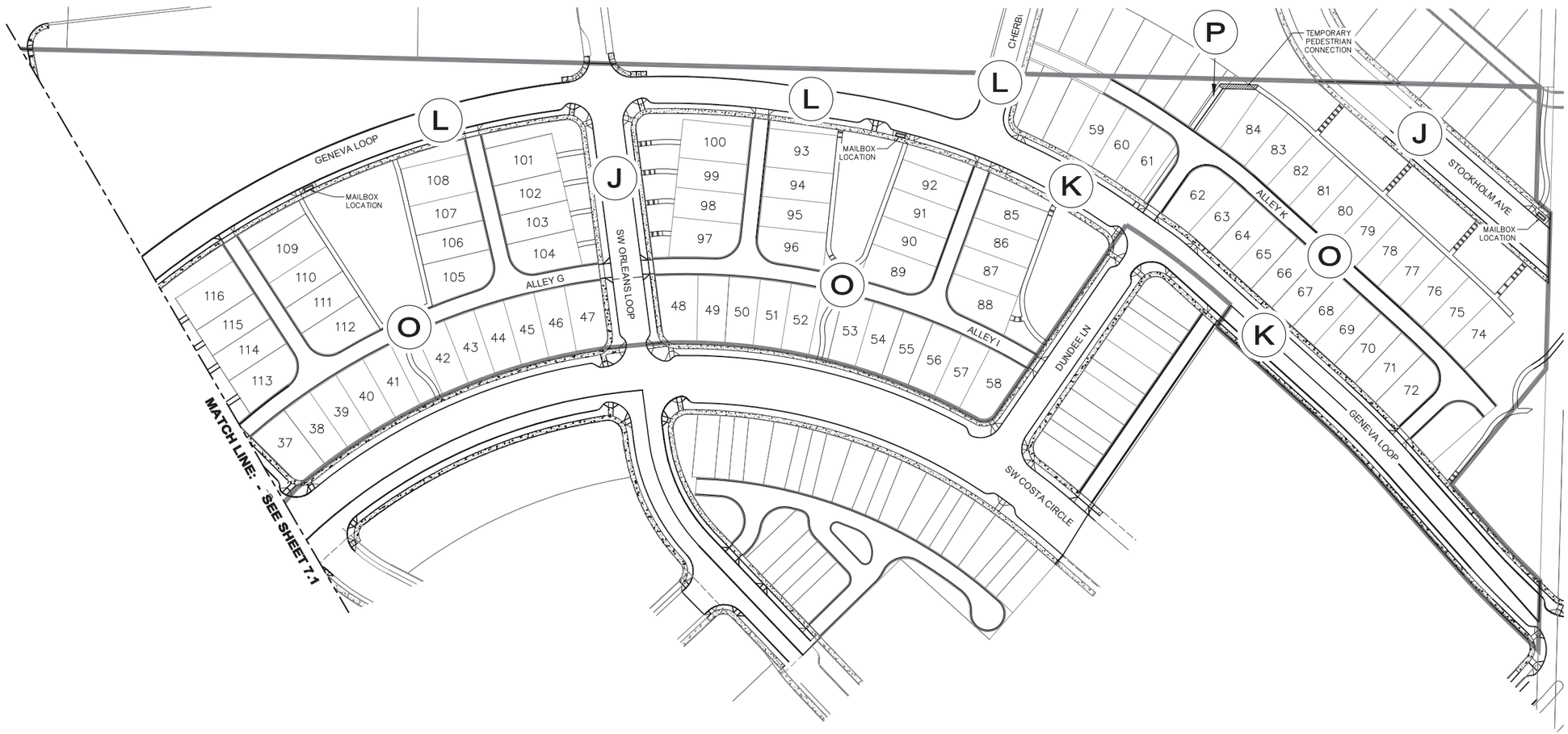
DATE 04/15/2013

7.1

LEGEND:

E1 ROAD SECTION TYPE SEE SHEET 7.3 FOR DETAILS

PROJECT BOUNDARY LINE



N

SCALE

60 0 30 60

1 INCH = 60 FEET

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

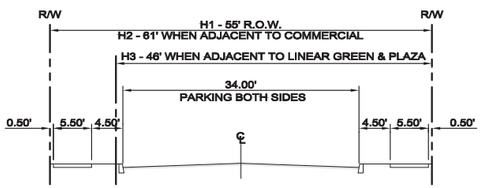
Preliminary Development Plan

Circulation Plan

DATE 04/15/2013

7.2

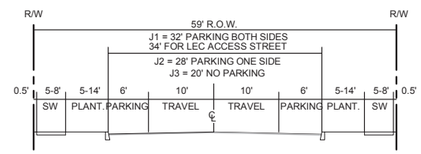
H1 H2 H3



RESIDENTIAL VILLAGE CENTER

SCALE: 1"=10'

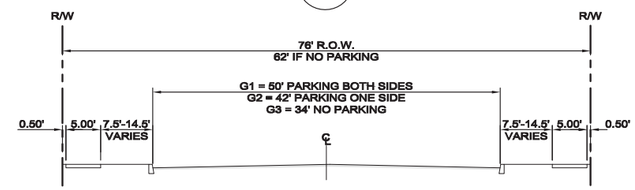
J



RESIDENTIAL - STANDARD - LEC ACCESS

SCALE: 1"=10'

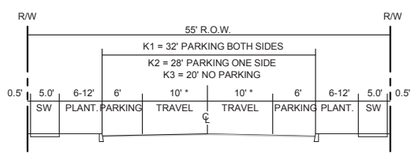
G



RESIDENTIAL - VILLAGE LOOP

SCALE: 1"=10'

K

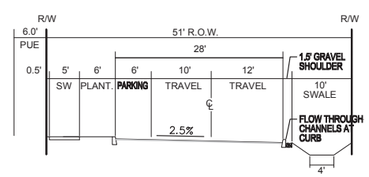


RESIDENTIAL - MINIMUM

SCALE: 1"=10'

* 12' TRAVEL ON OUTSIDE LANE WHEN PARKING ONE SIDE.

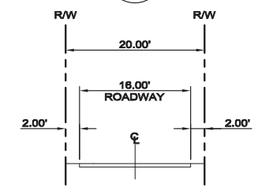
L



RESIDENTIAL - PARKING ONE SIDE

SCALE: 1"=10'

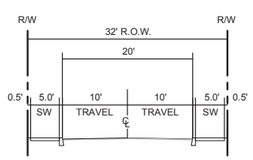
O



PRIVATE LANE

SCALE: 1"=10'

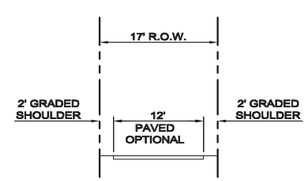
M



RESIDENTIAL - NO PARKING

SCALE: 1"=10'

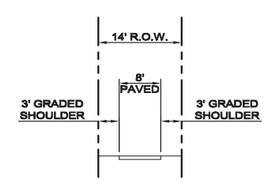
P



MAJOR PATHWAY

SCALE: 1"=10'

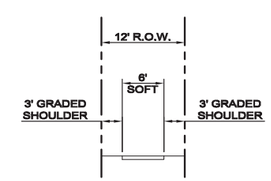
Q



MINOR PATHWAY

SCALE: 1"=10'

R



NATURE TRAIL

SCALE: 1"=10'

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Villebois

POLYGON NW COMPANY

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OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

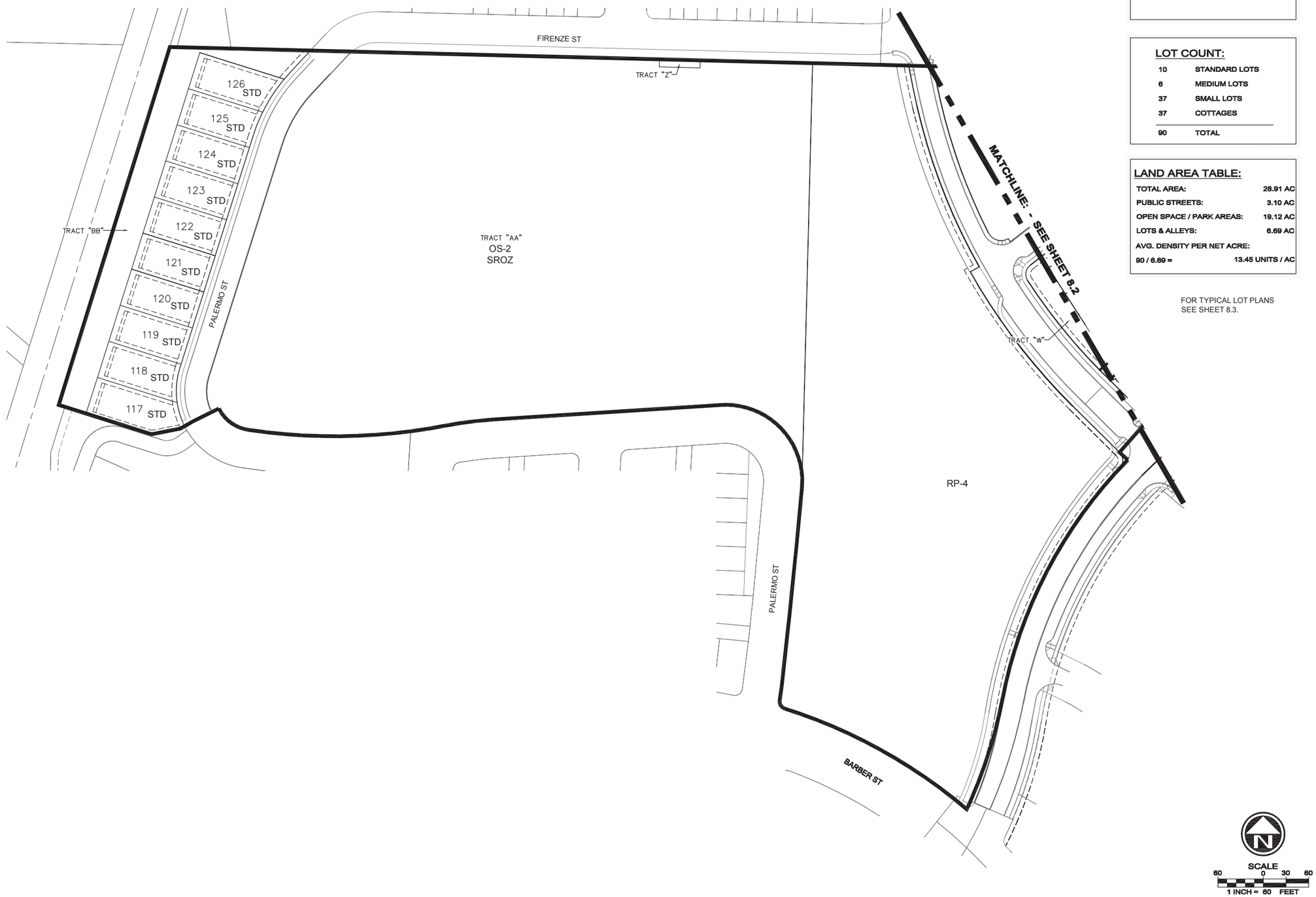
PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Street
Sections

DATE 04/15/2013

7.3



LEGEND:

▬	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

LOT COUNT:

10	STANDARD LOTS
6	MEDIUM LOTS
37	SMALL LOTS
37	COTTAGES
90	TOTAL

LAND AREA TABLE:

TOTAL AREA:	28.91 AC
PUBLIC STREETS:	3.10 AC
OPEN SPACE / PARK AREAS:	19.12 AC
LOTS & ALLEYS:	6.69 AC
AVG. DENSITY PER NET ACRE:	
90 / 6.69 =	13.45 UNITS / AC

FOR TYPICAL LOT PLANS
SEE SHEET 8.3.

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PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Site / Land Use Plan

DATE 04/15/2013

8.1

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LAND AREA TABLE:

TOTAL AREA:	28.91 AC
PUBLIC STREETS:	3.10 AC
OPEN SPACE / PARK AREAS:	19.12 AC
LOTS & ALLEYS:	6.69 AC
AVG. DENSITY PER NET ACRE:	
90 / 6.69 =	13.45 UNITS / AC

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

LOT COUNT:

10	STANDARD LOTS
6	MEDIUM LOTS
37	SMALL LOTS
37	COTTAGES
90	TOTAL

FOR TYPICAL LOT PLANS
SEE SHEET 8.3.

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OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

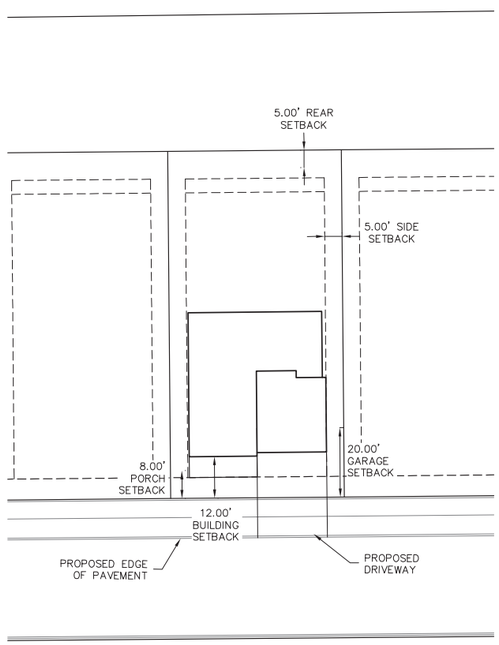
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Site / Land Use Plan

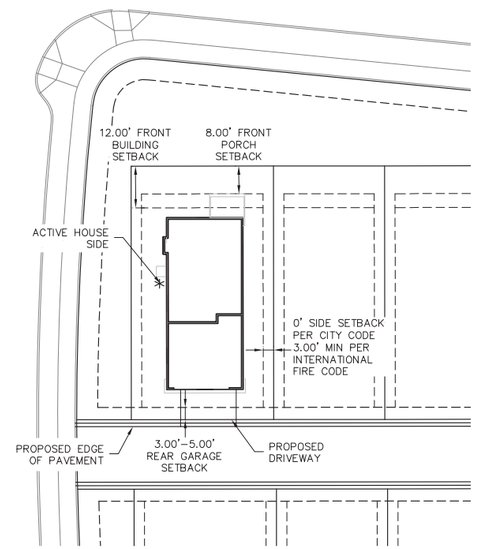
DATE 04/15/2013

8.2



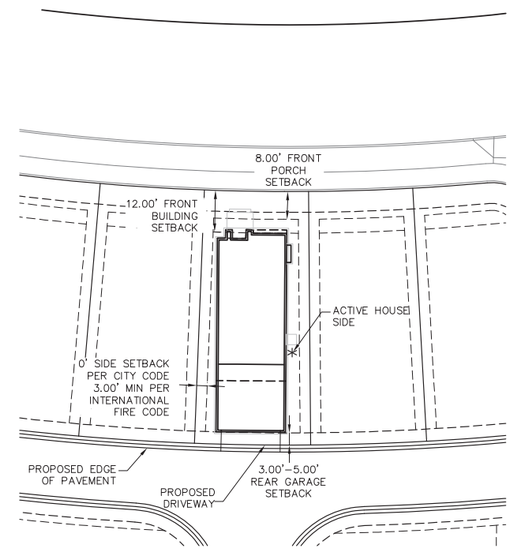
TYPICAL LOT PLAN - FRONT LOADED STANDARD

SCALE: 1" = 20'



TYPICAL LOT PLAN - REAR LOADED SMALL & MEDIUM

SCALE: 1" = 20'



TYPICAL LOT PLAN - REAR LOADED COTTAGE

SCALE: 1" = 20'

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GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Typical Lot
Plan

DATE 04/15/2013

8.3

NOTES

ALL CONSTRUCTION AND GRADING WITHIN TREE PROTECTION ZONE IS TO BE COMPLETED UNDER DIRECT SUPERVISION OF PROJECT ARBORIST.
CONTACT: MORGAN HOLEN
PHONE: 503-646-4349

THE INTENT OF THE PLAN IS TO RETAIN AND INCORPORATE THE MAXIMUM QUANTITY OF TREES WITH IMPORTANT, GOOD, AND MODERATE CLASSIFICATIONS. THE FOLLOWING CLASSIFICATION SYSTEM WAS USED:

CLASSIFICATION METHOD:
TREES WERE RATED BASED ON THE FOLLOWING CONSIDERATIONS:
1. HEALTH
2. SPECIES (NATIVES WITH HABITAT AND ECOSYSTEM VALUE)
3. COMPATIBILITY WITH DEVELOPMENT
4. FORM / VISUAL INTEREST / MATURE SIZE

TREES RANKED AS IMPORTANT WERE RATED HIGH IN ALL FOUR AREAS.

TREES IN THE GOOD CATEGORY HAD GOOD HEALTH AND WERE A DESIRABLE SPECIES, BUT HAD IRREGULAR FORM OR LESS COMPATIBILITY WITH DEVELOPMENT.

TREES IN THE MODERATE CATEGORY HAD GOOD TO MODERATE HEALTH AND FORM, BUT WERE A LESS DESIRABLE SPECIES OR MAY BE LESS COMPATIBLE WITH DEVELOPMENT.

TREES IN THE POOR CATEGORY HAD POOR HEALTH AND/OR SUBSTANTIAL DAMAGE.

NOTES:
1. THE INFORMATION PROVIDED WITHIN THE PROJECT BOUNDARY IS BASED ON AN ON-SITE EVALUATION OF THE EXISTING TREES BY ARBORIST MORGAN HOLAN AND WAS PROVIDED IN A TREE REPORT DATE 4/10/2013 INCLUDED WITH THE APPLICATION MATERIALS.

LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

SCALE
60 0 30 60
1 INCH = 60 FEET

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GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tree Preservation Plan

DATE 04/15/2013

9.1

PALRS

EI I VAPSLCFVLMAP EPT ZCETNPZ WNLDNP LCRR MCALRVLMAP KAPRNS LA BR VA: MI RLRT FPTRC TNDRVL SFMRCONSMAP A1 MCAJRVL ECBACNSL(VAPLEVL.: ACZEP DAI RP
MDAPR. 503-646-4349

LDR NPLRPL A1 LDR MI EP NS LA CRLENP EPT NPVACMACELR LDR: EXN F: QFEPLNLGA1 LCRRS WNLD N MACLEPL, ZAAT, EPT: ATRCELR VI ESSNNVELMAPS(LDR 1AI I AWNPZ VI ESSNNVELMAP SGSLR: WES FSRT.

VI ESSNNVELMAP: RLDAT.
LCRRS WRCR CELRT BESRT AP LDR 1AI I AWNPZ VAPSNTRCELNAPS.
2(DREI LD
Y(SMRVNRS UPELNDRS WNLD DEBNLEL EPT RVASGSLR: OEI FR)
3(VA: MELNBNNLG WNLD TRORI AM RPL
4(1AC: / ONSFEI NPLRCRSL / : ELFCR SNKR

LCRRS CEPHRT ES N MACLEPL WRCR CELRT DNZD NP EI I 1AFC ECRES(

LCRRS NP LDR ZAAT VELRZ ACG DET ZAAT DREI LD EPT WRCR E TRSNDEBI R SMRVNRS, BFL DET NCCRZFI EC 1AC: AC I RSS VA: MELNBNNLG WNLD TRORI AM RPL(

LCRRS NP LDR: ATRCELR VELRZ ACG DET ZAAT LA : ATRCELR DREI LD EPT 1AC: , BFL WRCR E I RSS TRSNDEBI R SMRVNRS AC: EG BR I RSS VA: MELNBI R WNLD TRORI AM RPL(

LCRRS NP LDR MAAC VELRZ ACG DET MAAC DREI LD EPT/AC SFBSLEPLNEI TE: EZR(

PALRS.
2(LDR NP 1AC: ELMAP MCAONTRT WNLDNP LDR MCAJRVL BAFPTECGNB BESRT AP EP AP-SNLR ROEI FELMAP A1 LDR RXNBLNPZ LCRRS BG ECBACNSL: ACZEP DAI EP EPT WES MCAONTRT NP E LCRR CRMACL TELR 4/20/Y023 NPVI FTRT WNLD LDR EMMI NVELMAP: ELRCNEI S(

LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

SCALE
60 0 30 60
1 INCH = 60 FEET

Villebois

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GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Treet Preservation Plan

DATE 04/15/2013

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LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

SROZ MITIGATION			
AREA RATIO	IMPACT AREA	REQUIRED MITIGATION AREA	PROPOSED MITIGATION AREA
2.5:1	16,255 SF	40,638 SF	46,212 SF

SCALE
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1 INCH = 60 FEET

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GEODESIGN, INC

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Preliminary
Development Plan

SROZ Impacts &
Mitigation Plan

DATE 04/15/2013

9.3

LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

STREET TREE LEGEND: SAP NORTH

QTY.	SYMBOL	BOTANICAL NAME Common Name	SIZE	SPACING
27		ACER x FREEMANII "AUTUMN BLAZE" Autumn Blaze Maple	2" cal.	30' o.c.
13		CLADRASTIS KENTUKEA Yellowwood	2" cal.	30' o.c.
19		FAGUS SYLVATICA European Beech	2" cal.	30' o.c.
41		LIRIODENDRON TULIPIFERA Tulip Tree	2 1/2" cal.	25' o.c.
44		QUERCUS ALBA White Oak	2" cal.	30' o.c.
22		TILIA x EUCHLORA Crimean Linden	2" cal.	30' o.c.
13		QUERCUS ALBA White Oak	2" cal.	30' o.c.

SCALE
60 0 30 60
1 INCH = 60 FEET

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Villebois

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OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

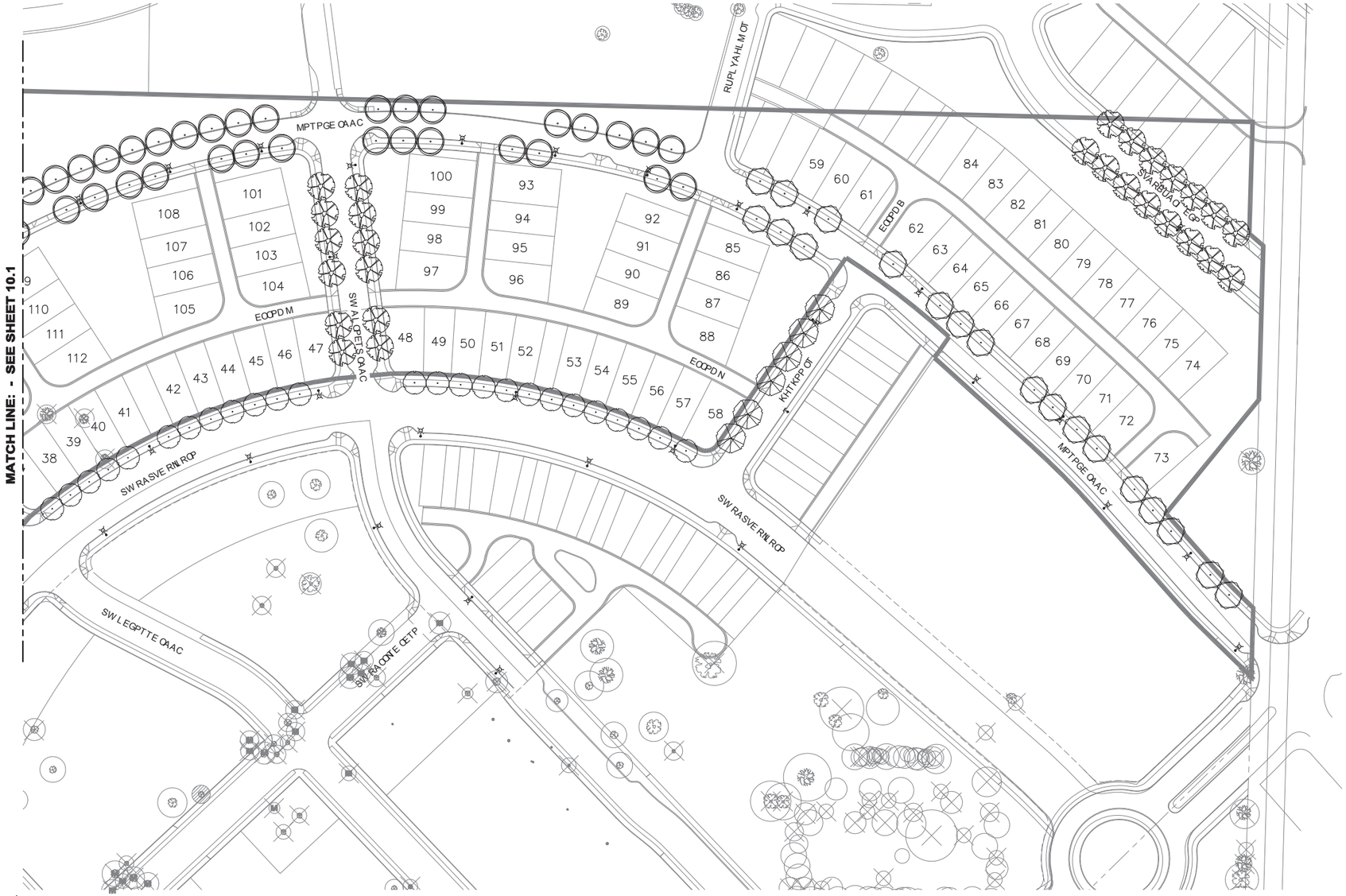
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Street Tree & Lighting Plan

DATE 04/15/2013

10.1



LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

STREET TREE LEGEND: SAP NORTH

QTY.	SYMBOL	BOTANICAL NAME Common Name	SIZE	SPACING
27		ACER x FREEMANII "AUTUMN BLAZE" Autumn Blaze Maple	2" cal.	30' o.c.
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13		QUERCUS ALBA White Oak	2" cal.	30' o.c.

N

SCALE
60 0 30 60
1 INCH = 60 FEET

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Villebois

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OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Street Tree & Lighting Plan

DATE 04/15/2013

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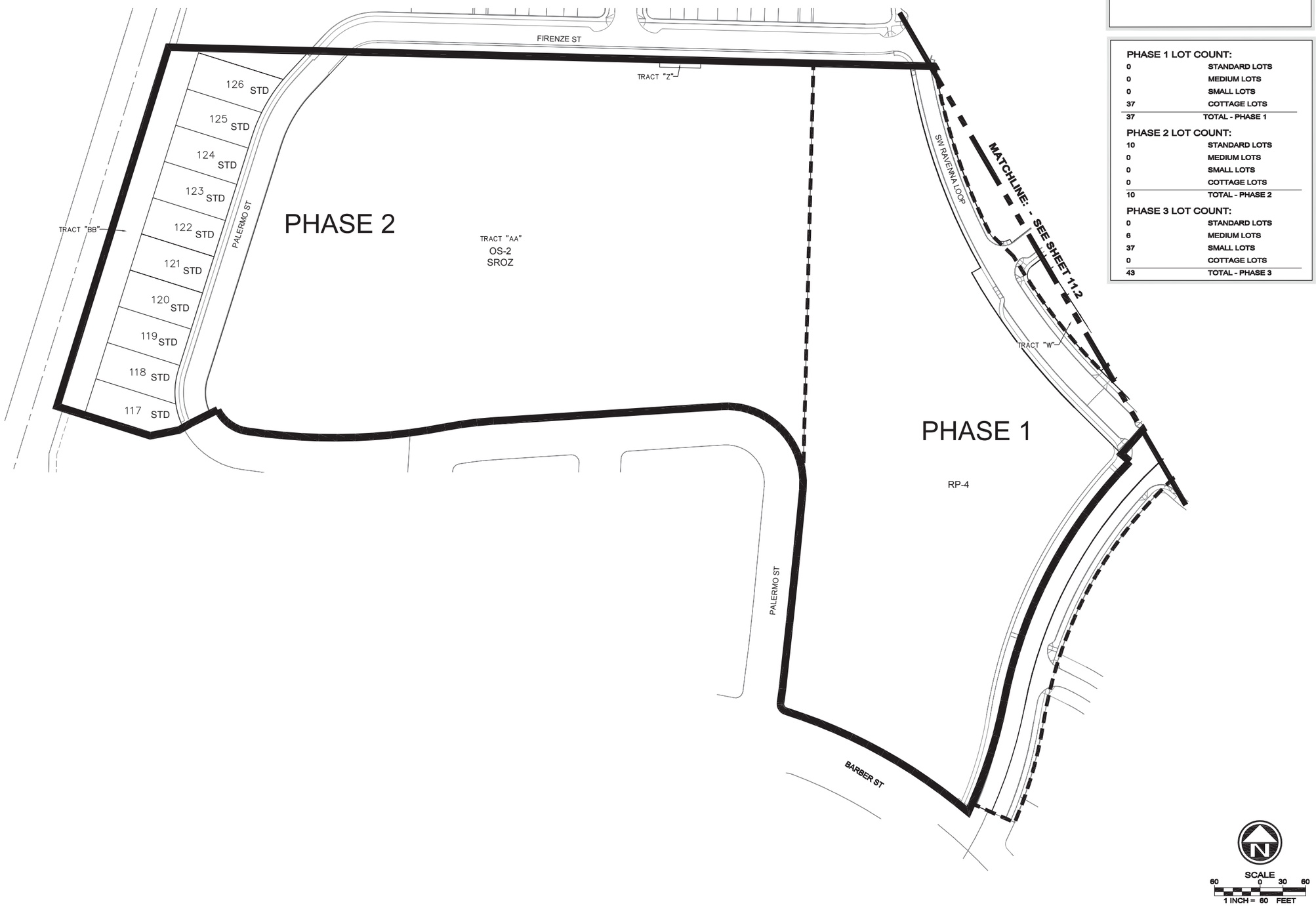

LEGEND:

STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGE LOTS

PHASE 1 LOT COUNT:

0	STANDARD LOTS
0	MEDIUM LOTS
0	SMALL LOTS
37	COTTAGE LOTS
37	TOTAL - PHASE 1

PHASE 2 LOT COUNT:

10	STANDARD LOTS
0	MEDIUM LOTS
0	SMALL LOTS
0	COTTAGE LOTS
10	TOTAL - PHASE 2

PHASE 3 LOT COUNT:

0	STANDARD LOTS
6	MEDIUM LOTS
37	SMALL LOTS
0	COTTAGE LOTS
43	TOTAL - PHASE 3

Villebois

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PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Phasing Plan

DATE 04/15/2013

11.1

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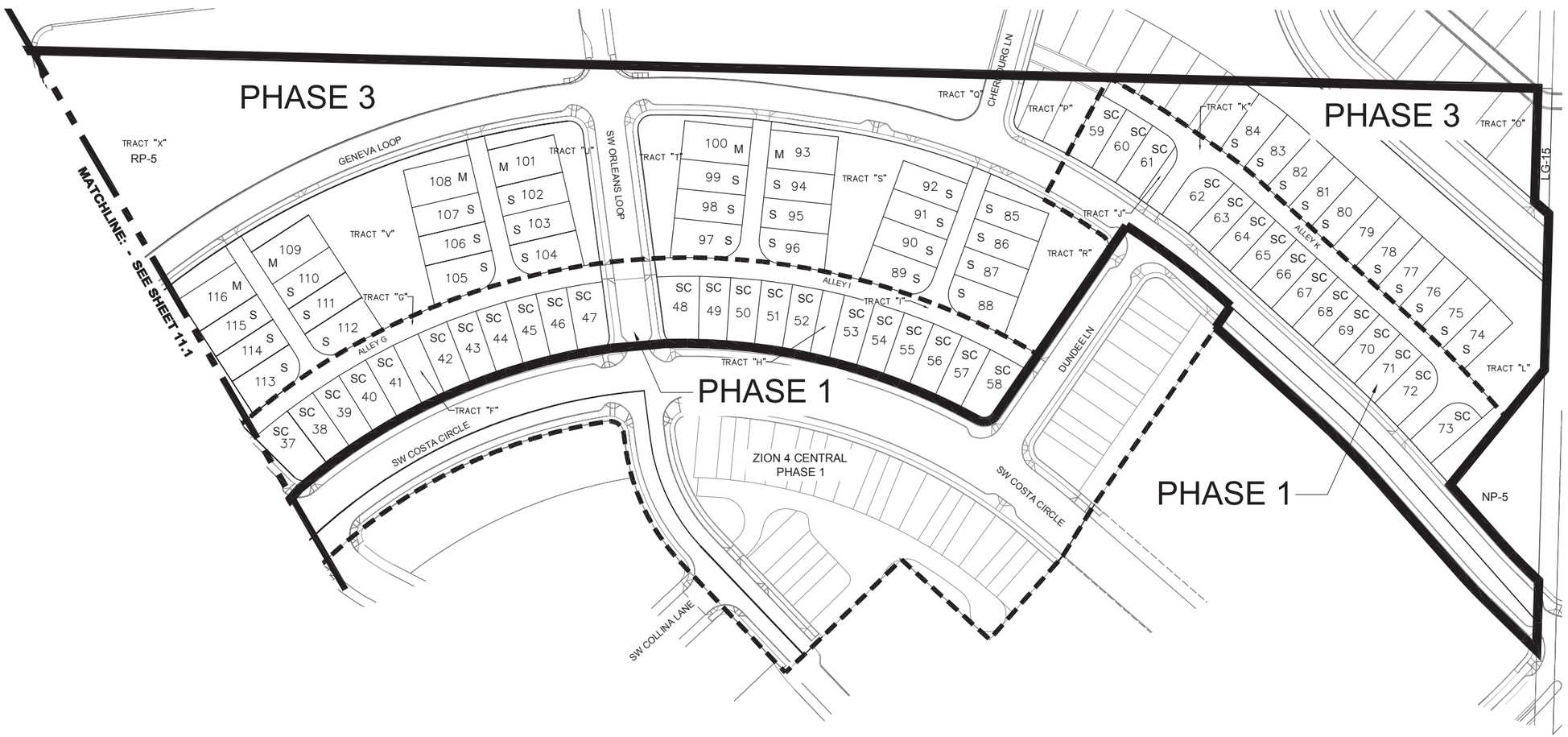
PHASE 1 LOT COUNT:	
0	STANDARD LOTS
0	MEDIUM LOTS
0	SMALL LOTS
37	COTTAGE LOTS
37	TOTAL - PHASE 1

PHASE 2 LOT COUNT:	
10	STANDARD LOTS
0	MEDIUM LOTS
0	SMALL LOTS
0	COTTAGE LOTS
10	TOTAL - PHASE 2

PHASE 3 LOT COUNT:	
0	STANDARD LOTS
6	MEDIUM LOTS
37	SMALL LOTS
0	COTTAGE LOTS
43	TOTAL - PHASE 3

LEGEND:	
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGE LOTS



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Villebois

POLYGON NW COMPANY

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OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Phasing
Plan

DATE 04/15/2013

11.2

M E M O R A N D U M

DATE: April 11, 2013

TO: City of Wilsonville

FROM: Patrick Espinosa, PE
Pacific Community Design

RE: Villebois PDP 4C & 1B N Stormwater Detention and Water Quality Analysis
Job No. 395-008

This memorandum report is to address the available downstream stormwater capacity for PDP 4C of Villebois SAP North and PDP 1B N. The majority of each phase is located north of PDP 6S and west of SW 110th Ave and will discharge east to the Coffee Lake Drainage Basin. A small portion of PDP 1B N is located north of Tonquin Woods No. 3 (PDP 1N) development and east of Grahams Ferry Road and will discharge south to the Mill Creek Drainage Basin.

The portion of this project draining to the Coffee Lake Drainage Basin was included within the water quality analysis report, dated August 23, 2012, for the Tonquin Meadows No. 3 development (PDP 3E) completed by Pacific Community Design. The land use for PDP 4C and 1N B is consistent with this previous report. Accordingly the water quality facility design outlined in the previous report will be adequately sized to handle the additional runoff from this site. Attached is the original Tonquin Meadows No. 3 report with the portion of runoff from the project highlighted on the developed shed map exhibit (Exhibit A2).

The portion of this project draining to the Mill Creek Drainage Basin was included within the water quality and drainage analysis report, dated January 2, 2013, for the Tonquin Woods No. 3 development (PDP 1N) completed by Pacific Community Design. The land use for PDP 1N B is consistent with this previous report. Accordingly the water quality and detention facility design outlined in the previous report will be adequately sized to handle the additional runoff from this site. Attached is the original Tonquin Woods No. 3 report with the portion of runoff from the project highlighted on the developed drainage basin map exhibit (Exhibit A3).

Thank you.

Attachments

1. water quality and drainage analysis report, dated January 2, 2013, for the Tonquin Woods No. 3 development (PDP 1N) completed by Pacific Community Design
2. water quality analysis report, dated August 23, 2012, for the Tonquin Meadows No. 3 development (PDP 3E) completed by Pacific Community Design

TONQUIN WOODS NO.3
&
GRAHAMS FERRY ROAD

WATER QUALITY AND DETENTION ANALYSIS
VILLEBOIS - PDP 1 NORTH - PHASE 2

JOB # 395-002

1/3/13

REGISTERED PROFESSIONAL ENGINEER
64472PE
OREGON
DEC 31, 2007
PATRICK R. ESPINOSA

DATE: 1/2/2013
BY: PATRICK ESPINOSA, PE

EXPIRES: 12-31-13

Prepared By:
Pacific Community Design, Inc.
13500 SW Pacific Highway, PMB #519
Tigard, OR 97223
Tele: 503-941-9484

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INTRODUCTION

This report represents the analysis done for the second phase of Preliminary Development Plan 1N, hereby referred to as PDP 1 North-Phase 2 (PDP 1N-II), of Villebois for water quality and detention facilities. In addition to PDP 1N-II, this report will represent the second phase of Grahams Ferry Road improvements. The intent of this report is to demonstrate consistency between PDP 1N-II, Grahams Ferry Road, and the SAP North Analysis, and demonstrate compliance with City of Wilsonville "Public Works Standards". All calculations and supporting figures are included with this document.

PROJECT DESCRIPTION

PROJECT LOCATION

The proposed Villebois development is located on tax lot 2906 of Clackamas County Tax Map 3S1W15. This portion of Villebois will consist of 58 residential homes on property located to the north of Phase 5 South and east of Grahams Ferry Road. The area of PDP 1N-II is 8.17 ac.

The second phase of Grahams Ferry Road consists of the portion of the road running north of Surrey Street along the entirety of the PDP 1N-II parcel.

PROJECT ZONING/LAND USE

Sap North in the Villebois Village development has been assigned the land use designation of Village zone by the City of Wilsonville. The Villebois Village Master Plan designates this area further as a Residential Village. This area will be developed as an urban village including single-family units of various sizes, neighborhood row houses, and park spaces.

EXISTING CONDITIONS

EXISTING TOPOGRAPHY, LAND USE, AND ONSITE DRAINAGE

The entirety of the pre-developed site is open space, a portion of which was cultivated. This site slopes to the southwest at a gradient of 1-3%. The drainage basin falls within hydrologic group C per the Soil Survey Map for Clackamas County (Exhibit A1). The pre-developed topography for the project site is shown in Exhibit A2.

SOIL CONDITIONS

Below is a summary of the existing soil conditions for the Mill Creek portion of SAP North.

TABLE 1
PROJECT SITE SOILS

SOIL NAME	SCS SYMBOL	HYDROLOGIC GROUP
ALOHA SILT LOAM (0-3 percent slopes)	1A	C
ALOHA SILT LOAM (3-6 percent slopes)	1B	C

SCS CURVE NUMBERS

Below is a summary of the SCS curve numbers in accordance with the Conditions of Approval for SAP North of the Villebois Village.

TABLE 2
SCS CURVE NUMBERS

LAND USE	CURVE NUMBER
OPEN SPACE AND LANDSCAPING	80
COMMERCIAL AREAS	94
RIGHT-OF-WAYS (based on 80% impervious – CN of 98 And 20% pervious – CN of 80)	94.4
RESIDENTIAL DEVELOPMENT (1/8 acre of less)	90
RESIDENTIAL DEVELOPMENT (1/4 acre)	83
DENSE FOREST AREA	80

EXISTING POINTS OF DISCHARGE

PDP 1N-II and Grahams Ferry Road currently drain to the Mill Creek Basin to the southwest of this site via an existing culvert (culvert 3) crossing under Grahams Ferry Road. This culvert previously drained west to Tax Lot 1600 of Clackamas County Tax Map 3S1W15 where the overland runoff crossed a pasture before it entered another culvert under a private driveway and drained to Mill Creek (see Figure A2 for culvert location). With recent improvements to Grahams Ferry Road this runoff is now collected by a new culvert which drains onto Tax Lot 1500 directly upstream of the existing culvert located under the private driveway.

HYDROLOGY

The Santa Barbara Urban Hydrograph (SBUH) methodology was used to calculate the runoff hydrographs for all of the shed areas. The HydroCAD Stormwater Modeling System 2006 software program by HydroCAD was used to perform these calculations. The following tables summarize the input parameters for the hydrographs as well as the results of the pre-developed analysis performed by OTAK.

The storm drainage report titled "Villebois Village: SAP North: Mill Creek Basin Storm Drainage Report" updated on June 29th, 2007 and published by OTAK separated the area within Mill Creek Basin into drainage sheds based on the approved SAP North layout and the existing Grahams Ferry Road alignment. Runoff calculations were provided in the above mentioned report for the pre-developed conditions of the Mill Creek Basin. The calculations within this report will show that the detained runoff from the developed PDP 1N area will not exceed these pre-developed levels. The following tables show the pre-developed input parameters and runoff rates for Mill Creek, as determined by the previously approved storm drainage report. See Exhibit A2 for pre-developed drainage map.

TABLE 3
PRE-DEVELOPED CONDITIONS HYDROCAD INPUT PARAMETERS – SAP NORTH*

BASIN ID	AREA (acre)	TIME OF CONCENTRATION (min)	COMPOSITE CURVE NUMBER
BASIN 2NE	14.11	52.2	80
BASIN 3NE	2.91	50.0	80
BASIN 2ME	2.69	50.0	80
BASIN 5NE	2.26	20.9	94.4
BASIN 6NE	0.80	5.0	94.4
TOTAL	**22.77**		

*Refer to the report titled "Villebois Village: SAP North: Mill Creek Basin Storm Drainage Report" updated on June 29th, 2007 and published by OTAK for all supporting calculations.

TABLE 4
PRE-DEVELOPED CONDITIONS RUNOFF RATES (cfs) – SAP NORTH*

BASIN ID	2-YEAR	10-YEAR	25-YEAR	100-YEAR
BASIN 2NE	1.25	2.78	3.64	4.54
BASIN 3NE	0.26	0.57	0.75	0.94
BASIN 5NE	0.89	1.36	1.59	1.82
BASIN 6NE	0.35	0.55	0.65	0.76
CULVERT 3**	**2.63**	**5.11**	**6.46**	**7.87**

*Refer to the report titled "Villebois Village: SAP North: Mill Creek Basin Storm Drainage Report" updated on June 29th, 2007 and published by OTAK for all supporting calculations.
**Existing flows equal the sum of the hydrographs; the peaks may not coincide

DEVELOPED CONDITIONS

DEVELOPED DRAINAGE CONDITIONS

Stormwater runoff from the developed site will be collected by a series of catch basins leading to an underground piping system. This system will transport the runoff to a detention pond in PDP 1N-II (Pond 'O'). Pond 'O' will detain the runoff to pre-developed levels prior to releasing upstream of the existing culvert on Tax Lot 1600 of Clackamas County Tax Map 3S1W15, via the 18-inch culvert recently constructed under Grahams Ferry Road.

HYDROLOGY – MILL CREEK

In order to determine the required detention volume, SAP North was divided into a number of shed basins based on the proposed land use and geography. The Santa Barbara Urban Hydrograph (SBUH) methodology was used to calculate the runoff hydrographs for all of these developed shed areas. The Hydroflow Hydrographs Modeling System 2004 software program by Intelisolve was used to perform these calculations. The following tables summarize the developed shed basin input parameters and their resulting runoff rates.

TABLE 5
DEVELOPED CONDITIONS HYDROFLOW INPUT PARAMETERS – MILL CREEK

BASIN ID	AREA (acre)	COMPOSITE CURVE NUMBER	TIME OF CONCENTRATION (min)
BASIN 1ND	4.40	89.4	22.25
BASIN 2ND	2.28	91.4	10.9
BASIN 3ND	3.81	80.0	66.0
BASIN 4ND-S	1.87	80.0	46.3
BASIN 4ND-N	2.18	90.3	14.5
BASIN 5ND	2.42	94.4	20.8
BASIN 6ND	0.71	94.4	4.9
BASIN 2MD	3.35	89.4	14.76
POND BASIN	0.48	80.0	0.0
TOTAL	**21.40**		

TABLE 6
DEVELOPED CONDITIONS RUNOFF RATES (cfs)

BASIN ID	2-YEAR	10-YEAR	25-YEAR	100-YEAR
BASIN 1ND	1.24	2.09	2.52	2.95
BASIN 2ND	0.85	1.36	1.62	1.88
BASIN 3ND	0.31	0.67	0.88	1.09
BASIN 4ND-S	0.18	0.39	0.51	0.63
BASIN 4ND-N	0.75	1.24	1.49	1.74
BASIN 5ND	0.95	1.44	1.68	1.93
BASIN 6ND	0.35	0.53	0.61	0.70
BASIN 2MD	1.01	1.69	2.04	2.40
POND BASIN	0.11	0.21	0.57	0.32

WATER QUANTITY – MILL CREEK

A detention pond will be constructed with the development of PDP 1N-II to detain the developed runoff and release the stormwater into Mill Creek at or below pre-developed levels. The Hydroflow Hydrographs Modeling System 2004 software program by Intelisolve was used to determine the required detention volume for this pond, as well as design the flow control structure. The following table is a summary of the pond volume and storage levels.

TABLE 7
POND SUMMARY

STORM EVENT	STORAGE VOLUME	WATER DEPTH
2-YEAR	13,087 cu.ft.	1.7 ft
10-YEAR	22,401 cu.ft.	2.7 ft
25-YEAR	28,300 cu.ft.	3.2 ft
100-YEAR	32,917 cu.ft.	4.2 ft

The table below summarizes the results of the pond analysis. Full calculations provided by Hydraflow are shown in Appendix C.

TABLE 8
POND "O" DETENTION PERFORMANCE

RETURN PERIOD	FLOW COMPLIANCE TARGET (cfs)*	DESIGN RELEASE RATE (cfs)	SURFACE ELEVATION	MAXIMUM STORAGE (cu.ft.)
2-YEAR	2.63	2.48	218.19	13,087
10-YEAR	5.11	5.10	219.16	22,401
25-YEAR	6.46	6.03	219.68	28,300
100-YEAR	7.87	8.07	220.07	32,917

*Flow compliance target is based on existing condition analysis completed as part of the following report: "Villebois Village: SAP North: Mill Creek Basin Storm Drainage Report" updated on June 29th, 2007 and published by OTAK.

The pond runoff will be conveyed to an existing ditch on the west side of Grahams Ferry Road via an 18-inch pipe. The capacity of this pipe is 8.68 cfs which will be sufficient to convey the 100-year storm event runoff rate of 8.07 cfs.

In addition to the detention pond analysis, conveyance calculations were completed for the storm drain mains designed for PDP 1N-II to insure that pipes were sized sufficiently to convey the 25-year storm event. These calculations are shown in Appendix E along with a conveyance map showing the individual drainage areas for each pipe run.

WATER QUALITY – MILL CREEK

The City of Wilsonville requires that 65% removal of phosphorous be provided for stormwater runoff if any new impervious surfaces are created during site development. A permanent water quality facility must be constructed or funded to reduce contaminants that enter the storm and surface water system. Impervious surfaces shall include pavement, gravel roads, buildings, public and private roadways, and other surfaces that contribute runoff to the surface water system.

Water quality requirements for Mill Creek Basin will be addressed with pollution control manholes and water quality swales located within Pond O. Shed Area 3MD will be treated by a water quality swale located within the southern portion of Pond O. This swale will be 2-feet wide and 100-feet long.

The remaining portion of Mill Creek (PDP 1N and SAP North) will be treated by a water quality swale within the northern portion of Pond O. This swale will be 5-feet wide and 120-feet long.

CONCLUSION

Detention and water quality facilities within the Mill Creek portion of SAP North are consistent with the design requirements of the City of Wilsonville as well as the report completed by OTAK. Development of the site will maintain flows from the site tributary to Mill Creek Basin at the existing levels. The pond within the PDP 1N-II development demonstrate that adequate storage will be provided, and the sizing of the water quality swales demonstrates adequate water quality will be provided. Additionally, the sizing of the storm drain mains demonstrates adequate capacity to convey the 25-year storm event.

APPENDIX A

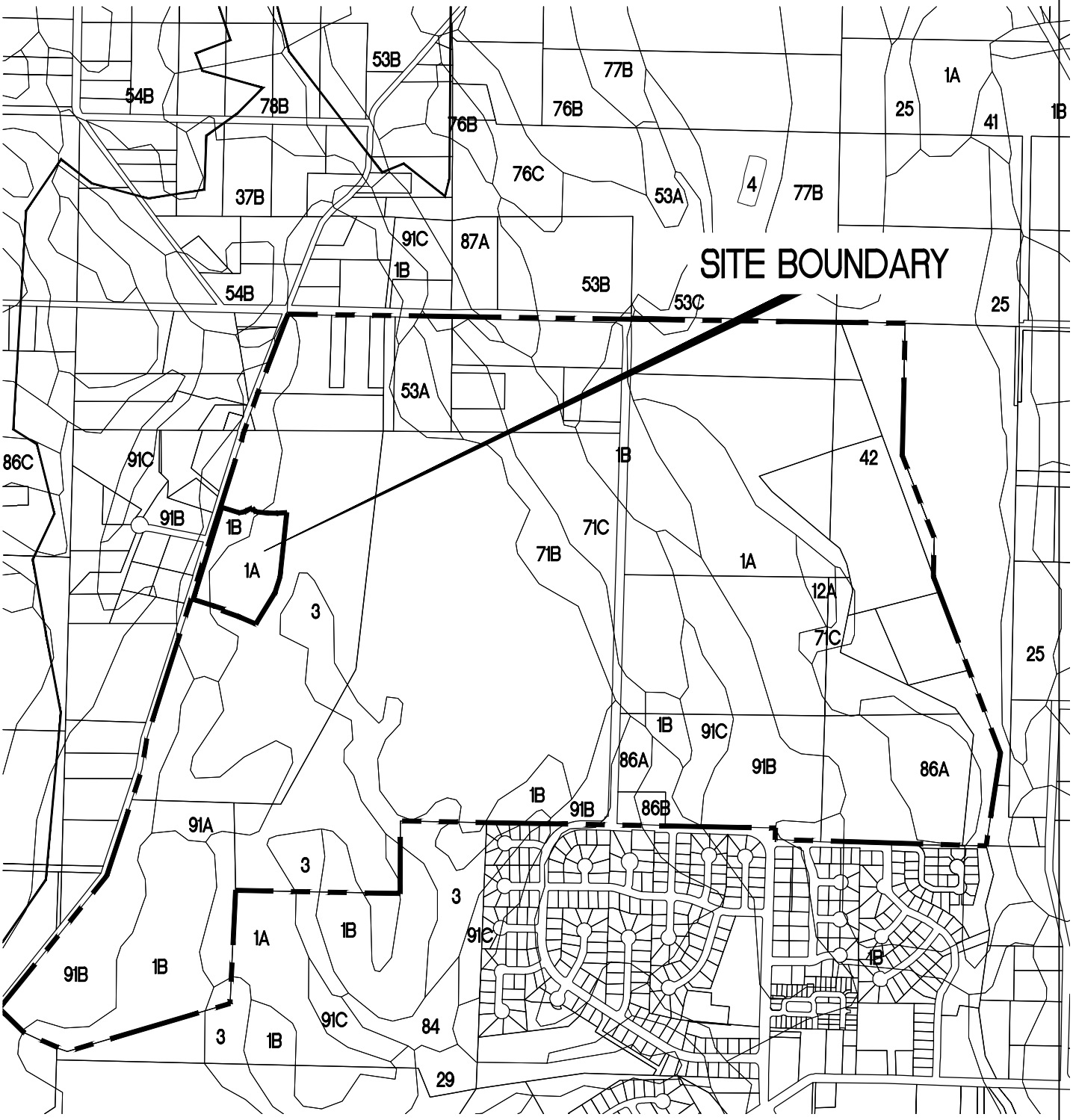


EXHIBIT A1: SOIL SURVEY MAP

DRAWN BY: PRE DATE: 12/26/12

REVIEWED BY: PRE DATE: 12/26/12

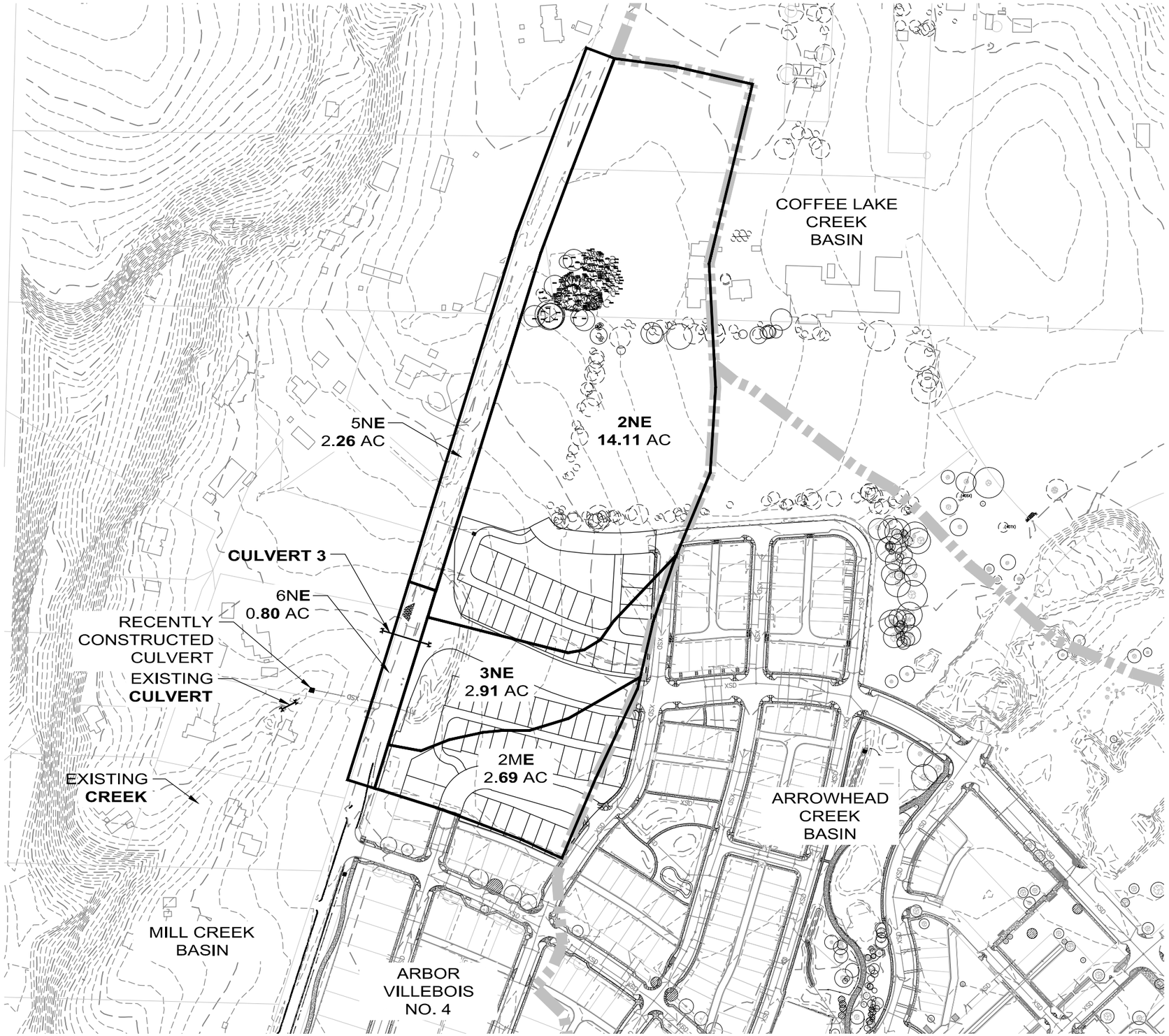
PROJECT NO.: 395-002

SCALE: 1"=1000'

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

N:\proj\395-002A\09 Drawings\04 Civil\Exhibits-Hydrology\395002.PSOIL.dwg - SHEET: 8x11 Dec. 27, 12 - 5:32 PM pre



LEGEND:

- EXISTING SHED BOUNDARY
- EX BASIN BOUNDARY
- XSD — EX STORM DRAIN

SCALE
0 125 250
1 INCH = 250 FEET

N:\proj\395-002A\09 Drawings\04 Civil\Exhibits-Hydrology\395002.EXST.dwg - SHEET: 11x17 Jan. 3, 13 - 9:21 AM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

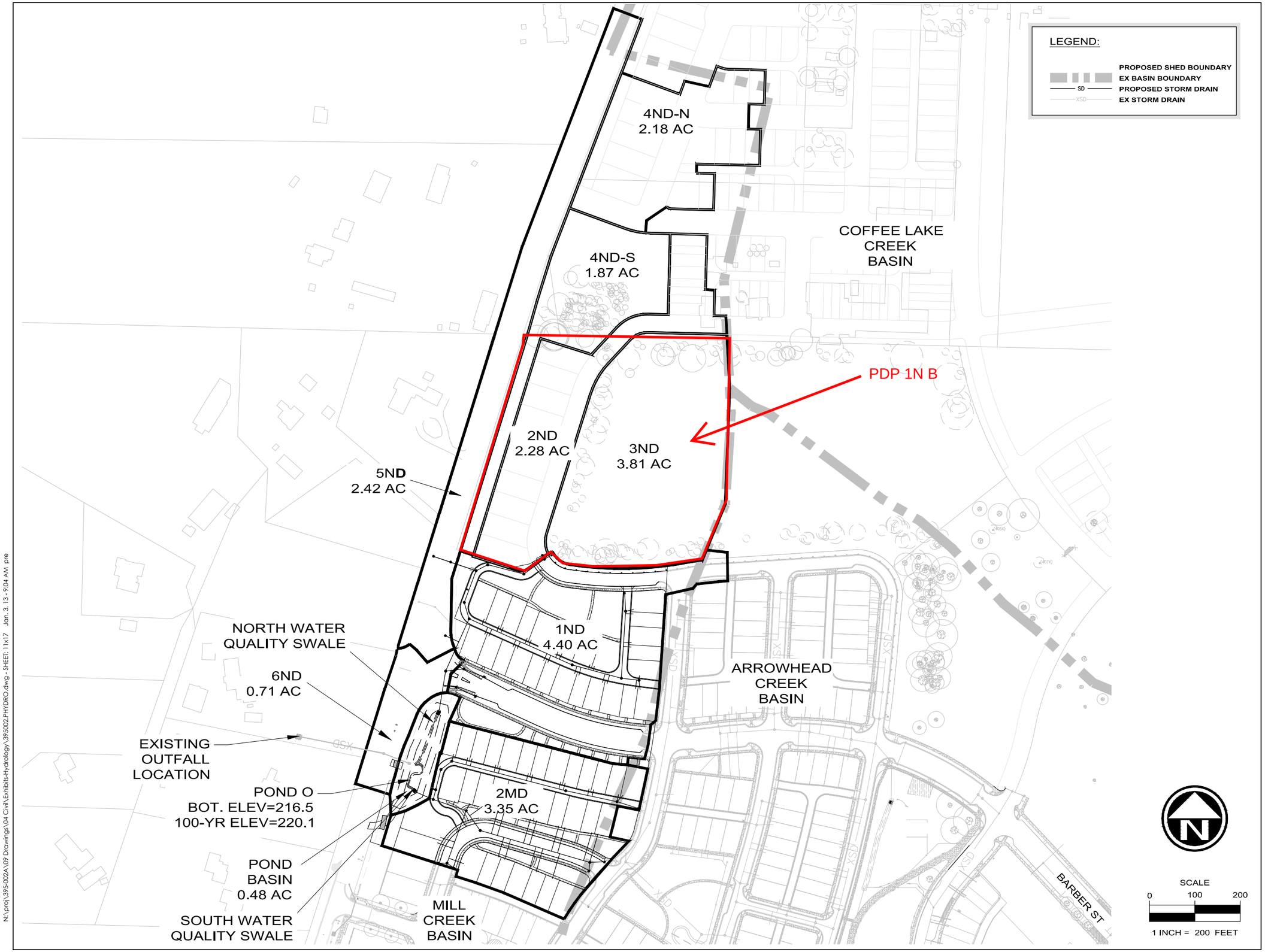
TONQUIN WOODS No. 3

Villebois
PDP 1N - Phase 2
Hydrology

Pre-Developed
Drainage Basin Map

DATE: 12/27/2012

A2



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

TONQUIN WOODS No. 3

Villebois
PDP 1N - Phase 2
Hydrology

Developed Drainage
Basin Map

DATE: 12/26/2012

A3

APPENDIX B

SCS CURVE NUMBERS
FIGURE B1

LAND USE DESCRIPTION		CURVE NUMBERS BY HYDROLOGIC SOIL GROUP			
		A	B	C	D
Cultivated land (1):	winter condition	86	91	94	95
Mountain open areas:	low growing brush & grasslands	74	82	89	92
Meadow or pasture:		65	78	85	89
Wood or forest land:	undisturbed	42	64	76	81
Wood or forest land:	young second growth or brush	55	72	81	86
Orchard:	with crop cover	81	88	92	94
Open spaces, lawns, parks, golf courses, cemeteries, landscaping					
Good condition:	grass cover on ≥ 75% of the area	68	80	86	90
Fair condition:	grass cover on 50-75% of the area	77	85	90	92
Gravel roads and parking lots:		76	85	89	91
Dirt roads and parking lots:		72	82	87	89
Impervious surfaces, pavement, roofs etc.		98	98	98	98
Open water bodies:	lakes, wetlands, ponds, etc.	100	100	100	100
Single family residential (2):	(per C.O.A)				
Lot Size (Acres)					
1/8	or less	90	90	90	90
1/4	or less	83	83	83	83
Commercial Development		94	94	94	94
PUD's, condos, apartments, commercial businesses & industrial areas	%impervious must be computed				

(1) For a more detailed description of agricultural land use curve numbers refer to National Engineering Handbook, Sec. 4, Hydrology, Chapter 9, August 1972.

(2) Assumes roof and driveway runoff is directed into street/storm system.

(3) The remaining pervious areas (lawn) are considered to be in good condition for these curve numbers.

MANNING'S "n" VALUES
FIGURE B2

SHEET FLOW EQUATION MANNING'S VALUES	n_s
Smooth Surfaces (concrete, asphault, gravel, or bare hand packed soil)	0.011
Fallow Fields or loose soil surface (no residue)	0.05
Cultivated soil with residue cover £ 20%	0.06
Cultivated soil with residue cover > 20%	0.17
Short prairie grass and lawns	0.15
Dense grasses	0.24
Bermuda grasses	0.41
Range (natural)	0.13
Woods or forrest with light underbrush	0.40
Woods or forrest with dense underbrush	0.80

SHALLOW CONCENTRATED FLOW (after initial 300 ft of sheet flow, R = 0.1)	k_s
Forrest with heavy ground litter and meadows (n = 0.010)	3
Brushy ground with some trees (n = 0.060)	5
Fallow or minimum tillage cultivation (n = 0.040)	8
High grass (n = 0.035)	9
Short grass, pasture and lawns (n = 0.030)	11
Nearly bare ground (n = 0.25)	13
Paved and gravel areas (n = 0.012)	27

CHANNEL FLOW (Intermittent) (At the beginning of all visible channels, R = 0.2)	k_c
Forested swale with heavy ground cover (n = 0.10)	5
Forested drainage course/ravine with defined channel bed (n = 0.050)	10
Rock-lined waterway (n = 0.035)	15
Grassed waterway (n = 0.030)	17
Earth-lined waterway (n = 0.025)	20
CMP pipe (n = 0.024)	21
Concrete pipe (n = 0.012)	42
Other waterways and pipe 0.508/n	

CHANNEL FLOW (continuous stream, R = 0.4)	k_c
Meandering stream (n = 0.040)	20
Rock-lined stream (n = 0.035)	23
Grass-lined stream (n = 0.030)	27
Other streams, man-made channels and pipe (n = 0.807/n)	

COMPOSITE CURVE NUMBER
SHED 2MD (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	2.01	90	60.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.78	94.4	23.3%
Open Space Area	0.56	80	16.7%
TOTAL	3.35		

Composite Curve Number per COA = 89.4

FIGURE B3

COMPOSITE CURVE NUMBER
SHED 1ND (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	1.65	90	37.5%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	1.73	94.4	39.3%
Open Space Area	1.02	80	23.2%
TOTAL	4.40		

Composite Curve Number per COA = 89.4

FIGURE B4

COMPOSITE CURVE NUMBER
SHED 2ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	1.53	90	67.1%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.75	94.4	32.9%
Open Space Area	0.00	80	0.0%
TOTAL	2.28		

Composite Curve Number per COA = 91.4

FIGURE B5

COMPOSITE CURVE NUMBER
SHED 3ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	0.00	90	0.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.00	94.4	0.0%
Open Space Area	3.81	80	100.0%
TOTAL	3.81		

Composite Curve Number per COA = 80.0

FIGURE B6

COMPOSITE CURVE NUMBER
SHED 4ND-S (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	0.00	90	0.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.00	94.4	0.0%
Open Space Area	1.87	80	100.0%
TOTAL	1.87		

Composite Curve Number per COA = 80.0

FIGURE B7

COMPOSITE CURVE NUMBER
SHED 4ND-N (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	1.17	90	53.7%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.75	94.4	34.4%
Open Space Area	0.26	80	11.9%
TOTAL	2.18		

Composite Curve Number per COA = 90.3

FIGURE B8

COMPOSITE CURVE NUMBER
SHED 5ND-N (GFR)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	0.00	90	0.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	2.42	94.4	100.0%
Open Space Area	0.00	80	0.0%
TOTAL	2.42		

Composite Curve Number per COA = 94.4

FIGURE B9

COMPOSITE CURVE NUMBER
SHED 6ND (GFR)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-12-26.XLS

CURVE NUMBERS PER SAP NORTH C.O.A. PFA3	
Open Space and landscape areas	80
Commercial areas	94
Impervious Area Streets, Alleys *	98
Residential Development 1/8 acre or less	90
Residential Development 1/4 acre or less	83

* Streets and Alleys are modeled as 80% impervious and 20% pervious. Utilizing a CN of 80 for the pervious area and 98 for the impervious area, the weighted CN for streets and alleys would be 94.4.

ON-SITE	(AC)	CN	% of total
Row House (1/8 acre)	0.00	90	0.0%
Single Family Detached (1/8 acre)	0.00	90	0.0%
Commercial/Multi-Family areas	0.00	94	0.0%
Street and Alley ROW's	0.71	94.4	100.0%
Open Space Area	0.00	80	0.0%
TOTAL	0.71		

Composite Curve Number per COA = 94.4

FIGURE B10

PERCENT IMPERVIOUS
SHED 2MD (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	3.35	acres	145,926	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	52,533
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	27,181
Total	79,715
% Impervious =	55%

FIGURE B11

PERCENT IMPERVIOUS
SHED 1ND (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	4.40	acres	191,664	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	43,124
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	60,287
Total	103,411
% Impervious =	54%

FIGURE B12

PERCENT IMPERVIOUS
SHED 2ND (PDP 1N-II)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	2.28	acres	99,317	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	39,988
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	26,136
Total	66,124
% Impervious =	67%

FIGURE B13

PERCENT IMPERVIOUS
SHED 3ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	3.81	acres	165,964	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	0
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	0
Total	0
% Impervious =	0%

FIGURE B14

PERCENT IMPERVIOUS
SHED 4ND-S (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	1.87	acres	81,457	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	0
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	0
Total	0
% Impervious =	0%

FIGURE B15

PERCENT IMPERVIOUS
SHED 4ND-N (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	2.18	acres	94,961	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	30,579
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	26,136
Total	56,715
% Impervious =	60%

FIGURE B16

PERCENT IMPERVIOUS
SHED 5ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	2.42	acres	105,415	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	0
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	84,332
Total	84,332
% Impervious =	80%

FIGURE B17

PERCENT IMPERVIOUS
SHED 6ND (SAP NORTH)
SAP LAYOUT

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

Total Site Area	0.71	acres	30,928	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	0
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	24,742
Total	24,742
% Impervious =	80%

FIGURE B18

DEVELOPED TIME OF CONCENTRATION
MILL CREEK (SAP AREAS)

JOB NUMBER: 395-002
PROJECT: TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE: N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

$$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$$

SHED 2ND (SAP NORTH)

		Accum.
PIPE FLOW (FIRST 680 FEET)		
Catchment Time	5.00 min.	
Longest Run of Pipe	1068 ft	
Velocity of Flow	3 ft/s	
Time in Pipe = (1068 ft)/(3 ft/s) =	356 s	10.93 min.

TOTAL DEVELOPED TIME OF CONCENTRATION = 10.93 min.

SHED 3ND (SAP NORTH)

				Accum. Tc
LAG ONE: SHEET FLOW (FIRST 300 FEET)				
Tt = Travel time				
Manning's "n " =	0.400			
Flow Length, L =	300	ft	(300 ft. max.)	
P = 2-year, 24hr storm =	2.5	in		
Slope, S_0 =	0.017	ft/ft		
$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$	62.88	min.		62.88 min.
LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 150 FEET)				
Tc Velocity factor, k=	5			
Slope, S_0 =	0.026	ft/ft		
$V = k\sqrt{S_0}$	0.81	ft/s		
Flow Length, L =	150	ft		
$T = \frac{L}{(60)(V)}$	3.10	min.		65.98 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =				**65.98 min.**

SHED 4ND-S (SAP NORTH)

				Accum. Tc
LAG ONE: SHEET FLOW (FIRST 300 FEET)				
Tt = Travel time				
Manning's "n " =	0.150			
Flow Length, L =	300	ft	(300 ft. max.)	
P = 2-year, 24hr storm =	2.5	in		
Slope, S_0 =	0.007	ft/ft		
$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$	40.63	min.		40.63 min.
LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 519 FEET)				
Tc Velocity factor, k=	11			
Slope, S_0 =	0.019	ft/ft		
$V = k\sqrt{S_0}$	1.52	ft/s		
Flow Length, L =	519	ft		
$T = \frac{L}{(60)(V)}$	5.70	min.		46.33 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =				**46.33 min.**

SHED 4ND-N (SAP NORTH)

			Accum.
PIPE FLOW (FIRST 680 FEET)			
Catchment Time	5.00 min.		
Longest Run of Pipe	1715 ft		
Velocity of Flow	3 ft/s		
Time in Pipe = (1715 ft)/(3 ft/s) =	572 s		14.53 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =			**14.53 min.**

SHED 5ND (GRAHAMS FERRY ROAD)

			Accum. Tc
LAG ONE: SHEET FLOW (FIRST 100 FEET)			
Tt = Travel time			
Manning's "n " =	0.011		
Flow Length, L =	100 ft	(300 ft. max.)	
P = 2-year, 24hr storm =	2.5 in		
Slope, S_0 =	0.020 ft/ft		
$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$	1.37 min.		1.37 min.
LAG TWO: SHALLOW CONCENTRATED FLOW (NEXT 1316 FEET)			
Tc Velocity factor, k=	10		
Slope, S_0 =	0.013 ft/ft		
$V = k\sqrt{S_0}$	1.13 ft/s		
Flow Length, L =	1316 ft		
$T = \frac{L}{(60)(V)}$	19.46 min.		20.83 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =			**20.83 min.**

SHED 6ND (GRAHAMS FERRY ROAD PER OTAK)

			Accum. Tc
LAG ONE: SHEET FLOW (FIRST 400 FEET)			
Tt = Travel time			
Manning's "n " =	0.011		
Flow Length, L =	400 ft	(300 ft. max.)	
P = 2-year, 24hr storm =	2.5 in		
Slope, S_0 =	0.013 ft/ft		
$T_T = \frac{(0.42)(n * L)^{0.8}}{(P)^{0.5}(S_0)^{0.4}}$	4.94 min.		4.94 min.
TOTAL DEVELOPED TIME OF CONCENTRATION =			**4.94 min.**

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Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow Hyd(s)	Peak Outflow (cfs)								Hydrograph description
			1-Yr	2-Yr	3-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	
1	SBUH Runoff	-------	-------	1.24	-------	-------	2.09	2.52	-------	2.95	Shed 1N - Developed
2	SBUH Runoff	-------	-------	0.85	-------	-------	1.36	1.62	-------	1.88	Shed 2N - Developed
3	SBUH Runoff	-------	-------	0.31	-------	-------	0.67	0.88	-------	1.09	Shed 3N - Developed
4	SBUH Runoff	-------	-------	0.18	-------	-------	0.39	0.51	-------	0.63	Shed 4N-S - Developed
5	SBUH Runoff	-------	-------	0.75	-------	-------	1.24	1.49	-------	1.74	SHED 4N-N (Developed)
6	SBUH Runoff	-------	-------	0.95	-------	-------	1.44	1.68	-------	1.93	Shed 5N - Developed
7	SBUH Runoff	-------	-------	0.35	-------	-------	0.53	0.61	-------	0.70	Shed 6N - Developed
8	SBUH Runoff	-------	-------	1.01	-------	-------	1.69	2.04	-------	2.40	Shed 2M - Developed
9	SBUH Runoff	-------	-------	0.11	-------	-------	0.21	0.27	-------	0.32	Pond
11	Combine	1, 2, 3, 4, 5, 6,	-------	4.17	-------	-------	7.04	8.52	-------	10.04	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	7, 8, 9,	-------	1.47	-------	-------	2.43	2.92	-------	3.42	SHEDS 6N, 2M, POND
13	Combine	11, 12	-------	5.61	-------	-------	9.46	11.44	-------	13.46	COMBINED POND IN
14	Reservoir	13	-------	2.48	-------	-------	5.10	6.03	-------	8.07	COMBINED OUT

Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SBUH Runoff	1.24	6	486	23,716	----	------	------	Shed 1N - Developed
2	SBUH Runoff	0.85	6	480	13,599	----	------	------	Shed 2N - Developed
3	SBUH Runoff	0.31	6	528	12,294	----	------	------	Shed 3N - Developed
4	SBUH Runoff	0.18	6	498	6,034	----	------	------	Shed 4N-S - Developed
5	SBUH Runoff	0.75	6	480	12,301	----	------	------	SHED 4N-N (Developed)
6	SBUH Runoff	0.95	6	486	16,747	----	------	------	Shed 5N - Developed
7	SBUH Runoff	0.35	6	474	4,913	----	------	------	Shed 6N - Developed
8	SBUH Runoff	1.01	6	480	17,697	----	------	------	Shed 2M - Developed
9	SBUH Runoff	0.11	6	480	1,840	----	------	------	Pond
11	Combine	4.17	6	486	84,690	1, 2, 3, 4, 5, 6,	------	------	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	1.47	6	480	24,451	7, 8, 9,	------	------	SHEDS 6N, 2M, POND
13	Combine	5.61	6	480	109,141	11, 12	------	------	COMBINED POND IN
14	Reservoir	2.48	6	564	109,141	13	218.19	13,087	COMBINED OUT

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

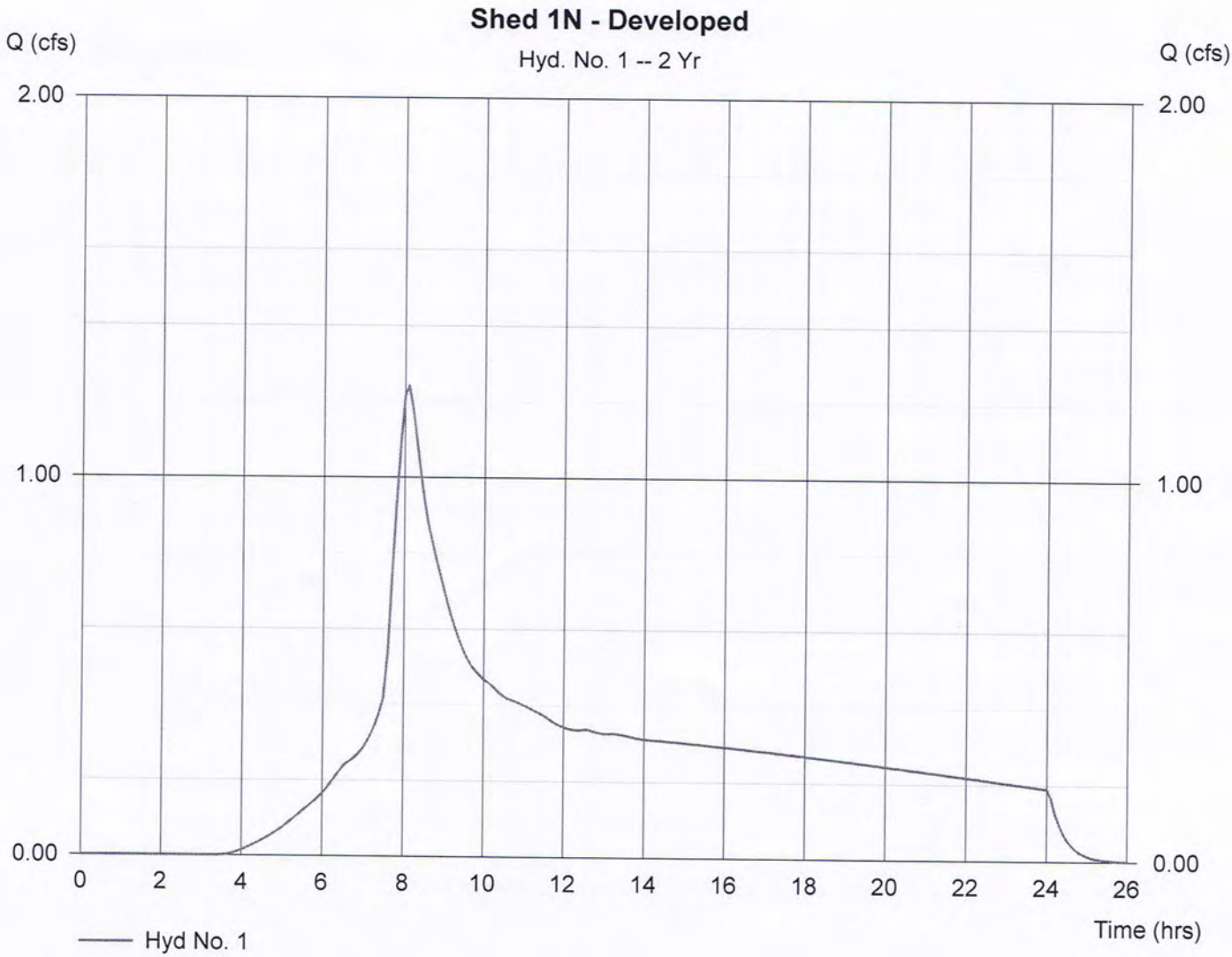
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 1

Shed 1N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.24 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 4.40 ac	Curve number	= 89.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 22.25 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 23,716 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 2

Shed 2N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.85 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 2.28 ac	Curve number	= 91.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 13,599 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

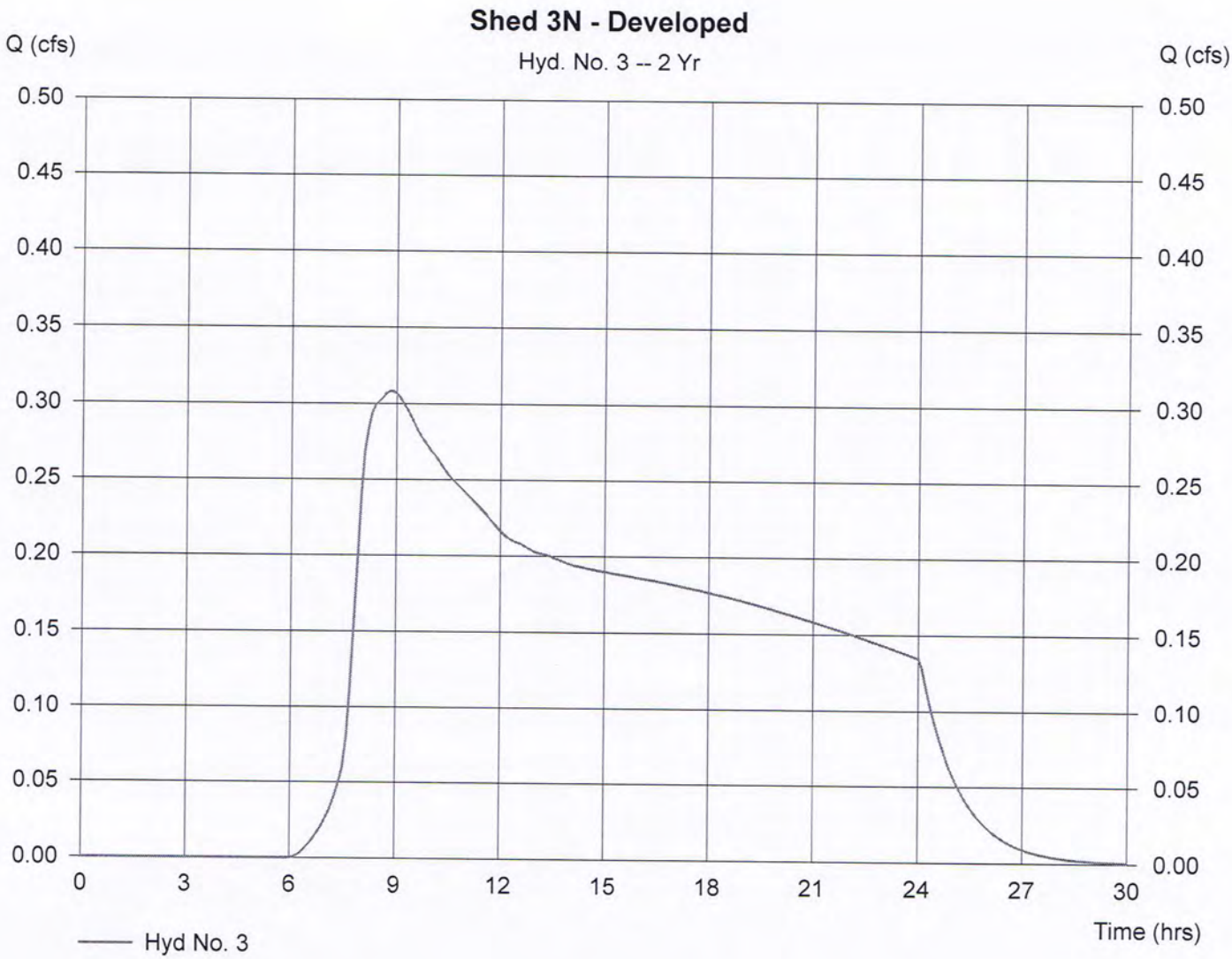
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 3

Shed 3N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.31 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 3.81 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 66 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 12,294 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 4

Shed 4N-S - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.18 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 1.87 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 46.3 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 6,034 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

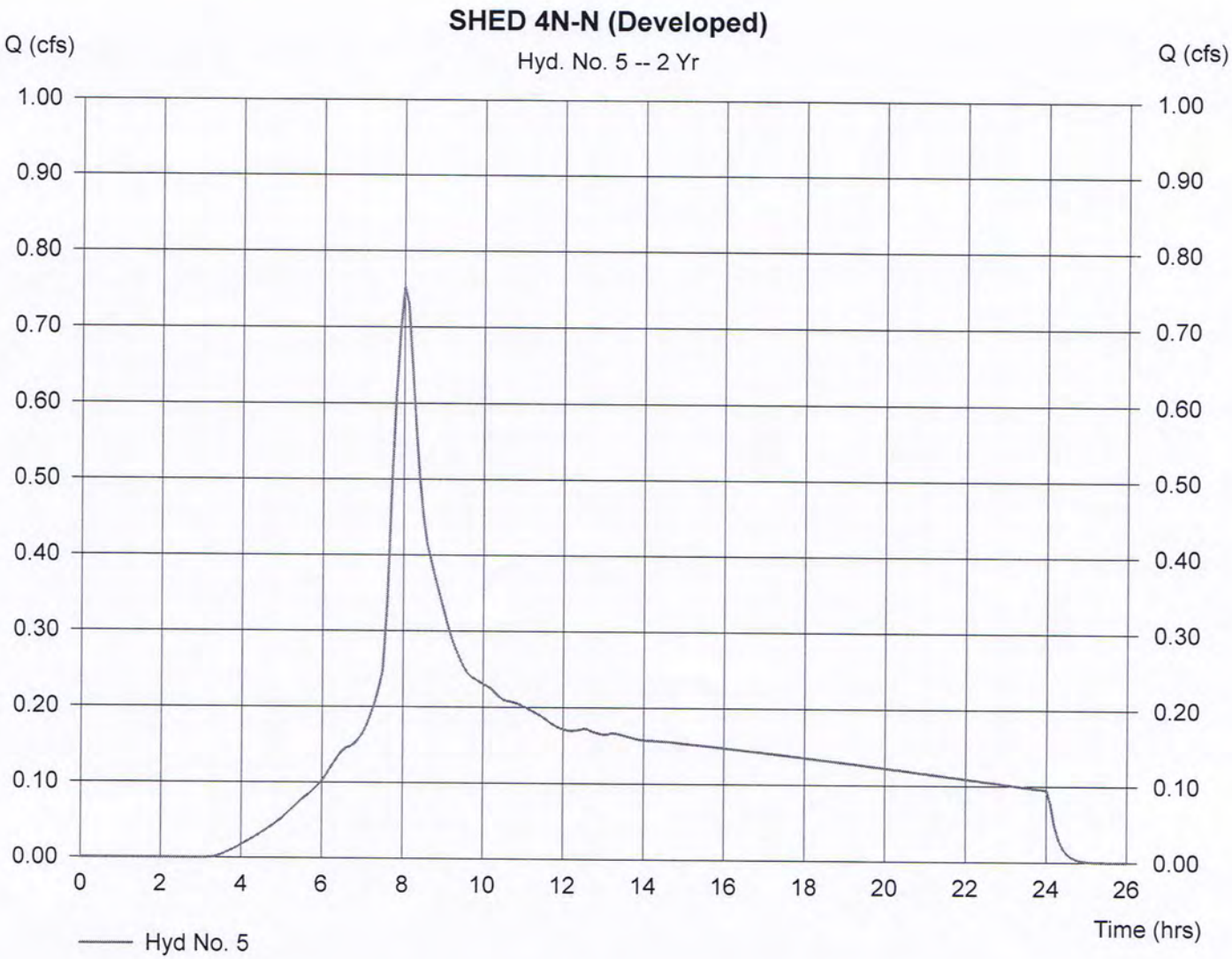
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 5

SHED 4N-N (Developed)

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.75 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 2.18 ac	Curve number	= 90.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 12,301 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 6

Shed 5N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.95 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 2.42 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20.8 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 16,747 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

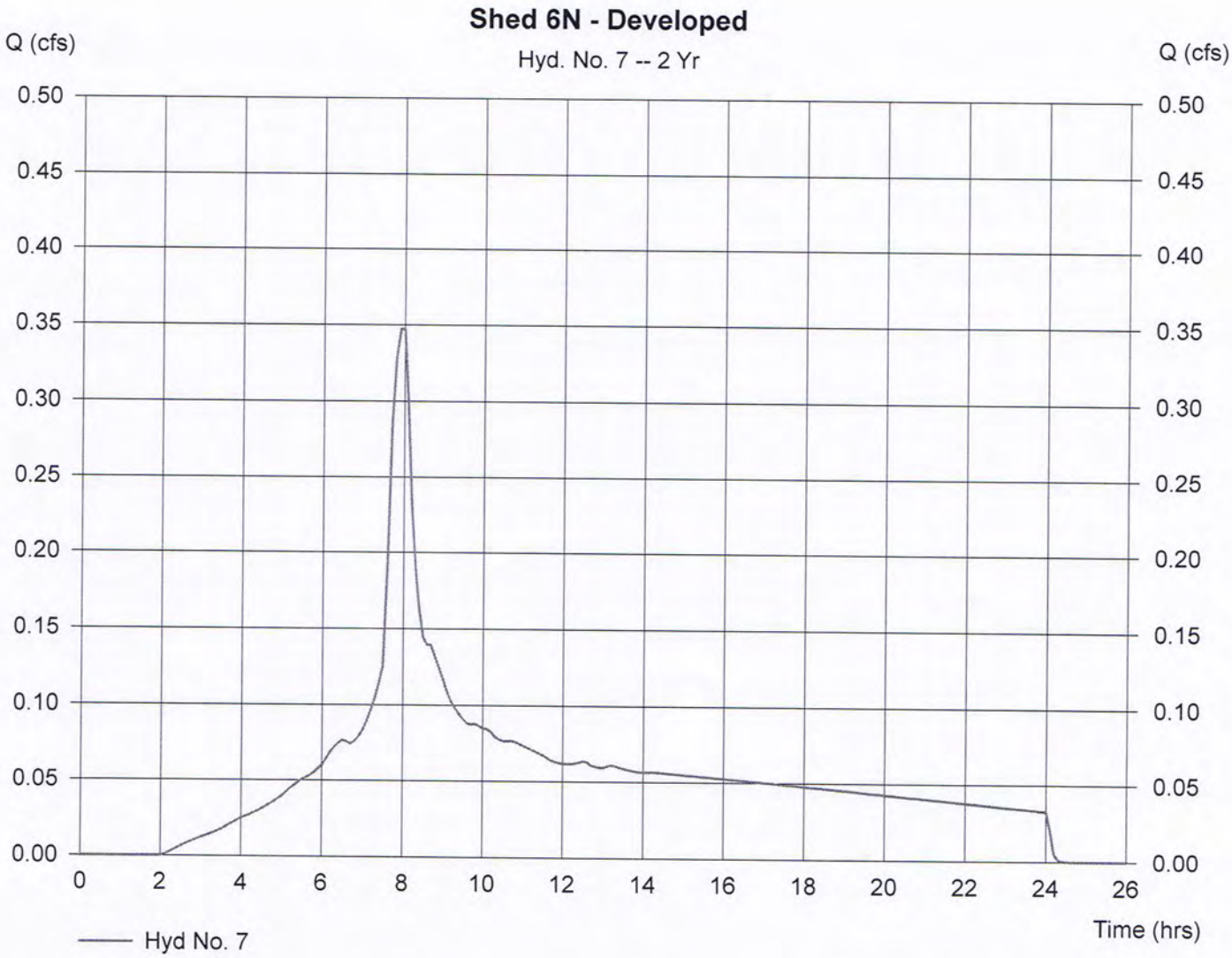
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 7

Shed 6N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.35 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 0.71 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 4,913 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 8

Shed 2M - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.01 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 3.25 ac	Curve number	= 89.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 16.4 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 17,697 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

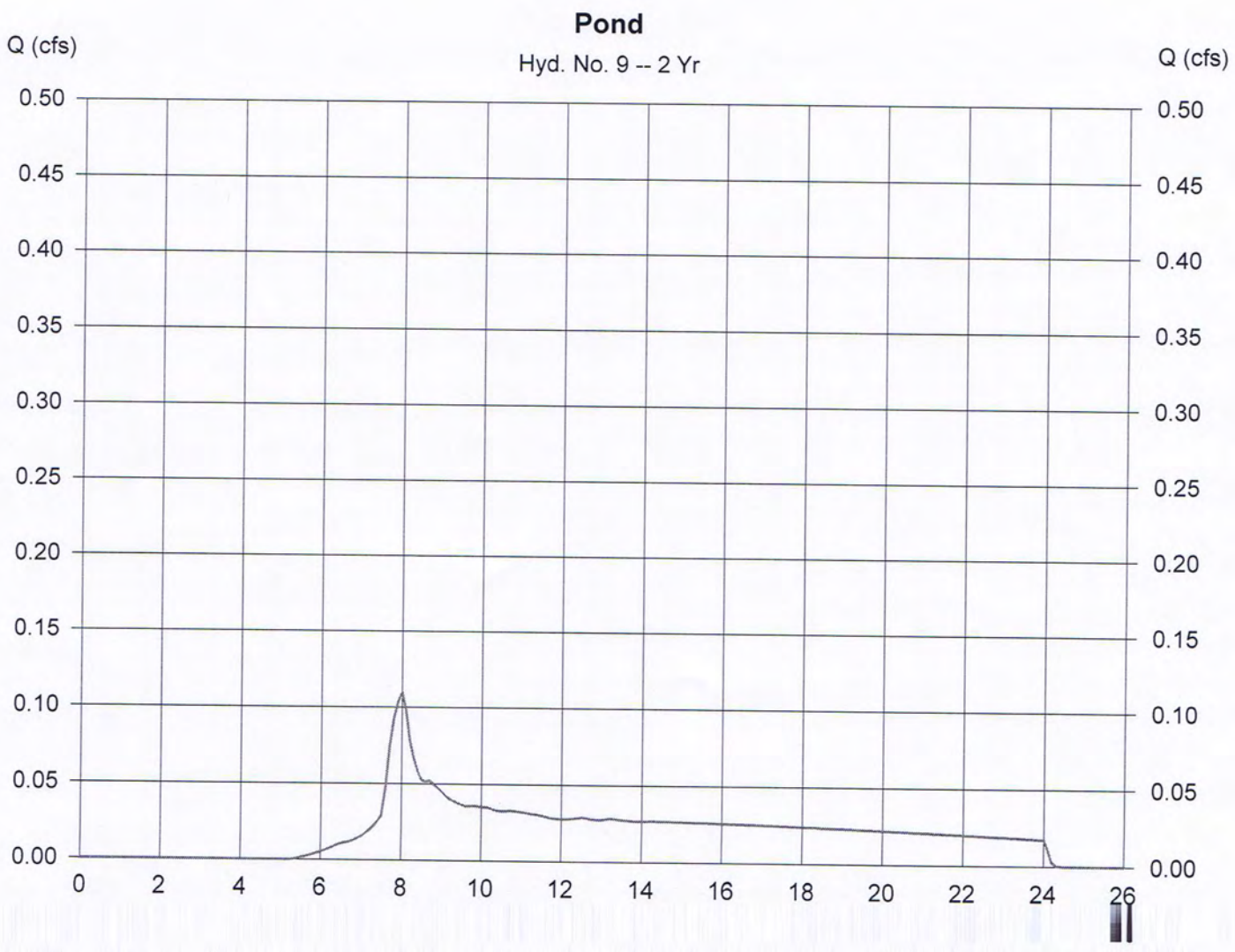
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 9

Pond

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.11 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Drainage area	= 0.48 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 2.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 1,840 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

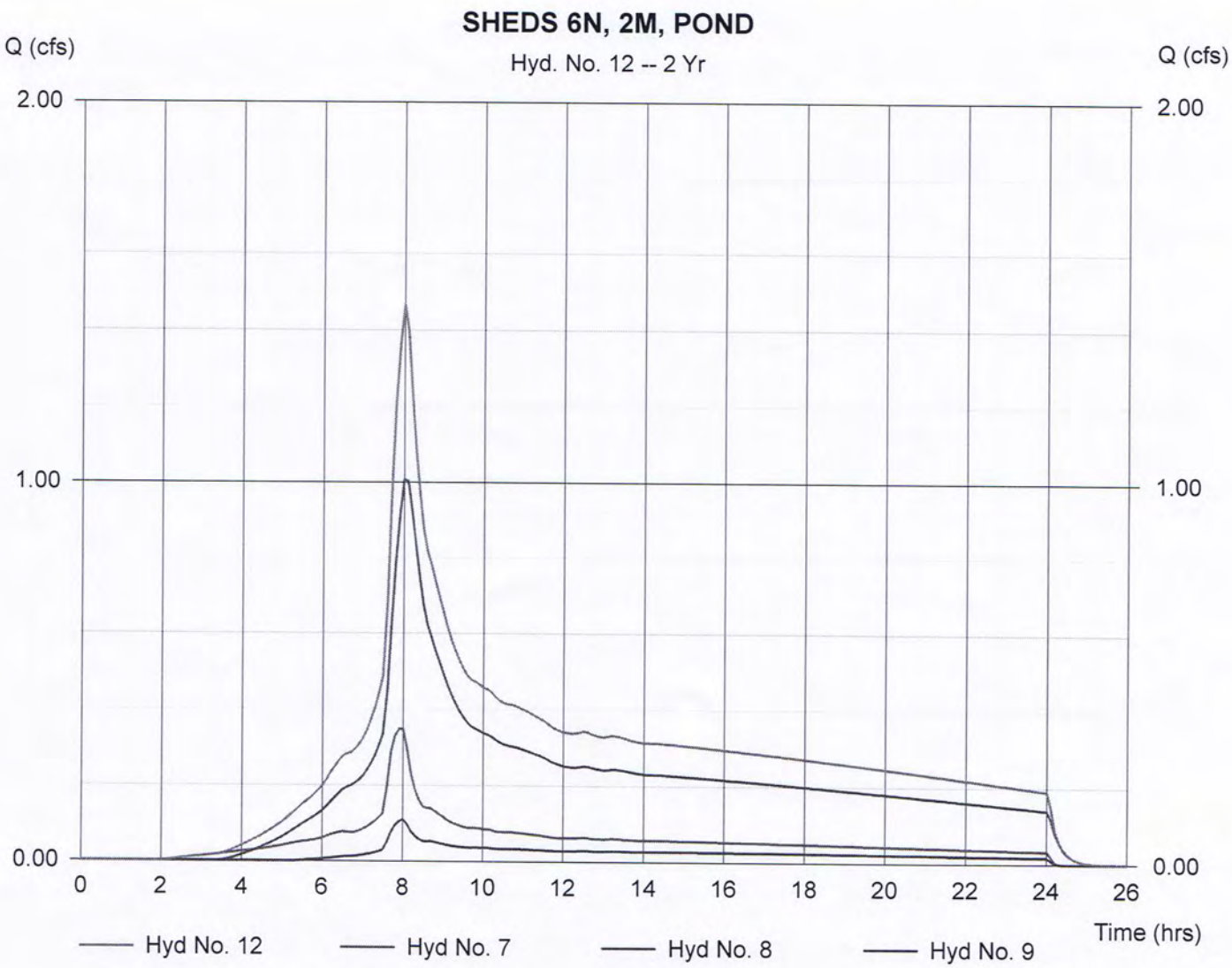
Hyd. No. 12

SHEDS 6N, 2M, POND

Hydrograph type = Combine
Storm frequency = 2 yrs
Inflow hyds. = 7, 8, 9

Peak discharge = 1.47 cfs
Time interval = 6 min

Hydrograph Volume = 24,451 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

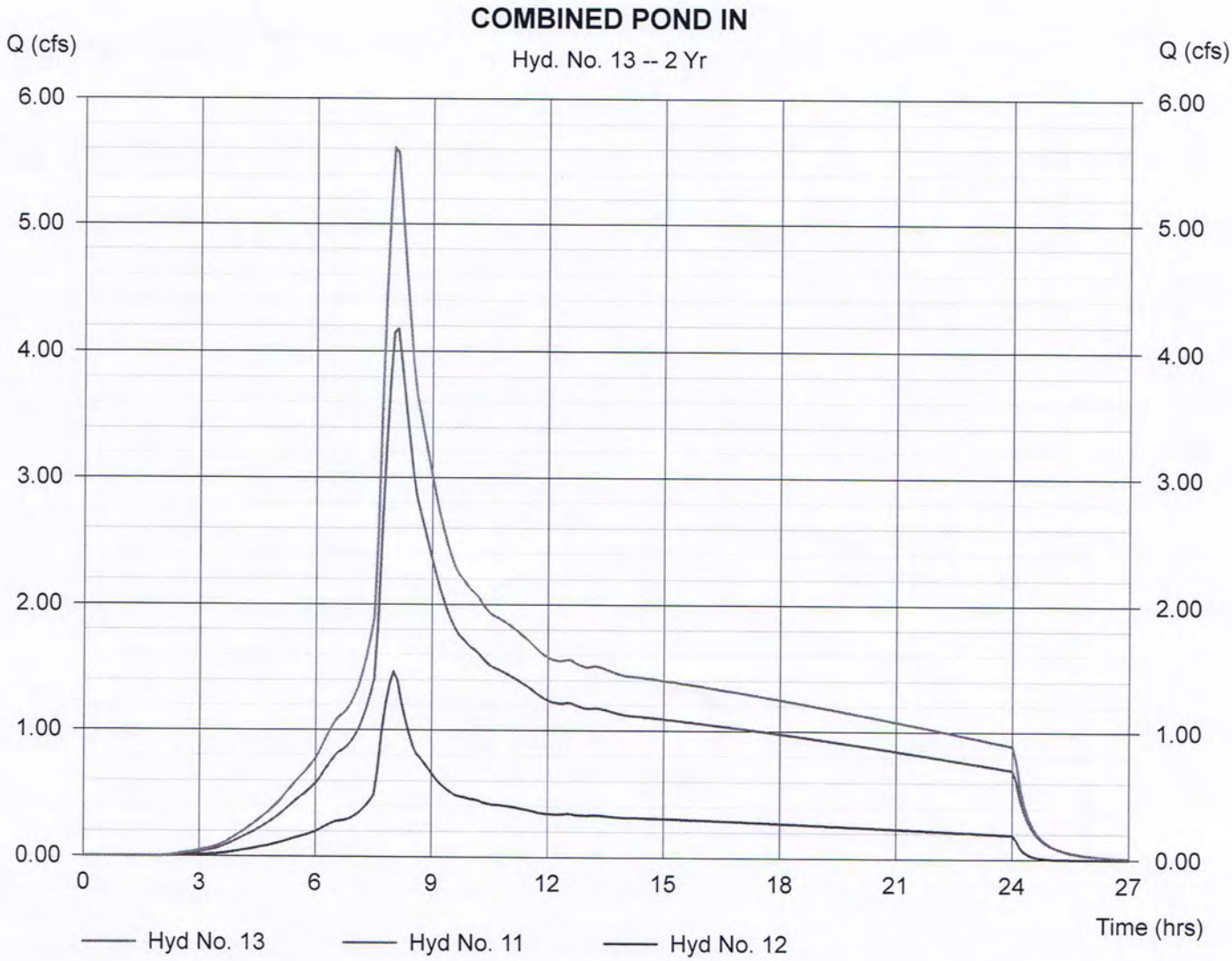
Hyd. No. 13

COMBINED POND IN

Hydrograph type = Combine
Storm frequency = 2 yrs
Inflow hyds. = 11, 12

Peak discharge = 5.61 cfs
Time interval = 6 min

Hydrograph Volume = 109,141 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

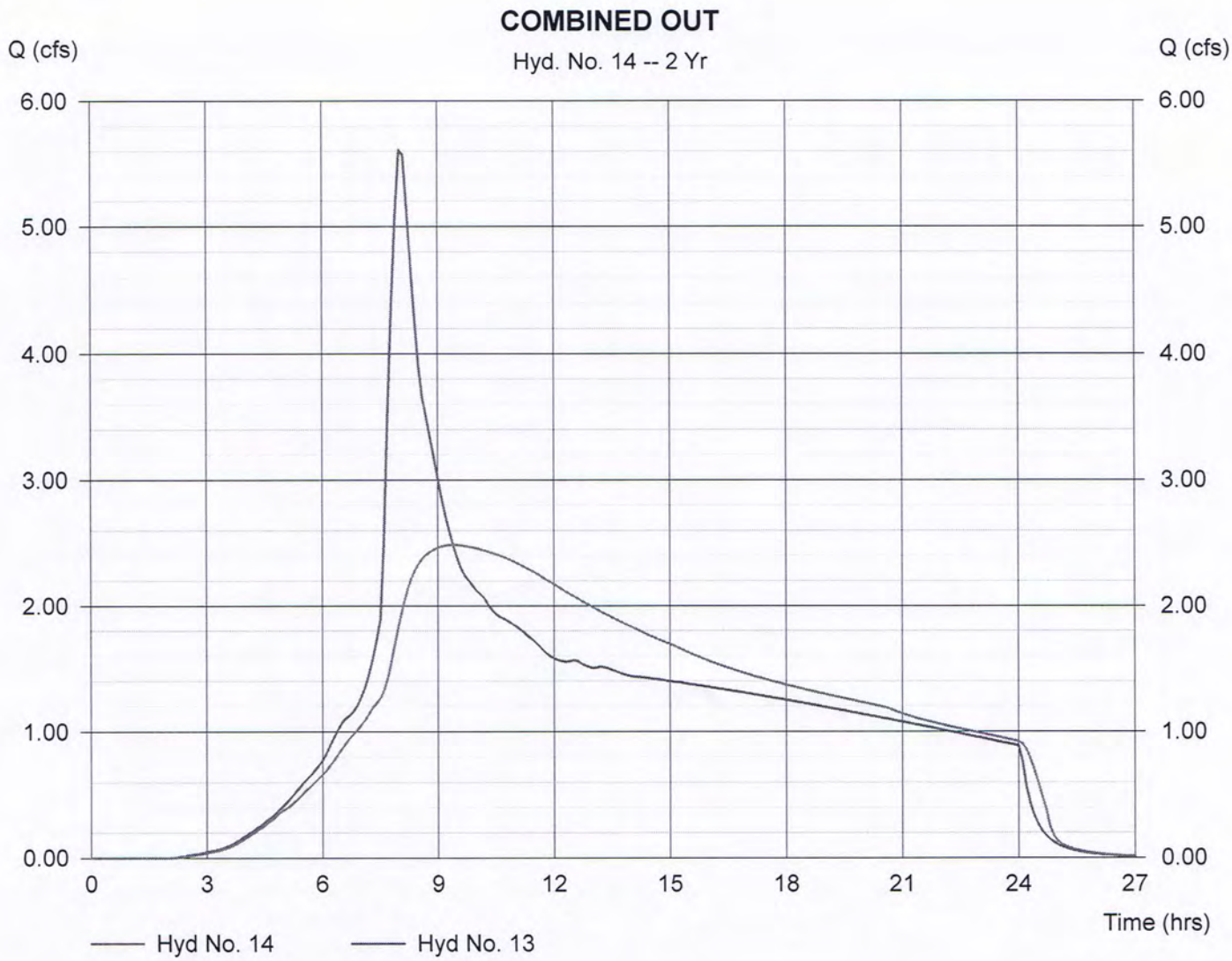
Hyd. No. 14

COMBINED OUT

Hydrograph type	= Reservoir	Peak discharge	= 2.48 cfs
Storm frequency	= 2 yrs	Time interval	= 6 min
Inflow hyd. No.	= 13	Max. Elevation	= 218.19 ft
Reservoir name	= POND O	Max. Storage	= 13,087 cuft

Storage Indication method used.

Hydrograph Volume = 109,141 cuft



Pond Report

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Pond No. 3 - POND O

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	216.00	231	0	0
0.50	216.50	5,259	1,373	1,373
1.00	217.00	6,171	2,858	4,230
2.00	218.00	8,126	7,149	11,379
3.00	219.00	10,218	9,172	20,551
4.00	220.00	12,470	11,344	31,895
5.00	221.00	16,044	14,257	46,152

Culvert / Orifice Structures

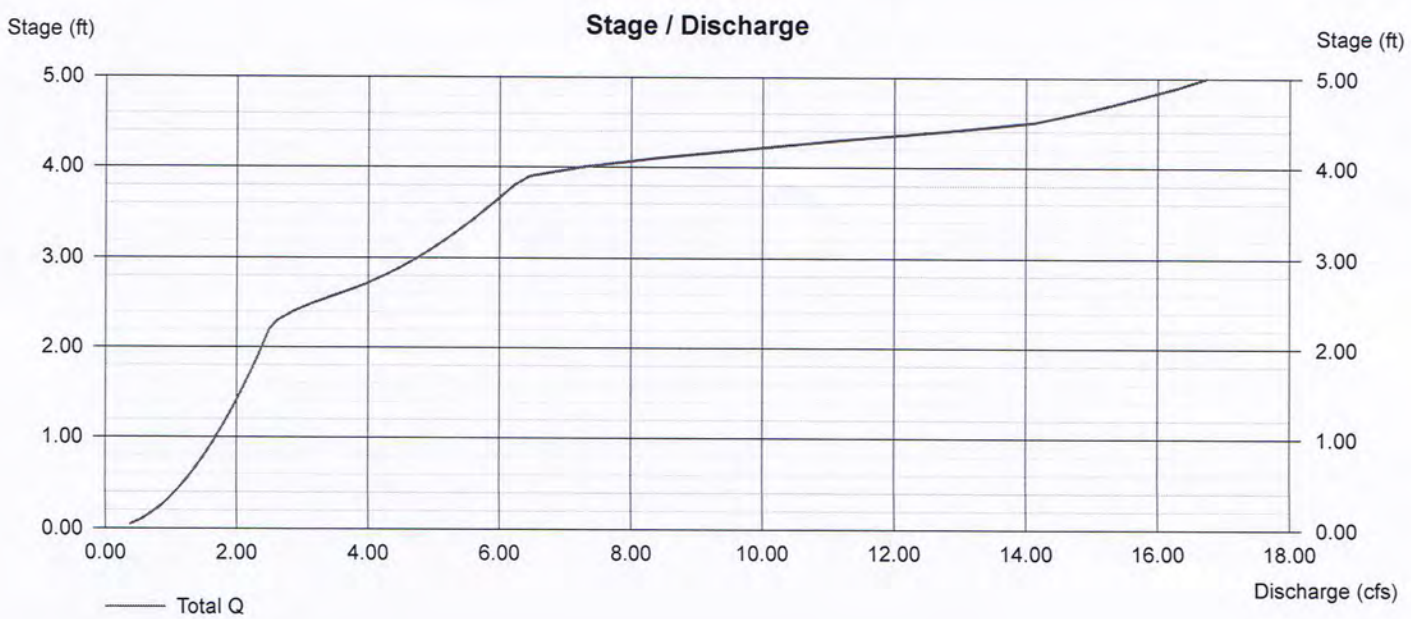
	[A]	[B]	[C]	[D]
Rise (in)	= 18.00	8.00	7.00	0.00
Span (in)	= 18.00	8.00	7.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 213.74	213.72	218.20	0.00
Length (ft)	= 72.00	0.00	0.00	0.00
Slope (%)	= 0.80	0.00	0.00	0.00
N-Value	= .013	.013	.013	.013
Orif. Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	0.00	0.00	0.00
Crest El. (ft)	= 219.87	0.00	0.00	0.00
Weir Coeff.	= 3.33	0.00	0.00	0.00
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration = 0.000 in/hr (Contour) Tailwater Elev. = 0.00 ft

Note: Culvert/Orifice outflows have been analyzed under inlet and outlet control. Weir riser checked for orifice conditions.



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SBUH Runoff	2.09	6	486	38,224	----	------	------	Shed 1N - Developed
2	SBUH Runoff	1.36	6	480	21,345	----	------	------	Shed 2N - Developed
3	SBUH Runoff	0.67	6	504	22,631	----	------	------	Shed 3N - Developed
4	SBUH Runoff	0.39	6	492	11,108	----	------	------	Shed 4N-S - Developed
5	SBUH Runoff	1.24	6	480	19,591	----	------	------	SHED 4N-N (Developed)
6	SBUH Runoff	1.44	6	480	25,270	----	------	------	Shed 5N - Developed
7	SBUH Runoff	0.53	6	474	7,414	----	------	------	Shed 6N - Developed
8	SBUH Runoff	1.69	6	480	28,448	----	------	------	Shed 2M - Developed
9	SBUH Runoff	0.21	6	480	3,238	----	------	------	Pond
11	Combine	7.04	6	486	138,170	1, 2, 3, 4, 5, 6,	------	------	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	2.43	6	480	39,100	7, 8, 9,	------	------	SHEDS 6N, 2M, POND
13	Combine	9.46	6	480	177,271	11, 12	------	------	COMBINED POND IN
14	Reservoir	5.10	6	534	177,270	13	219.16	22,401	COMBINED OUT

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 1

Shed 1N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.09 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 4.40 ac	Curve number	= 89.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 22.25 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 38,224 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

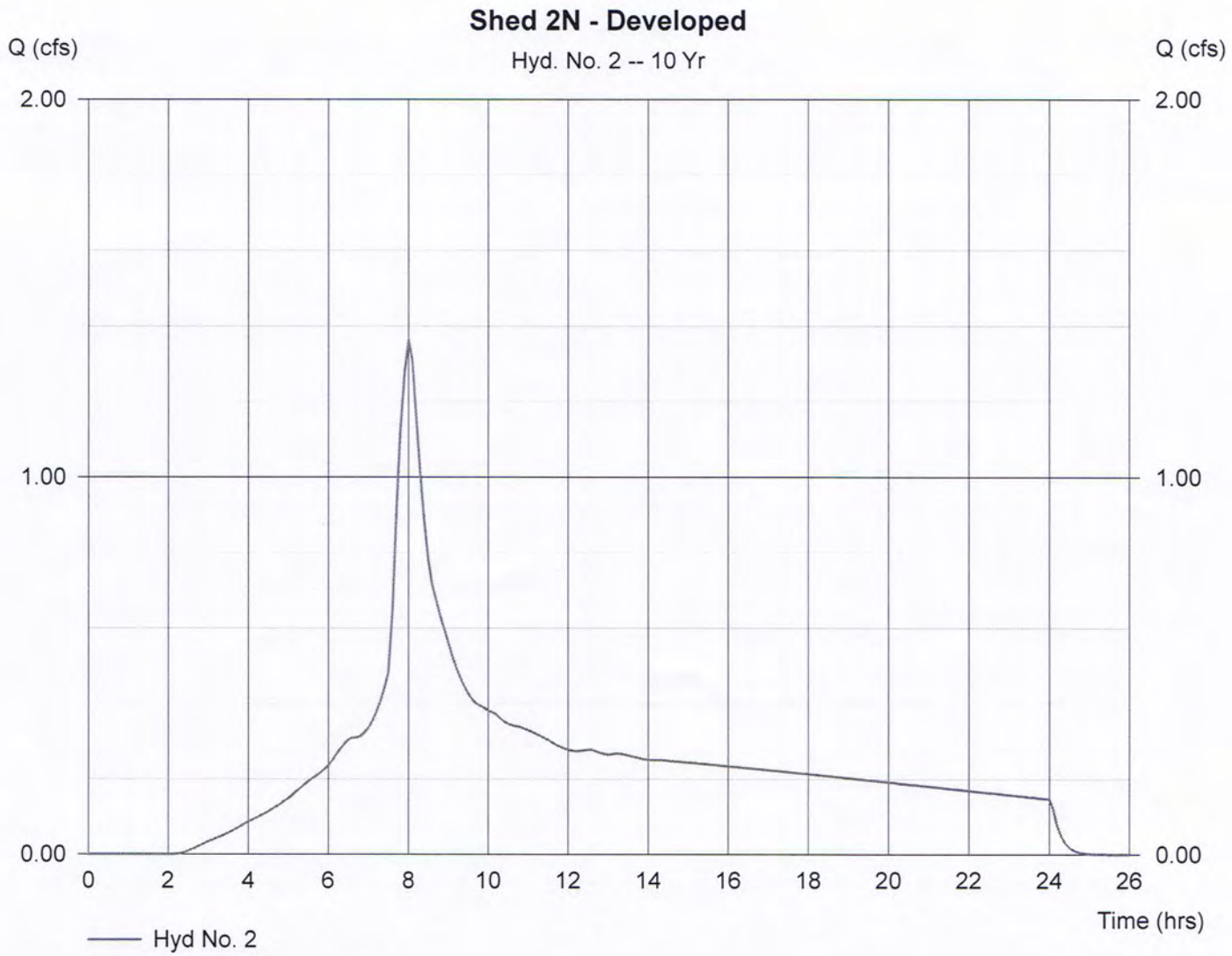
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 2

Shed 2N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.36 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 2.28 ac	Curve number	= 91.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 21,345 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 3

Shed 3N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.67 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 3.81 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 66 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 22,631 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 4

Shed 4N-S - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.39 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 1.87 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 46.3 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 11,108 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

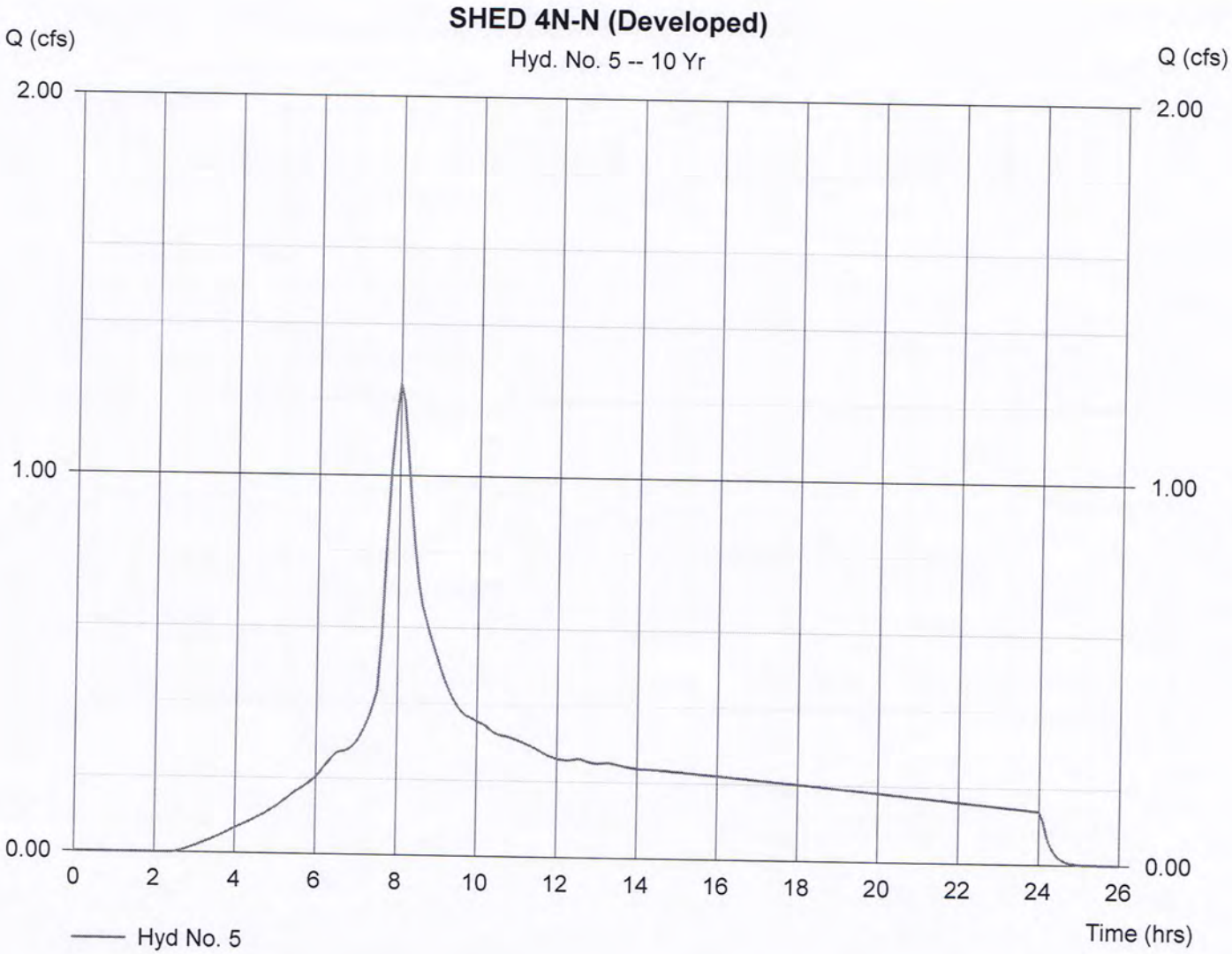
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 5

SHED 4N-N (Developed)

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.24 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 2.18 ac	Curve number	= 90.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 19,591 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

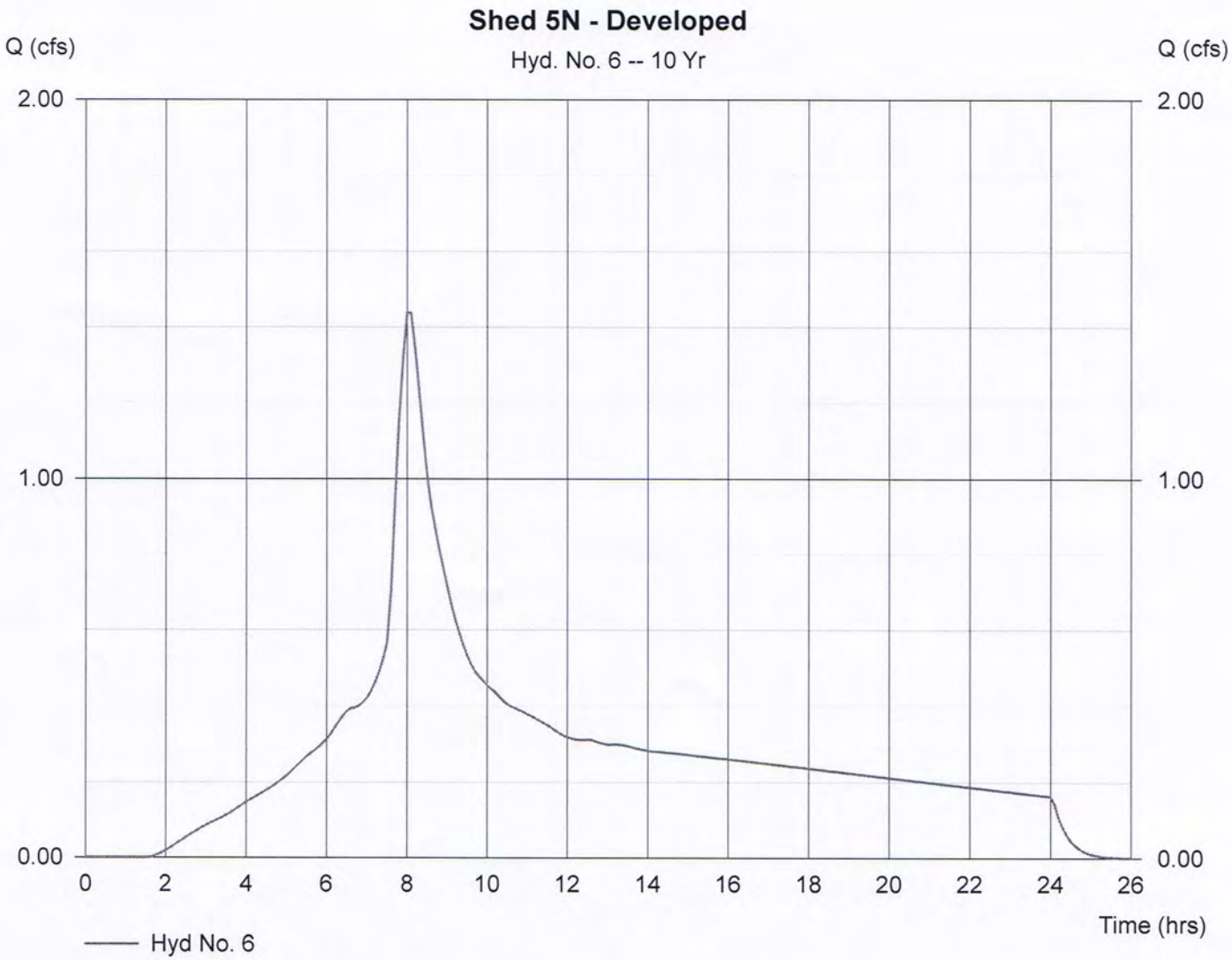
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 6

Shed 5N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.44 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 2.42 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20.8 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 25,270 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

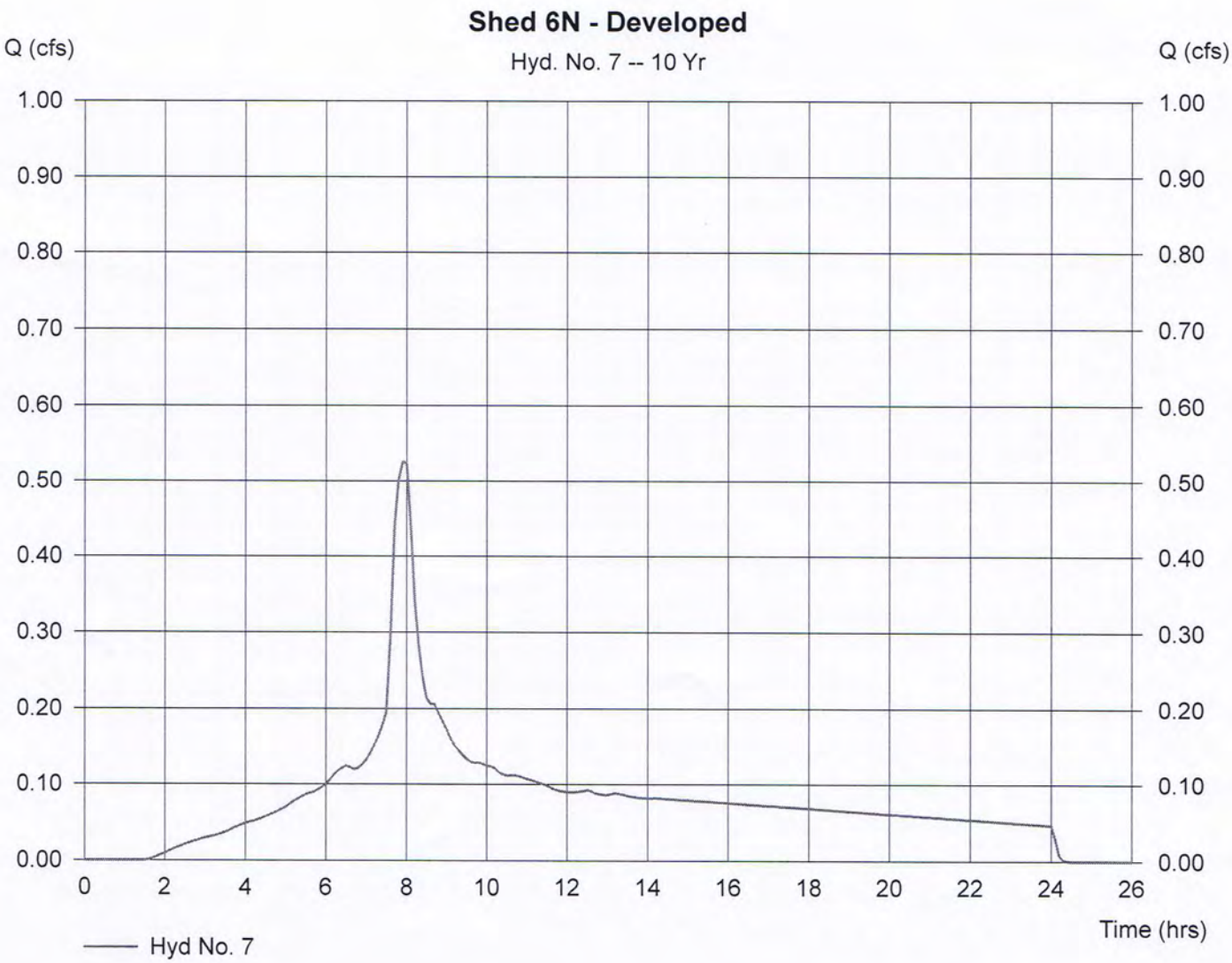
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 7

Shed 6N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.53 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 0.71 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 7,414 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

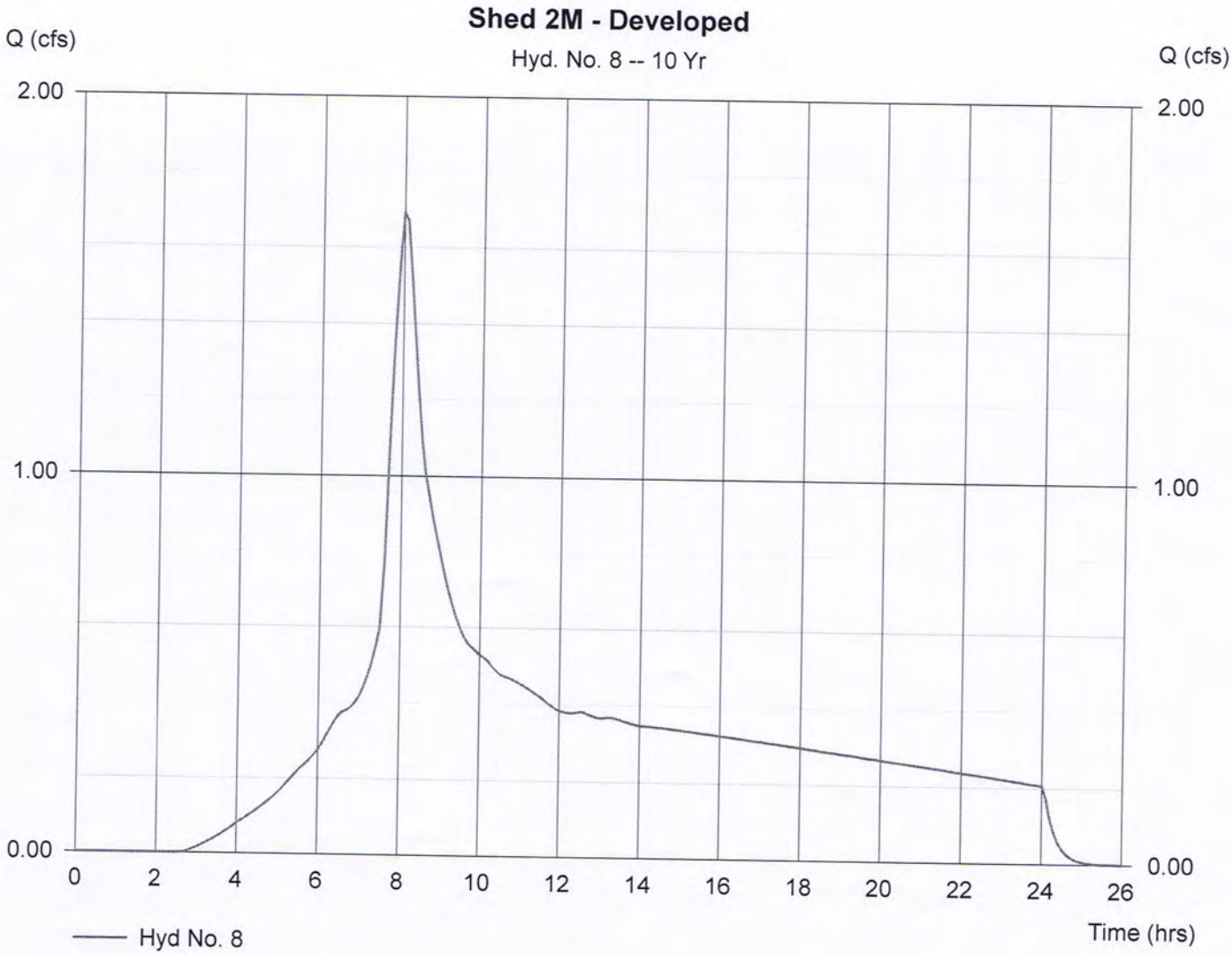
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 8

Shed 2M - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.69 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 3.25 ac	Curve number	= 89.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 16.4 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 28,448 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

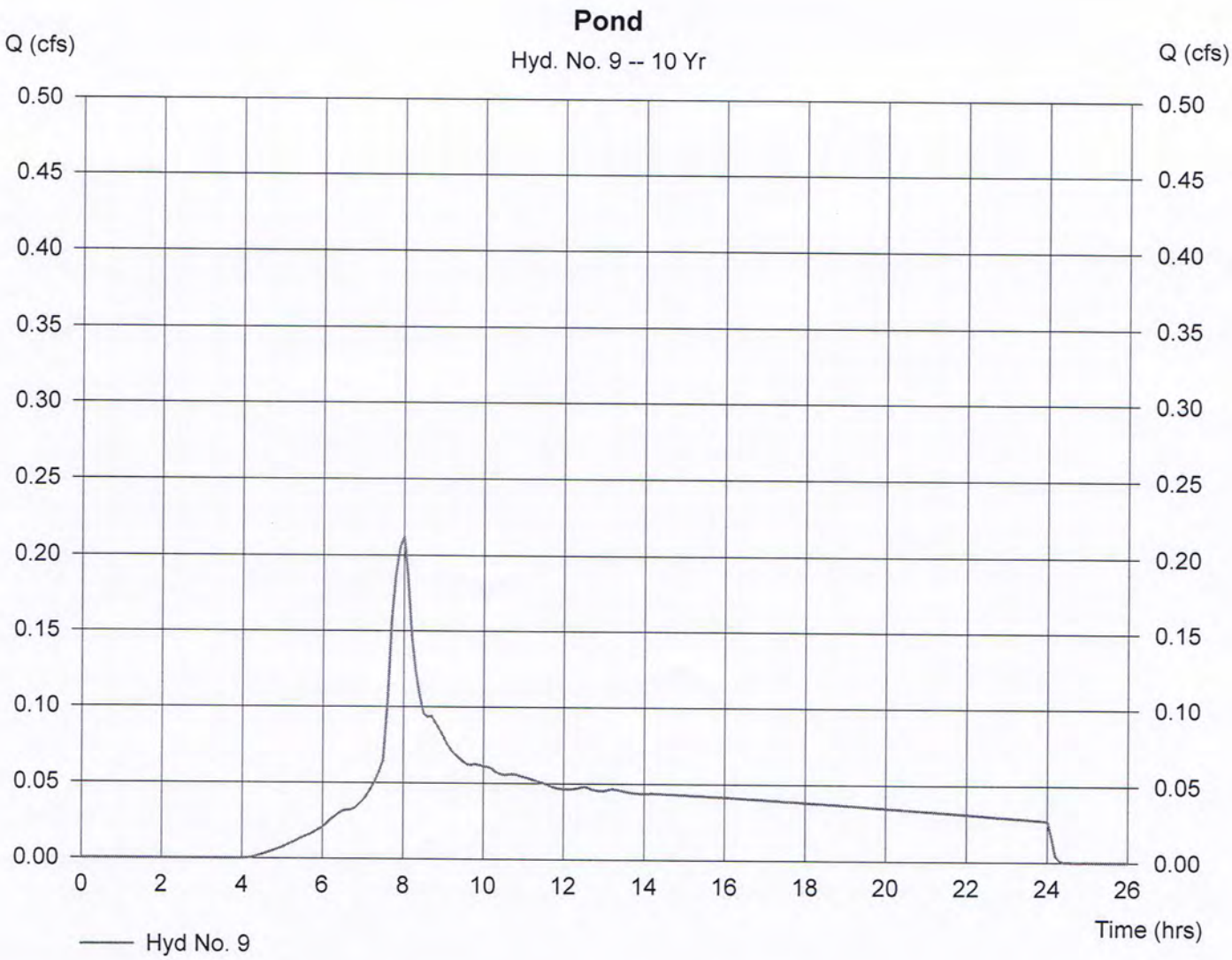
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 9

Pond

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.21 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Drainage area	= 0.48 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 3,238 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

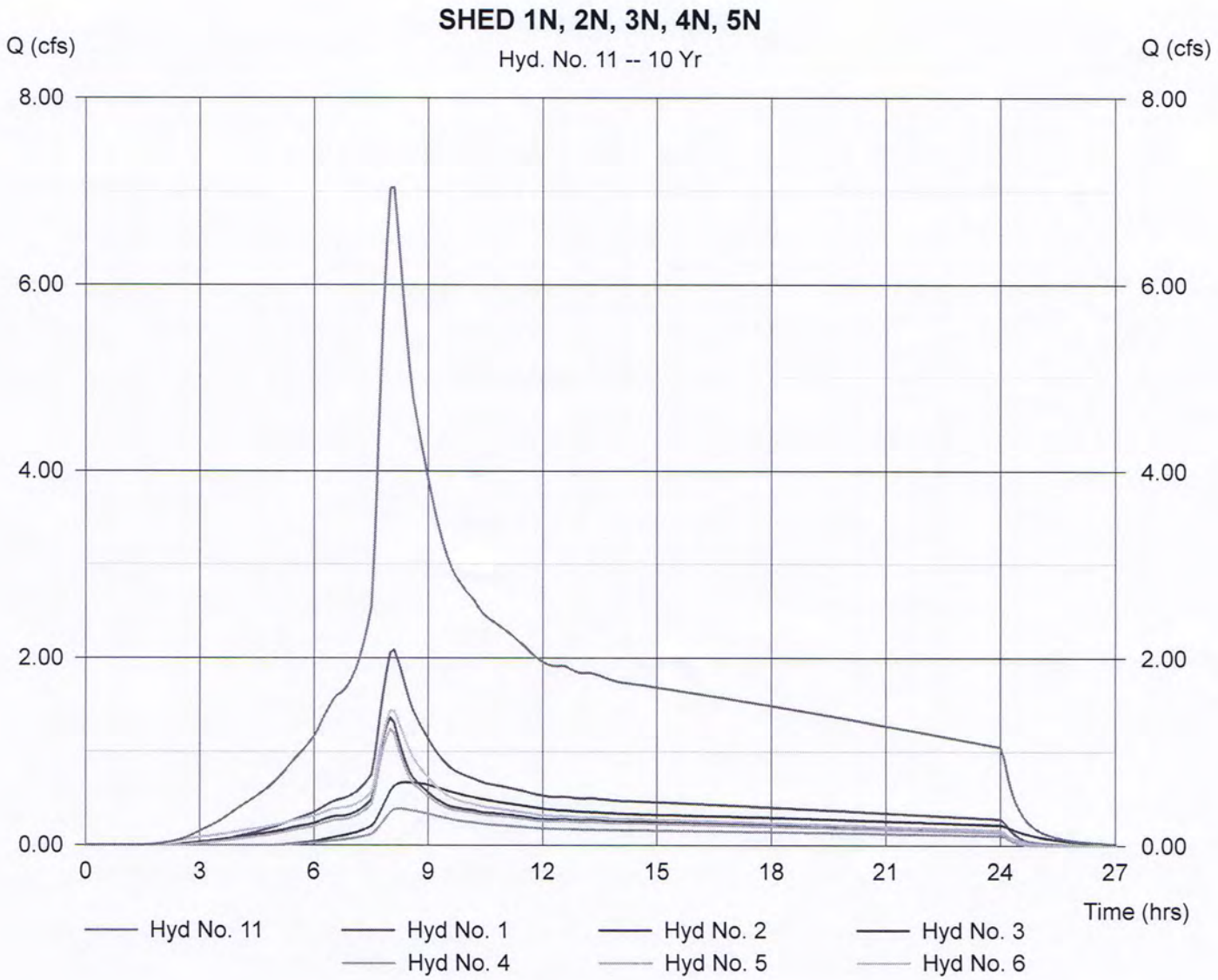
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 11

SHED 1N, 2N, 3N, 4N, 5N

Hydrograph type	= Combine	Peak discharge	= 7.04 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Inflow hyds.	= 1, 2, 3, 4, 5, 6		

Hydrograph Volume = 138,170 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

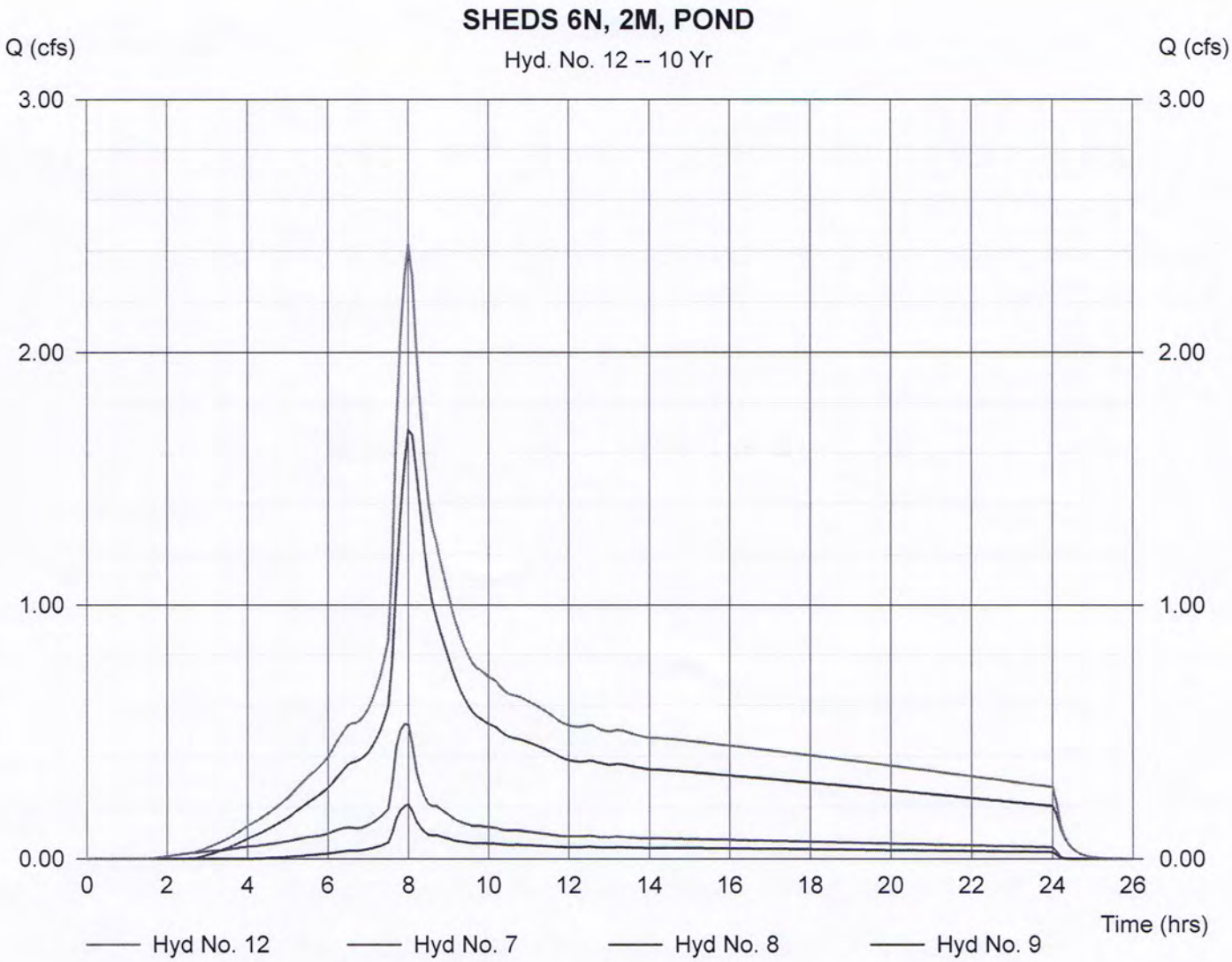
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 12

SHEDS 6N, 2M, POND

Hydrograph type	= Combine	Peak discharge	= 2.43 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Inflow hyds.	= 7, 8, 9		

Hydrograph Volume = 39,100 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

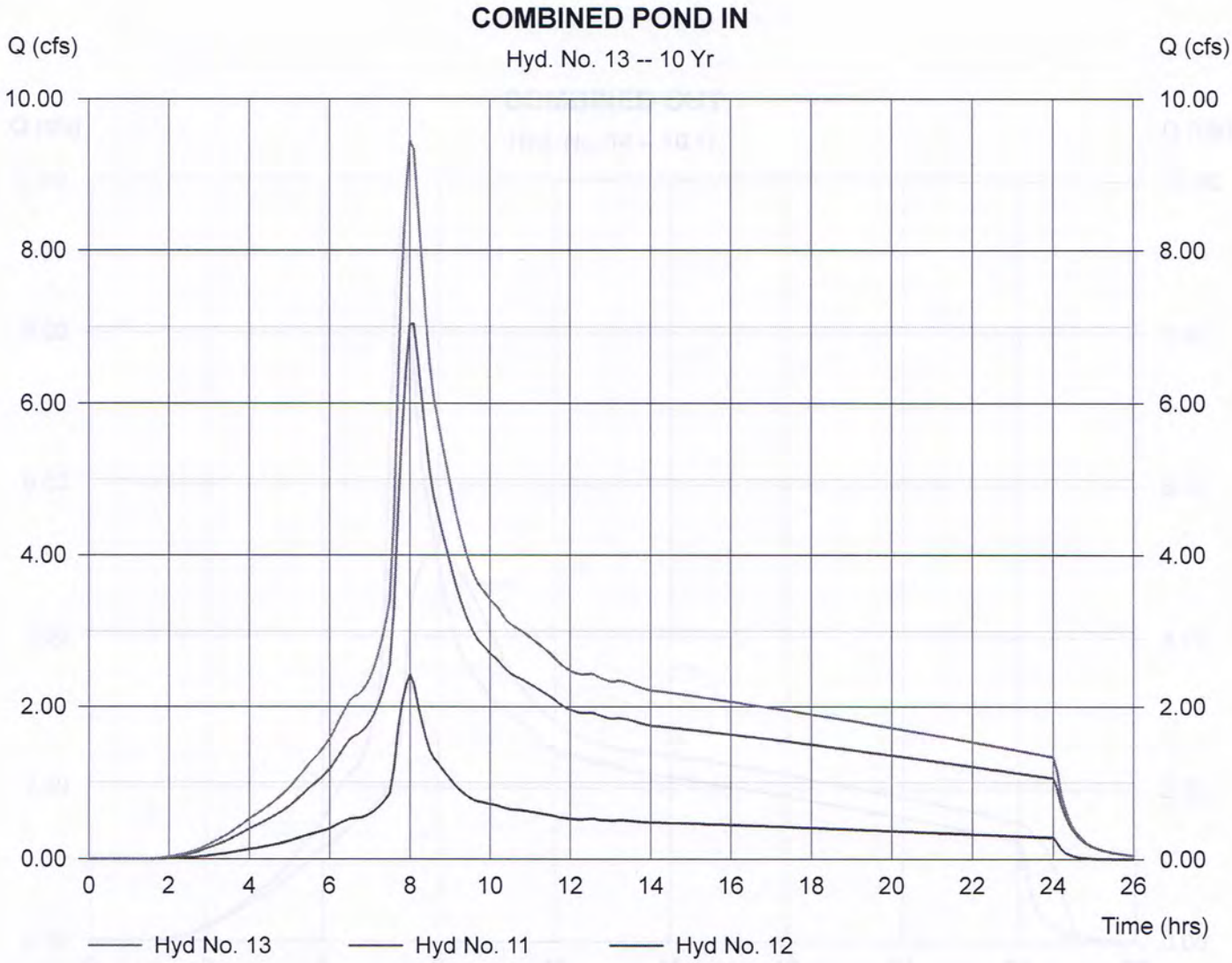
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 13

COMBINED POND IN

Hydrograph type	= Combine	Peak discharge	= 9.46 cfs
Storm frequency	= 10 yrs	Time interval	= 6 min
Inflow hyds.	= 11, 12		

Hydrograph Volume = 177,271 cuft



Pond Report

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Pond No. 3 - POND O

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	216.00	231	0	0
0.50	216.50	5,259	1,373	1,373
1.00	217.00	6,171	2,858	4,230
2.00	218.00	8,126	7,149	11,379
3.00	219.00	10,218	9,172	20,551
4.00	220.00	12,470	11,344	31,895
5.00	221.00	16,044	14,257	46,152

Culvert / Orifice Structures

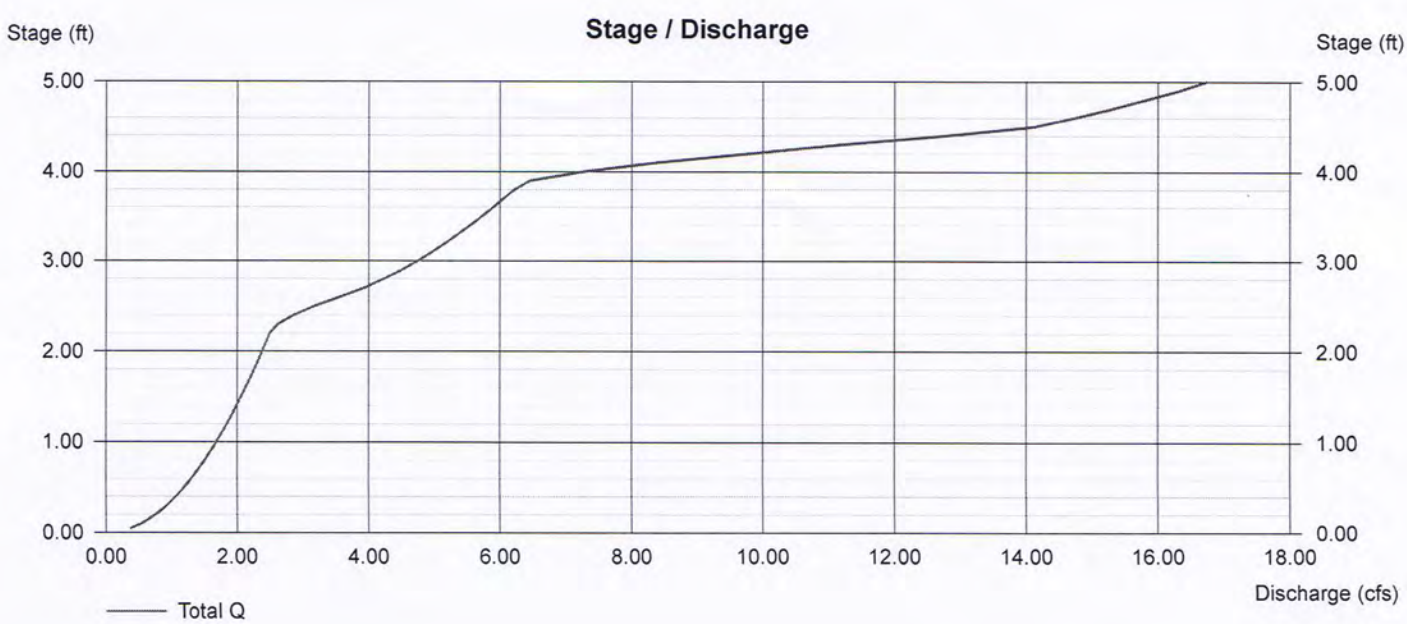
	[A]	[B]	[C]	[D]
Rise (in)	= 18.00	8.00	7.00	0.00
Span (in)	= 18.00	8.00	7.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 213.74	213.72	218.20	0.00
Length (ft)	= 72.00	0.00	0.00	0.00
Slope (%)	= 0.80	0.00	0.00	0.00
N-Value	= .013	.013	.013	.013
Orif. Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	0.00	0.00	0.00
Crest El. (ft)	= 219.87	0.00	0.00	0.00
Weir Coeff.	= 3.33	0.00	0.00	0.00
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration = 0.000 in/hr (Contour) Tailwater Elev. = 0.00 ft

Note: Culvert/Orifice outflows have been analyzed under inlet and outlet control. Weir riser checked for orifice conditions.



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SBUH Runoff	2.52	6	486	45,700	----	------	------	Shed 1N - Developed
2	SBUH Runoff	1.62	6	480	25,302	----	------	------	Shed 2N - Developed
3	SBUH Runoff	0.88	6	504	28,237	----	------	------	Shed 3N - Developed
4	SBUH Runoff	0.51	6	492	13,859	----	------	------	Shed 4N-S - Developed
5	SBUH Runoff	1.49	6	480	23,332	----	------	------	SHED 4N-N (Developed)
6	SBUH Runoff	1.68	6	480	29,576	----	------	------	Shed 5N - Developed
7	SBUH Runoff	0.61	6	474	8,677	----	------	------	Shed 6N - Developed
8	SBUH Runoff	2.04	6	480	33,983	----	------	------	Shed 2M - Developed
9	SBUH Runoff	0.27	6	480	3,983	----	------	------	Pond
11	Combine	8.52	6	480	166,006	1, 2, 3, 4, 5, 6,	------	------	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	2.92	6	480	46,643	7, 8, 9,	------	------	SHEDS 6N, 2M, POND
13	Combine	11.44	6	480	212,650	11, 12	------	------	COMBINED POND IN
14	Reservoir	6.03	6	540	212,650	13	219.68	28,300	COMBINED OUT

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

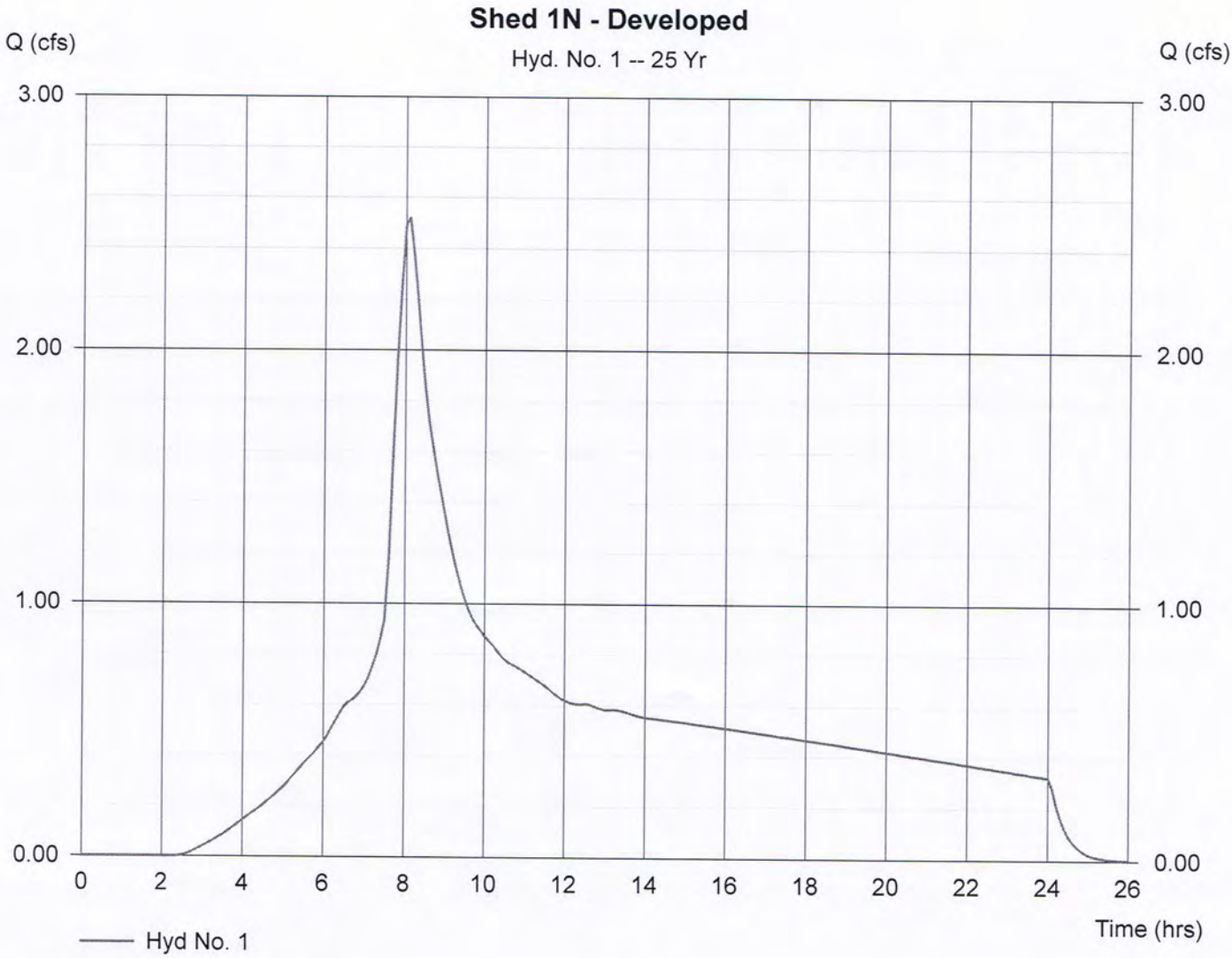
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 1

Shed 1N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.52 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 4.40 ac	Curve number	= 89.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 22.25 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 45,700 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

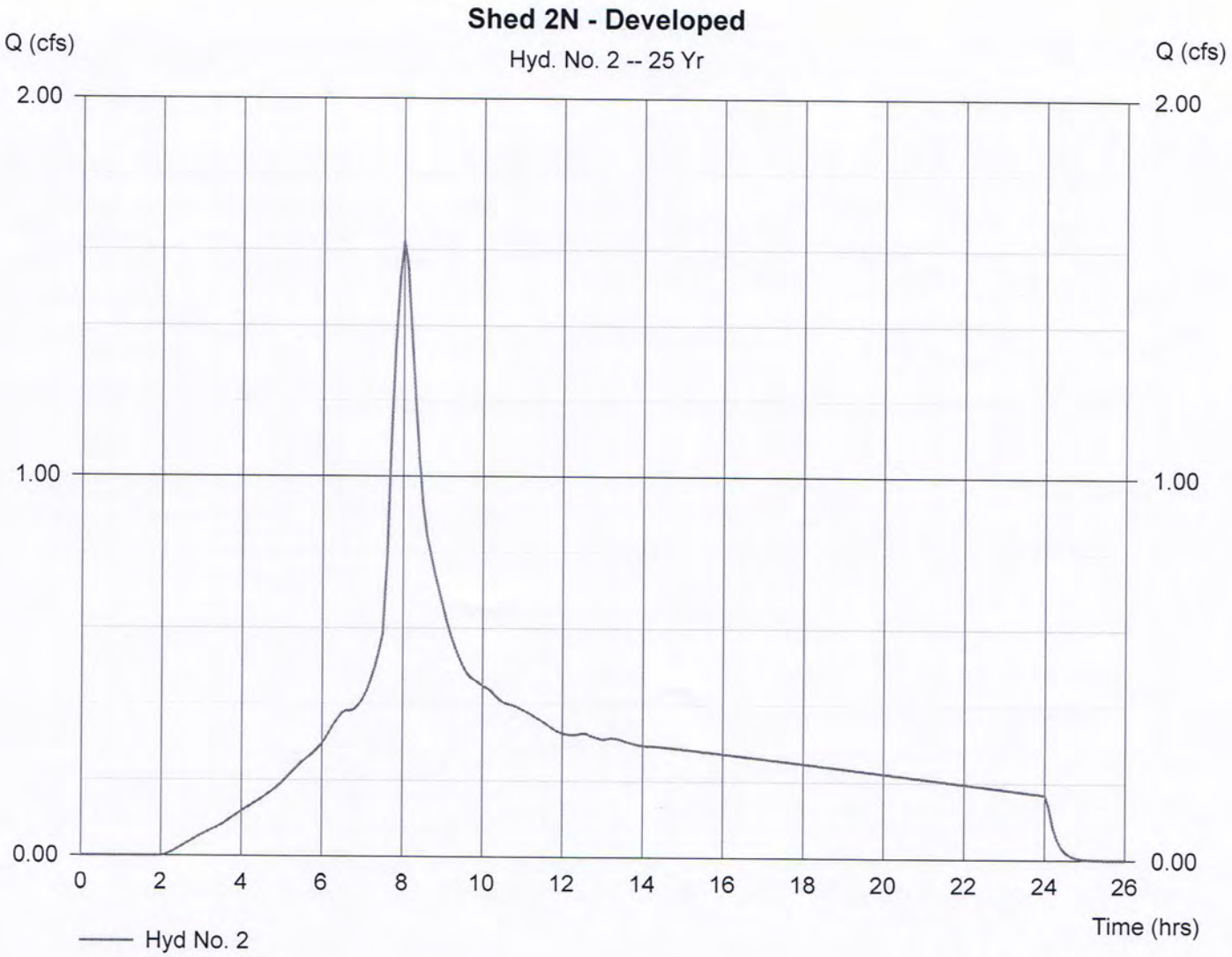
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 2

Shed 2N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.62 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 2.28 ac	Curve number	= 91.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 25,302 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 3

Shed 3N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.88 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 3.81 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 66 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 28,237 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 4

Shed 4N-S - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.51 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 1.87 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 46.3 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 13,859 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

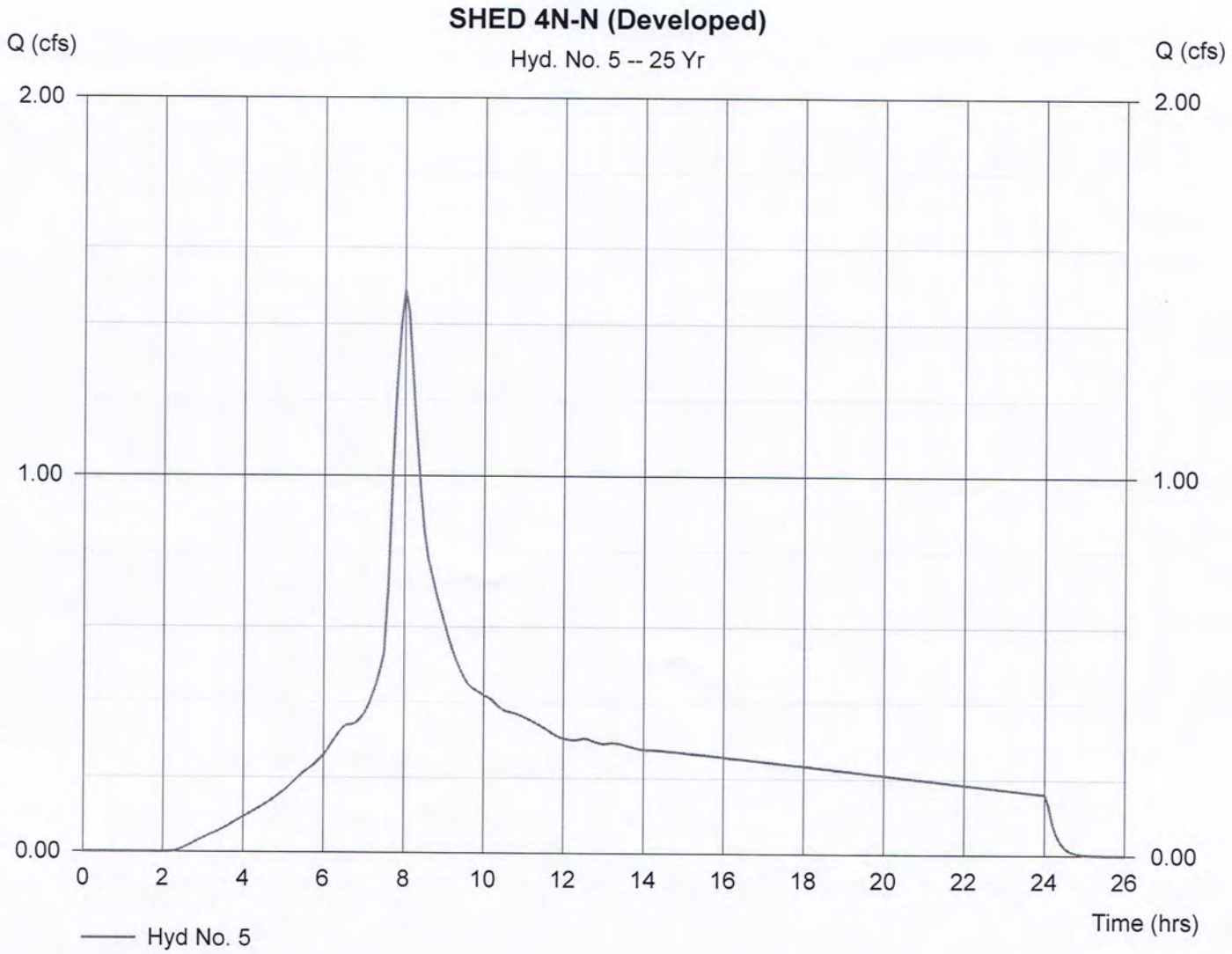
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 5

SHED 4N-N (Developed)

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.49 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 2.18 ac	Curve number	= 90.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 23,332 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

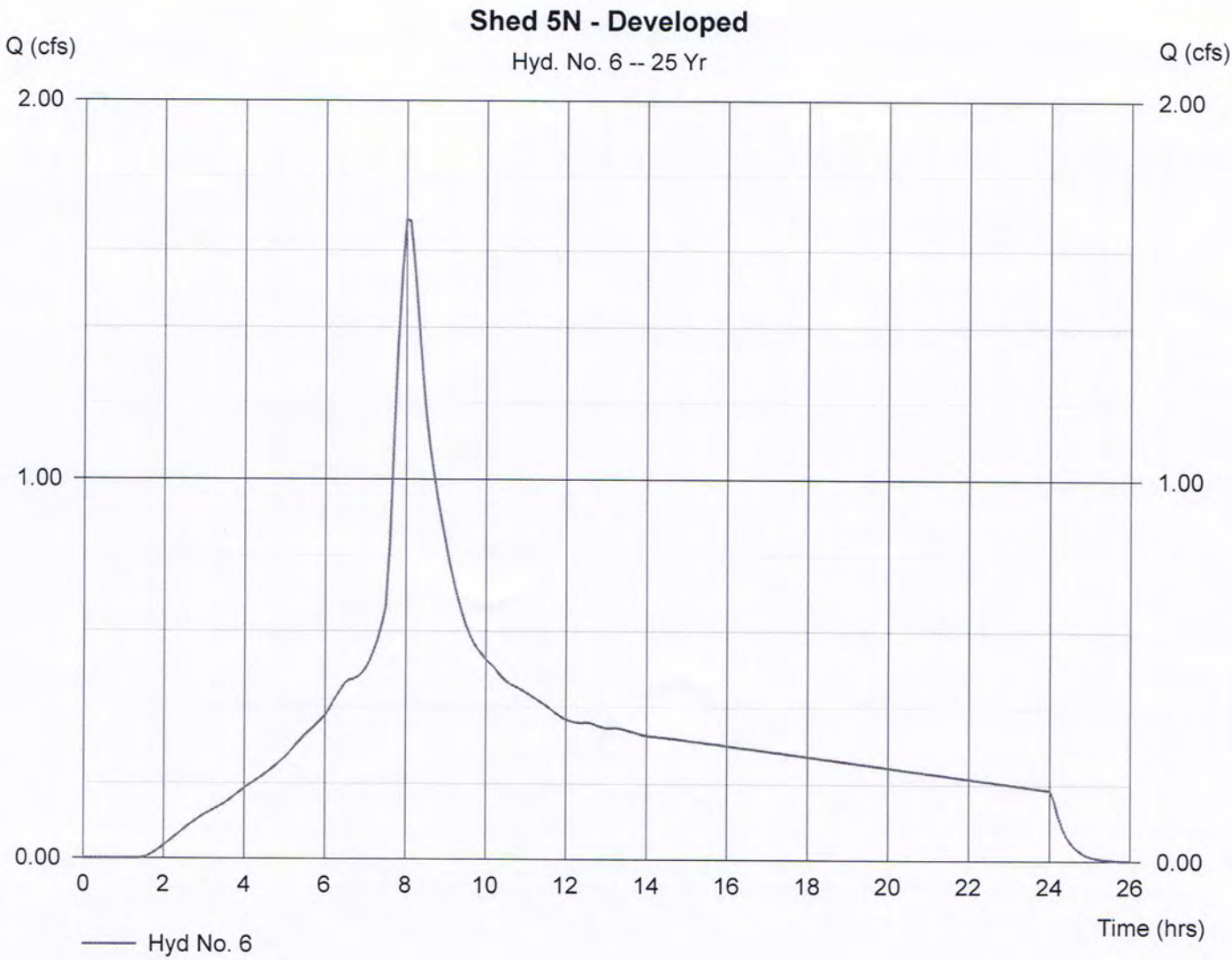
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 6

Shed 5N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.68 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 2.42 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20.8 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 29,576 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

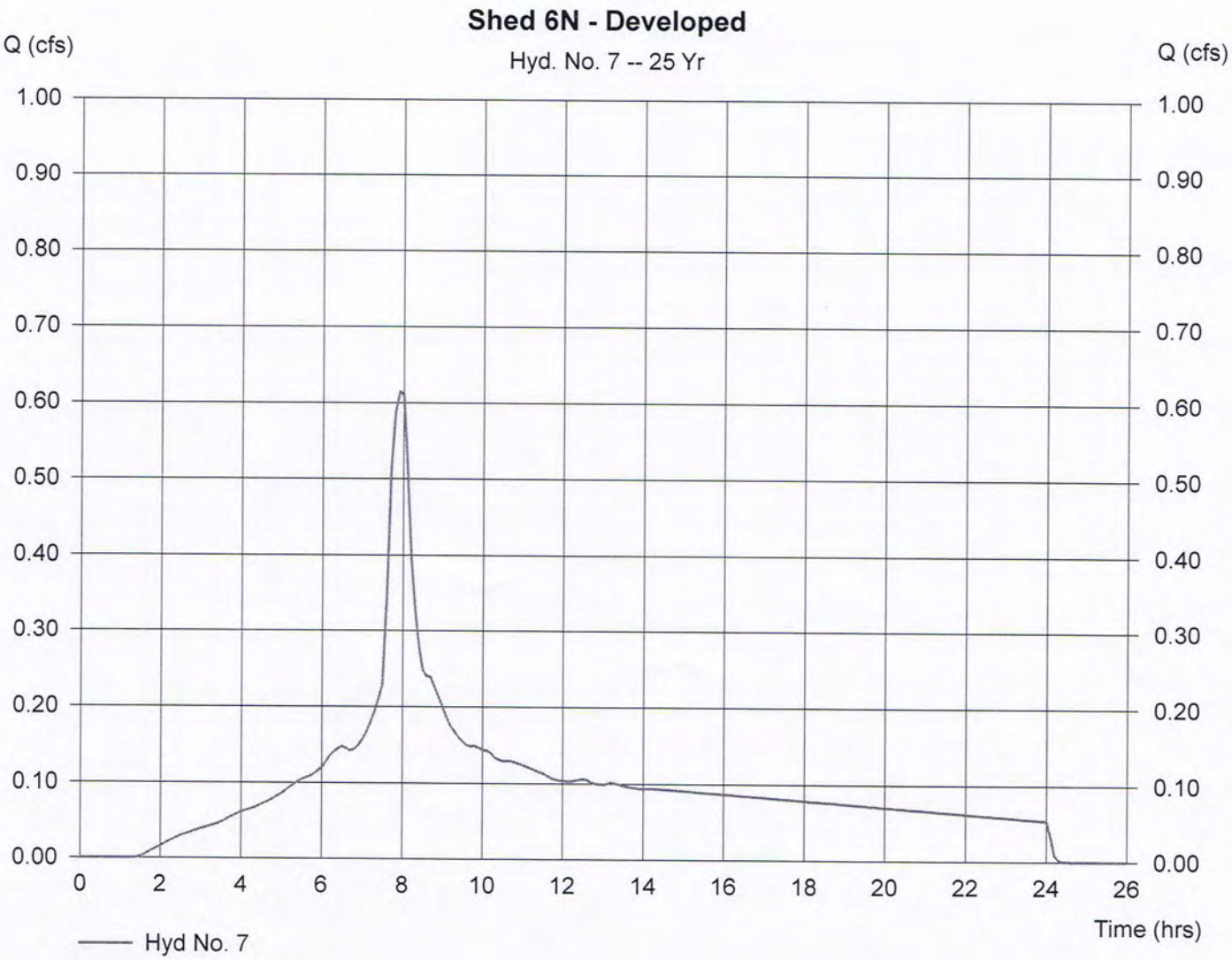
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 7

Shed 6N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.61 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 0.71 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 8,677 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

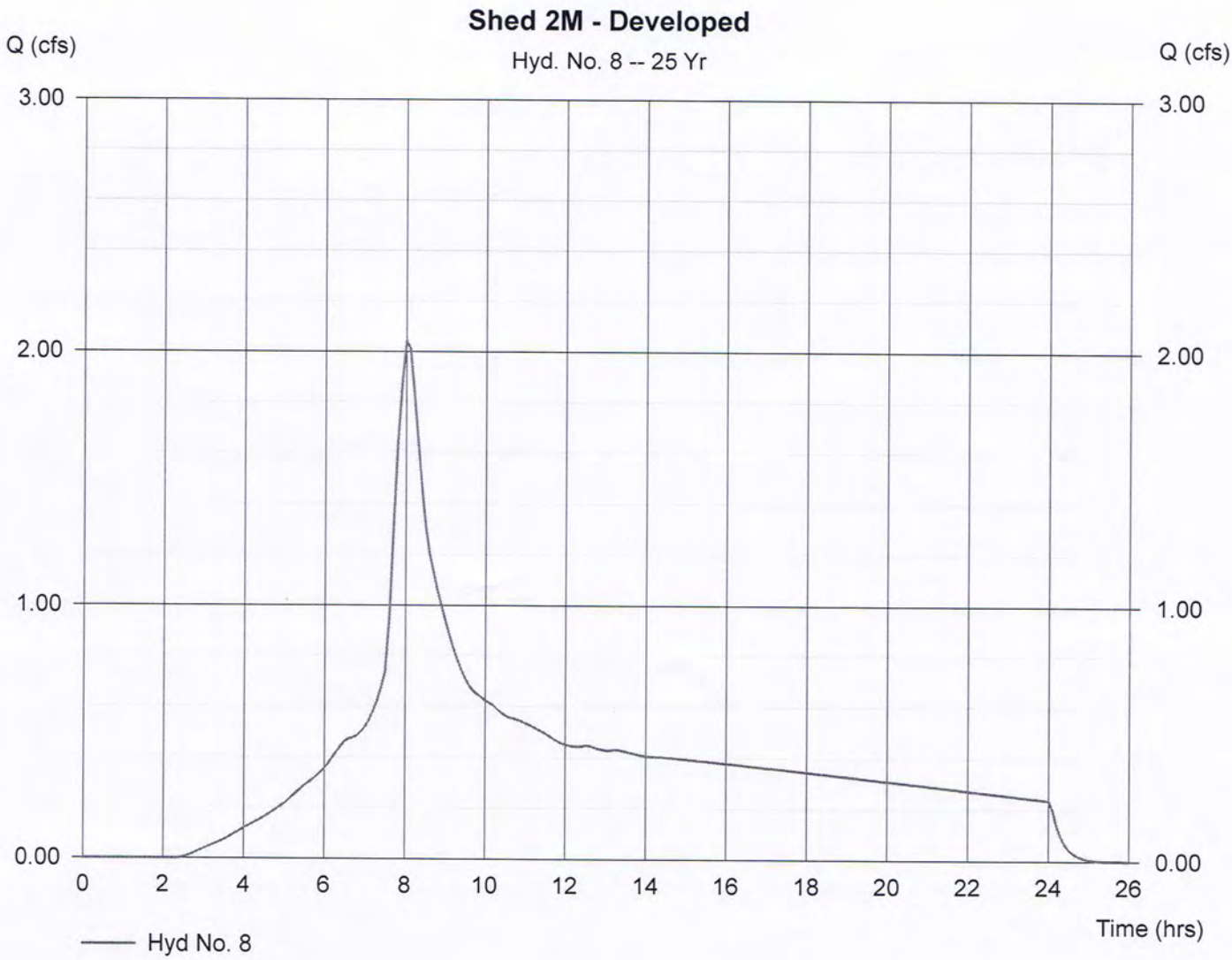
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 8

Shed 2M - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.04 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 3.25 ac	Curve number	= 89.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 16.4 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 33,983 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

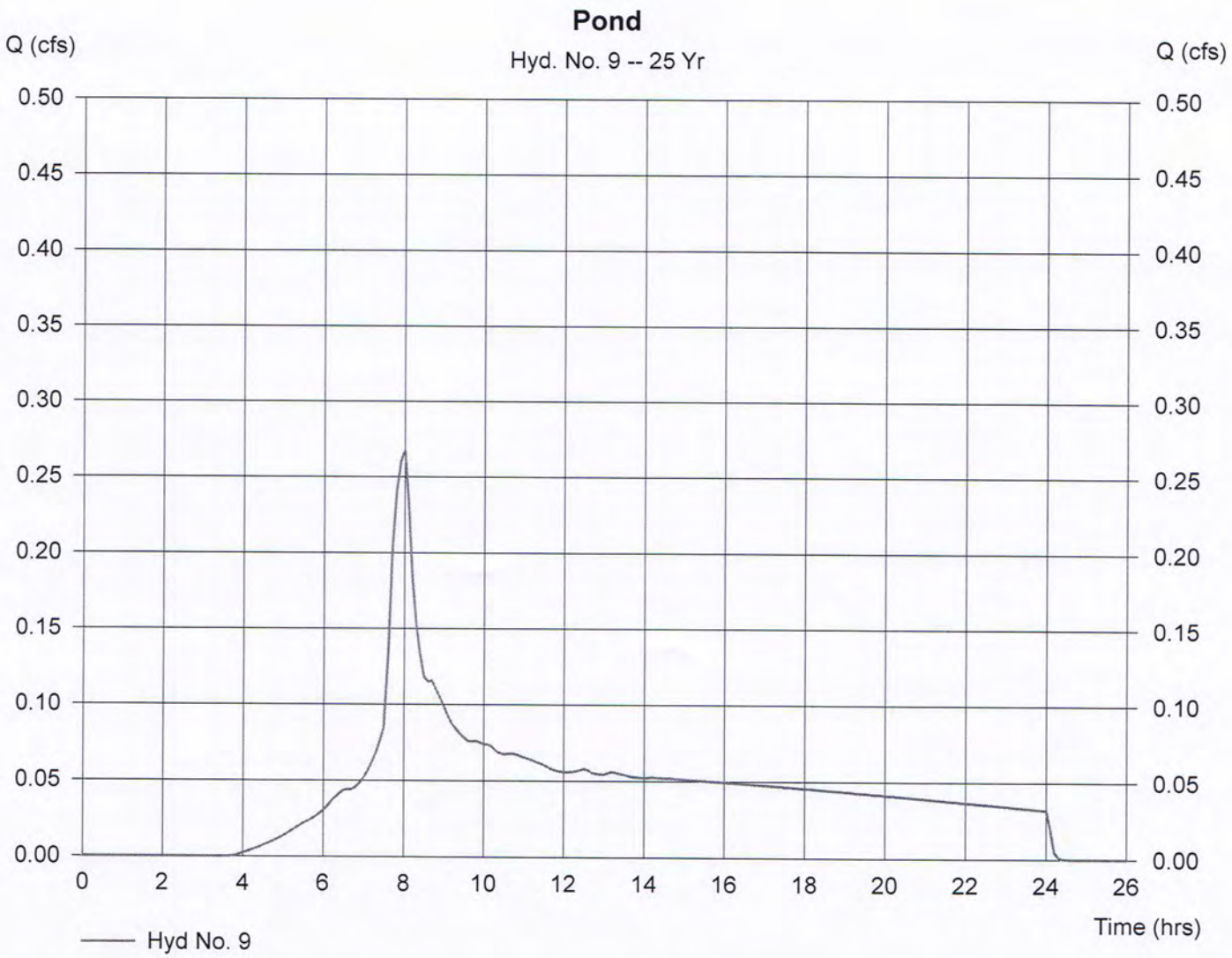
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 9

Pond

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.27 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Drainage area	= 0.48 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 3,983 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

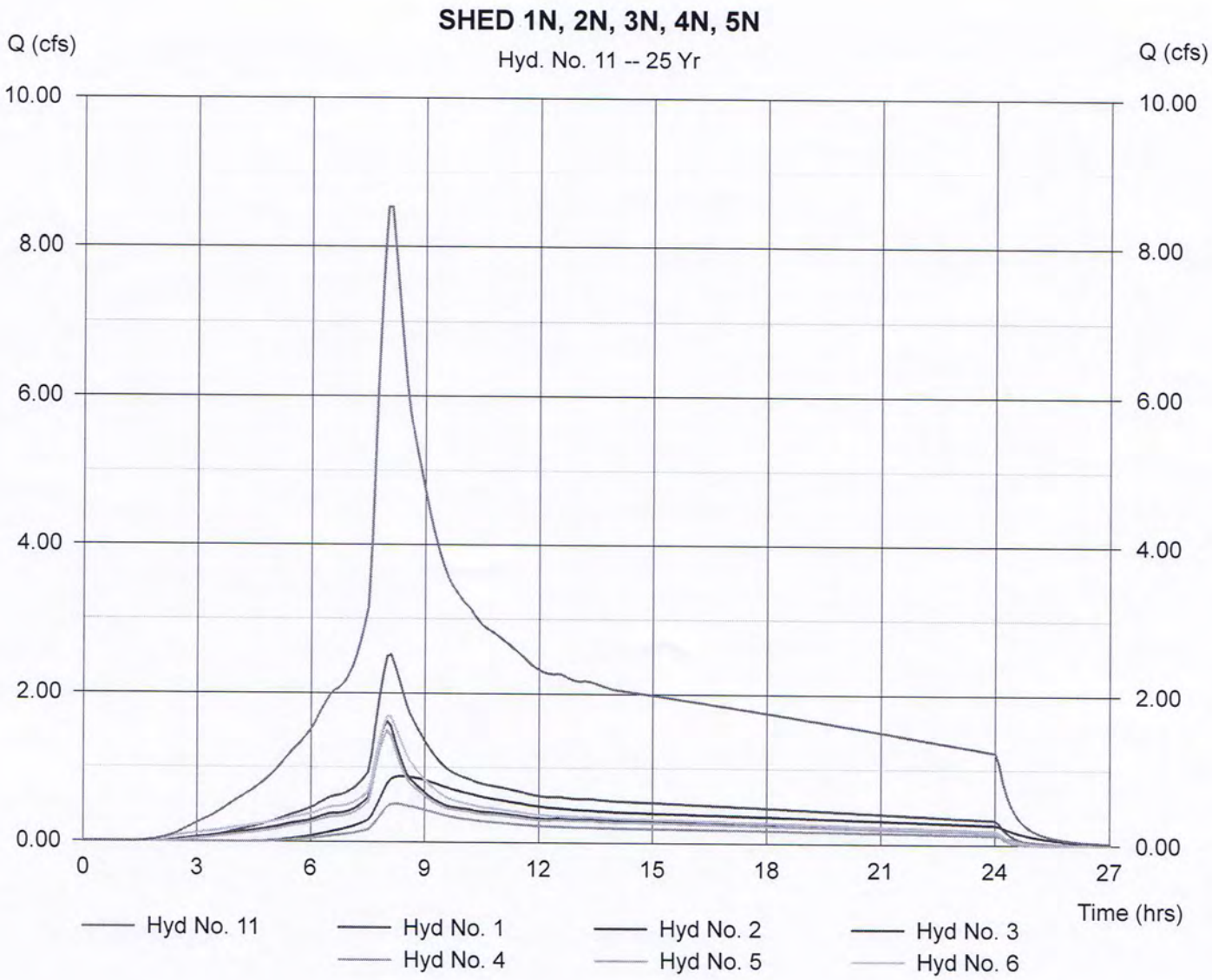
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 11

SHED 1N, 2N, 3N, 4N, 5N

Hydrograph type	= Combine	Peak discharge	= 8.52 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Inflow hyds.	= 1, 2, 3, 4, 5, 6		

Hydrograph Volume = 166,006 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

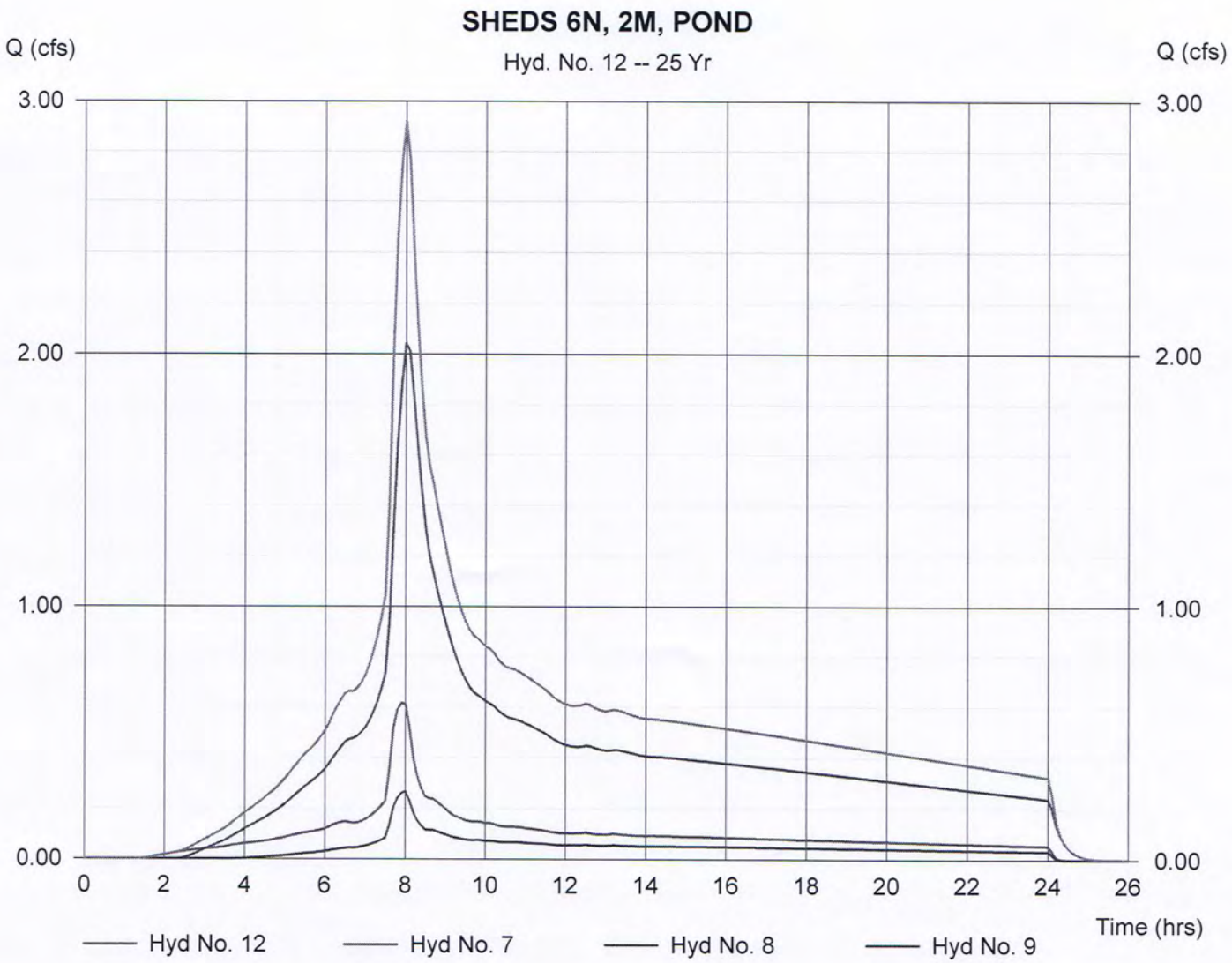
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 12

SHEDS 6N, 2M, POND

Hydrograph type	= Combine	Peak discharge	= 2.92 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Inflow hyds.	= 7, 8, 9		

Hydrograph Volume = 46,643 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

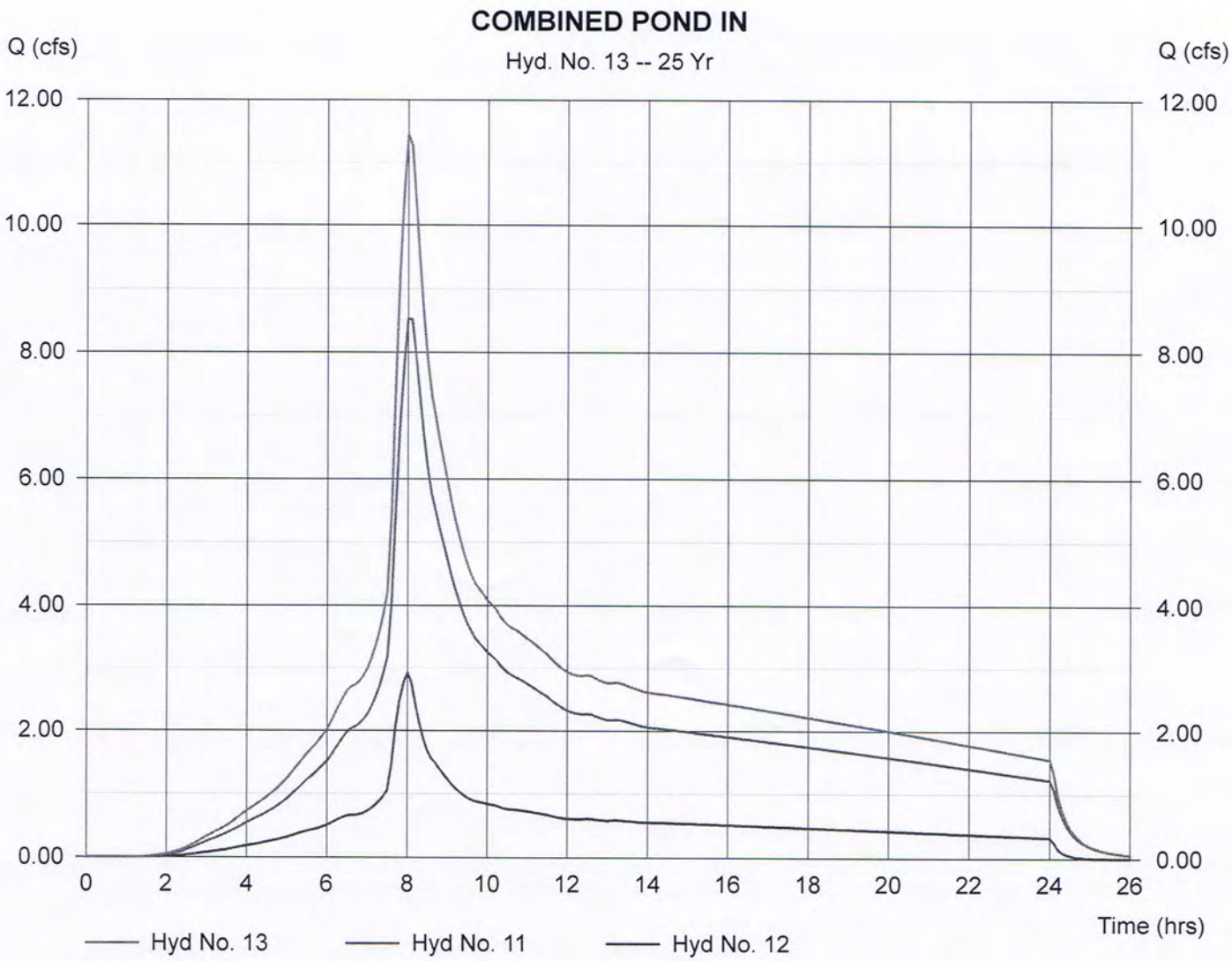
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 13

COMBINED POND IN

Hydrograph type	= Combine	Peak discharge	= 11.44 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Inflow hyds.	= 11, 12		

Hydrograph Volume = 212,650 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

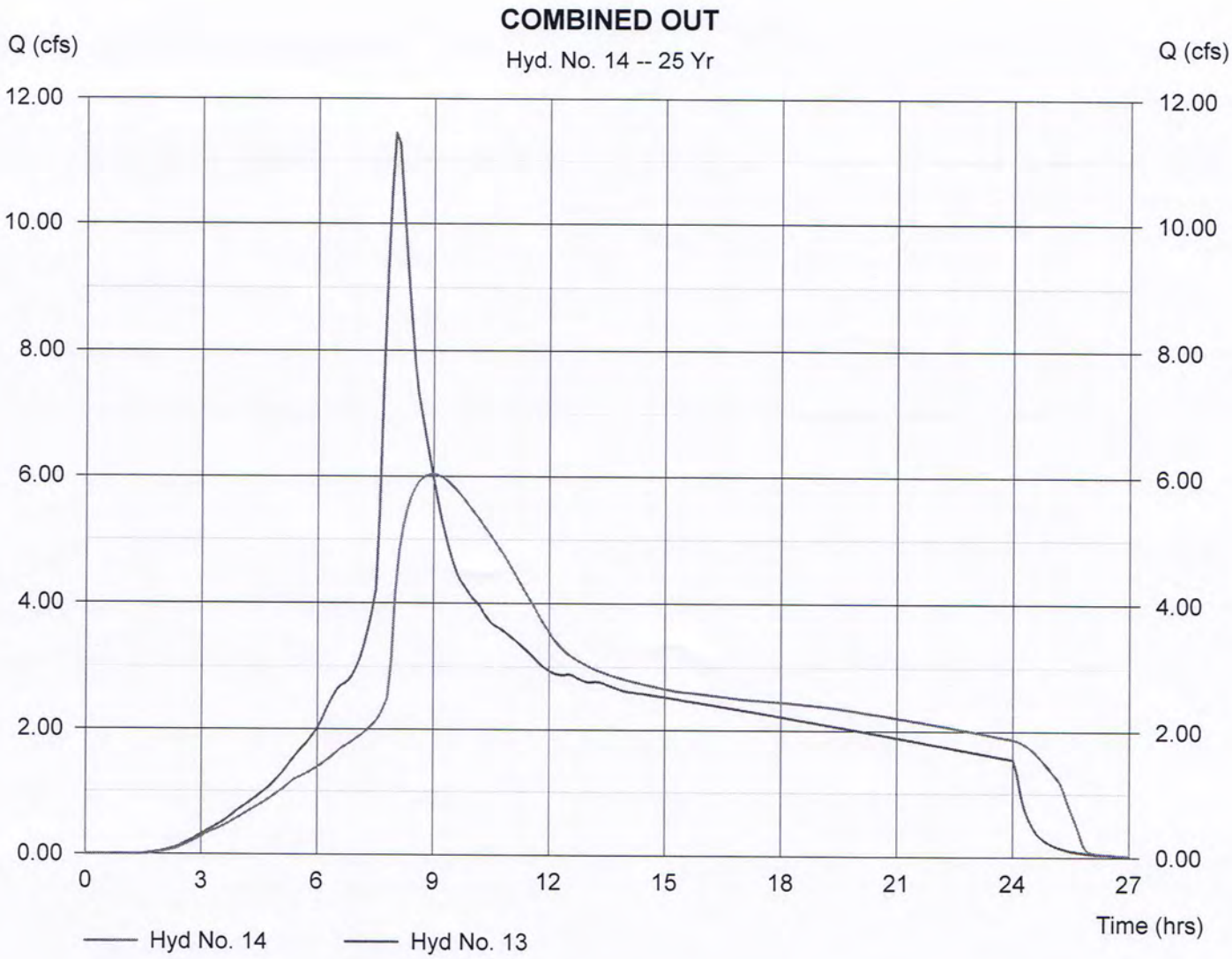
Hyd. No. 14

COMBINED OUT

Hydrograph type	= Reservoir	Peak discharge	= 6.03 cfs
Storm frequency	= 25 yrs	Time interval	= 6 min
Inflow hyd. No.	= 13	Max. Elevation	= 219.68 ft
Reservoir name	= POND O	Max. Storage	= 28,300 cuft

Storage Indication method used.

Hydrograph Volume = 212,650 cuft



Pond Report

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Pond No. 3 - POND O

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	216.00	231	0	0
0.50	216.50	5,259	1,373	1,373
1.00	217.00	6,171	2,858	4,230
2.00	218.00	8,126	7,149	11,379
3.00	219.00	10,218	9,172	20,551
4.00	220.00	12,470	11,344	31,895
5.00	221.00	16,044	14,257	46,152

Culvert / Orifice Structures

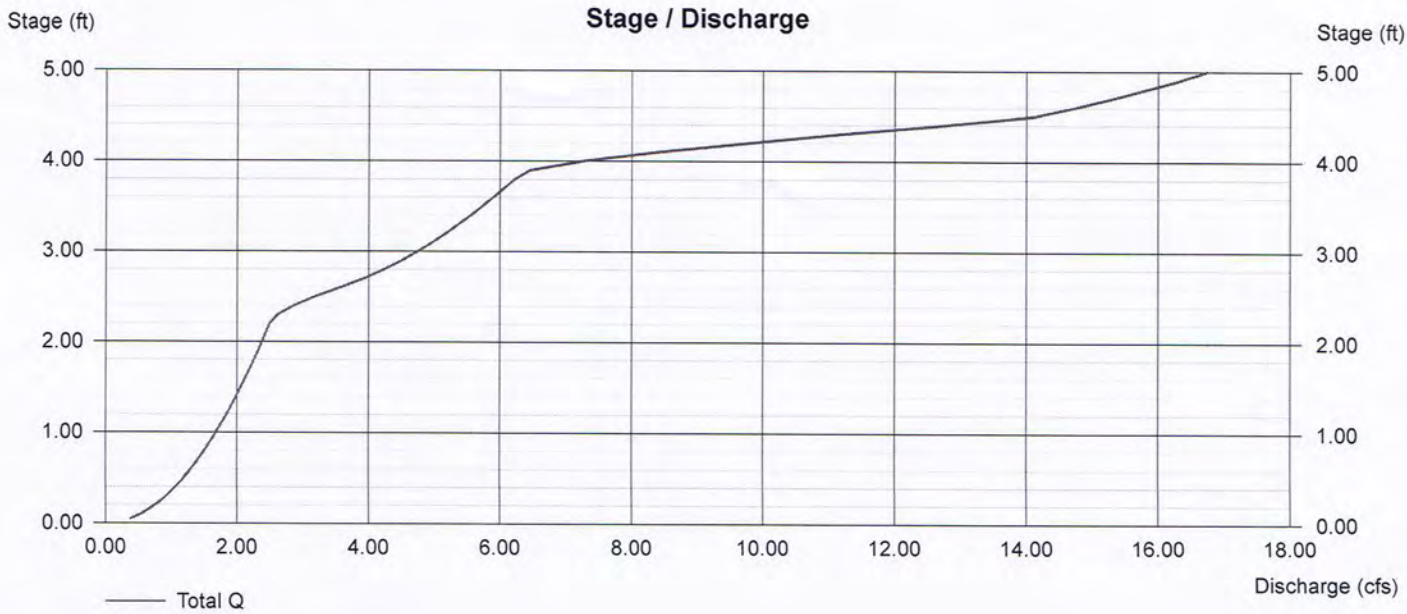
	[A]	[B]	[C]	[D]
Rise (in)	= 18.00	8.00	7.00	0.00
Span (in)	= 18.00	8.00	7.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 213.74	213.72	218.20	0.00
Length (ft)	= 72.00	0.00	0.00	0.00
Slope (%)	= 0.80	0.00	0.00	0.00
N-Value	= .013	.013	.013	.013
Orif. Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	0.00	0.00	0.00
Crest El. (ft)	= 219.87	0.00	0.00	0.00
Weir Coeff.	= 3.33	0.00	0.00	0.00
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration = 0.000 in/hr (Contour) Tailwater Elev. = 0.00 ft

Note: Culvert/Orifice outflows have been analyzed under inlet and outlet control. Weir riser checked for orifice conditions.



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description
1	SBUH Runoff	2.95	6	486	53,270	----	------	------	Shed 1N - Developed
2	SBUH Runoff	1.88	6	480	29,294	----	------	------	Shed 2N - Developed
3	SBUH Runoff	1.09	6	498	34,044	----	------	------	Shed 3N - Developed
4	SBUH Runoff	0.63	6	492	16,709	----	------	------	Shed 4N-S - Developed
5	SBUH Runoff	1.74	6	480	27,113	----	------	------	SHED 4N-N (Developed)
6	SBUH Runoff	1.93	6	480	33,899	----	------	------	Shed 5N - Developed
7	SBUH Runoff	0.70	6	474	9,945	----	------	------	Shed 6N - Developed
8	SBUH Runoff	2.40	6	480	39,584	----	------	------	Shed 2M - Developed
9	SBUH Runoff	0.32	6	480	4,749	----	------	------	Pond
11	Combine	10.04	6	480	194,329	1, 2, 3, 4, 5, 6,	------	------	SHED 1N, 2N, 3N, 4N, 5N
12	Combine	3.42	6	480	54,279	7, 8, 9,	------	------	SHEDS 6N, 2M, POND
13	Combine	13.46	6	480	248,608	11, 12	------	------	COMBINED POND IN
14	Reservoir	8.07	6	522	248,607	13	220.07	32,917	COMBINED OUT

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 1

Shed 1N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.95 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 4.40 ac	Curve number	= 89.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 22.25 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 53,270 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

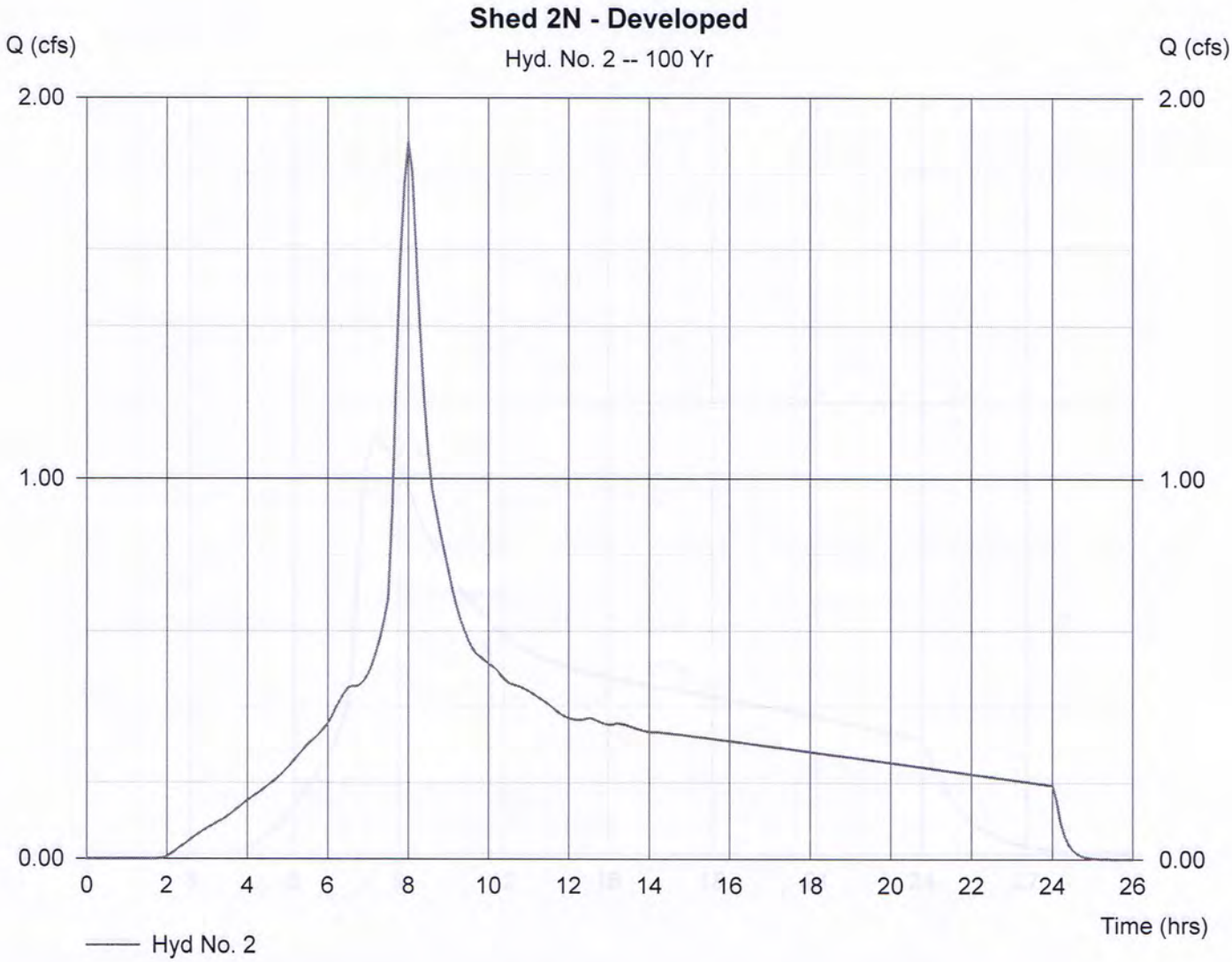
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 2

Shed 2N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.88 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 2.28 ac	Curve number	= 91.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 29,294 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

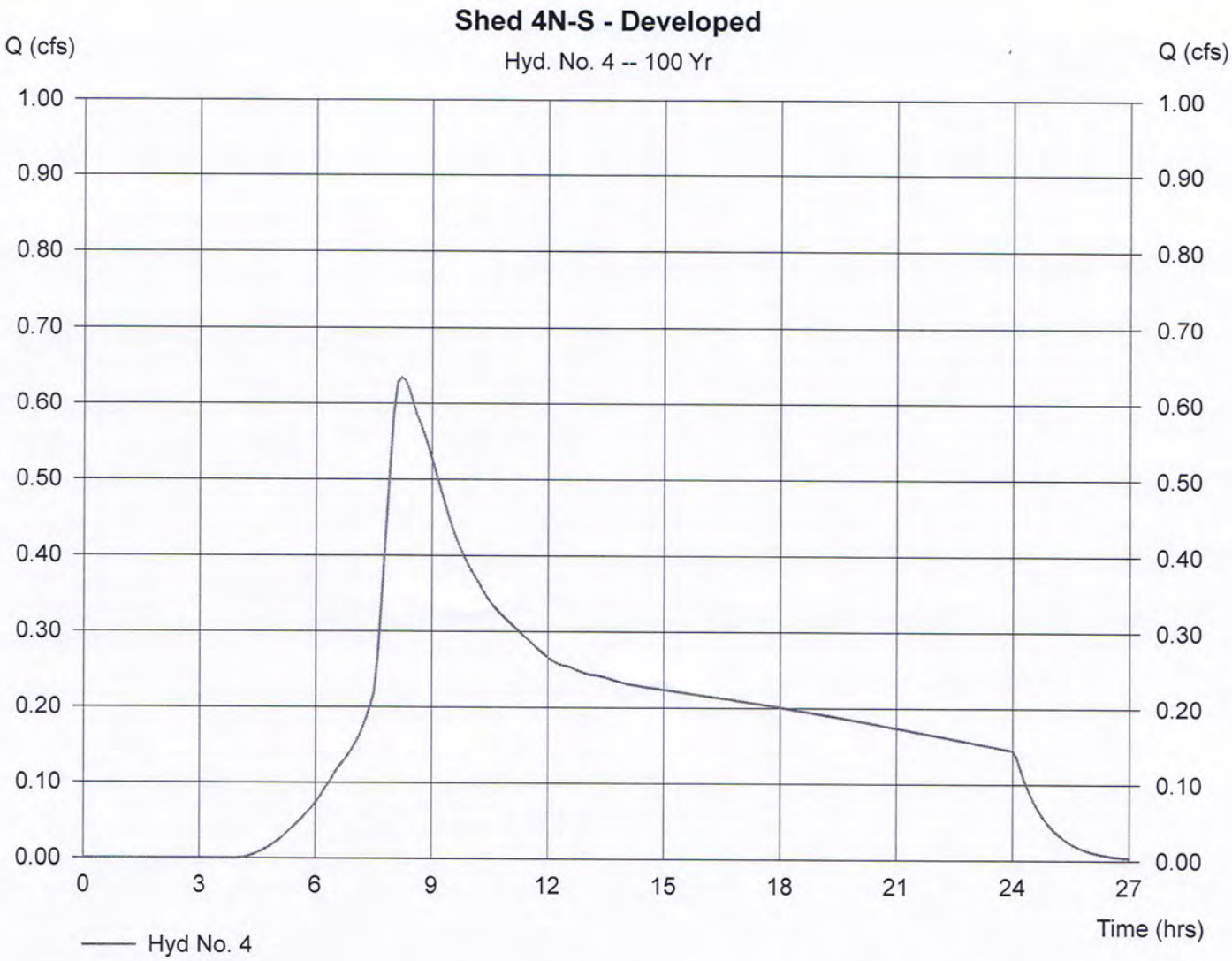
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 4

Shed 4N-S - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.63 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 1.87 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 46.3 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 16,709 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

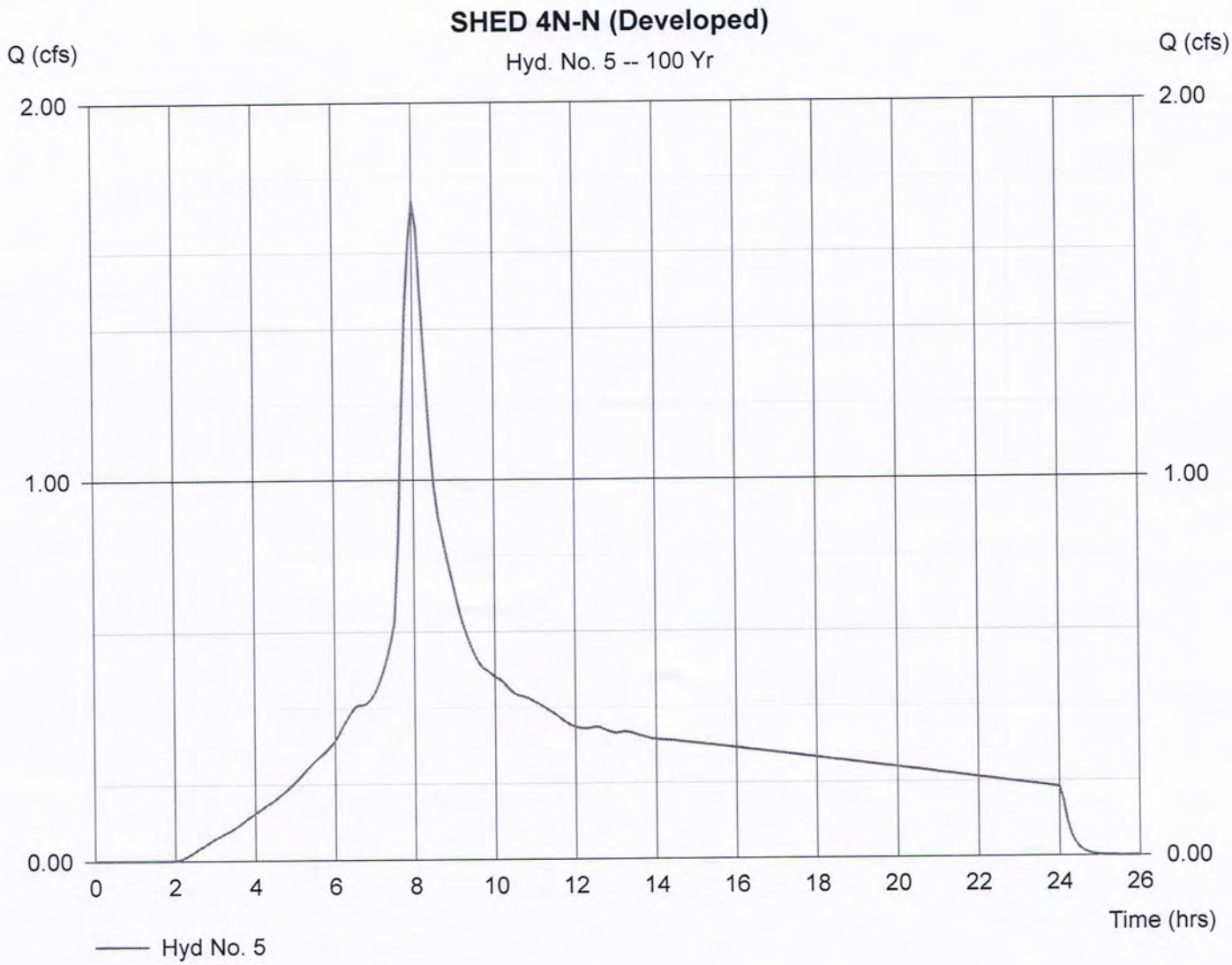
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 5

SHED 4N-N (Developed)

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.74 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 2.18 ac	Curve number	= 90.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 13.1 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 27,113 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

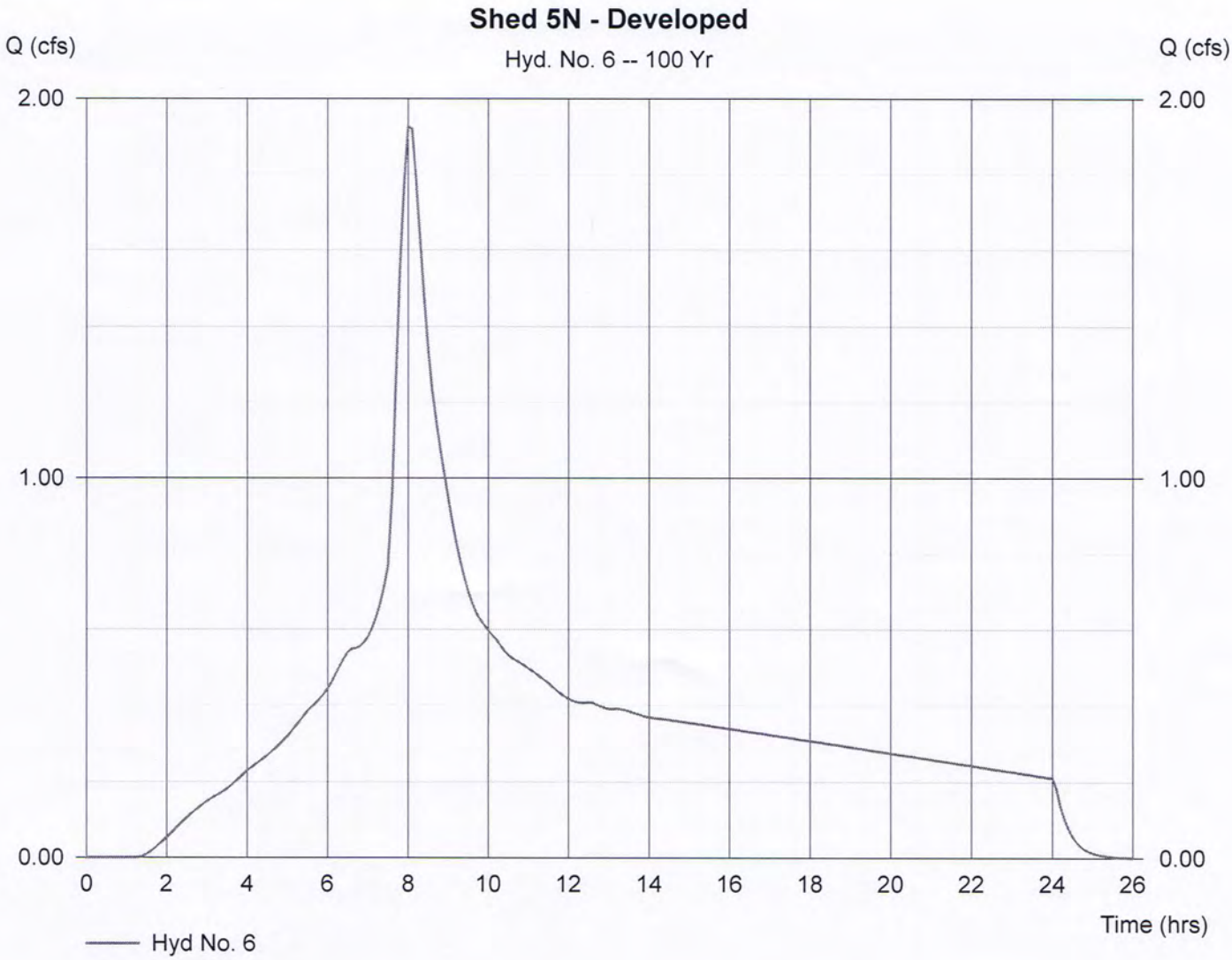
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 6

Shed 5N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.93 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 2.42 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20.8 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 33,899 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

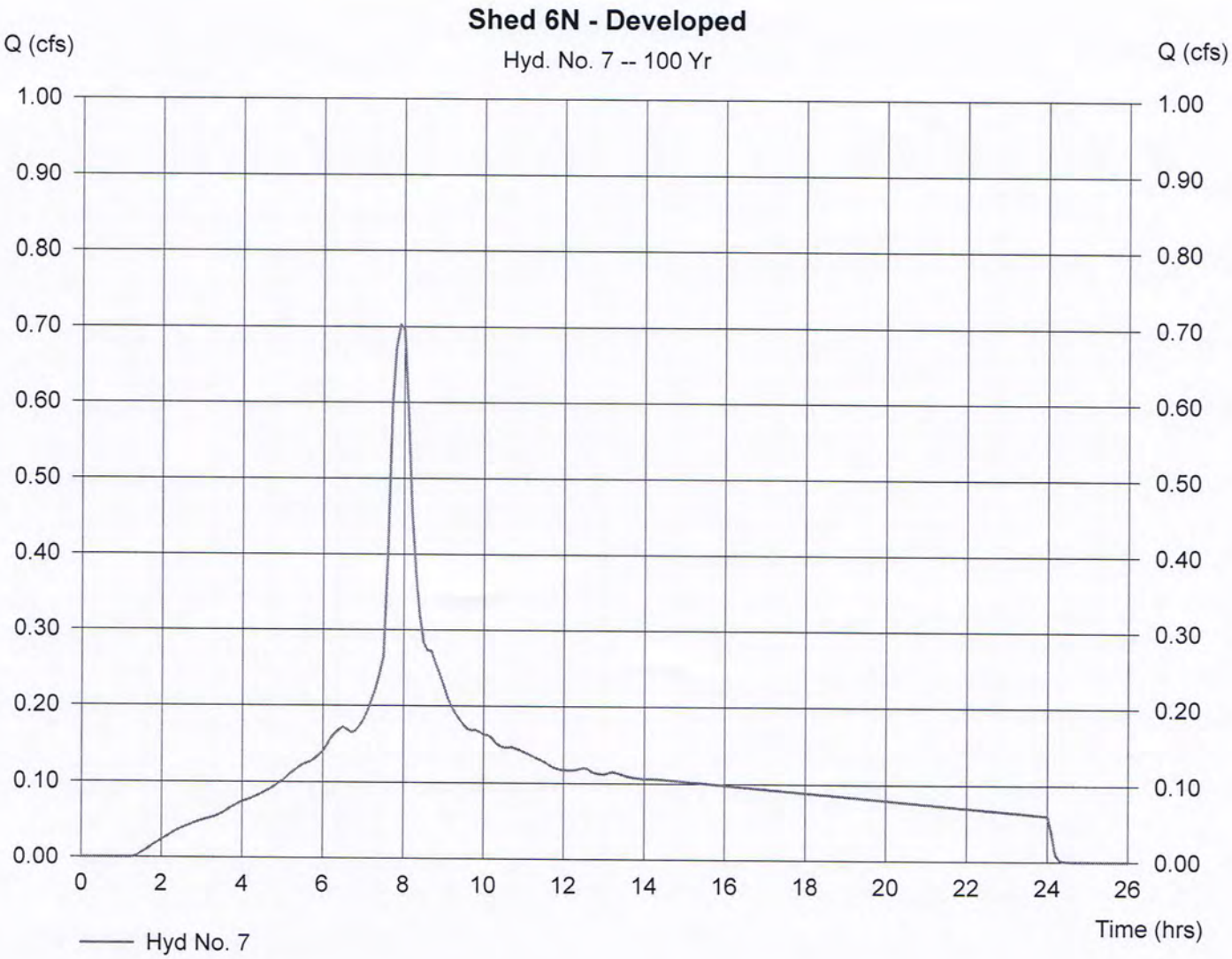
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 7

Shed 6N - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.70 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 0.71 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 9,945 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 8

Shed 2M - Developed

Hydrograph type	= SBUH Runoff	Peak discharge	= 2.40 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 3.25 ac	Curve number	= 89.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 16.4 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 39,584 cuft

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

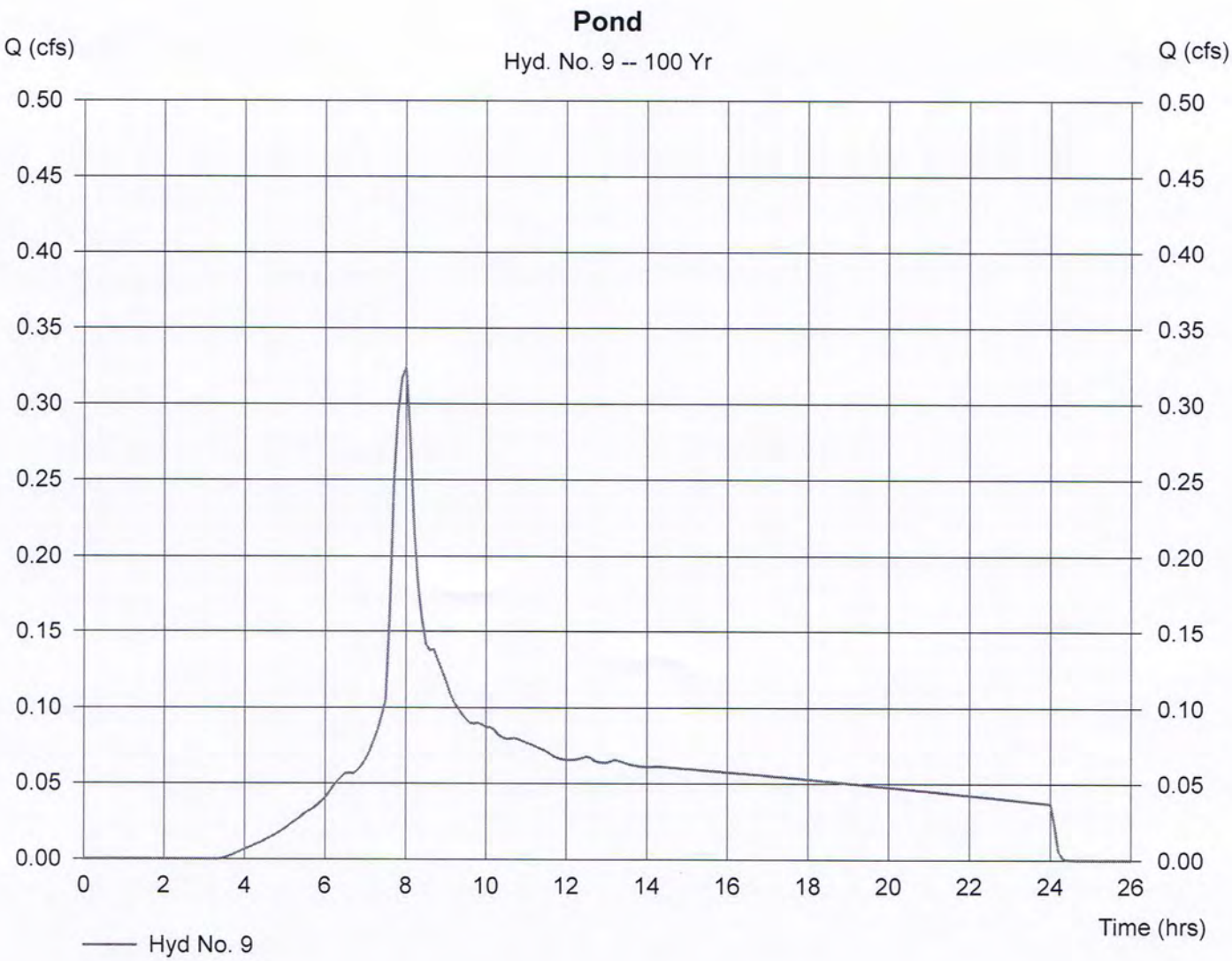
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 9

Pond

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.32 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Drainage area	= 0.48 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= N/A

Hydrograph Volume = 4,749 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

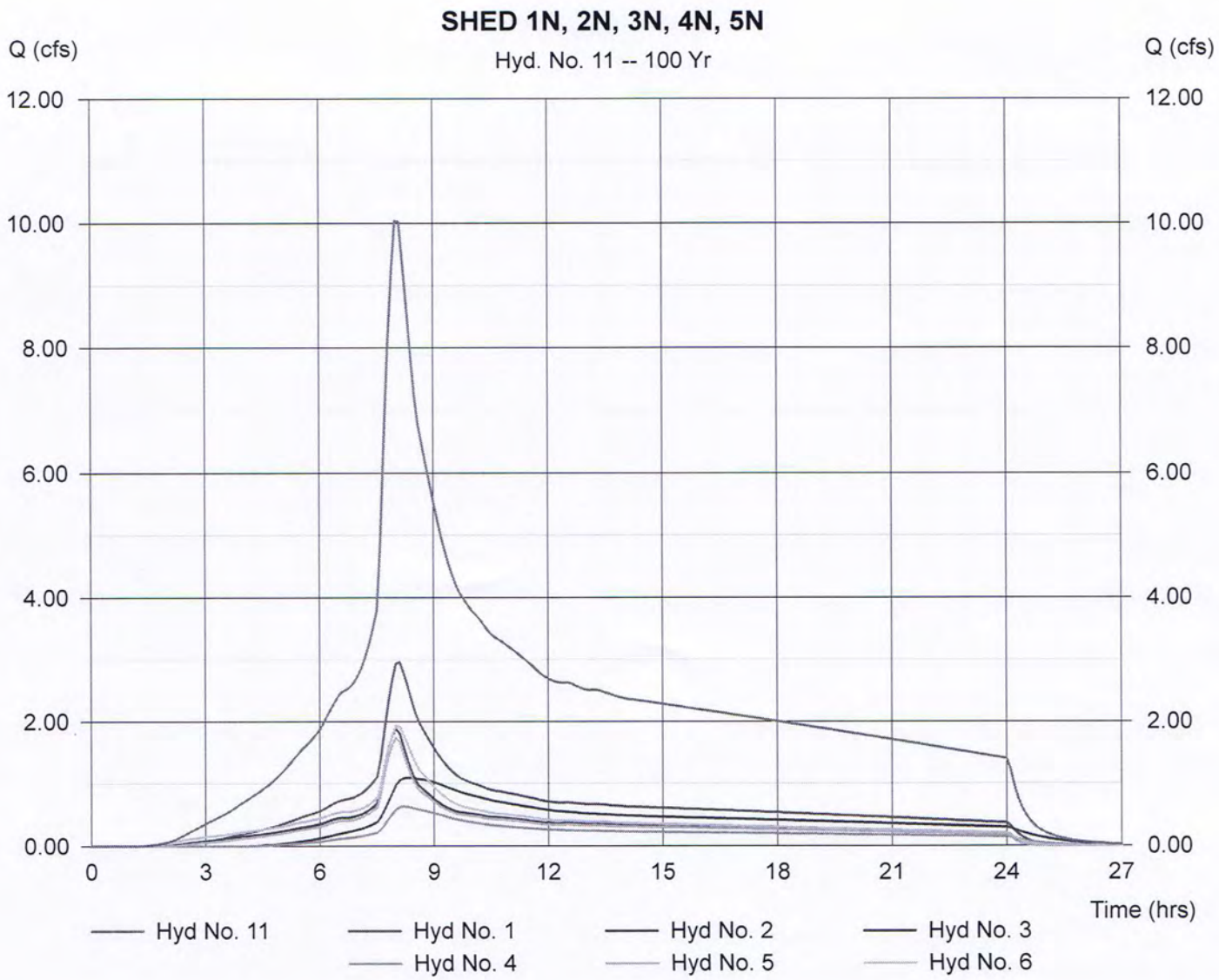
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 11

SHED 1N, 2N, 3N, 4N, 5N

Hydrograph type	= Combine	Peak discharge	= 10.04 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Inflow hyds.	= 1, 2, 3, 4, 5, 6		

Hydrograph Volume = 194,329 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

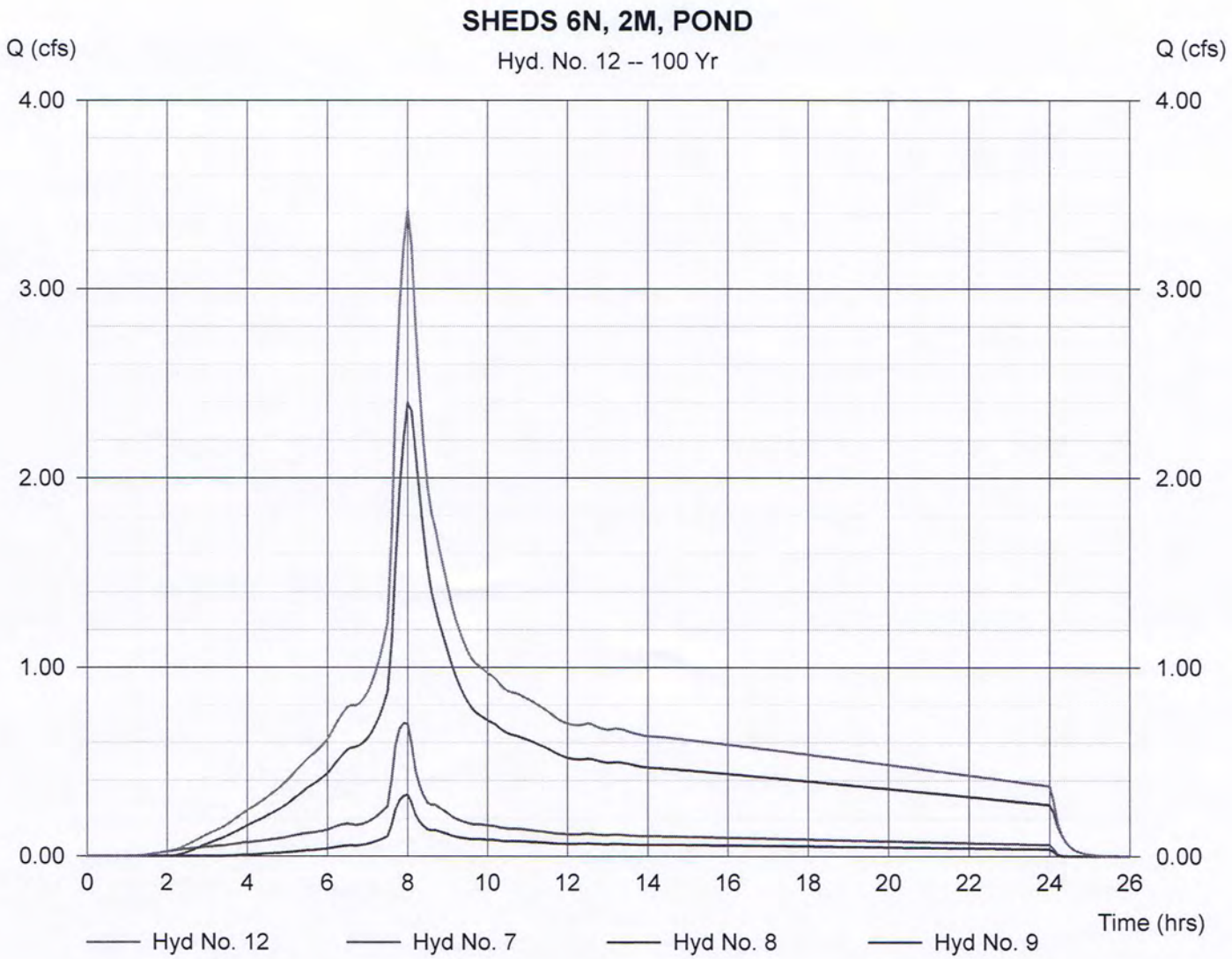
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 12

SHEDS 6N, 2M, POND

Hydrograph type	= Combine	Peak discharge	= 3.42 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Inflow hyds.	= 7, 8, 9		

Hydrograph Volume = 54,279 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

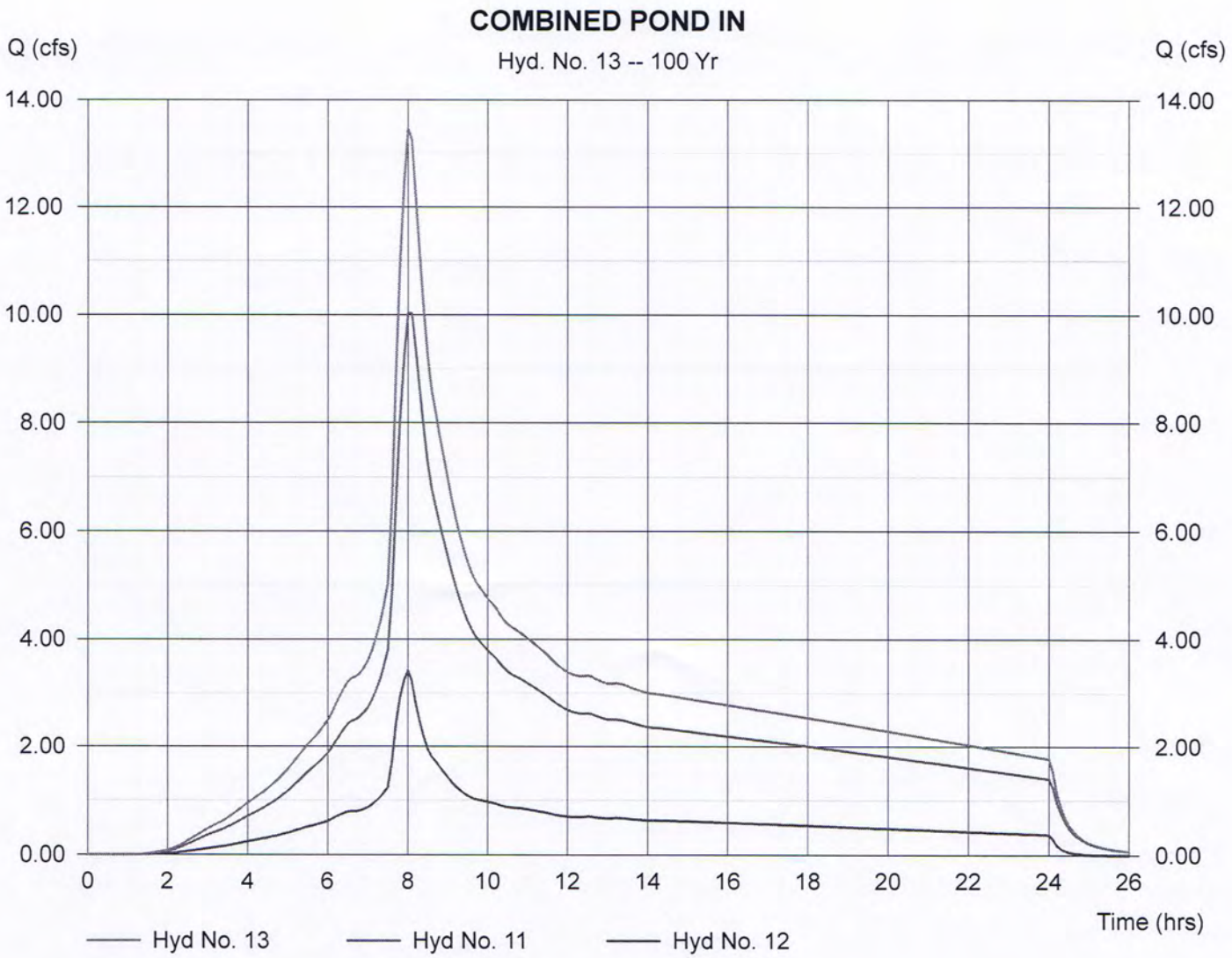
Wednesday, Jan 2 2013, 12:30 PM

Hyd. No. 13

COMBINED POND IN

Hydrograph type	= Combine	Peak discharge	= 13.46 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Inflow hyds.	= 11, 12		

Hydrograph Volume = 248,608 cuft



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

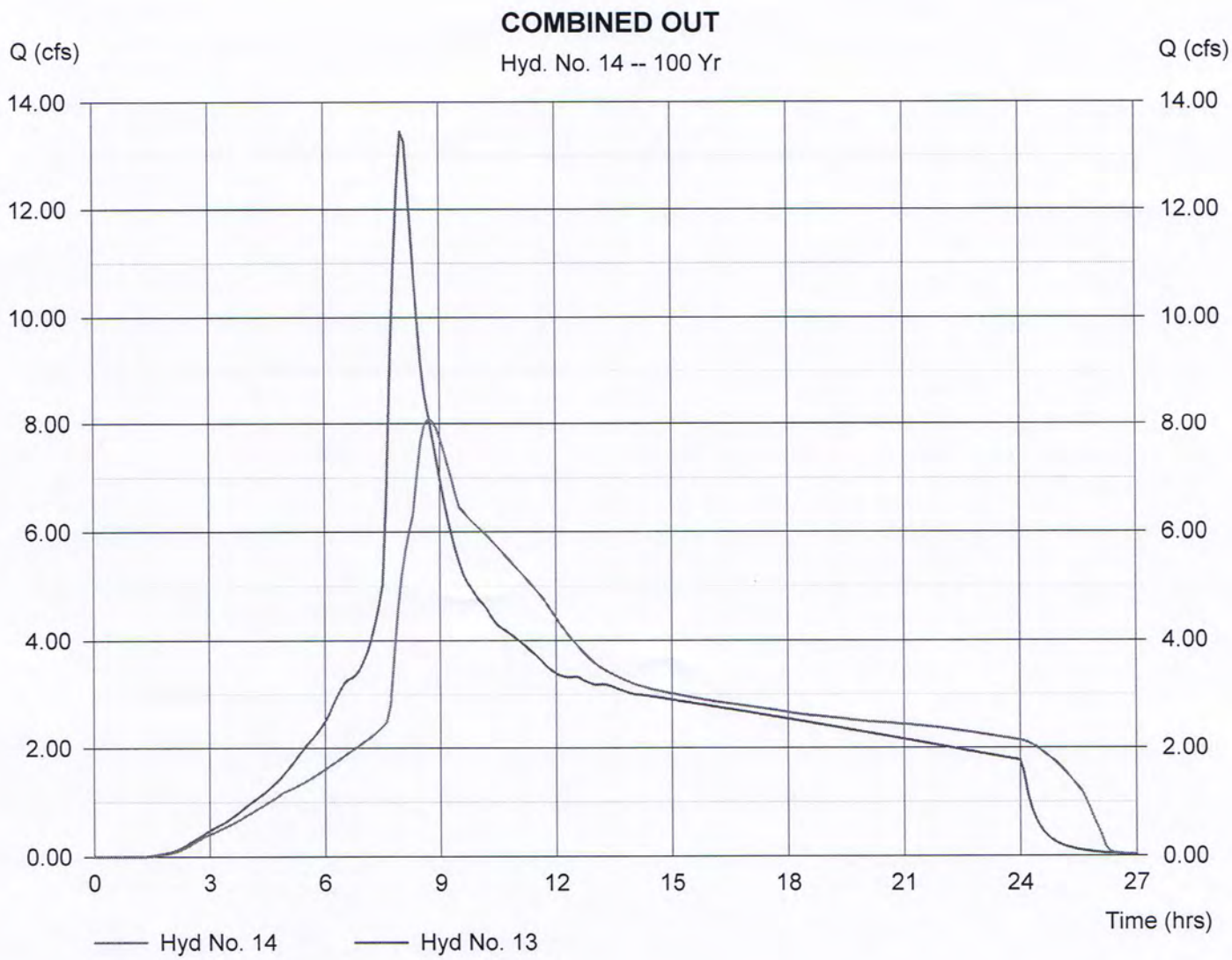
Hyd. No. 14

COMBINED OUT

Hydrograph type	= Reservoir	Peak discharge	= 8.07 cfs
Storm frequency	= 100 yrs	Time interval	= 6 min
Inflow hyd. No.	= 13	Max. Elevation	= 220.07 ft
Reservoir name	= POND O	Max. Storage	= 32,917 cuft

Storage Indication method used.

Hydrograph Volume = 248,607 cuft



Pond Report

Hydraflow Hydrographs by Intelisolve

Wednesday, Jan 2 2013, 12:30 PM

Pond No. 3 - POND O

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	216.00	231	0	0
0.50	216.50	5,259	1,373	1,373
1.00	217.00	6,171	2,858	4,230
2.00	218.00	8,126	7,149	11,379
3.00	219.00	10,218	9,172	20,551
4.00	220.00	12,470	11,344	31,895
5.00	221.00	16,044	14,257	46,152

Culvert / Orifice Structures

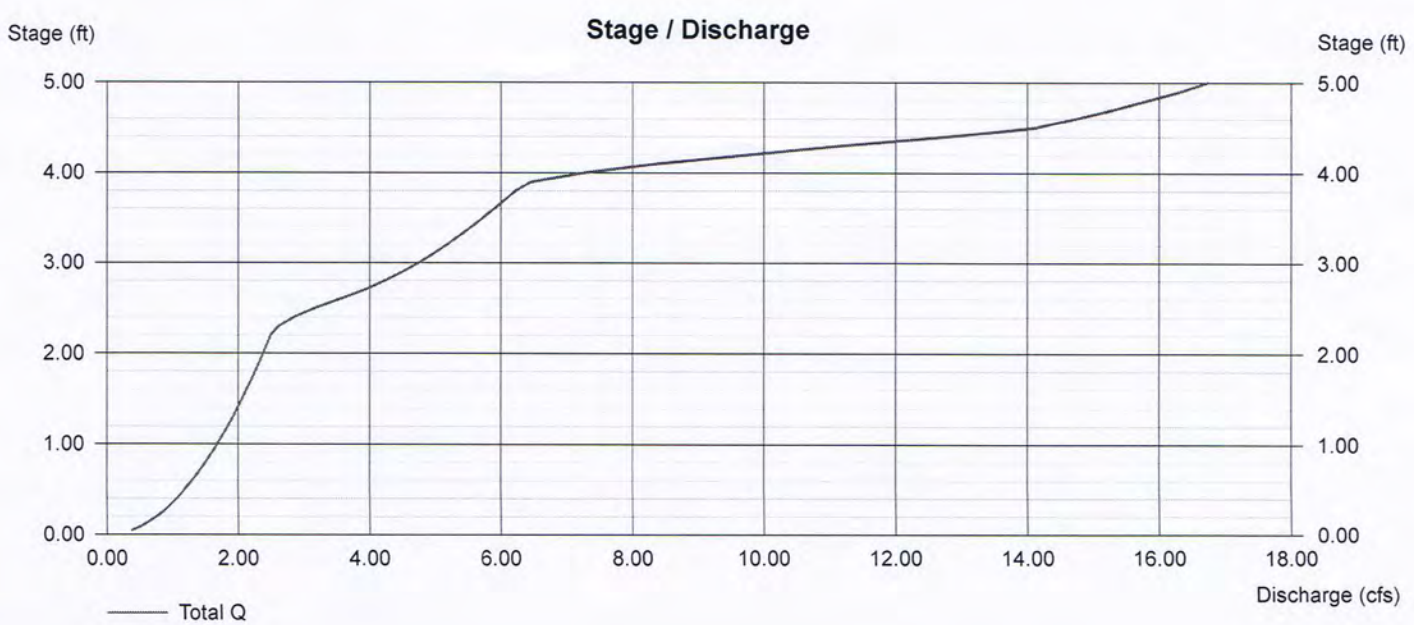
	[A]	[B]	[C]	[D]
Rise (in)	= 18.00	8.00	7.00	0.00
Span (in)	= 18.00	8.00	7.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 213.74	213.72	218.20	0.00
Length (ft)	= 72.00	0.00	0.00	0.00
Slope (%)	= 0.80	0.00	0.00	0.00
N-Value	= .013	.013	.013	.013
Orif. Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	0.00	0.00	0.00
Crest El. (ft)	= 219.87	0.00	0.00	0.00
Weir Coeff.	= 3.33	0.00	0.00	0.00
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration = 0.000 in/hr (Contour) Tailwater Elev. = 0.00 ft

Note: Culvert/Orifice outflows have been analyzed under inlet and outlet control. Weir riser checked for orifice conditions.



APPENDIX D

WATER QUALITY SWALE CALCULATIONS
SOUTH SWALE
(SHED BASIN 2MD)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

REFERENCES:

1. City of Wilsonville Public Works Standards - 2006 Edition

REQUIRED WATER QUALITY TREATMENT: 70% Total Suspended Solids (TSS) Removal

PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins		15%
2. Bio-Filtration Swale		55%
	total	70%

DESIGN STORM:

Precipitation:	0.36	inches
Storm Duration:	4	hours
Storm Return Period:	96	hours
Storm Window:	2	weeks

IMPERVIOUS AREA:

Watershed Area:	3.35 acres
Percent imp:	55%
Impervious Area:	1.83 acres

Design Inflow = (1.83 ac)*(43560 ft^2/ac)*(0.36 in / 4.0 hrs) = **0.17 cfs**

BIOFILTRATION SWALE DESIGN CRITERIA:

Max Velocity:	0.9	ft/s
Side Slopes:	4	:1 (treatment area)
Base:	2	feet (2' min)
n Factor:	0.24	(plantings)

SWALE CHARACTERISTICS:

Q=	0.17	Design Storm Discharge (determined above)
N=	0.24	Plantings
B=	2 ft	Base width of channel
Z=	4	:1 Side slopes
SLOPE=	0.005 ft/ft	Slope of channel (0.005 minimum)
ASS. Y=	0.5 ft	Assumed depth to begin analysis (0.5 ft maximum)

ITERATIVE SOLUTION OF MANNING'S EQUATION FOR NORMAL DEPTH:

ITERATION	Y (FT)	P (FT)	A(FT^2)	R	Q (CFS)	% ERROR	V (FPS)
1	0.50	6.12	2.00	0.33	0.42	144.95	0.21
2	0.28	4.27	0.85	0.20	0.13	-24.69	0.15
3	0.33	4.74	1.11	0.23	0.18	8.37	0.17
4	0.32	4.60	1.03	0.22	0.17	-2.33	0.16
5	0.32	4.64	1.05	0.23	0.17	0.69	0.16
6	0.32	4.63	1.04	0.23	0.17	-0.20	0.16
7	0.32	4.63	1.05	0.23	0.17	0.06	0.16
8	0.32	4.63	1.04	0.23	0.17	-0.02	0.16
9	0.32	4.63	1.04	0.23	0.17	0.00	0.16
10	0.32	4.63	1.04	0.23	0.17	0.00	0.16
11	0.32	4.63	1.04	0.23	0.17	0.00	0.16
12	0.32	4.63	1.04	0.23	0.17	0.00	0.16
13	0.32	4.63	1.04	0.23	0.17	0.00	0.16
14	0.32	4.63	1.04	0.23	0.17	0.00	0.16
15	0.32	4.63	1.04	0.23	0.17	0.00	0.16

NORMAL DEPTH =	0.32 ft
FLOW WIDTH =	4.55 ft
VELOCITY =	0.16 ft/s
TREATMENT TIME =	9.00 min
TREATMENT LENGTH =	**87.86 ft**

WATER QUALITY SWALE CALCULATIONS
NORTH SWALE
(SHED BASINS 1ND-6ND)

JOB NUMBER:	395-002
PROJECT:	TONQUIN WOODS NO. 3 - VILLEBOIS PDP 1N-II
FILE:	N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.HYDRO.2012-01-03.XLS

REFERENCES:

1. City of Wilsonville Public Works Standards - 2006 Edition

REQUIRED WATER QUALITY TREATMENT: 70% Total Suspended Solids (TSS) Removal

PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins		15%
2. Bio-Filtration Swale		55%
	total	70%

DESIGN STORM:

Precipitation:	0.36	inches
Storm Duration:	4	hours
Storm Return Period:	96	hours
Storm Window:	2	weeks

IMPERVIOUS AREA:

Watershed Area:	17.67 acres
Percent imp:	44%
Impervious Area:	7.70 acres

Design Inflow = (7.698 ac)*(43560 ft^2/ac)*(0.36 in / 4.0 hrs) = **0.70 cfs**

BIOFILTRATION SWALE DESIGN CRITERIA:

Max Velocity:	0.9	ft/s
Side Slopes:	4	:1 (treatment area)
Base:	5	feet (2' min)
n Factor:	0.24	(plantings)

SWALE CHARACTERISTICS:

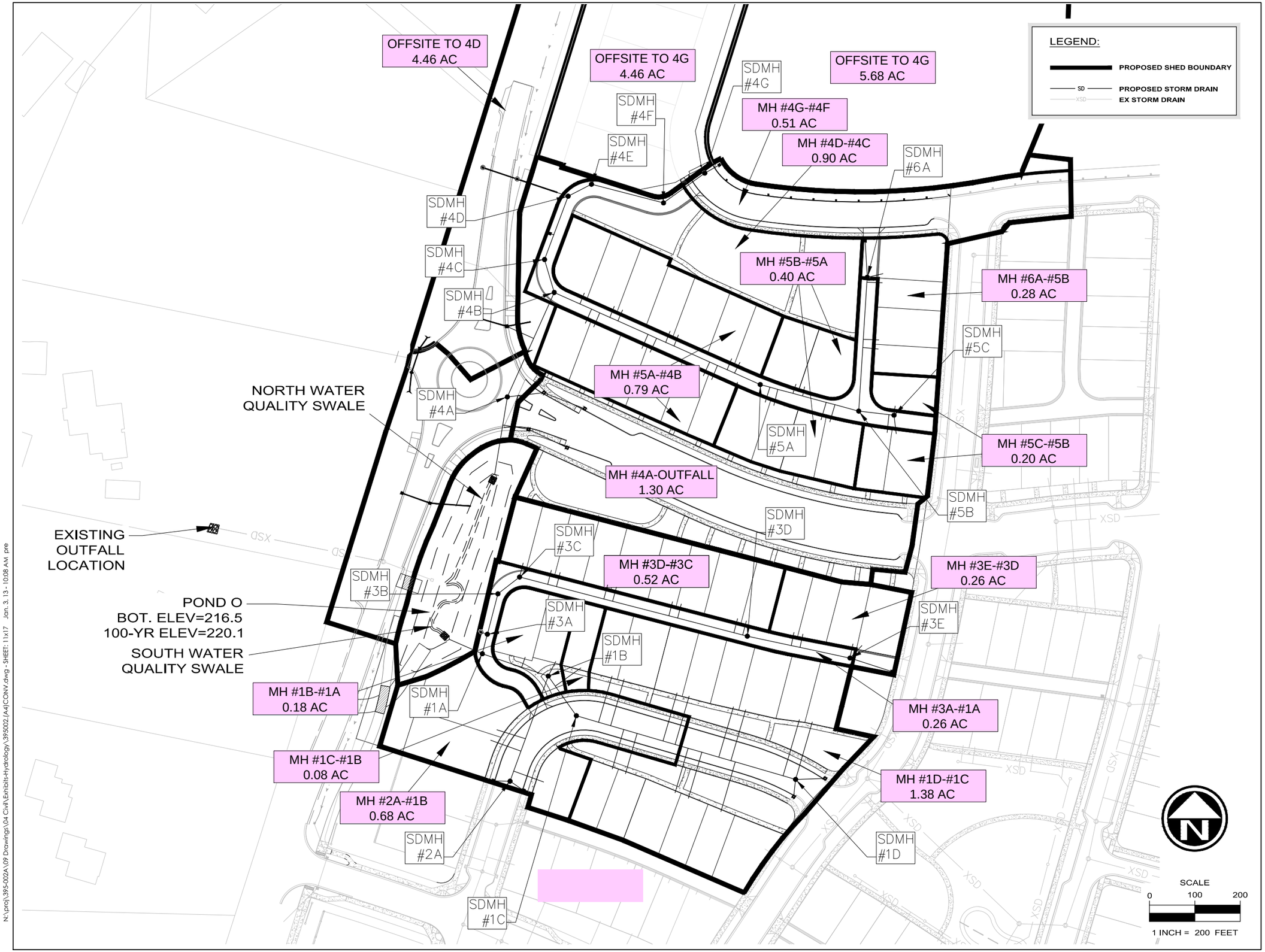
Q=	0.70	Design Storm Discharge (determined above)
N=	0.24	Plantings
B=	5 ft	Base width of channel
Z=	4 :1	Side slopes
SLOPE=	0.005 ft/ft	Slope of channel (0.005 minimum)
ASS. Y=	0.5 ft	Assumed depth to begin analysis (0.5 ft maximum)

ITERATIVE SOLUTION OF MANNING'S EQUATION FOR NORMAL DEPTH:

ITERATION	Y (FT)	P (FT)	A(FT^2)	R	Q (CFS)	% ERROR	V (FPS)
1	0.50	9.12	3.50	0.38	0.81	15.89	0.23
2	0.45	8.74	3.09	0.35	0.68	-3.22	0.22
3	0.46	8.82	3.17	0.36	0.71	0.72	0.22
4	0.46	8.80	3.15	0.36	0.70	-0.16	0.22
5	0.46	8.81	3.16	0.36	0.70	0.03	0.22
6	0.46	8.80	3.16	0.36	0.70	-0.01	0.22
7	0.46	8.80	3.16	0.36	0.70	0.00	0.22
8	0.46	8.80	3.16	0.36	0.70	0.00	0.22
9	0.46	8.80	3.16	0.36	0.70	0.00	0.22
10	0.46	8.80	3.16	0.36	0.70	0.00	0.22
11	0.46	8.80	3.16	0.36	0.70	0.00	0.22
12	0.46	8.80	3.16	0.36	0.70	0.00	0.22
13	0.46	8.80	3.16	0.36	0.70	0.00	0.22
14	0.46	8.80	3.16	0.36	0.70	0.00	0.22
15	0.46	8.80	3.16	0.36	0.70	0.00	0.22

NORMAL DEPTH =	0.46 ft
FLOW WIDTH =	8.69 ft
VELOCITY =	0.22 ft/s
TREATMENT TIME =	9.00 min
TREATMENT LENGTH =	**119.68 ft**

APPENDIX E



N:\proj\395-002A\09 Drawings\04 Civil\Exhibits-Hydrology\395002 (A4)CGNV.dwg - SHEET: 11x17 Jan. 3, 13 - 10:08 AM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

TONQUIN WOODS No. 3

Villebois
PDP 1N - Phase 2
Hydrology

Proposed
Conveyance Map

DATE: 12/26/2012

E1

STORMWATER CONVEYANCE CALCULATIONS
EXHIBIT E2

JOB: 395-002
PROJECT: VILLEBOIS PDP 1N-II
FILE: N:/PROJ/395-002A/05-REPORTS/HYDROLOGY/395002A.CONV.2012-12-26.XLS

Design Storm: 25 YR
Storm Duration: 24 HRS
Precipitation: 4 IN
Manning's "n" 0.013

STORM CONVEYANCE - STORM LINES 5 & 6 (ALLEY 8 & 9)

LINE	INC. AREA (AC)	AREA TOTAL (AC)	% IMP.	AREA PERV. (AC)	TOTAL AREA PERV. (AC)	CN PER.	AREA IMP. (AC)	TOTAL AREA IMP. (AC)	CN IMP.	TIME (MIN)	Q (CFS)	PIPE SIZE (IN)	SLOPE (FT/FT)	Qf (CFS)	Q/Qf (%)	Vf (FPS)	V/Vf (%)	ACTUAL V (FPS)	LENGTH (FT)	INC. TIME (MIN)
6A - 5B	0.02	0.02	80	0.00	0.00	80	0.02	0.02	98	10.00	0.02	12	0.0187	4.89	0.00	6.22	0.20	1.27	147.74	1.95
	0.26	0.28	60	0.10	0.11	80	0.16	0.17	98	10.00	0.21	12	0.0187	4.89	0.04	6.22	0.24	1.52	147.74	1.62
5C - 5B	0.20	0.20	60	0.08	0.08	80	0.12	0.12	98	10.00	0.15	12	0.0060	2.77	0.05	3.52	0.25	0.90	39.17	0.73
5B - 5A[1]	0.40	0.88	60	0.16	0.35	80	0.24	0.53	98	11.62	0.65	12	0.0060	2.77	0.24	3.52	0.44	1.53	112.38	1.22
5A - 4B	0.79	1.67	60	0.32	0.66	80	0.47	1.01	98	12.35	1.22	12	0.0255	5.70	0.21	7.26	0.41	3.01	248.65	1.38

[1] Pipe segment includes flow from line ' 6'

STORM CONVEYANCE - STORM LINE 4 (ALLEY 8 TO NORTH OUTFALL)

OFFSITE TO 4G (SAP NORTH) - SHED AREAS 2ND, 4ND-N	4.46	4.46	63	1.65	1.65	80	2.81	2.81	98	10.00	3.43	18	0.0050	7.45	0.46	4.21	0.66	3.00	560.00	3.11
OFFSITE TO 4G (OPEN SPACES) - SHED AREAS 3ND, 4ND-S	5.68	5.68	0	5.68	5.68	80	0.00	0.00	98	62.88	1.36	18	0.0050	7.45	0.18	4.21	0.38	3.00	0.00	0.00
4G - 4F	0.51	10.65	80	0.10	7.43	80	0.41	3.22	98	13.11	6.27	18	0.0050	7.45	0.84	4.21	1.04	4.39	56.02	0.21
4F - 4E	0.00	10.65	60	0.00	7.43	80	0.00	3.22	98	13.32	6.25	18	0.0060	8.16	0.77	4.62	0.97	4.46	81.98	0.31
4E - 4D	0.00	10.65	60	0.00	7.43	80	0.00	3.22	98	13.63	6.22	18	0.0060	8.16	0.76	4.62	0.96	4.44	28.93	0.11
OFFSITE TO 4D (GRAHAMS FERRY ROAD) - SHED AREA 5ND	2.42	2.42	80	0.48	0.48	80	1.94	1.94	98	20.83	1.73	12	0.0050	2.53	0.69	3.22	0.89	3.00	59.26	0.33
4D - 4C	0.50	13.57	10	0.45	8.37	80	0.05	5.20	98	21.16	7.40	21	0.0040	10.05	0.74	4.18	0.94	3.91	74.46	0.32
	0.40	13.97	80	0.08	8.45	80	0.32	5.52	98	21.16	7.69	21	0.0040	10.05	0.76	4.18	0.96	4.03	74.46	0.31
4C - 4B	0.00	13.97	60	0.00	8.45	80	0.00	5.52	98	21.47	7.65	24	0.0030	12.42	0.62	3.95	0.82	3.23	37.83	0.20
4B - 4A[2]	0.00	15.64	60	0.00	9.11	80	0.00	6.53	98	21.66	8.67	24	0.0030	12.42	0.70	3.95	0.90	3.55	126.14	0.59
4A - OUTFALL (NORTH SWALE)	0.50	16.14	10	0.45	9.56	80	0.05	6.58	98	22.25	8.81	24	0.0030	12.42	0.71	3.95	0.91	3.59	89.20	0.41
	0.80	**16.94**	**80**	**0.16**	**9.72**	**80**	**0.64**	**7.22**	**98**	**22.25**	**9.37**	**24**	**0.0030**	**12.42**	**0.75**	**3.95**	**0.95**	**3.77**	**89.20**	**0.39**

[2] Pipe segment includes flow from line ' 5'

STORM CONVEYANCE - STORM LINE 3 (ALLEY 7)

3E - 3D	0.03	0.03	80	0.01	0.01	80	0.02	0.02	98	10.00	0.03	12	0.0090	3.39	0.01	4.31	0.21	0.90	115.71	2.15
	0.23	0.26	60	0.09	0.10	80	0.14	0.16	98	10.00	0.20	12	0.0090	3.39	0.06	4.31	0.26	1.12	115.71	1.73
3D - 3C	0.52	0.78	60	0.21	0.31	80	0.31	0.47	98	11.73	0.58	12	0.0104	3.64	0.16	4.64	0.36	1.66	259.26	2.60
3C - 3B	0.00	0.78	60	0.00	0.31	80	0.00	0.47	98	14.33	0.55	12	0.0176	4.74	0.12	6.03	0.32	1.91	30.24	0.26
3B - 3A	0.00	0.78	60	0.00	0.31	80	0.00	0.47	98	14.59	0.55	12	0.0177	4.75	0.12	6.05	0.32	1.91	46.01	0.40
3A - 1A	0.26	1.04	80	0.05	0.36	80	0.21	0.68	98	14.59	0.76	12	0.0180	4.79	0.16	6.10	0.36	2.18	22.24	0.17

STORM CONVEYANCE - STORM LINE 2 (SAN REMO)

2A - 1B	0.30	0.30	80	0.06	0.06	80	0.24	0.24	98	10.00	0.25	12	0.0050	2.53	0.10	3.22	0.30	0.97	123.27	2.12
	0.38	0.68	60	0.15	0.21	80	0.23	0.47	98	10.00	0.54	12	0.0050	2.53	0.21	3.22	0.41	1.33	123.27	1.54

STORM CONVEYANCE - STORM LINE 1 (SAN REMO TO SOUTH OUTFALL)

1D - 1C	0.20	0.20	80	0.04	0.04	80	0.16	0.16	98	10.00	0.17	12	0.0058	2.72	0.06	3.46	0.26	0.91	251.53	4.61
	0.83	1.03	60	0.33	0.37	80	0.50	0.66	98	10.00	0.80	12	0.0058	2.72	0.29	3.46	0.49	1.71	251.53	2.45
	0.35	1.38	10	0.32	0.69	80	0.04	0.69	98	10.00	0.98	12	0.0058	2.72	0.36	3.46	0.56	1.94	251.53	2.16
1C - 1B	0.08	1.46	60	0.03	0.72	80	0.05	0.74	98	12.16	1.01	12	0.0050	2.53	0.40	3.22	0.60	1.93	53.54	0.46
1B - 1A[3]	0.18	2.32	60	0.07	1.00	80	0.11	1.32	98	12.62	1.65	12	0.0050	2.53	0.65	3.22	0.85	2.75	76.64	0.47
1A - SOUTH OUTFALL[4]	**0.00**	**3.36**	**60**	**0.00**	**1.36**	**80**	**0.00**	**2.00**	**98**	**14.76**	**2.35**	**18**	**0.0050**	**7.45**	**0.32**	**4.21**	**0.52**	**2.17**	**42.29**	**0.32**

[3] Pipe segment includes flow from line ' 2'

[4] Pipe segment includes flow from line ' 3'

TONQUIN MEADOWS
VILLEBOIS PDP 3E

WATER QUALITY ANALYSIS
COFFEE LAKE CREEK BASIN

JOB #395-007

DATE: 8/23/12
BY: PATRICK ESPINOSA

Prepared By:
Pacific Community Design, Inc.
13500 SW Pacific Highway, PMB #519
Tigard, OR 97223
Tele: 503-941-9484

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Methodology 4
Water Quality 4
Conclusion 5

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Exhibit A2: Developed Shed Map
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Figure B1-B6: Percent Impervious

Appendix C: Water Quality Facility Sizing Calculations
Figures C1-C2: Water Quality Dry Pond Calculations

INTRODUCTION

This report represents the analysis done for a portion of the Villebois development known as Tonquin Meadows (PDP 3E), located within the Coffee Lake Creek Basin. The intent of this report is to demonstrate that the proposed water quality facilities comply with City of Wilsonville "Public Works Standards". It delineates areas and sizes for on-site water quality facilities. All calculations and supporting figures are included with this document.

This report will identify the Runoff rates for the water quality storm event that produces 0.36 inches of rainfall in a 4-hr period as part of the Villebois Rainwater Management Program.

SITE DESCRIPTION AND LOCATION

The proposed Villebois development is located on tax lots 100, 102, 180, and 192 of Clackamas County Tax Map 3S1W15. The proposal is to develop a residential on property located east SW 110th Avenue and south of SW Beockman Road. The total area of the development site is 30.8 acres.

This portion of the Villebois development drains east to the Coffee Lake Basin.
During the construction of the Dammasch State Hospital, the area identified as Shed A1 on Exhibit B1 was re-routed to Mill Creek. This study corrects this basin transfer and returns flows to the Coffee Lake Creek basin.

The Coffee Lake Creek Basin is primarily cultivated open space with a scattering of houses and barns that make up approximately 0.5% impervious area within the site. The site, which slopes to the east at an average gradient of 3.5% falls within hydrologic groups A, B, and C per the Soil Survey Map for Clackamas County (Figure A3). The existing topography for the project site is shown in Appendix A.

METHODOLOGY

The site was first divided into drainage sheds as shown on the Existing Shed map and the Developed Shed Map (Figures A1 & A2). The locations of these divisions were based on the existing and proposed drainage patterns. The percentage of impervious area for each shed area was then calculated based on the approved land use. The following Table summarizes the impervious area information from Figures B1 through B6:

Shed	Area (acres)	Percent Impervious
P-2.3C	2.26	63%
P-2.6S	3.60	64%
P-2.3E	15.38	60%
P-2.4E	15.44	53%
P-1	4.51	0%
Q-1	3.13	0%
Q-2C	29.68	36%
Q-2E	10.14	63%

WATER QUANTITY:

The City of Wilsonville Master Stormwater Plan currently does not require any detention within this portion of the Coffee Lake Basin.

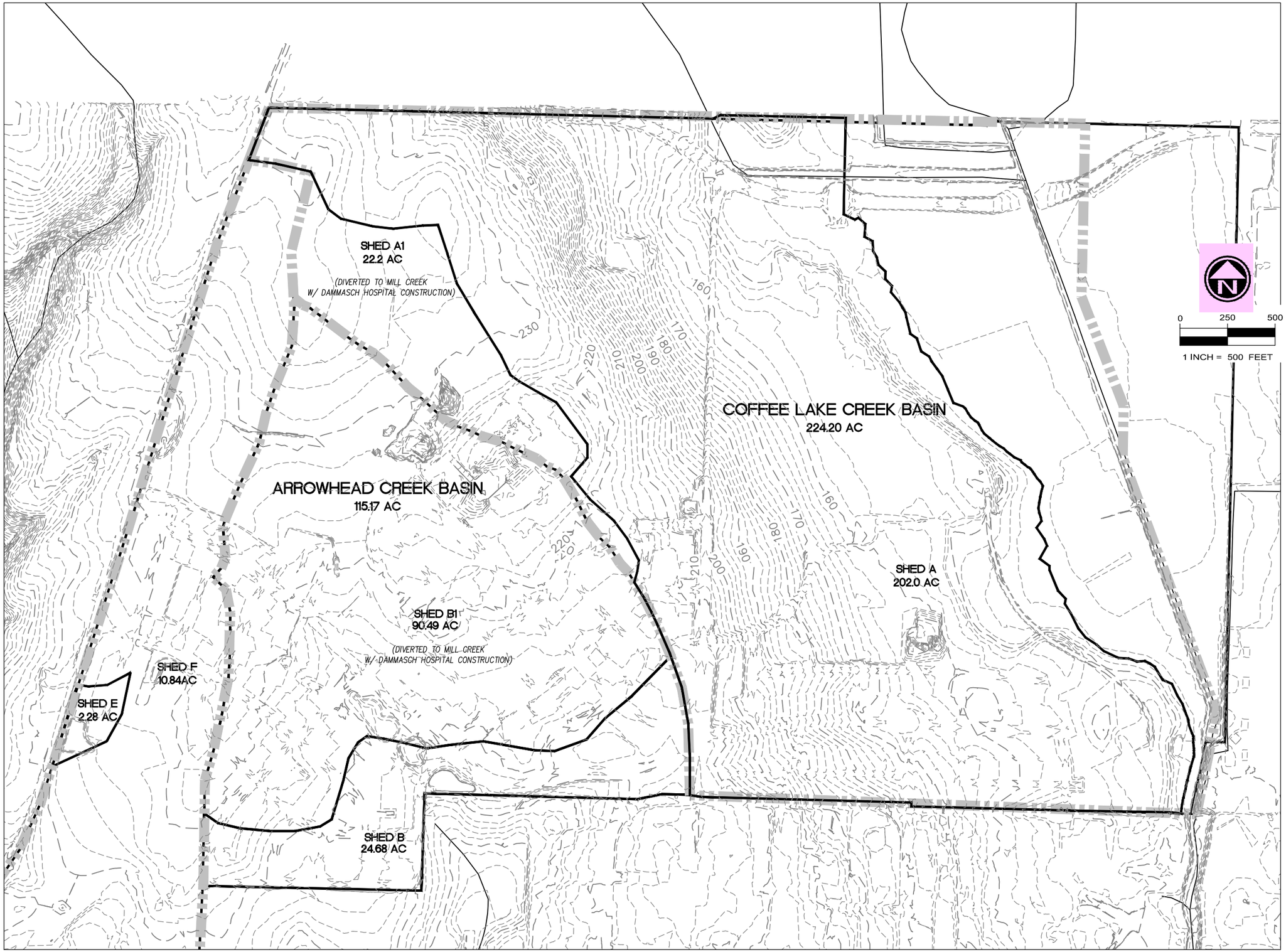
WATER QUALITY:

The City of Wilsonville requires that 65% removal of phosphorous be provided for stormwater runoff if any new impervious surfaces are created during site development. A permanent water quality facility must be constructed or funded to reduce contaminants that enter the storm and surface water system. Impervious surfaces shall include pavement, gravel roads, buildings, public and private roadways, and other surfaces that contribute runoff to the surface water system. Water quality requirements for Tonquin Meadows will be addressed with pollution control manholes and water quality dry ponds located at each of two located at the east side of the site. These dry ponds will be sized to temporarily retain the runoff from the water quality storm event of 0.36-inches over a 4-hour period. An energy dissipation device will be constructed at the outfall to prevent erosive velocities entering the facilities and to distribute the runoff across the width of the pond. A flow spreader will be constructed at the east edge of the facilities to allow larger storm events to drain to the Coffee Lake wetlands as overland sheet flow. Additionally, these dry ponds will contain a thicker media section and additional plantings to provide rainwater management during storm events smaller than the water quality storm event. See Appendix C for water quality dry pond sizing calculations and phosphorus removal calculations.

CONCLUSION:

Water quality facilities for Tonquin Meadows are consistent with the design requirements of the City of Wilsonville. The dry pond system has been designed to reduce post-development phosphorous levels by 65 percent for the portions of SAP North, SAP Central, and SAP East construction within the Coffee Lake Basin, which will maintain an acceptable level of water quality as the site discharges to the Coffee Lake Creek outlet.

APPENDIX A



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

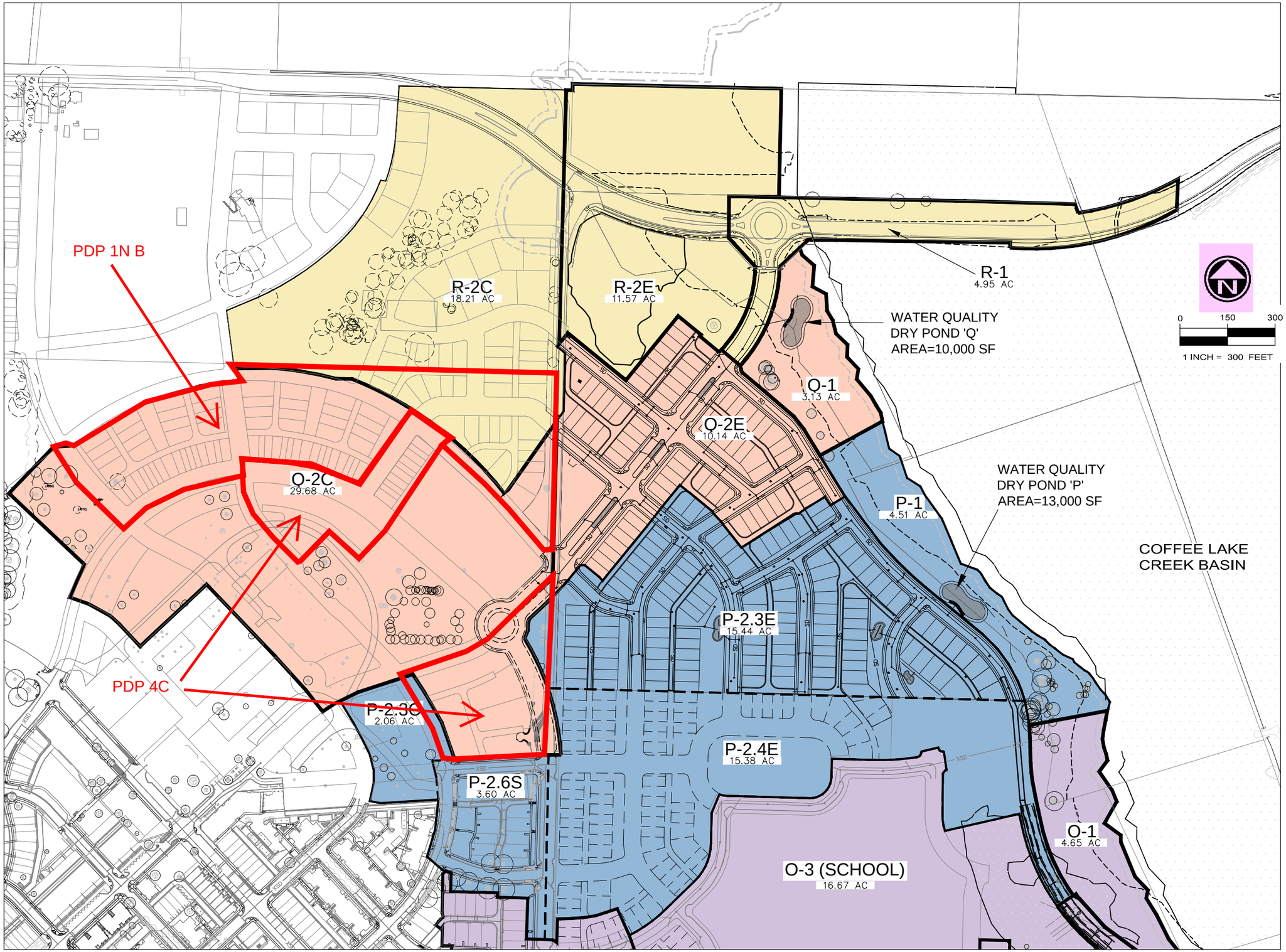
TONQUIN MEADOWS

Villebois
Phase 3 East
Hydrology

Pre-Developed Drainage Map

DATE: 8/24/2012

A1



N:\proj\395-007\09 Drawings\03 Planning\Exhibits-Hydrology\395007.Developed Shed Map.DWG - SHEET: DVLP Aug. 23, 12 - 3:48 PM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

TONQUIN MEADOWS

Villebois
Phase 3 East
Hydrology

Developed Drainage Map

DATE: 8/24/2012

A2

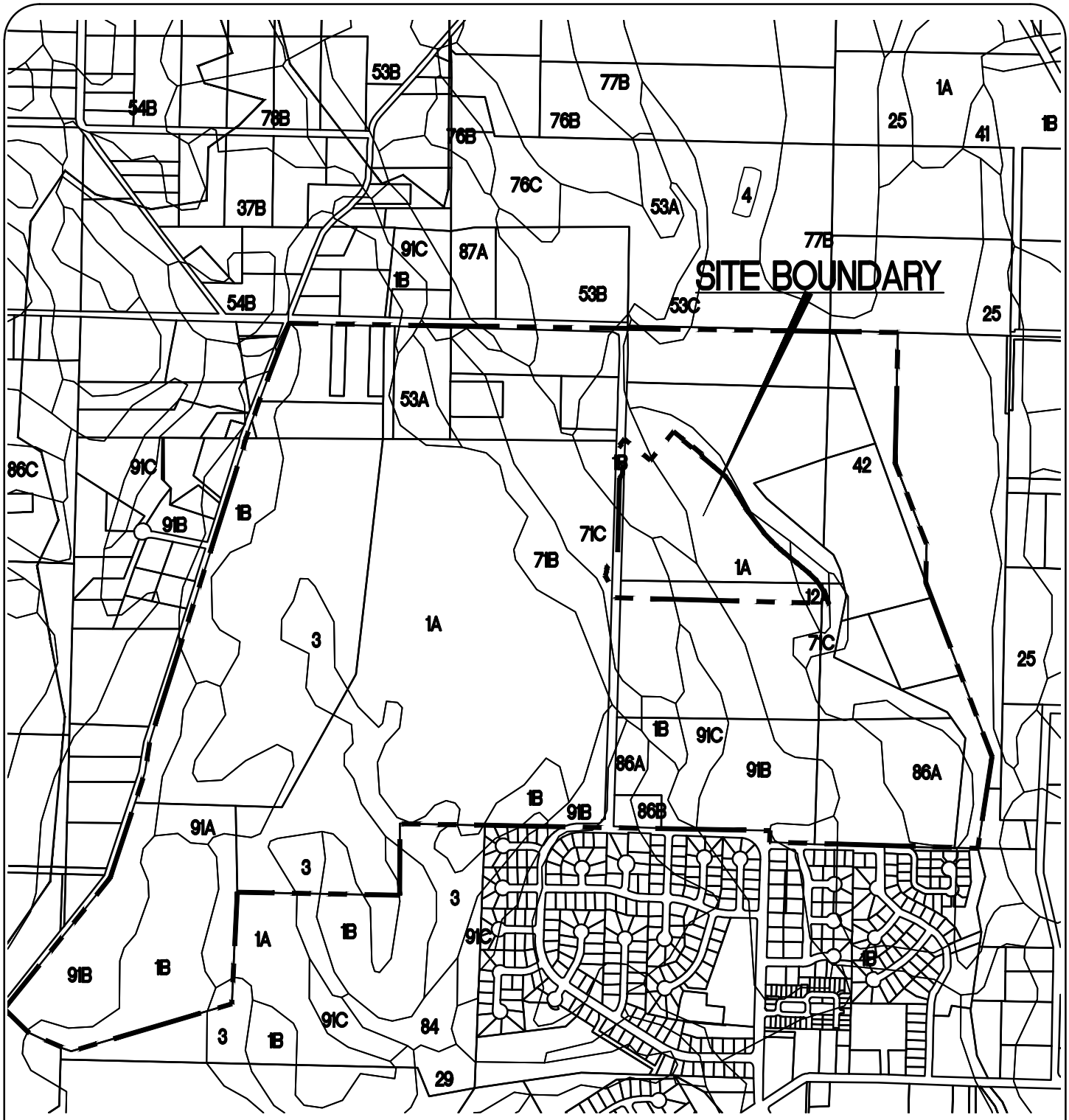


FIGURE A3: SOIL SURVEY MAP

DRAWN BY: PRE DATE: 8/23/12
REVIEWED BY: PRE DATE: 8/23/12
PROJECT NO.: 395-007
SCALE: N/A

Pacific Community Design
[T] 503-941-9484 [F] 503-941-9485

N:\proj\395-007\09 Drawings\03 Planning\Exhibits-Hydrology\395007.SOIL.dwg - SHEET: 8x11 Aug. 23, 12 - 4:10 PM pre

APPENDIX B

PERCENT IMPERVIOUS
SHEDP-2.3C (SAP CENTRAL)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	2.26	acres	98,446	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	36,068
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	26,136
Total	62,204
% Impervious =	63%

FIGURE B1

PERCENT IMPERVIOUS
SHED P-2.6S (PDP 6 SOUTH)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	3.60	acres	156,816	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	39,727
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	61,332
Total	101,059
% Impervious =	64%

FIGURE B2

PERCENT IMPERVIOUS
SHED P-2.3E
(PDP 3 EAST)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	15.44	acres	672,566	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	188,441
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	217,800
Total	406,241
% Impervious =	60%

FIGURE B3

PERCENT IMPERVIOUS
SHED P-2.4E
(PDP 4 EAST)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	15.38	acres	669,953	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	148,714
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	205,255
Total	353,969
% Impervious =	53%

FIGURE B4

PERCENT IMPERVIOUS
SHED Q-2C
(SAP CENTRAL & SAP NORTH)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	29.68	acres	1,292,861	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	101,930
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	365,904
Total	467,834
% Impervious =	36%

FIGURE B5

PERCENT IMPERVIOUS
SHED Q-2E
(PDP 3 EAST)

JOB NUMBER:	395-007
PROJECT:	TONQUIN MEADOWS
FILE:	N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

Total Site Area	10.14	acres	441,698	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	105,851
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	172,149
Total	278,000
% Impervious =	63%

FIGURE B6

APPENDIX C

WATER QUALITY DRY POND 'P' CALCULATIONS
(SAP CENTRAL, PDP 6S, PDP 3E & 4E)
FIGURE C1

JOB NUMBER: 395-007
PROJECT: TONQUIN MEADOWS
FILE: N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

REFERENCES:
1. City of Wilsonville Public Works Standards 2006

REQUIRED WATER QUALITY TREATMENT: 65% Phosphorus Removal.

PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins		15%
2. Extended Dry Pond		50%
	total	65%

DESIGN STORM:

Precipitation:	0.36	inches
Storm Duration:	4	hours
Storm Return Period:	96	hours
Storm Window:	2	weeks

IMPERVIOUS AREA: SAP CENTRAL, PDP 6S, PDP 3E & 4E (SHED AREAS P-2.3C, P-2.6S, P-2.3E, P-2.4E)

Watershed Area:	36.68	acres
Percent imp:	57.8%	
Impervious Area:	21.20	acres

Water Quality Volume = (21.2 ac)*(43560 ft^2/ac)*(0.36 in / 12 in/ft) = **27,704 cf**

DRY POND DESIGN CRITERIA:

Min Depth:	0.4	ft
Side Slopes:	4	:1 (treatment area)

DRY POND CHARACTERISTICS:

WQV=	27,704		Design Storm Volume (determined above)
Facility Area(A)=	13,200	sq. ft.	
depth (d)=	2.1	ft	Depth of Dry Pond
Z=	4	:1	Side slopes
SLOPE=	0.005	ft/ft	Slope of pond bottom (0.005 minimum)

WATER QUALITY DRY POND 'P' CALCULATIONS
(SAP CENTRAL, SAP NORTH, PDP 3E)
FIGURE C2

JOB NUMBER: 395-007
PROJECT: TONQUIN MEADOWS
FILE: N:/PROJ/395-007/05-REPORTS/HYDROLOGY/395007.PHYDRO.2012-08-22.XLS

REFERENCES:
1. City of Wilsonville Public Works Standards 2006

REQUIRED WATER QUALITY TREATMENT: 65% Phosphorus Removal.

PROPOSED TREATMENT METHODS:

1. Sumped Catch Basins		15%
2. Extended Dry Pond		50%
	total	65%

DESIGN STORM:

Precipitation:	0.36	inches
Storm Duration:	4	hours
Storm Return Period:	96	hours
Storm Window:	2	weeks

IMPERVIOUS AREA: SAP CENTRAL, SAP NORTH, PDP 3E (SHED AREAS Q-2C & Q-2E)

Watershed Area:	39.82	acres
Percent imp:	43.0%	
Impervious Area:	17.12	acres

Water Quality Volume = (17.122 ac)*(43560 ft^2/ac)*(0.36 in / 12 in/ft) = **22,375 cf**

DRY POND DESIGN CRITERIA:

Min Depth:	0.4	ft
Side Slopes:	4	:1 (treatment area)

DRY POND CHARACTERISTICS:

WQV=	22,375		Design Storm Volume (determined above)
Facility Area(A)=	10,000	sq. ft.	
depth (d)=	2.2	ft	Depth of Dry Pond
Z=	4	:1	Side slopes
SLOPE=	0.005	ft/ft	Slope of pond bottom (0.005 minimum)

M E M O R A N D U M

DATE: April 11, 2013

TO: City of Wilsonville

FROM: Patrick Espinosa, PE
Pacific Community Design

RE: Villebois PDP 4C & 1B N
Sanitary Sewer Capacity
Job No. 395-008

This memorandum report is to address the available downstream sanitary sewer capacity and the anticipated discharge locations for sanitary sewer flow from PDP 4C of Villebois SAP North and PDP 1B N. Both phases are located north of PDP 6S and west of SW 110th Ave and will discharge to the Tooze main. A small portion of PDP 1B N is located north of Tonquin Woods No. 3 and east of Grahams Ferry Road and will discharge south to the Barber Main. These sewer mains will then discharge to the Kinsman main via the connection installed in 2007 and the sewer extension installed in 2011.

The Sewer Capacity Analysis report, dated February 28, 2006, for the Villebois Master Plan was completed by Alpha Community Development. The boundaries for the proposed phases are included in, and are consistent with, the Sanitary Sewer Master Plan. PDP 4C and PDP 1B N is located within Area 5 as shown in the Sanitary Sewer Master Plan; see attached Figure B. The small portion draining to the Barber Main is located with Area 3A.

Phase 1B N consists of 28.91 acres with 90 single-family homes while Phase 4C consists of 6.83 acres with 57 single-family homes.

The development within both phases is made up of open spaces, roadways, and single-family residential lots. The attached spreadsheet provides the calculations for the total peak flow from each phase, which is as follows:

1. Phase 1N B (Area 3A) – 7.73 gpm
2. Phase 1N B (Area 5) - 42.24 gpm
3. Phase 4C (Area 5) – 29.09 gpm

The unit flow factors, determined by HDR Engineering during the Wilsonville Wastewater Collection System Master Plan Update, are as follows:

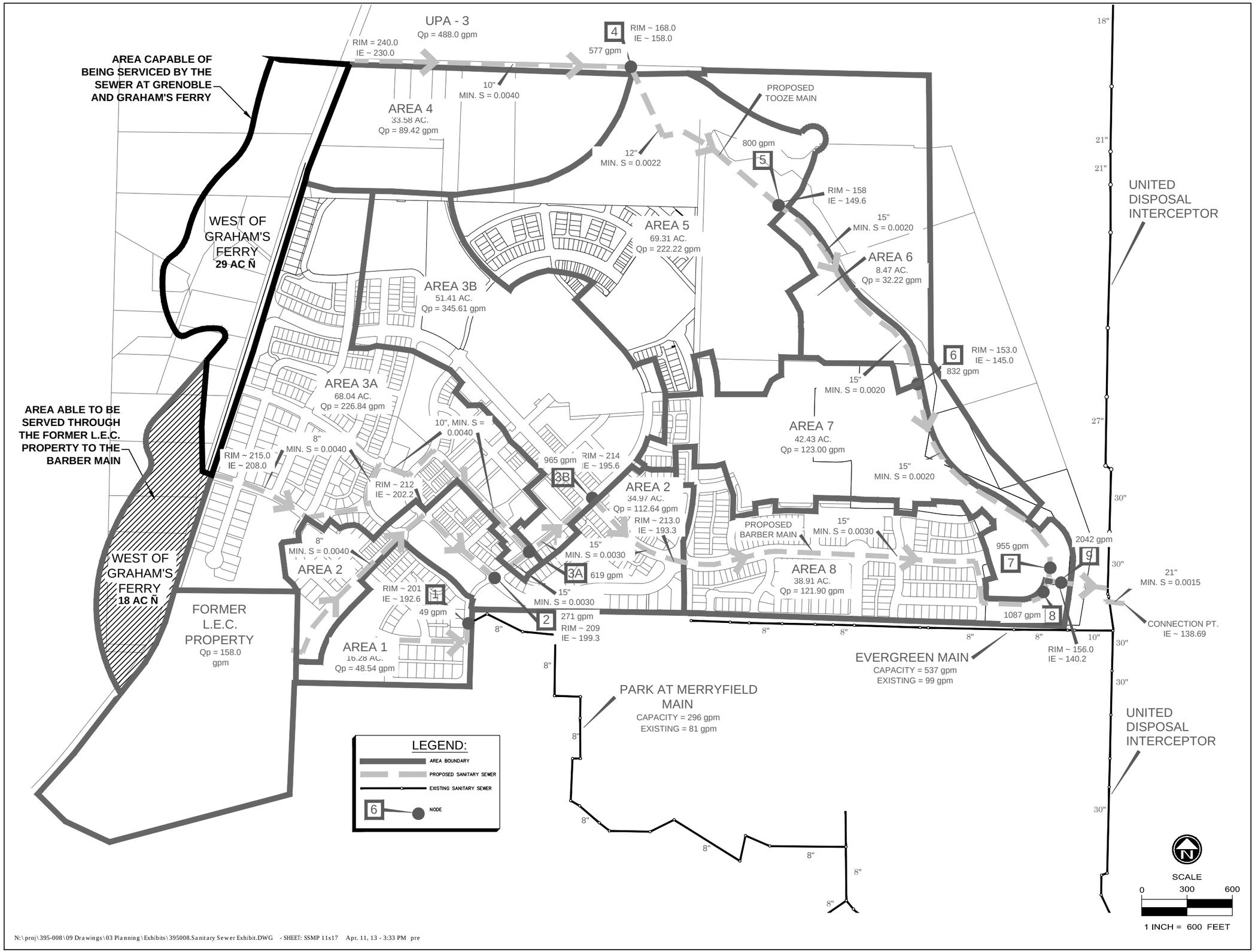
	Unit Flow Factors
Residential	213 gal/day/unit
Infiltration (I/T)	800 gal/day/acre
Peaking Factor	3

The proposed phase is located near the middle of the Tooze main sanitary sewer collection system and therefore, based on the calculated peak flows, the sanitary sewer lines within this phase are proposed to be eight inches. The Tooze main, as illustrated in the Sewer Capacity Analysis Report, has been designed as a 15-inch trunk line to provide the necessary capacity for this phase.

Thank you.

Attachments *(from the* Villebois *Village Sewer Capacity Analysis* Report)

1. Figure B — Sanitary Sewer Master Plan, Dated August 23, 2012, Prepared by Pacific Community Design
2. Sanitary Conveyance Calculations, Prepared by Pacific Community Design



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

VILLEBOIS

Villebois
Phase 4 Central
&
Phase 1 B North
Preliminary
Sewer Plan

Sanitary Sewer
United Disposal

DATE: 4/11/2013

SS1

JOB: 395-008

PROJECT: Villebois SAP North PDP 1 B & SAP Central PDP 4

FILE: N:/PROJ/395-008/05 Reports/Sanitary Sewer/3950082.Sanitary Conveyance.2013-04-11.xls

SAP NORTH PDP 1N B - SANITARY PEAK FLOW CALCULATIONS

AREA 3A

UNIT FLOW FACTORS

Residential:	213	gal/day/unit
Commercial:	1500	gal/day/acre
Infiltration (I/I):	800	gal/day/acre
Peaking Factor:	3, or Fig. 3-11	

Residential (R): 10 units

Qr = R x 213 gal/day/unit = 2,130 gal/day

Qr = 1.48 gal/min

Commercial (C): 0 acres

Qc = C x 1500 gal/day/acre = 0.00 gal/day

Qc = 0.00 gal/min

Developed Flow (Qf):

Qf = Qr + Qc = 1.48 gal/min 2130 gal/day

0.00213 MGD

Peak Flow (Qp):

Peaking Factor = -0.284ln(Q)+2.33

3.00

Qp = Qf x Peak F = 4.44 gal/min

Total Area (A): 5.93 acres

Qi = A x 800 gal/day/acre = 4,744 gal/day

Qi = 3.29 gal/min

Qt = Qp + Qi = 7.73 gal/min

AREA 5

UNIT FLOW FACTORS

Residential:	213	gal/day/unit
Commercial:	1500	gal/day/acre
Infiltration (I/I):	800	gal/day/acre
Peaking Factor:	3, or Fig. 3-11	

Residential (R): 80 units

Qr = R x 213 gal/day/unit = 17,040 gal/day

Qr = 11.83 gal/min

Commercial (C): 0 acres

Qc = C x 1500 gal/day/acre = 0.00 gal/day

Qc = 0.00 gal/min

Developed Flow (Qf):

Qf = Qr + Qc = 11.83 gal/min 17040 gal/day
0.01704 MGD

Peak Flow (Qp):

Peaking Factor = -0.284ln(Q)+2.33
3.00

Qp = Qf x Peak F = 35.50 gal/min

Total Area (A): 12.13 acres

Qi = A x 800 gal/day/acre = 9,704 gal/day

Qi = 6.74 gal/min

Qt = Qp + Qi = 42.24 gal/min

SAP CENTRAL PDP 4C - SANITARY PEAK FLOW CALCULATIONS

AREA 5

UNIT FLOW FACTORS

Residential:	213	gal/day/unit
Commercial:	1500	gal/day/acre
Infiltration (I/I):	800	gal/day/acre
Peaking Factor:	3, or Fig. 3-11	

Residential (R): 57 units

Qr = R x 213 gal/day/unit = 12,141 gal/day

Qr = 8.43 gal/min

Commercial (C): 0 acres

Qc = C x 1500 gal/day/acre = 0.00 gal/day

Qc = 0.00 gal/min

Developed Flow (Qf):

Qf = Qr + Qc = 8.43 gal/min 12141 gal/day
0.01214 MGD

Peak Flow (Qp):

Peaking Factor = -0.284ln(Q)+2.33
3.00

Qp = Qf x Peak F = 25.29 gal/min

Total Area (A): 6.83 acres

Qi = A x 800 gal/day/acre = 5,464 gal/day

Qi = 3.79 gal/min

Qt = Qp + Qi = 29.09 gal/min

VILLEBOIS PDP 1N B & PDP 4C

RAINWATER MANAGEMENT PLAN
FOR COFFEE LAKE CREEK BASIN

BY: Patrick Espinosa
DATE: 4/11/2013

Prepared By:
Pacific Community Design, Inc.
13500 SW Pacific Highway, PMB #519
Tigard, OR 97223
Tele: 503-941-9484

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III. PROCEDURE

IV. CONCLUSION

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I: INTRODUCTION

The purpose of this Rainwater Management Plan is to demonstrate how the Rainwater Management Program will be applied to the Villebois PDP 1N B & 4C developments. The Rainwater Management Program is a valuable and significant component of sustainability for Villebois. It is important with each phase of development to continue to search for and create opportunities for rainwater management for the benefit of the community of Villebois and its neighbors.

II: PROPOSED SYSTEM

The rainwater management system described in this report is a compilation of several of the components from the Rainwater Management Program approved with SAP Central and SAP North. In an effort to provide diversity, there are 3 types of components utilized including bio-retention cells, vegetated swales, and street trees.

This report reflects those components that are envisioned for the PDP 1N B & 4C development. While conceptual only, these components are intended to be implemented in concert with parks planning and infrastructure to provide a benefit to the watershed, and be complimentary to park and open space uses.

III: PROCEDURE

The PDP 1N B & 4C will create new impervious areas. The Water Quality Analysis Report for Tonquin Meadows, August 23, 2012, quantified the anticipated impervious area created for future land uses of SAP Central, and SAP North. The Villebois Master Plan was used as a guide to determine future development patterns including street infrastructure and land use. These area calculations are copied into this report and included in Appendix B.

The second step was to determine the total area of proposed Rainwater Management Components. The total area for each component type was tabulated, and then divided by its sizing factor to determine the amount of impervious area mitigated. In order to determine the percent of created impervious area mitigated with rainwater components, this area was divided by the total impervious area for the entire basin.

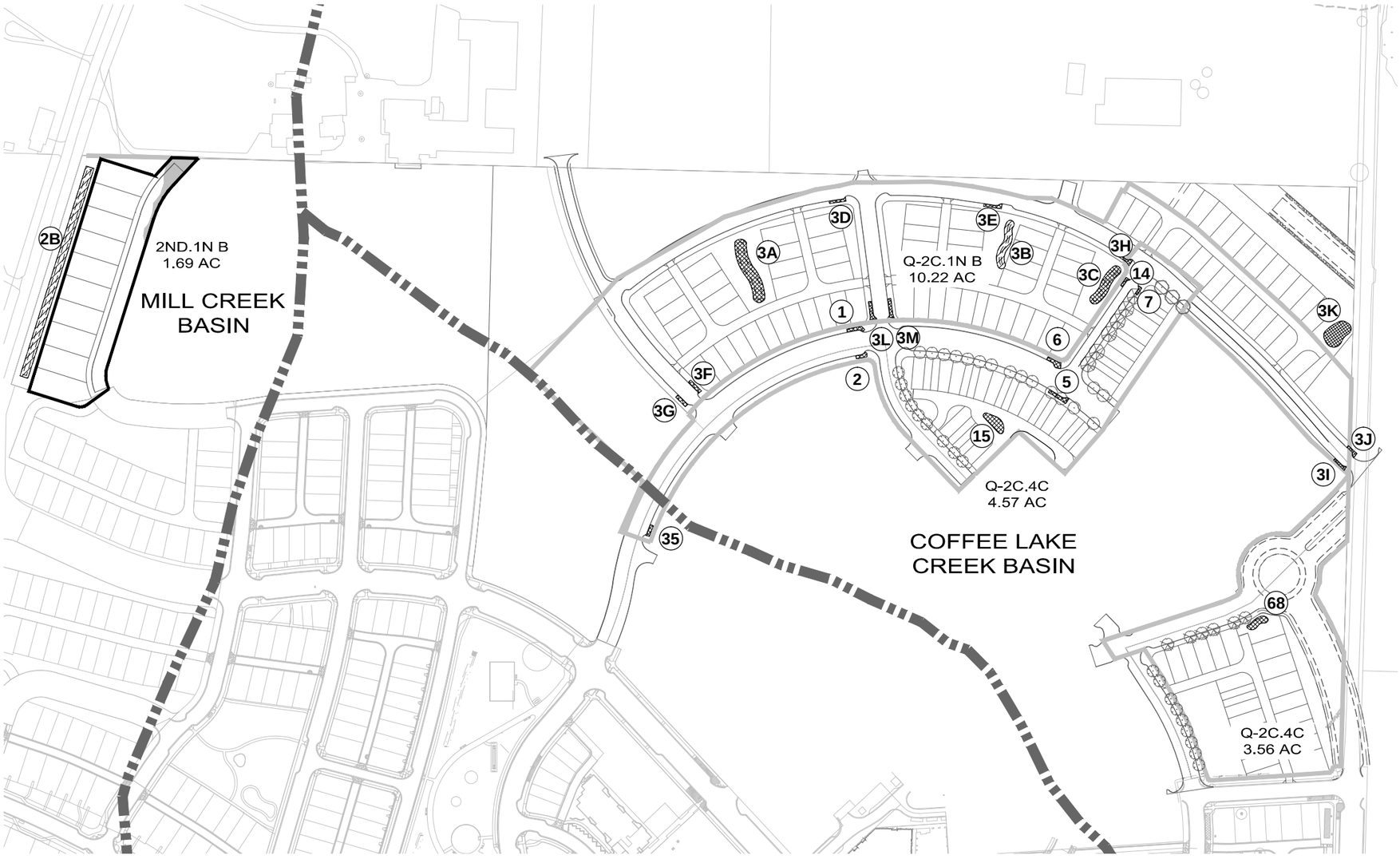
IV: CONCLUSION

The Rainwater Management Plan for PDP 1N B, as presented with this report, will achieve 72% mitigation of created impervious area. PDP 4C will achieve 55% mitigation of created impervious area.

With the current rainwater management facilities and those planned for future development SAP North will achieve 71% mitigation, while SAP Central will achieve 72%.

Additional opportunities exist within the Coffee Lake Creek Basin to provide rainwater management. Developers and builders are encouraged to continue efforts to exceed this plan and should drive to achieve the maximum mitigation practicable.

APPENDIX A: MAP FIGURES



LEGEND:

- SD — PROPOSED STORM DRAIN
- RAINWATER BIO-RETENTION CELL
- RAINWATER SWALE
- PROPOSED STREET TREE

N

SCALE

0 125 250

1 INCH = 250 FEET

N:\proj\395-008\09 Drawings\03 Planning\Exhibits-Hydrology\395008.Rainwater Map.DWG - SHEET: RAIN Apr. 12, 13 - 12:00 PM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

VILLEBOIS

Villebois
Phase 4 Central
&
Phase 1 B North
Hydrology

Rainwater Management Map

DATE: 4/11/2013

A1

APPENDIX B: IMPERVIOUS AREA CALCULATION

PERCENT IMPERVIOUS
SHED Q-2C.1N B (PDP 1N B)
PDP LAYOUT

JOB NUMBER:	395-008
PROJECT:	VILLEBOIS PDP 1N B & 4C
FILE:	N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

Total Site Area	10.22	acres	445,183	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	106,130
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	116,287
Total	222,418
% Impervious =	50%

FIGURE B1

PERCENT IMPERVIOUS
SHED C-2C.4C (PDP 4C)
PDP LAYOUT

JOB NUMBER:	395-008
PROJECT:	VILLEBOIS PDP 1N B & 4C
FILE:	N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

Total Site Area	8.13	acres	354,143	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	47,366
Single Family Lot Impervious Area (60%)	27,274
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	176,721
Total	251,361
% Impervious =	71%

FIGURE B2

PERCENT IMPERVIOUS
SHED 2ND (PDP 1N B)
PDP LAYOUT

JOB NUMBER:	395-008
PROJECT:	VILLEBOIS PDP 1N B & 4C
FILE:	N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

Total Site Area	1.69	acres	73,616	sf

ON-SITE	Imp. Area (sf)
Row House Lot Impervious Area (85%)	0
Single Family Lot Impervious Area (60%)	30,831
Commercial Lot Impervious Area (90%)	0
ROW/Alley Impervious Area (80%)	17,785
Total	48,616
% Impervious =	66%

FIGURE B3

APPENDIX C: RAINWATER MANAGEMENT CALCULATIONS

Pacific Community Design

JOB NUMBER: 395-008
PROJECT: VILLEBOIS PDP 1N B & 4C
FILE: N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

EXHIBIT C:
RAINWATER COMPLIANCE SUMMARY - SAP NORTH

PHASE	DRAINAGE BASIN	BASIN ID	AREA (SF)	% IMPERVIOUS	IMPERVIOUS AREA (SF)	RAINWATER COMPONENT NO.	RAINWATER COMPONENT TYPE	RAINWATER COMPONENT AREA/ NO. OF TREES	SIZING FACTOR	IMPERVIOUS AREA TREATED			% IMPERVIOUS AREA TREATED
										ARROWHEAD CREEK	MILL CREEK	COFFEE LAKE CREEK	
1	ARROWHEAD CREEK	E1-5A	445,183	50%	222,418	-	-	-	-	257,924	-	-	-
							TREES	164	0.01	16,400			
						2	VEGETATED SWALE[1]	7,818	0.06	26,447			
						3	VEGETATED SWALE[1]	9,533	0.06	121,077			
						4	BIORETENTION CELL	2,820	0.03	94,000			
2	MILL CREEK	2MD	354,143	71%	251,361	-	-	-	-	-	8,950	-	-
							TREES	18	0.01		1,800		
						1A	VEGETATED SWALE	429	0.06		7,150		
2	MILL CREEK	1ND	73,616	66%	48,616	-	-	-	-	-	38,288	-	-
							TREES	29	0.01		2,900		
						1	VEGETATED SWALE[1]	4,414	0.06		14,821		
						2E	VEGETATED SWALE	1,234	0.06		20,567		
1 B	MILL CREEK	2ND	73,616	66%	48,616	-	-	-	-	-	32,431	-	-
							TREES	16	0.01		1,600		
						2B	VEGETATED SWALE	1,850	0.06		30,831		
1 B	MILL CREEK	Q-2C.1N B	445,183	50%	222,418	-	-	-	-	-	-	162,678	-
							TREES	106	0.01			10,600	
						3A	BIORETENTION CELL	375	0.03			12,516	
						3B	VEGETATED SWALE	1,018	0.06			16,962	
						3C	BIORETENTION CELL	900	0.03			30,000	
						3D	BIORETENTION CELL	228	0.03			7,600	
						3E	BIORETENTION CELL	210	0.03			7,000	
						3F	BIORETENTION CELL	110	0.03			3,667	
						3G	BIORETENTION CELL	110	0.03			3,667	
						3H	BIORETENTION CELL	240	0.03			8,000	
						3I	BIORETENTION CELL	200	0.03			6,667	
						3J	BIORETENTION CELL	200	0.03			6,667	
						3K	BIORETENTION CELL	1,200	0.03			40,000	
						3L	BIORETENTION CELL	140	0.03			4,667	
						3M	BIORETENTION CELL	140	0.03			4,667	
TOTAL PHASE 1-PHASE 1			445,183		222,418					257,924			**116%**
TOTAL PHASE 1-PHASE 2			427,759		299,976						47,238		**16%**
TOTAL PHASE 1 B			518,800		271,033						32,431	162,678	**72%**
FUTURE SAP NORTH PHASES[2]			2,482,283		821,383					0	47,547	595,684	**78%**
SAP NORTH TOTAL			3,874,025		1,614,810					257,924	127,216	758,362	**71%**

[1]COMPONENT IMPERVIOUS AREA TREATED REFLECTS ACTUAL COMPONENT CATCHMENT AREA AND MAY NOT REFLECT SIZING FACTOR

[2]FUTURE SAP NORTH PHASE TOTALS PER APPROVED SAP NORTH AND PDP 1N RAINWATER MANAGEMENT PLAN

JOB NUMBER: 395-008

PROJECT: VILLEBOIS PDP 1N B & 4C

FILE : N:/PROJ/395-008/05-REPORTS/RAINWATER MANAGEMENT/395002.PRAIN.2013-04-11.XLS

EXHIBIT C:

RAINWATER COMPLIANCE SUMMARY - SAP CENTRAL

PHASE	DRAINAGE BASIN	BASIN ID	AREA (SF)	% IMPERVIOUS	IMPERVIOUS AREA (SF)	RAINWATER COMPONENT NO.	RAINWATER COMPONENT TYPE	RAINWATER COMPONENT AREA / NO. OF TREES	SIZING FACTOR	IMPERVIOUS AREA TREATED			% IMPERVIOUS AREA TREATED
										ARROWHEAD CREEK	MILL CREEK	COFFEE LAKE CREEK	
4C	COFFEE LAKE CREEK	Q-2C.4C	354,143	71%	251,361	-	-	-	-	-	-	137867	-
							TREES	52	0.01			5200	
						1	BIO-RETENTION CELL	240	0.03			8000	
						2	BIO-RETENTION CELL	240	0.03			8000	
						3C[3]	BIORETENTION CELL	900	0.03			30,000	
						5	BIO-RETENTION CELL	495	0.03			16500	
						6	BIO-RETENTION CELL	495	0.03			16500	
						7	BIO-RETENTION CELL	120	0.03			4000	
						14	BIO-RETENTION CELL	120	0.03			4000	
						15	BIO-RETENTION CELL	590	0.03			19667	
						35	BIO-RETENTION CELL	180	0.03			6000	
						68	BIO-RETENTION CELL	600	0.03			20000	
TOTAL PDP 1C			717,433		556,610					369,104			**66%**
TOTAL PDP 2C			230,432		189,922					90,499			**48%**
TOTAL PIAZZA VILLEBOIS			38,768		38,768					26,042			**67%**
TOTAL PHASE 4C			354,143		251,361							137,867	**55%**
FUTURE SAP CENTRAL PHASES[2]			1,035,442		770,207					0	47,547	626,045	**87%**
SAP CENTRAL TOTAL			2,336,123		1,806,868					485,645	47,547	763,912	**72%**

[1]COMPONENT IMPERVIOUS AREA TREATED REFLECTS ACTUAL COMPONENT CATCHMENT AREA AND MAY NOT REFLECT SIZING FACTOR

[2]FUTURE SAP CENTRAL PHASE TOTALS PER APPROVED SAP CENTRAL RAINWATER MANAGEMENT PLAN

[3]DENOTES A FACILITY THAT PROVIDES MITIGATION FOR BOTH SAP NORTH AND SAP CENTRAL AREAS

DKS

117 Commercial Street NE
Suite 310
Salem, OR 97301
503.391.8773
www.dksassociates.com

MEMORANDUM

REGISTERED PROFESSIONAL ENGINEER
56267
OREGON
July 9, 2002
SCOTT M. MANSUR
EXPIRES: 12-31-2014

DATE: May 31, 2013

TO: Steve Adams, P.E., City of Wilsonville

FROM: Scott Mansur, P.E., PTOE
Brad Coy, P.E.
Derek Moore, E.I.T

SUBJECT: **Villebois SAP North PDP 2 Transportation Review**

P13003-008

This memorandum evaluates trip generation for the updated Villebois Specific Area Plan (SAP) North with emphasis on Planned Development Phase (PDP) 2. The review is based on a revised site plan provided by the project sponsor.[1] Since the Master Plan approval of SAP North, the land use within this SAP has been modified, and residential units associated with PDP 1 have already been approved and constructed.

The following sections of this memorandum document the SAP North land use and trip generation (general area), PDP 2 trip generation (current phase), and the site plan impacts for PDP 2.

SAP Central Land Use/Trip Generation

The *Villebois Master Plan*[2] initially approved SAP North for 252 single family units, 71 condo/townhouse units, and 30 apartments for a total of 353 residential units, along with 5,000 square feet of commercial space and a 47,000 sq. ft. primary school. Instead of performing trip generation estimates for each of the SAP areas, the original traffic study was based on the entire Villebois area (i.e., SAPs North, South, East, and Central). However, based on the SAP North's portion of the Villebois land use, Table 1 shows the estimated trip generation for SAP North based on the *Master Plan* unit counts and assumptions regarding trip generation rates. As shown, the original SAP North land uses were approved for 447 (268 in, 179 out) p.m. peak hour trips.

---

[1] *Villebois Zion Site Map*, Polygon Northwest Company, March 29, 2013.

[2] *Villebois Urban Village Master Plan Amendment Transportation Study,* DKS Associates, June 2005

Table 1: Master Plan Approved SAP North Trip Generation (based on assumed trip generation rates)

Land Use (ITE Code)	Size	Average Trip Generation Rate	Number of New Trips		
			In	Out	Total
Single Family Units (210)	252 units	1.01 trips/unit	161	94	255
Condo/Townhome (230)	71 units	0.52 trips/unit	25	12	37
Apartments (220)	30 units	0.62 trips/unit	12	7	19
Shopping Center (820)	5 KSF	3.75 trips/KSF	9	10	19
School	47 KSF	3 trips/KSF	73	68	141
		Total Trips	**280**	**191**	**471**
		Internal Trips[a]	*-9*	*-9*	*-18*
		Pass-By Trips[b]	*-3*	*-3*	*-6*
		Net New Trips	**268**	**179**	**447**

[a] Internal trip rates from ITE's *Trip Generation Manual*, 9th Edition, 2012. 5% of school trips assumed to be internal.
[b] 34% of external shopping center trips

Currently, SAP North is proposed to include 423 single family units, 31 condo/townhouse units, and 10 apartment units for a total of 464 residential units. Since approval of the *Master* Plan, the proposed Lowrie Primary School was moved to SAP East and was replaced with residential development. As shown in Table 2, the proposed land uses would generate 449 (284 in, 165 out) p.m. peak hour trips, which is consistent with the prior *Master Plan* approval (i.e., only 2 additional p.m. peak hour trips).

Table 2: Proposed SAP North Trip Generation

Land Use (ITE Code)	Size	Average Trip Generation Rate	Number of New Trips		
			In	Out	Total
Single Family Units (210)	423 units	1.01 trips/unit	269	158	427
Condo/Townhome (230)	31 units	0.52 trips/unit	11	5	16
Apartments (220)	10 units	0.62 trips/unit	4	2	6
		Total Trips	**284**	**165**	**449**

SAP North PDP 2 Trip Generation

SAP North is broken into approximately seven PDPs, with the current phase being PDP 2 (i.e. the 2nd phase). A prior transportation study[3] determined that SAP North PDP 1, consisting of 130 single-family units and 12 townhome/condo units, would generate 137 (87 in, 50 out) p.m. peak hour trips.

[3] *Villebois SAP North PDP 1 Transportation Review*, DKS Associates, March 2011

Table 3 shows the estimated trip generation for PDP 2 based on the unit counts provided by the project sponsor. As shown, the 90 proposed single family detached residential units planned for PDP 2 would generate approximately 91 (57 in, 34 out) p.m. peak hour trips.

Table 3: PDP 2 P.M. Peak Hour Trip Generation

Land Use (ITE Code)	Number of Units	Average Trip Generation Rate	Number of New Trips		
			In	Out	Total
Single Family Units (210)	90	1.01 trips/unit	57	34	91
TOTAL	**90**	-	**57**	**34**	**91**

Site Plan Evaluation

DKS reviewed the current site plan provided by the project sponsor, and the site plan comments are summarized below:

- **Pedestrian Pathways:** The *Villebois Master Plan* identifies several pedestrian pathways and trails through the PDP 1B area, including the regional Tonquin Trial. These pathways are not identified on the provided site plan; however the project sponsor should ensure that the appropriate pathways are incorporated into the Villebois North PDP 1B development. A copy of the Parks and Open Space Plan from the *Villebois Master Plan* is attached to this document for reference.

Summary

A summary of key findings relating to the SAP East PDP 3E review include the following:

- SAP North was initially approved for 252 single family units, 71 condo/townhouse units, and 30 apartments for a total of 353 residential units, along with 5,000 square feet of commercial space and a 47,000 sq. ft. primary school. Based on the 2005 unit counts and assumptions regarding trip generation rates, SAP North's initial land uses were approved for 447 (268 in, 179 out) p.m. peak hour trips.
- The currently proposed land use includes 423 single family units, 31 condo/townhouse units, and 10 apartment units for a total of 464 residential units. The proposed land uses would generate 449 (284 in, 165 out) p.m. peak hour trips, which is consistent with the prior *Master Plan* approval (i.e., only 2 additional p.m. peak hour trips).
- The proposed current phase for SAP North (PDP 2) consists of 90 single family detached units which are expected to generate 91 (57 in, 34 out) p.m. peak hour trips.

Please let us know if you have any questions or comments.

Figure 5

Legend

- Neighborhood Commons
- PP Pocket Park
- LG Linear Green
- UP Urban Plaza
- Villebois Proposed Major Pathways
- Villebois Proposed Minor Pathways
- Villebois Proposed Nature Trails
- Wetland Delineation
- Tentative 100 Year Flood Line (pending approval of MT2 application to update mapping for the upper portion of Coffee Lake Creek, Seely Ditch, and Basalt Creek prepared by HDR on October 25, 2005)
- Significant Resource Overlay Zone (SROZ) with 25' buffer
- Elementary School Site: includes minimum 3 acre Community Park

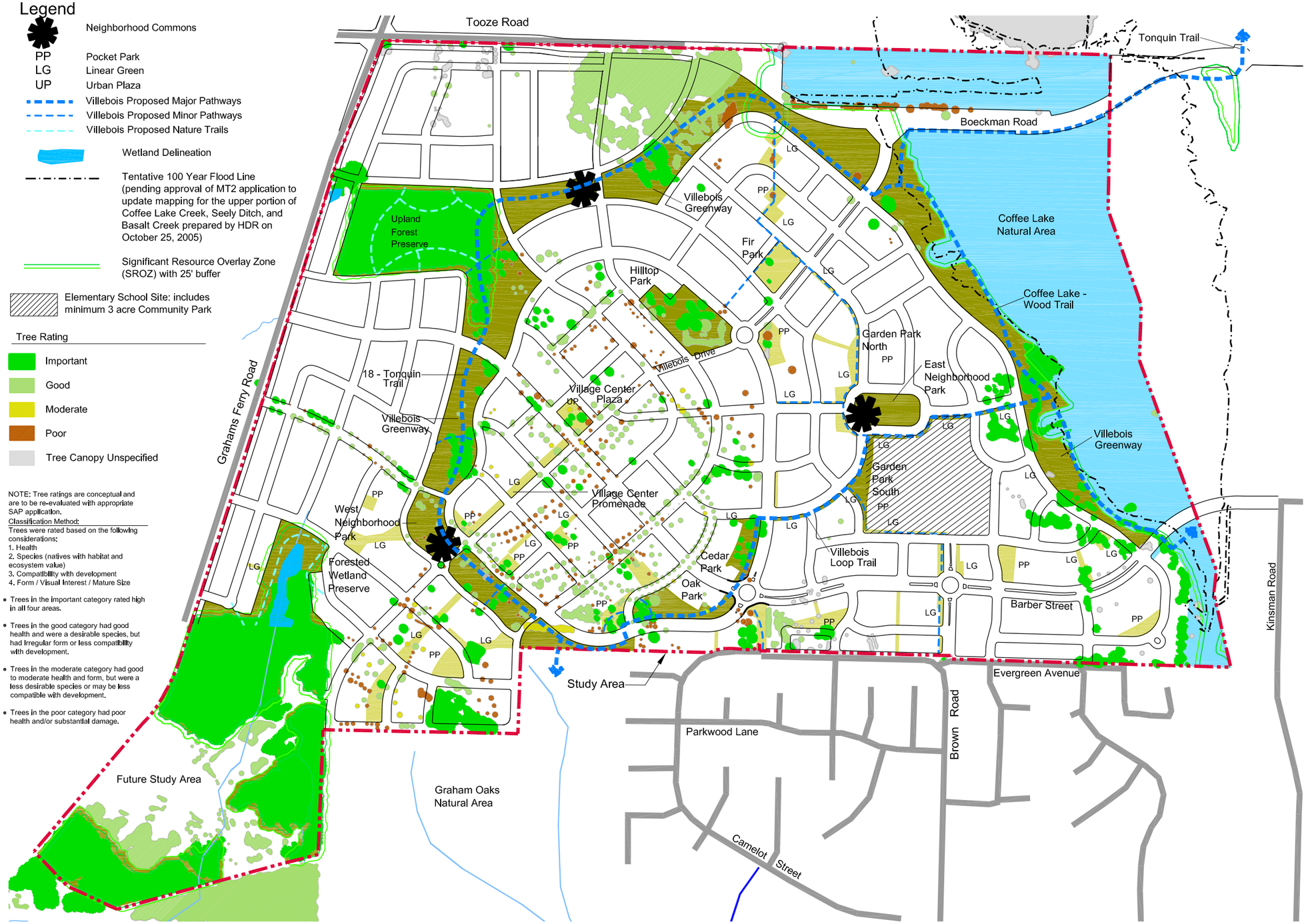
Tree Rating

- Important
- Good
- Moderate
- Poor
- Tree Canopy Unspecified

NOTE: Tree ratings are conceptual and are to be re-evaluated with appropriate SAP application.

Classification Method:
Trees were rated based on the following considerations:
1. Health
2. Species (natives with habitat and ecosystem value)
3. Compatibility with development
4. Form / Visual Interest / Mature Size

- Trees in the important category rated high in all four areas.
- Trees in the good category had good health and were a desirable species, but had irregular form or less compatibility with development.
- Trees in the moderate category had good to moderate health and form, but were a less desirable species or may be less compatible with development.
- Trees in the poor category had poor health and/or substantial damage.



Neighborhood Parks - 21.42 acres

- East Neighborhood Park - 1.60 acres
- Cedar Park - 1.00 acre
- Oak Park - 1.53 acre
- Fir Park - 1.00 acre
- (UP)Village Center Plaza - 0.52 acres
- Hilltop Park - 2.90 acres
- West Neighborhood Park - 1.80 acres
- (PP)Pocket Parks - 5.57 acres
- (LG)Linear Greens with Pathways- 4.81 acres
- (LG)Village Center Promenade- 0.69 acres

Community Parks - minimum 3.00 Acres

- Elementary School
  Minimum 3 acres of park area associated with school location

Regional Parks - 33.45 acres

- Villebois Greenway - 33.45 acres

Open Space - 101.46 acres

- Forested Wetland Preserve - 5.07 acres
- Future Study Area - 23.20 acres
- Upland Forest Preserve - 10.60 acres
- Coffee Lake Natural Area - 62.59 acres

Total amount of Parks= 57.87 acres
Total amount of Open Space= 101.46 acres
Total amount of Parks & Open Space= 159.33 acres

Trails and Pathways - 47.51 miles

- Nature Trail - 0.71 miles
- Minor Path - 1.20 miles
- Major Path - 2.90 miles
  (Tonquin Trail/Villebois Loop Trail/ Coffee Lake-Wood Trail)
- Bike Lane - 9.90 miles
- Sidewalks - 32.80 miles

Park Legend

- City ownership; HOA maintenance for 5 years; then city maintenance except for Special Features. (Note: NP-4 and NP-6 may be in this category if restrooms and parking are provided for the community in addition to the park area shown. If not they will be owned and maintained by the HOA with public access.)
- Owned and maintained by HOA with public access.
- Coffee Lake Open Space- To be publicly owned and maintained, with more specific responsibilities to be detailed at the time of specific O&M Agreement for the appropriate development phase(s).

NOTES:
The Villebois Village Master Plan shall comply with the City of Wilsonville SROZ regulations. Encroachments within the SROZ and flood plain are shown for illustrative purposes only, and will be reviewed for compliance or exemption as more detailed information is provided that will affect the SROZ areas. Adjustments in plan, street alignments, and intersections as well as rainwater facilities and pathways will be made to comply with SROZ regulations. Flood Insurance Rate Map 410025-0004-C dated February 19, 1987 shows the northerly limit of the detailed study area having an elevation of 143 (Ft. NGVD). This elevation has been used to approximate the flood plain limits within the project limits. Development in and around wetlands will be done per all applicable federal, state and local wetland regulations.

0 150 300 600

NORTH

Parks and Open Space Plan

MAY 12, 2010

DKS

117 Commercial Street NE
Suite 310
Salem, OR 97301
503.391.8773
www.dksassociates.com

MEMORANDUM

REGISTERED PROFESSIONAL ENGINEER
56267
OREGON
July 9, 2002
SCOTT M. MANSUR
EXPIRES: 12-31-2014

DATE: May 31, 2013

TO: Steve Adams, P.E., City of Wilsonville

FROM: Scott Mansur, P.E., PTOE
Brad Coy, P.E.
Derek Moore, E.I.T

SUBJECT: **Villebois Urban Village SAP North Area 1B Transportation Study** P13003-009

This memorandum evaluates trip generation for the entire Villebois Urban Village (i.e., Central, East, South, and North areas) based on current land use information and assumptions. Since the Master Plan approval and subsequent legislative amendments, the land use within the Villebois area has been modified, including changes to the number and type of residential units as well as moving the Lowrie Primary School from Specific Area Plan (SAP) North to SAP East. This memorandum was prepared to help understand how the currently proposed trip generation levels compare with previously approved trip generation levels for the Villebois Urban Village as a whole as well as for each SAP area.

The following sections of this memorandum document the previously approved and currently proposed land use and trip generation, as well as provide a comparison between the two. The SAP North site plan is also evaluated and recommendations are provided.

Villebois Land Use

The *Villebois Master Plan* was amended in 2005 to approve the Villebois Urban Village for 2,473 residential units, 35,000 square feet of commercial space, and a 47,000 sq. ft. elementary school (see Table 1). These land uses were estimated to generate 1,907 p.m. peak hour trips, and this trip level was the basis for the Villebois Village transportation impact study.[1]

Table 1: Approved Land Use for Villebois Urban Village Legislative Amendment April 26, 2005

SAP	Single Family Units	Condo/Town House Units	Apartment Units	Retail (KSF)	School	TOTAL
East	568	87	-	5	-	655
Central	9	500	501	20	-	1,010
North	252	71	30	5	47 (KSF)	353
South	324	121	10	5	-	455
Total	**1,153**	**779**	**541**	**35**	**47 (KSF)**	**2,473**

[1] *Villebois Urban Village Master Plan Amendment Transportation Study*, DKS Associates, June 2005

Since approval of the 2005 legislative amendment, these land use estimates have been modified and many units have been constructed. Most notably, there has been an increase in the number of residential units along with a shift in the number of units constructed as detached homes versus attached homes. In addition, the Lowrie Primary School has been constructed in SAP East instead of its original location in SAP North. Table 2 shows the updated land use estimates, which includes 57 residential units more than what was previously approved.

Table 2: Currently Proposed Lane Use for Villebois Urban Village

SAP	Single Family Units	Condo/Town House Units	Apartment Units	Retail (KSF)	School	TOTAL
East	534	42	-	-	500 students	576
Central	49	459	501	33	-	1,009
North	423	31	10	-	-	464
South	357	103	21	-	-	481
Total	**1,363**	**635**	**532**	**33**	**500 students**	**2,530**
Net Change	**+210**	**-144**	**-9**	**-2**	**-**	**+57**

Proposed Villebois Trip Generation

New trip generation estimates were performed for the currently proposed Villebois land use based on the original trip rates. As shown in Table 3, the Villebois Urban Village is now expected to generate 2,043 (1,298 in, 745 out) p.m. peak hour new external trips.

Table 3: Current Villebois Trip Generation

Land Use (ITE Code)	Size	Average Trip Generation Rate	Number of New Trips		
			In	Out	Total
Single Family Units (210)	1,363 units	1.01 trips/unit	868	509	1377
Condo/Townhome (230)	532 units	0.52 trips/unit	186	91	277
Apartments (220)	532 units	0.62 trips/unit	215	115	330
Shopping Center (820)	33 KSF	3.75 trips/KSF	60	64	124
School	500 students	0.15 trips/student	39	36	75
		Total Trips	**1,368**	**815**	**2,183**
		Internal Trips[a]	*-51*	*-51*	*-102*
		Pass-By Trips[b]	*-19*	*-19*	*-38*
		Net New Trips	**1,298**	**745**	**2,043**

[a] Internal trip rates from ITE's *Trip Generation Manual*, 9th Edition, 2012. 50% of school trips assumed to be internal.
[b] 34% of external shopping center trips

Land Use/Trip Generation Comparison

Table 4 compares the previously approved and currently proposed land use and trip generation findings for the entire Villebois Urban Village. As shown, the Villebois area as now proposed would include an additional 57 residential units and is estimated to generate an additional 136 p.m. peak hour trips. These additional p.m. peak hour trips are a result of the overall increase in the number of units as well as a shift from attached units to detached units (detached units have a trip rate nearly double that of attached units). At the PDP level, many of these land use changes and additional trips have been approved with the assumption that fewer trips would be generated in other Villebois phases. However, this analysis shows that the proposed land use would generate more trips than what was originally approved.

Table 4: Villebois Trip Generation Comparison

Transportation Study	Study Date	Unit Count	New External Trips
Villebois Master Plan Second Legislative Amendment	April, 2005	2,473	1,907
Currently Proposed Villebois Development	May, 2013	2,530	2,043
Difference	**-**	**+57**	**+136**

Site Plan Evaluation

DKS reviewed the current site plan for SAP North provided by the project sponsor (see attached), and the site plan comments are summarized below:

- **Curb Extensions**: The current site plan shows curb extensions at numerous intersections. The applicant should submit AutoTurn templates to verify that emergency vehicles have adequate room to make turning maneuvers.
- **Pedestrian Pathways:** The *Villebois Master Plan* identifies several pedestrian pathways and trails throughout the Villebois North Area, including the regional Tonquin Trial. These pathways are not identified on the provided site plan; however the project sponsor should ensure that the appropriate pathways are incorporated into SAP North development. A copy of the Parks and Open Space Plan from the *Villebois Master Plan* is attached to this document for reference.

A site plan for SAP North was previously evaluated[2] and the following concerns still apply to the current site plan:

[2] *Villebois SAP North PDP 1 Transportation Review*, DKS Associates, September 2007

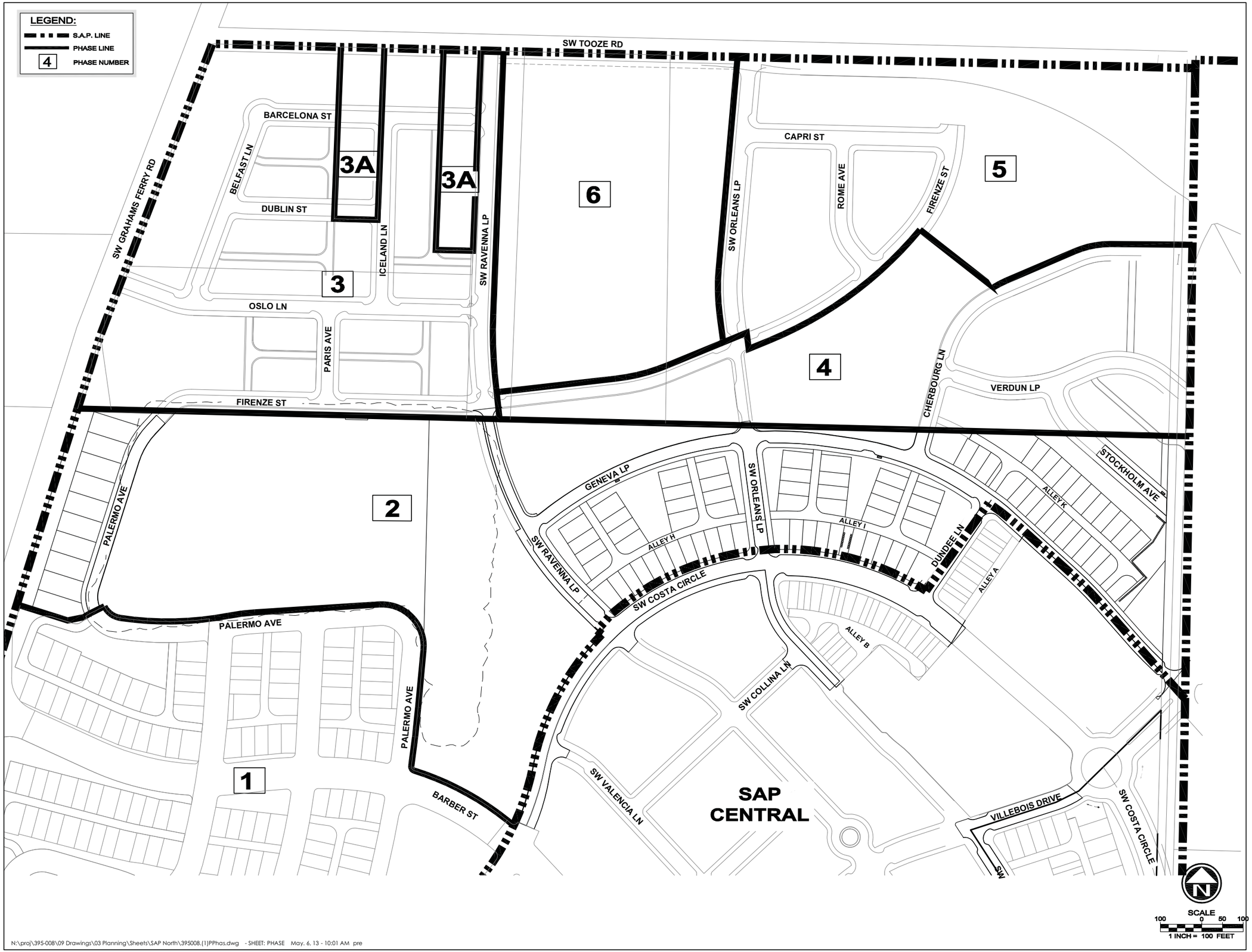
- **Firenze Street Extension to Grahams Ferry:** The approved Villebois Master Plan previously showed Firenze Street extending to Grahams Ferry Road. The current site plan does not show this extension, but it does show a new connection to Grahams Ferry Road made instead by Oslo Lane; Oslo Lane is located approximately 200 feet north of Firenze Street and 600 feet south of Tooze Road. Even though the Oslo Lane extension would still meet required spacing standards along Grahams Ferry Road, the extension of Firenze Street would provide better internal circulation within SAP North and better access spacing on Grahams Ferry Road between Tooze Road and Barber Street.
- **Firenze Street or Oslo Lane Left Turn Lane**: Whether the Grahams Ferry Road connection from Firenze Street or Oslo Lane is considered (see site plan comment #1), a left turn pocket should be provided for turn movements onto Grahams Ferry Road. Adequate street width for the left turn lane can be obtained by removing the on-street parking and internal curb extensions.
- **Iceland Lane/Paris Avenue Connection to Firenze Street:** The approved Villebois Master Plan showed a residential street connection between Firenze Street and Barcelona Street. The current site plan shows two offset residential streets (Paris Avenue and Iceland Lane). The Paris Avenue connection to Firenze Street is aligned with an alley rather than being aligned with Iceland Lane. The proposed street network may encourage additional through traffic on the alley which is not desirable. Paris Avenue and Iceland Lane should be aligned to provide a residential connector street between Firenze Street and Barcelona Street.

Summary

A summary of key findings relating to the Villebois Urban Village transportation review include the following:

- The Villebois Urban Village is now proposed to include 2,530 residential units, 33,000 square feet of commercial space, and a 500 student elementary school. These land uses are estimated to generate 2,043 p.m. peak hour trips. The original Villebois Urban Village traffic impact analysis was based on the assumption of 1,907 p.m. peak hour trips. Therefore, the current proposal includes 136 p.m. peak hour trips more than what was approved in the *Villebois Master Plan Legislative Amendment*. At the PDP level, many of these land use changes and additional trips have been approved with the assumption that fewer trips would be generated in other Villebois phases.
- Various site plan concerns should be resolved as indicated in the previous section of this memorandum.

Please let us know if you have any questions or comments.



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

SAP NORTH

Villebois North

PDP's

Phasing Plan Update

DATE 03/18/2013

1

Figure 5

Legend

- Neighborhood Commons
- PP Pocket Park
- LG Linear Green
- UP Urban Plaza
- Villebois Proposed Major Pathways
- Villebois Proposed Minor Pathways
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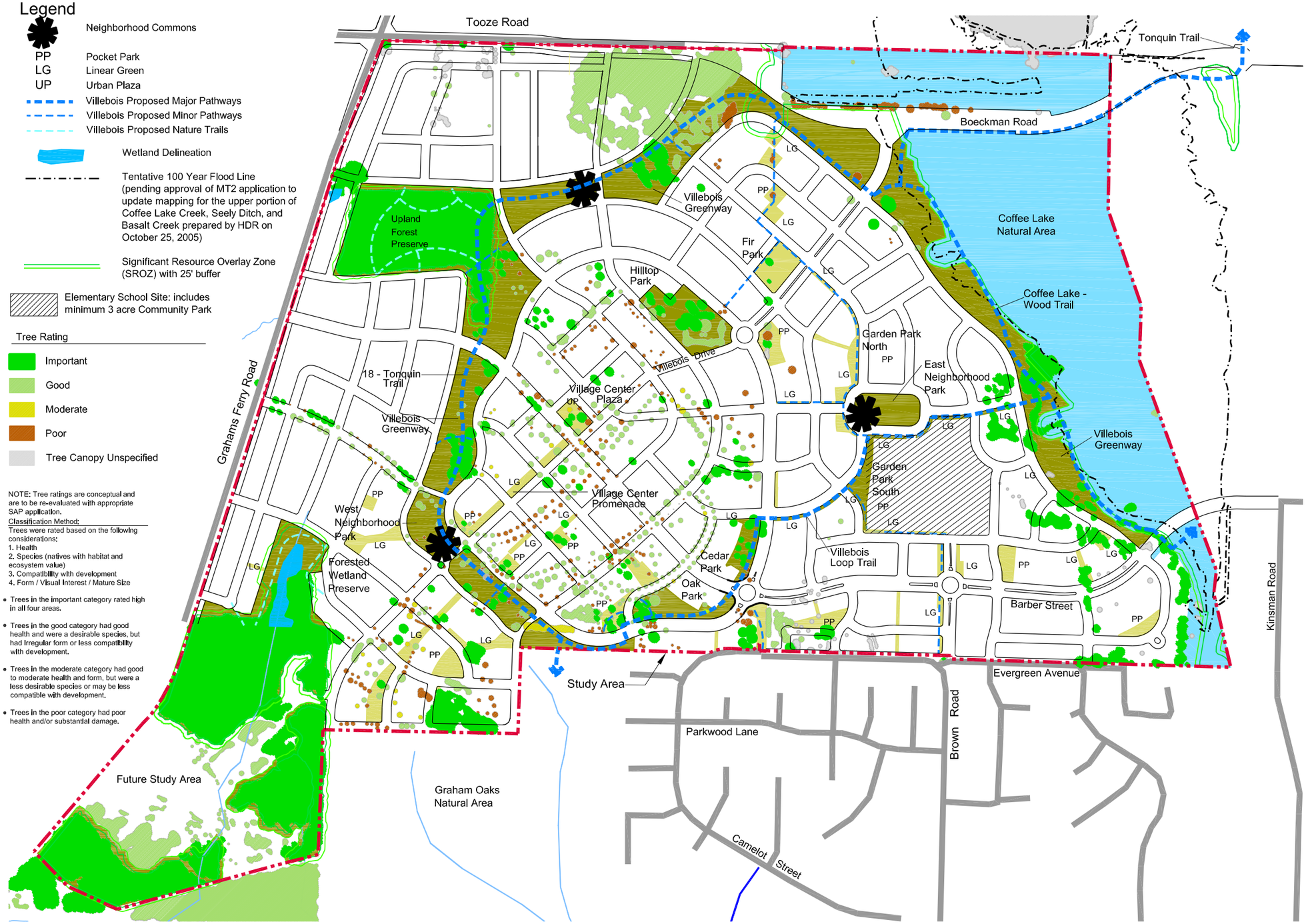

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0 150 300 600

NORTH

Parks and Open Space Plan

MAY 12, 2010

Walter H. Knapp & Associates, LLC
Consultants in Arboriculture, Silviculture, and Forest Ecology

MEMORANDUM

DATE: May 19, 2013

TO: Stacy Connery (Pacific Community Design)

FROM: Morgan Holen, Project Arborist

RE: Villebois PDP 1B – Supplemental Arborist Recommendations

At your request, this memorandum provides arborist recommendations supplemental to the April 10, 2013 Tree Maintenance and Protection Plan for the Zion property in SAP North at Villebois. This report specifically addresses 13 trees located in proposed Regional Park 4.

Trees 4737, 3851 3852, 3842, 3843, 3844, 3845, 3846, 3847, 3848, and two unnumbered trees are all recommended for removal because of poor condition. These trees are not sustainable or suitable for retention with construction.

Tree 257 has been well protected throughout construction and was recently pruned to remove dead wood. Retention with regular monitoring is recommended; however, this tree could be noted as "likely to be removed", accounted for as removed, re-evaluated during construction in terms of long-term sustainability, and retained or removed at that time. The tree will be protected during construction, but if the arborist determines that the tree is not sustainable, the arborist shall submit a brief memorandum to the City documenting the change in condition to seek written authorization to proceed with removal and mitigation. If the tree is protected throughout construction, no mitigation will be required for this tree.

Removal of these 13 trees will require planting 13 trees for mitigation. If tree 257 is preserved, the number of replacement trees required may be reduced by one tree.

Tree protection fencing is recommended at the dripline of important tree 3850, at a minimum.

Please contact us if you have questions or need any additional information.

Morgan E. Holen

Morgan E. Holen
Morgan Holen & Associates, LLC
ISA Certified Arborist, PN-6145A
ISA Tree Risk Assessment Qualified
Forest Biologist

Walter H. Knapp & Associates, LLC
Consultants in Arboriculture, Silviculture, and Forest Ecology

April 10, 2013

VILLEBOIS SAP NORTH – ZION
TREE MAINTENANCE AND PROTECTION PLAN

1315

Purpose

This Tree Maintenance and Protection Plan for Villebois SAP North – Zion in Wilsonville, Oregon, is provided pursuant to the City of Wilsonville Development Code, Section 4.610.40. This report describes the existing trees located on the project site, as well as recommendations for tree removal, retention, protection, and mitigation.

General Description

The Zion Property in SAP North at Villebois spans the southern SAP North boundary and includes Open Space Tract 2 and Regional Parks 4 and 5, which are heavily treed. We visited the site on April 5, 2013 in order to verify existing tree inventory data and to evaluate trees in terms of potential construction impacts. In densely forested areas, only trees located along the outer boundaries of intact groves were included in the tree survey and therefore inventoried. The groves are composed of native Oregon white oak (*Quercus garryana*), Douglas-fir (*Pseudotsuga menziesii*), and Oregon ash (*Fraxinus latifolia*) in wetter areas. Non-native and invasive tree species are also growing within the relatively natural area, including sweet cherry (*Prunus avium*), English hawthorn (*Crataegus monogyna*), European mountain ash (*Sorbus aucuparia*), and European white birch (*Betula pendula*).

Complete assessment was inhibited by thickets of Himalayan blackberry (*Rubus discolor*) and English ivy (*Hedera helix*) growing aggressively up tree trunks, but in general the trees appear in variable condition. Large Oregon white oaks and Douglas-firs appear in the best condition. In the relatively natural area, the trees are undergoing natural forest stand succession, whereby trees compete with one another and some grow to dominate and suppress others. The grove is best retained intact, with selective removal of high risk hazardous trees and trees that must be removed for the purposes of construction.

The tree inventory includes 79 (38%) Oregon white oak (*Quercus garryana*), but no native yews (*Taxus* spp.) or any species listed by either the state or federal government as rare or endangered were found on the site.

A complete description of individual trees is provided in the enclosed tree inventory data.

7615 SW Dunsmuir Lane, Beaverton, OR 97007
Phone: (503) 646-4349 Fax: (503) 747-4863

Tree Plan Recommendations

In all, 208 trees were inventoried on the Zion property in SAP Central, including one tree located on neighboring property (#15493). Twenty-one trees are recommended for removal and 187 trees are recommended for retention. Table 1 provides a count of trees by species and treatment recommendation.

Table 1. Count of Trees by Species and Treatment Recommendation.

Common Name	Species Name	Remove	Retain	Total
bigleaf maple	*Acer macrophyllum*	5	2	7 (3%)
black cottonwood	*Populus trichocarpa*	1		1 (<1%)
Deciduous	unknown		26	26 (13%)
Douglas-fir	*Pseudotsuga menziesii*	5	11	16 (8%)
English hawthorn	*Crataegus monogyna*		9	9 (4%)
European mountain ash	*Sorbus aucuparia*	2		2 (1%)
European white birch	*Betula pendula*	1		1 (<1%)
incense cedar	*Calocedrus decurrens*	2	1	3 (1%)
Oregon ash	*Fraxinus latifolia*	2	42	44 (21%)
Oregon white oak	*Quercus garryana*	2	77	79 (38%)
Scouler's willow	*Salix scouleriana*		6	6 (3%)
Spruce	*Picea* spp.		1	1 (<1%)
sweet cherry	*Prunus avium*	1	12	13 (6%)
Grand Total		**21** (10%)	**187** (90%)	**208 trees**

During construction—following site clearing and once the pathways proposed through the open space have been staked—the protected trees will need to be re-evaluated in terms of risk potential and safety. The project arborist should evaluate trees in terms of risk potential along the proposed pathways, adjust pathways to avoid tree hazards where feasible, document hazardous trees recommended for removal, if any, and provide supplemental recommendations for tree protection as needed.

The inventory data identifies four trees identified for retention with regular monitoring. This includes trees 967, 257, 21589, and 21590, one Douglas-fir, two Oregon ashes, and one Oregon white oak all with moderate defects that should be monitored regularly for change, or an increase in the probability for failure, over time. While these trees are not in excellent condition, there is low target potential and they are suitable for retention with the project.

The trees to be retained will be protected with tree protection fencing. However, additional recommendations are provided for tree 1316 including a modified profile for paving beneath the dripline of this important tree.

Pruning for clearance and to remove dead and defective branches will likely be necessary. Pruning should be performed by a Qualified Tree Service. Prune the

minimum amount needed and prune prior to construction activity in order to provide clearance and avoid crown damage.

In addition, the open space could be enhanced by removing invasive trees and plants, including English ivy growing up tree trunks. Native trees, shrubs, and ground covers could be replanted to increase species, age class, and structural diversity within the grove. Standing dead trees should remain standing for wildlife habitat where safe to do so. Large woody debris may be left on site following tree removal activities to provide wildlife habitat and soil nutrients; place large wood in direct contact with the ground surface and remove small woody debris from the site to avoid fire hazard.

Mitigation Requirements

The 21 trees recommended for removal all measured larger than 6-inches in diameter and require mitigation per Section 4.620.00; removed trees shall be replaced on a basis of one tree planted for each tree removed. Therefore, 21 trees measuring at least 2-inch in diameter will be planted as mitigation for tree removal.

Tree Protection Standards

Trees designated for retention will need special consideration to assure their protection during construction. We recommend a preconstruction meeting with the owner, contractors and project arborist to review tree protection measures and address questions or concerns on site. Tree protection measures include:

- **Fencing.** Trees to remain will be protected by installation of tree protection fencing to prevent injury to tree trunks or roots, or soil compaction within the root protection area, which generally coincides with the tree dripline. Fences will be 6-foot high steel on concrete blocks. The project arborist will determine the exact location of tree protection fencing. Trees located more than 30-feet from construction activity will not require fencing. Without authorization from the Project Arborist, none of the following will occur within root protection zones:
    1. New buildings;
    2. Grade change or cut and fill, during or after construction;
    3. New impervious surfaces;
    4. Utility or drainage field placement;
    5. Staging or storage of materials and equipment during construction;
    6. Vehicle maneuvering during construction.

  Root protection zones may be entered for tasks like surveying, measuring and sampling. Fences must be closed upon completion of these tasks.
- **Soil protection.** The stripping of topsoil around retained trees will be restricted, except under the guidance of the project arborist. No fill (including temporary storage of spoils) will be placed within the root protection area, except as otherwise directed by the project arborist.
- **Excavation.** The project arborist should provide on-site consultation during all excavation activities beneath the dripline of protected trees. Excavation

immediately adjacent to roots larger than 2-inches in diameter within the root protection zone of retained trees shall be by hand or other non-invasive techniques to ensure that roots are not damaged. Where feasible, major roots shall be protected by tunneling or other means to avoid destruction or damage. Exceptions can be made if, in the opinion of the project arborist, unacceptable damage will not occur to the tree. Where soil grade changes affect the root protection area, the grade line should be meandered wherever practicable. This will require on-site coordination to ensure a reasonable balance between engineering, construction, and the need for tree protection.

- **Surfacing.** Where surfacing is proposed beneath the dripline of protected trees, coordinate with the project arborist to provide recommendations for adjustments to protection fencing and to monitor construction in the tree protection zone. Avoid excavation and use a modified profile to build up from existing grade (Figure 1). The profile includes a layer of permeable geotextile fabric on the ground surface and crushed rock to raise the grade as needed. Surfacing may include asphalt, concrete, or other materials. If excavation is necessary, work shall be performed under arborist supervision.

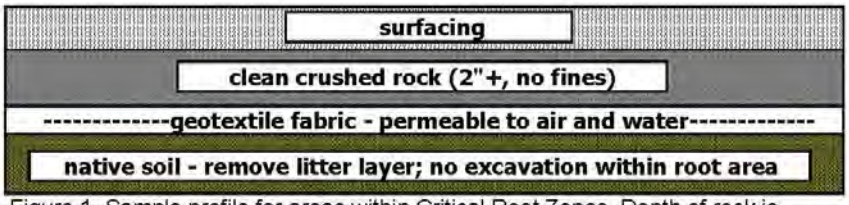


Figure 1. Sample profile for areas within Critical Root Zones. Depth of rock is dependent on grading. Technique based on best management practices.

- **Landscaping.** Following construction, apply approximately 3-inches of mulch beneath the dripline of protected trees, but not directly against tree trunks. Shrubs and ground covers may be planted within tree protection areas. If irrigation is used, use drip irrigation only beneath the driplines of protected trees.
- **Quality Assurance.** The project arborist will supervise proper execution of this plan during construction activities that could encroach on retained trees. Tree protection site inspection monitoring reports will be provided to the Client and City on a regular basis throughout construction.

Please contact us if you have questions or need any additional information.

Morgan E. Holen
Morgan Holen & Associates, LLC
ISA Certified Arborist, PN-6145A
ISA Tree Risk Assessment Qualified
Forest Biologist

Enclosure: Villebois SAP North Zion - Tree Data 4-5-13

1314 Villebois SAP North Zion
Tree Data 4-5-13

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
16458	257	Oregon ash	*Fraxinus latifolia*	22,14	18	dead branches	P	retain, monitor
16459	258	Oregon ash	*Fraxinus latifolia*	24	15	no major defects	G	retain
15332	281	Douglas-fir	*Pseudotsuga menziesii*	50		included bark, basal swelling, one broken top, hazardous	P	remove
16105	297	Douglas-fir	*Pseudotsuga menziesii*	24		low vigor	P	remove
16106	298	Douglas-fir	*Pseudotsuga menziesii*	24	18	no major defects	F	remove
16107	299	Douglas-fir	*Pseudotsuga menziesii*	38		low vigor	P	remove
17459	314	Oregon ash	*Fraxinus latifolia*	18	25		G	retain
16141	401	European mountain ash	*Sorbus aucuparia*	2*10		invasive species, low vigor	P	remove
16142	402	bigleaf maple	*Acer macrophyllum*	36		verticillium wilt	P	remove
16164	403	bigleaf maple	*Acer macrophyllum*	24		verticillium wilt	P	remove
	405	Oregon white oak	*Quercus garryana*	14			F	retain
16234	408	bigleaf maple	*Acer macrophyllum*	18	20	dead branches, verticillium wilt	F	remove
16233	409	bigleaf maple	*Acer macrophyllum*	24	26	dead branches, verticillium wilt	F	remove
21623	410	Oregon white oak	*Quercus garryana*	14, 10	25		I	retain
21622	411	Oregon white oak	*Quercus garryana*	16			F	retain
21621	412	Oregon white oak	*Quercus garryana*	16	30		G	retain
	412	Oregon white oak	*Quercus garryana*	12			F	retain
21620	413	Oregon white oak	*Quercus garryana*	24	30	dead branches	G	retain
21619	414	Oregon white oak	*Quercus garryana*	16	12		F	retain
21617	415	Oregon white oak	*Quercus garryana*	12	8	low vigor	P	retain
21618	416	Oregon white oak	*Quercus garryana*	8		low vigor	P	retain
21624	417	Oregon white oak	*Quercus garryana*	22	30		I	retain
21615	418	Oregon white oak	*Quercus garryana*	36	30	dead branches	F	retain
19804	419	Oregon white oak	*Quercus garryana*	10			F	retain
21614	420	Oregon white oak	*Quercus garryana*	22			F	retain
	420	Oregon white oak	*Quercus garryana*	10			F	retain
21611	421	Oregon white oak	*Quercus garryana*	12	12		I	retain
21612	422	Oregon ash	*Fraxinus latifolia*	8		excess lean	F	retain
21613	423	Oregon ash	*Fraxinus latifolia*	8		excess lean	F	retain
21610	424	Oregon white oak	*Quercus garryana*	28	30		I	retain
21609	425	Oregon white oak	*Quercus garryana*	6			P	retain
	428	Oregon white oak	*Quercus garryana*	14			F	retain
21605	430	Oregon white oak	*Quercus garryana*	32	20		I	retain
21602	431	Oregon white oak	*Quercus garryana*	24	25	dead branches	I	retain
21603	432	Oregon white oak	*Quercus garryana*	14, 10	12		I	retain
21604	433	Oregon white oak	*Quercus garryana*	24, 12, 16	25	dead branches	F	retain
21601	434	Oregon white oak	*Quercus garryana*	28	30		I	retain
21600	435	Oregon white oak	*Quercus garryana*	44	35	good condition, remove ivy	I	retain
21596	436	Oregon white oak	*Quercus garryana*	2*16,20	30		I	retain
21595	437	Oregon white oak	*Quercus garryana*	22	15		I	retain
21594	438	Oregon white oak	*Quercus garryana*	20	25		I	retain
21597	439	Oregon white oak	*Quercus garryana*	18	20		I	retain
21598	440	Oregon white oak	*Quercus garryana*	14, 10	15		I	retain
21599	441	Oregon white oak	*Quercus garryana*	32	30		I	retain

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
21593	442	Oregon white oak	*Quercus garryana*	12	8		I	retain
21591	443	Oregon white oak	*Quercus garryana*	16	15		I	retain
21592	444	Oregon white oak	*Quercus garryana*	10			I	retain
21586	447	Oregon ash	*Fraxinus latifolia*	3*8,10			G	retain
21585	448	Oregon white oak	*Quercus garryana*	2*18,22	25	one-sided crown	I	retain
21588	449	Oregon ash	*Fraxinus latifolia*	12			G	retain
21587	450	Oregon ash	*Fraxinus latifolia*	16			G	retain
16262	451	incense cedar	*Calocedrus decurrens*	36	14	no major defects	I	retain
16263	452	European white birch	*Betula pendula*	18	15	invasive species, thin crown, dead top	P	remove
16264	453	incense cedar	*Calocedrus decurrens*	26	10	thin crown, not viable	F	remove
16265	454	incense cedar	*Calocedrus decurrens*	24	12	thin crown, not viable	F	remove
21951	766	deciduous		14			F	retain
21952	768	Oregon white oak	*Quercus garryana*	14			F	retain
21953	769	Oregon white oak	*Quercus garryana*	10			F	retain
21957	771	Oregon white oak	*Quercus garryana*	2*10,12			F	retain
21955	772	deciduous		22			F	retain
21958	773	bigleaf maple	*Acer macrophyllum*	18			F	retain
21960	774	deciduous		6			F	retain
21959	775	deciduous		16			F	retain
21961	776	Oregon white oak	*Quercus garryana*	10			F	retain
21956	777	deciduous		14			F	retain
21969	781	spruce	*Picea* spp.	20			F	retain
21970	782	Oregon white oak	*Quercus garryana*	12			F	retain
21979	786	deciduous		8			F	retain
21977	787	deciduous		6			P	retain
21978	788	English hawthorn	*Crataegus monogyna*	6		invasive species	P	retain
21971	789	Oregon white oak	*Quercus garryana*	6			F	retain
21972	790	deciduous		18			F	retain
21973	791	Oregon white oak	*Quercus garryana*	12			F	retain
21974	792	Oregon white oak	*Quercus garryana*	14			F	retain
17336	808	Oregon ash	*Fraxinus latifolia*	10				retain
17337	809	Oregon ash	*Fraxinus latifolia*	2*18,22				retain
17333	821	Oregon ash	*Fraxinus latifolia*	10				retain
17331	822	Oregon ash	*Fraxinus latifolia*	20				retain
17330	826	Oregon ash	*Fraxinus latifolia*	12				retain
17329	827	Oregon ash	*Fraxinus latifolia*	6				retain
17327	828	Oregon ash	*Fraxinus latifolia*	10				retain
21950	899	deciduous		14			F	retain
21949	900	Oregon white oak	*Quercus garryana*	2*14			F	retain
17325	920	Oregon ash	*Fraxinus latifolia*	10				retain
17465	921	English hawthorn	*Crataegus monogyna*	8		invasive species	G	retain
18012	959	Douglas-fir	*Pseudotsuga menziesii*	24	20		G	retain
18011	960	bigleaf maple	*Acer macrophyllum*	12		lean	P	retain
18018	961	English hawthorn	*Crataegus monogyna*	6		invasive species	F	retain

1314 Villebois SAP North Zion
Tree Data 4-5-13

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
18010	962	Douglas-fir	*Pseudotsuga menziesii*	12	15	one-sided crown	F	retain
18008	964	Douglas-fir	*Pseudotsuga menziesii*	10	15	one-sided crown	F	retain
18009	965	Douglas-fir	*Pseudotsuga menziesii*	15	15	one-sided crown	F	retain
18006	967	Douglas-fir	*Pseudotsuga menziesii*	36	15	one-sided crown, re-evaluate with removal of 17838	F	retain, monitor
18014	971	Oregon white oak	*Quercus garryana*	12	10		F	retain
18027	1134	Oregon white oak	*Quercus garryana*	12			F	retain
18026	1135	sweet cherry	*Prunus avium*	16		invasive species	F	retain
18022	1137	sweet cherry	*Prunus avium*	8		invasive species	F	retain
17480	1252	Douglas-fir	*Pseudotsuga menziesii*	24			F	retain
17478	1255	sweet cherry	*Prunus avium*	8		invasive species	F	retain
17476	1256	Oregon white oak	*Quercus garryana*	12		no major defects	G	retain
	1257	Oregon white oak	*Quercus garryana*	4*10,24		no major defects	I	retain
17472	1258	Oregon white oak	*Quercus garryana*	2*12,24	30	no major defects	G	retain
17358	1310	Oregon ash	*Fraxinus latifolia*	12	10		G	retain
17460	1315	Oregon ash	*Fraxinus latifolia*	14	20		G	retain
17359	1316	Oregon white oak	*Quercus garryana*	18	25		I	retain, use modified profile
17348	1317	Oregon ash	*Fraxinus latifolia*	16				retain
17347	1318	Oregon ash	*Fraxinus latifolia*	18				retain
17346	1320	Oregon ash	*Fraxinus latifolia*	2*12,15				retain
17344	1321	Oregon ash	*Fraxinus latifolia*	24				retain
17343	1322	Oregon ash	*Fraxinus latifolia*	12				retain
17341	1323	Oregon ash	*Fraxinus latifolia*	10				retain
17340	1324	Oregon ash	*Fraxinus latifolia*	15				retain
17338	1325	Oregon ash	*Fraxinus latifolia*	18				retain
17349	1348	Oregon ash	*Fraxinus latifolia*	8				remove
15493		English hawthorn	*Crataegus monogyna*	3*8	8	invasive species, poor structure and condition	P	protect adjacent tree
16165		bigleaf maple	*Acer macrophyllum*	16	20	verticillium wilt	P	remove
16227		European mountain ash	*Sorbus aucuparia*	6		invasive species, poor condition	P	remove
16944		Oregon ash	*Fraxinus latifolia*	24	25	no major defects	G	retain
16945		Oregon ash	*Fraxinus latifolia*	6		suppressed	F	retain
16946		Oregon ash	*Fraxinus latifolia*	10	30	lean	F	retain
16947		Oregon ash	*Fraxinus latifolia*	12	30	lean	F	retain
16948		Oregon ash	*Fraxinus latifolia*	14	30	lean	F	retain
16949		Oregon ash	*Fraxinus latifolia*	3*14,24	35	dead branches, broken top	F	retain
16950		Oregon ash	*Fraxinus latifolia*	18		suppressed	F	retain
16957		Scouler's willow	*Salix scouleriana*	3*6,14		decay	P	retain
16958		Scouler's willow	*Salix scouleriana*	12		decay	P	retain
16959		Oregon ash	*Fraxinus latifolia*	3*8,12	20	wetland	G	retain
16960		Oregon ash	*Fraxinus latifolia*	8*8,16	25	some dead branches	G	retain
17324		Oregon ash	*Fraxinus latifolia*	2*6				retain
17334		Oregon ash	*Fraxinus latifolia*	10				retain
17339		Oregon ash	*Fraxinus latifolia*	6				retain
17351		sweet cherry	*Prunus avium*	6		invasive species, inherent limitations	F	remove
17352		Oregon white oak	*Quercus garryana*	8			F	remove

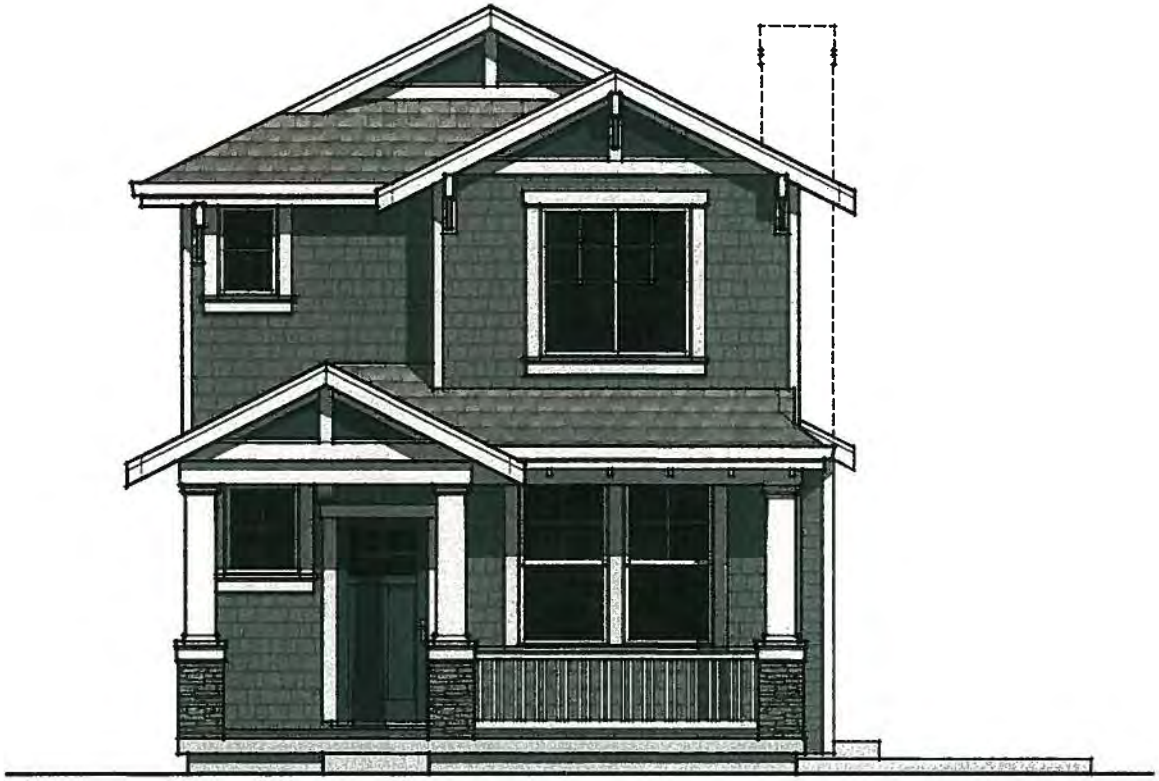
No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
17353		Oregon white oak	*Quercus garryana*	8			F	remove
17357		Oregon ash	*Fraxinus latifolia*	6			G	remove
17461		Scouler's willow	*Salix scouleriana*	8		inherent species limitations	P	retain
17462		Oregon white oak	*Quercus garryana*	18			G	retain
17466		Scouler's willow	*Salix scouleriana*	2*6		inherent species limitations	P	retain
17467		English hawthorn	*Crataegus monogyna*	8		invasive species	P	retain
17469		Scouler's willow	*Salix scouleriana*	2*6,8		inherent species limitations	P	retain
17470		Oregon white oak	*Quercus garryana*	10		no major defects	F	retain
17473		Oregon white oak	*Quercus garryana*	14		no major defects	F	retain
17475		Scouler's willow	*Salix scouleriana*	6		inherent species limitations	P	retain
17479		sweet cherry	*Prunus avium*	2*161253		invasive species	F	retain
17481		sweet cherry	*Prunus avium*	6		invasive species	F	retain
17482		sweet cherry	*Prunus avium*	6		invasive species	F	retain
17483		sweet cherry	*Prunus avium*	6		invasive species	F	retain
17838		Douglas-fir	*Pseudotsuga menziesii*	2*30,36	25	remove for construction	G	remove
18015		sweet cherry	*Prunus avium*	8		invasive species	P	retain
18017		sweet cherry	*Prunus avium*	10		invasive species	F	retain
18020		sweet cherry	*Prunus avium*	6		invasive species	F	retain
18021		black cottonwood	*Populus trichocarpa*	30		inherent species limitations, high target potential	F	remove
21589		Oregon ash	*Fraxinus latifolia*	2*16		basal decay	F	retain, monitor
21590		Oregon white oak	*Quercus garryana*	24		one-sided crown	F	retain, monitor
21606		Oregon ash	*Fraxinus latifolia*	2*14,16	20		I	retain
21608		Oregon white oak	*Quercus garryana*	3*14,26	20	dead branches	F	retain
21648		Oregon white oak	*Quercus garryana*	2*12,18			F	retain
21649		English hawthorn	*Crataegus monogyna*	8		invasive species	P	retain
21650		deciduous		3*6,10			F	retain
21651		deciduous		3*6,10			F	retain
21652		deciduous		6			F	retain
21653		deciduous		6			F	retain
21654		deciduous		10			F	retain
21655		deciduous		6			F	retain
21656		deciduous		12			F	retain
21658		Oregon white oak	*Quercus garryana*	18			F	retain
21665		deciduous		20			F	retain
21666		deciduous		2*8,20			F	retain
21668		Oregon white oak	*Quercus garryana*	3*12,18			F	retain
21670		Oregon white oak	*Quercus garryana*	4*6,12			F	retain
21672		Oregon white oak	*Quercus garryana*	2*16,18			F	retain
21673		Oregon white oak	*Quercus garryana*	2*8,18			F	retain
21674		Oregon white oak	*Quercus garryana*	2*12,20			F	retain
21675		Oregon white oak	*Quercus garryana*	18			F	retain
21676		Oregon white oak	*Quercus garryana*	8			F	retain
21677		Oregon white oak	*Quercus garryana*	2*8,14			F	retain
21678		deciduous		12			F	retain

1314 Villebois SAP North Zion
Tree Data 4-5-13

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
21679		deciduous		6			F	retain
21680		Oregon white oak	*Quercus garryana*	2*6,12			F	retain
21681		Oregon white oak	*Quercus garryana*	3*8,14			F	retain
21682		Oregon white oak	*Quercus garryana*	8			F	retain
21686		Oregon white oak	*Quercus garryana*	2*14			F	retain
21687		Oregon white oak	*Quercus garryana*	2*8,12			F	retain
21927		Oregon white oak	*Quercus garryana*	8			F	retain
21930		English hawthorn	*Crataegus monogyna*	6		invasive species	P	retain
21931		English hawthorn	*Crataegus monogyna*	4*4,8		invasive species	P	retain
21932		deciduous		6			F	retain
21933		Oregon white oak	*Quercus garryana*	8			F	retain
21937		English hawthorn	*Crataegus monogyna*	8			F	retain
21938		Oregon white oak	*Quercus garryana*	2*8,14			F	retain
21939		Oregon white oak	*Quercus garryana*	3*4,10			F	retain
21940		Oregon white oak	*Quercus garryana*	14			F	retain
21944		deciduous		2*4,6			F	retain
21945		deciduous		6			F	retain
21946		Oregon white oak	*Quercus garryana*	24			F	retain
21947		Oregon white oak	*Quercus garryana*	14			F	retain
21954		Oregon white oak	*Quercus garryana*	28			F	retain
21975		deciduous		6			P	retain
21980		deciduous		8			F	retain
23337		Douglas-fir	*Pseudotsuga menziesii*	2*18		overtopped	F	retain
23338		Douglas-fir	*Pseudotsuga menziesii*	18		excess lean	P	retain
23340		Douglas-fir	*Pseudotsuga menziesii*	20	15		F	retain
23341		deciduous		6,12			P	retain
23343		Douglas-fir	*Pseudotsuga menziesii*	36		ivy, thin crown	F	retain
23345		Oregon ash	*Fraxinus latifolia*	6,8			F	retain
23346		Oregon ash	*Fraxinus latifolia*	10			P	retain
23348		sweet cherry	*Prunus avium*	10		invasive species	F	retain
23350		sweet cherry	*Prunus avium*	4,6,8		invasive species	F	retain
23358		Douglas-fir	*Pseudotsuga menziesii*	36			F	retain

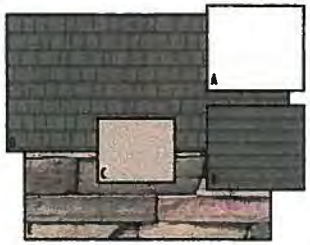
*DBH: Diameter at Breast Height (measured 4.5-feet above ground level in inches)
^C-Rad: Crown Radius, the distance from the center of the tree to the edge of the dripline (measured in feet)
#Condition Codes:

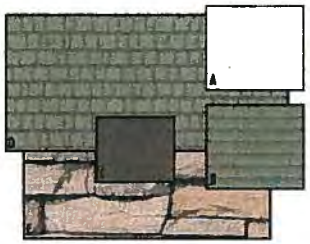
- I: Special Importance
- G: Good
- F: Fair
- P: Poor



Color Option Legend

- (A) ACCENT 1 — WINDOW, TRIM & COLLUMNS
- (B) ACCENT 2 — 5" LAP SIDING SIDING
- (C) ACCENT 3 — DOOR & VENT
- (D) BODY — SHINGLE
- (E) BASE — STONE VENEER





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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Cottage (American Modern) Front Elevation

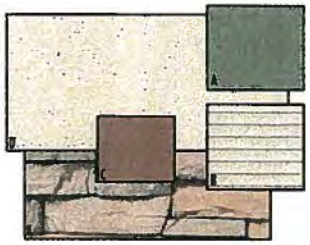
Scale	Drawn By	Date	Date Plotted
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

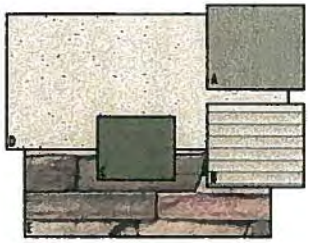
Sheet No.: 3

Job No.: 1119

Color Option Legend

- (A) ACCENT 1 — WINDOW, TRIM & COLLUMNS
- (B) ACCENT 2 — 5" LAP SIDING SIDING
- (C) ACCENT 3 — DOOR & SHUTTERS
- (D) BODY — STUCCO SIDING
- (E) BASE — STONE VENEER





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Polygon at Villebois

Wilsonville, Oregon

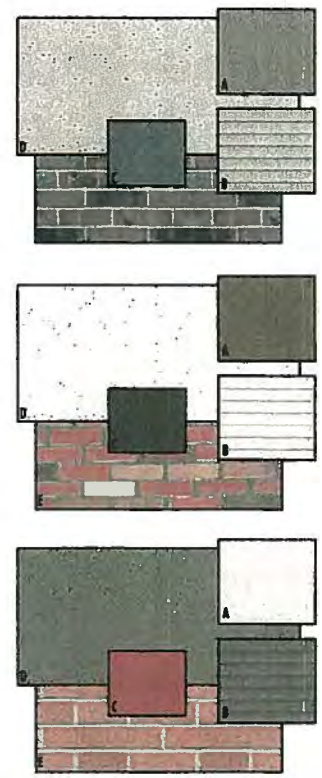
Polygon Northwest Company

Cottage (French Revival) Front Elevation

Scale	Drawn By	Date	Date Plotted	Sheet No.	Job No.
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12	4	1119

Color Option Legend

- (A) ACCENT 1 — WINDOW, TRIM & COLLUMNS
- (B) ACCENT 2 — 5" LAP SIDING SIDING
- (C) ACCENT 3 — DOOR
- (D) BODY — STUCCO SIDING
- (E) BASE — BRICK VENEER



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Polygon at Villebois

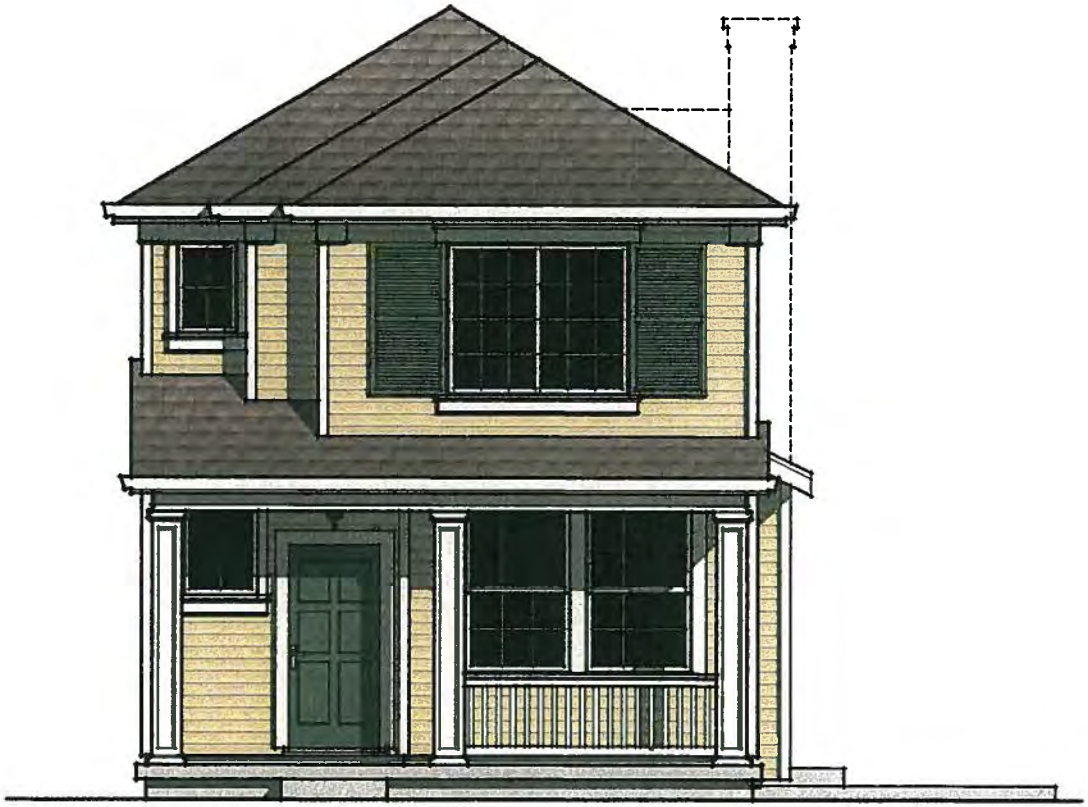
Wilsonville, Oregon

Polygon Northwest Company

Cottage (English Revival)
Front Elevation

Scale:	Drawn By:	Date:	Date Plotted:	Sheet No.:
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12	5

Job No.: 1119

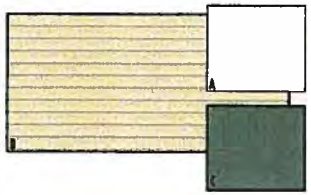


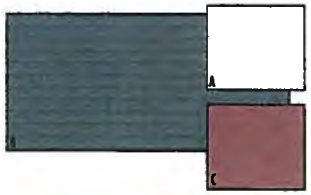
Color Option Legend

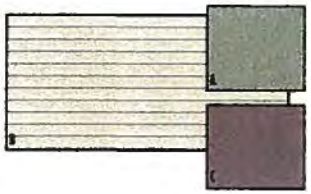
(A) ACCENT 1
WINDOW, TRIM & COLLUMNS

(B) ACCENT 2
5" LAP SIDING SIDING

(C) ACCENT 3
DOOR & SHUTTERS







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Polygon at Villebois
Wilsonville, Oregon

Polygon Northwest Company

Cottage (American Classic)
Front Elevation

Scale	Drawn By	Date	Date Plotted
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No. 6

Job No. 1119

Color Option Legend

- (A) ACCENT 1 — WINDOW, TRIM & COLLUMNS
- (B) ACCENT 2 — 5" LAP SIDING SIDING
- (C) ACCENT 3 — DOOR & SHUTTERS
- (D) BODY — STUCCO SIDING
- (E) BASE — STONE VENEER

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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Small Detached (French Revival)
Front Elevation

Scale	Drawn By	Date	Date Plotted
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No.: 7

Job No.: 1119

Color Option Legend

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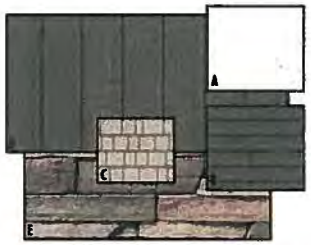
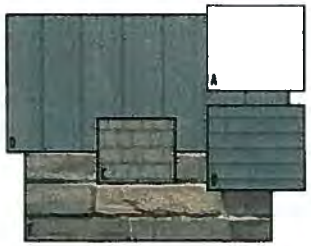
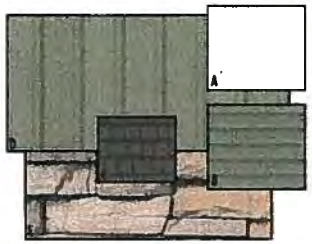
- (D) BODY — BOARD & BATTEN
- (E) BASE — STONE VENEER







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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Small Detached (American Modern) Front Elevation

Scale	Drawn By	Date	Date Plotted
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No. 8

Job No. 1119

Color Option Legend

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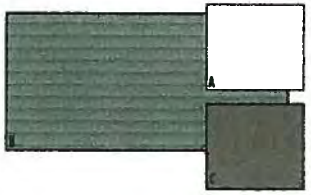
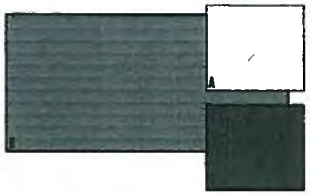
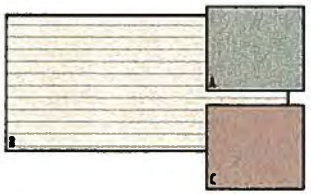
- (B) BODY
  5" LAP SIDING SIDING
- (C) ACCENT 2
  DOOR & SHUTTERS







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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Small Detached (American Classic)
Front Elevation

Scale	Drawn By	Date	Date Plotted
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12

Sheet No.: 9

Job No.: 1119

Color Option Legend

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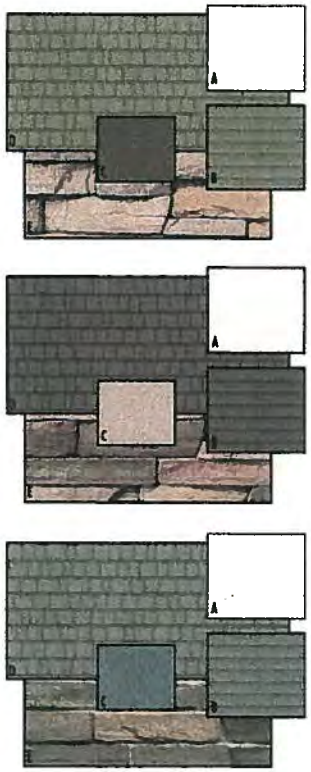
- (C) ACCENT 3 — DOOR & VENT
- (D) BODY — SHINGLE
- (E) BASE — STONE VENEER



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Polygon at Villebois

Wilsonville, Oregon

Polygon Northwest Company

Medium Detached (American Modern)
Front Elevation

Scale	Drawn By	Date	Date Plotted	Sheet No.
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12	10

Job No.: 1119

Color Option Legend

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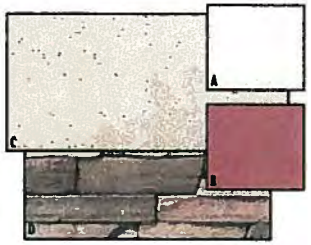

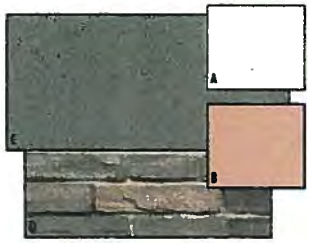

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Polygon at Villebois
Wilsonville, Oregon

Polygon Northwest Company

Medium Detached (French Revival) Front Elevation

Scale	Drawn By	Date	Date Revised	Sheet No.	Job No.
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12	11	1119

Color Option Legend

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- (C) BODY — STUCCO SIDING
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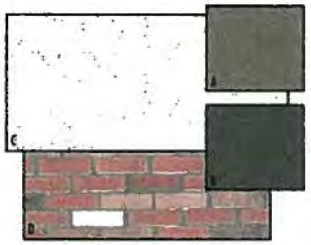

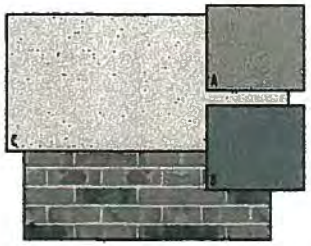

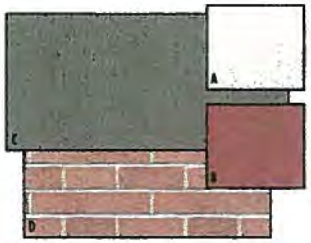

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Polygon at Villebois

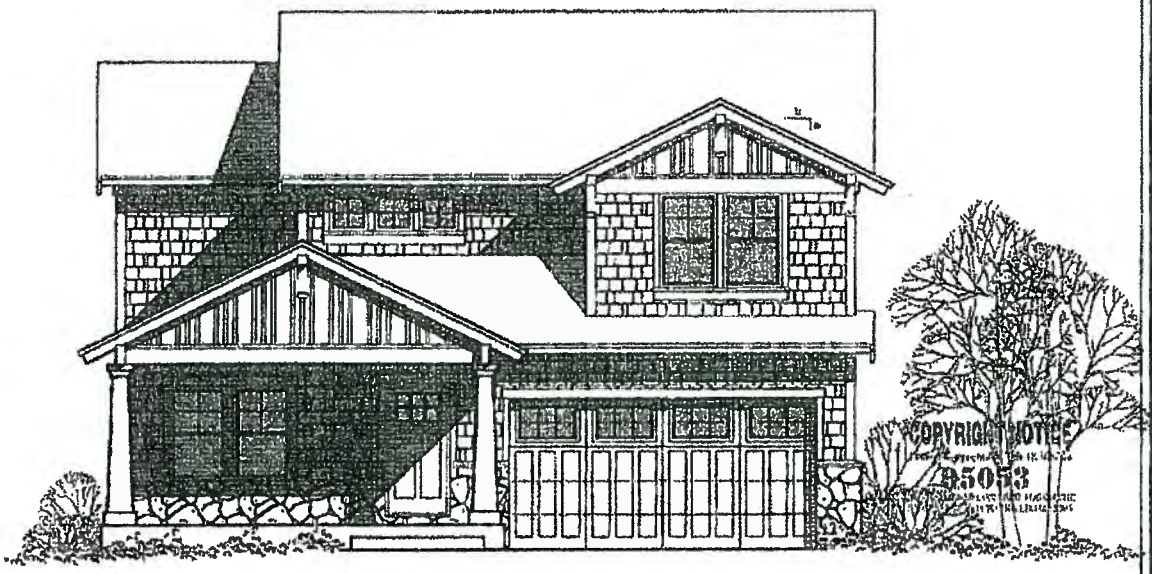
Wilsonville, Oregon

Polygon Northwest Company

Medium Detached (English Revival)
Front Elevation

Scale	Drawn By	Date	Date Plotted	Sheet No.	Job No.
1/4" = 1'-0"	RT/AF	11-07-12	11-07-12	12	1119

NOTE:
ALL EXTERIOR PROJECTS
ON FRONT ELEVATION IS
NO PART GRADE MATERIALS
VERIFY W/ BUILDER / DEVELOPER



FRONT ELEVATION

SCALE 1/4" = 1'-0"

63B-POLYGON-5 "C"

THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE CORRECT INSTALLATION OF ALL EXTERIOR FINISHES AND WEATHERPROOFING

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RESIDENCE BY:
POLYGON NORTHWEST CO.
30# SNOW LOAD

UPPER FLOOR 1,118 SQ. FT.
MAIN FLOOR 1,101 SQ. FT.
SUB TOTAL 2,209 SQ. FT.
BASEMENT
GARAGE AREA

63B
1

FRONT ELEVATION

SCALE 1/4" = 1'-0"

62B-POLYGON-3 "B"

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RESIDENCE BY:
POLYGON NORTHWEST CO.
30# SNOW LOAD

UPPER FLOOR 1,118 SQ. FT.
MAIN FLOOR 1,101 SQ. FT.
SUB TOTAL 2,209 SQ. FT.
BASEMENT 1,128 SQ. FT.
GARAGE AREA 441 SQ. FT.

62B
1

PHASE 2 NORTH VILLEBOIS (ZION PROPERTY)
SIGNIFICANT RESOURCE IMPACT REPORT
WILSONVILLE, OREGON
T3S, R1W, SECTION 15, TAX LOTS 2915, 2922, 2991, 2992, 2995, 2996 and 2916 (portion)
CLACKAMAS COUNTY, W.M.

Prepared for

Polygon Northwest Company
109 East 13th Street
Vancouver, Washington 98660

Prepared by

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

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1220 SW Morrison Street, Suite 700
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www.swca.com

May 2013

SWCA Project No. 21087.02

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C. PROPOSED IMPACTS 1

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- Wetland Mitigation 4

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B. Wetland Delineation Report
C. West Hills Development SRIR Report (2007)
D. Site Photgraphs
E. Natural Resource Inventory Map and Summary Sheet
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INTRODUCTION

Polygon Northwest Company recently acquired the Zion Property, consisting of tax lots 31W15 AD 2915, 2922, 2991, 2992, 2995, 2996 and 2916 (portion) and is planning to develop the previously permitted Phase 2 North Villebois project. The project site is located east of SW Grahams Ferry Road and south of SW Boeckman-Tooze Road in Wilsonville, Oregon. The preliminary development plan is included in Appendix A.

SWCA Environmental Consultants (SWCA) was contracted by Polygon Northwest Company to conduct a wetland delineation for the Phase 2 North Villebois project and update the Significant Resource Impact Report

A. PHYSICAL ANALYSIS

Information regarding the soil types, geology, and hydrology of the project area was previously summarized in the Significant Resource Impact Report (SRIR) prepared in 2007 by the previous applicant, West Hills Development (Appendix B). Existing conditions specific to soil types, geology, and hydrology as described on pages 2 – 3 of the 2007 SRIR are unchanged.

Wetlands were previously delineated in the northwest corner of the project site by Pacific Habitat Services (PHS) in 2003 and 2007 for the Villebois development, and the delineations received concurrence under the Oregon Department of State Lands (DSL) Files WD #2002-0408 and WD #2007-0706. SWCA conducted a site visit in April 2013 to confirm the previously delineated wetland boundaries and determined that additional wetland area was present in the northwest corner of the project site. The wetland delineated by SWCA includes both of the previously delineated small wetlands and extends the wetland further south than was previously delineated. The SWCA wetland delineation report is included in Appendix C.

B. ECOLOGICAL ANALYSIS

Information regarding the existing condition of vegetation communities and wildlife species occurring in the project area as well as functional assessment information for wetlands and wildlife habitat was previously summarized in the 2007 SRIR. Existing conditions described on pages 7 – 14 of the 2007 SRIR are consistent with site conditions observed in 2013.

Representative ground-level site photographs are included in Appendix D.

C. PROPOSED IMPACTS

The Area of Limited Conflicting Use (ALCU) on the project site totals 425,149 square feet, or 9.76 acres. Impacts will occur to small portions of the wildlife habitat area along the west, north, and east edges of the upland forest. The area to be impacted within the Area of Limited Conflicting Use is 16,255 square feet (0.37 acre), or 3.8% of the total ALCU. The proposed mitigation area is located along the southern edge of the upland forest. The proposed wildlife habitat impact and mitigation areas are shown on the preliminary development plan in Appendix A.

Table 1 summarizes the proposed function and ratios for enhancement to mitigate for impacts to upland wildlife habitat.

Table 1. Summary of proposed impacts and mitigation

Impact Type	Impact Area	Phase	Mitigation
Wildlife habitat	663 SF	PDP 1	46,212 SF of enhancement in southern portion of SROZ
Wildlife habitat	3,535 SF	PDP 2 North	
Wildlife habitat	325 SF	Future PDP	
Wildlife habitat	4,610 SF	Future PDP	
Wildlife habitat	7,122 SF	PDP 2	
TOTAL	16,255 SF		
Wetland	1.81 acres	PDP 2	No on-site mitigation; requirement to be met through purchase of Mud Slough Mitigation Bank credits

D. MITIGATION PLAN

Functional Assessment

Natural resource function ratings for the upland forest (URA#41U1; Appendix E) on the project site were assessed in 2000 for the City of Wilsonville's Natural Resource Inventory and are summarized in Table 2. Existing conditions of the upland forest are similar to conditions in 2000, although English ivy and Himalayan blackberry cover has increased in the outer edges of the forest. The current wildlife habitat assessment ratings are also summarized Table 2.

Table 2. Wildlife habitat assessment summary for years 2000 and 2013

Upland Habitat Function	City's Inventory Rating (2000)	Comments	Current Rating (2013)	Comments
Wildlife habitat	High	Intact, diverse structure, large size	Medium	Limited native understory due to large areas of English ivy on ground and on trees
Water quality protection	Low	No adjacent water	Low	No adjacent water
Ecological integrity	Medium	Some ivy present	Medium	Increased invasive species in forest edges
Connectivity	Low	Surrounded by agricultural lands	Low	Surrounded by agricultural lands and residential development

Uniqueness	Low	--	Low	--

Minimal adverse impacts to significant wildlife habitat resources and ecological integrity may result from minor encroachment by access roads along the forest edge and by inclusion of a trail system in the eastern edge of the forest interior. These impacts are summarized in Table 3.

Table 3. Summary of adverse ecological impacts

Upland Habitat Function	Anticipated Adverse Impact?	Comments
Wildlife habitat	No	Minor impacts to the interior forest habitat will occur due to construction of a trail connection. The wildlife habitat function of forest interior habitat has been reduced since the 2000 inventory due to ongoing encroachment of invasive species. Invasive species will be removed and native shrubs will be planted to improve the quality of this function.
Water quality protection	No	This function is currently low, and development is not anticipated to result in a change to this function.
Ecological integrity	No	Minor impacts to the ecological integrity of interior forest habitat may occur due to the potential for introduction of invasive species along the edges of the trail. The ecological integrity of the forest has been affected due to encroachment of invasive species. Invasive species will be removed and native shrubs will be planted to improve the quality of this function.
Connectivity	No	This function is currently low due to surrounding agricultural fields, roads, and residential development, and no change will occur due to site development..
Uniqueness	No	This function is currently low, and no change will occur due to site development.

Upland Wildlife Habitat Mitigation

Mitigation for impacts to upland wildlife habitat will include a combination invasive species control, focusing on English ivy and Himalayan blackberry, and enhancement of the understory to increase vegetation structure and species diversity. Invasive species control and enhancement plantings will improve the wildlife habitat function and the ecological integrity function of the upland forest. Invasive species will be controlled using a combination of mechanical removal and herbicide application.

The current assessment of habitat functions on the site determined that the existing wildlife habitat and ecological integrity functions are medium due to invasive plants in the understory along the forest edges. The upland wildlife habitat mitigation goal is to improve these functions to a “high” rating. According to the ratios established in Table NR-4 in Section 4.139.07 of the City’s Significant Resource Overlay Zone (SROZ) Ordinance, to improve a function from a medium rating to a high rating, it will require mitigation at a ratio of 2.5:1. Therefore, to compensate for impacts to 16,255 square feet of wildlife habitat, a minimum of 40,638 square feet would need to be enhanced. The applicant is proposing to conduct 46,212 square feet of enhancement.

The following native plants will be installed after invasive species have been controlled on the site.

Table 4. Mitigation plantings

Scientific Name	Common Name	Size
Amelanchier alnifolia	serviceberry	18-24”
Crataegus douglasii	black hawthorn	24-36”
Oemleria cerasiformis	Indian plum	18-24”
Physocarpus capitatus	Pacific ninebark	18-24”
Symphoricarpos albus	snowberry	12-18”

Wetland Mitigation

The wetland delineated in the project area was not mapped in the City’s Local Wetland Inventory and does not meet the criteria for locally significant wetlands. The wetland is likely to be considered jurisdictional by the Oregon Department of State Lands (DSL) and the U.S. Army Corps of Engineers (Corps). The wetland delineation report was submitted to DSL for concurrence on April 25, 2013, and the report will be submitted to the Corps along with the wetland removal/fill permit application. The DSL and Corps compensatory wetland mitigation requirement is proposed to be met through the purchase of 1.81 credits from the Mud Slough Mitigation Bank.

E. MITIGATION PERFORMANCE STANDARDS

The objective of the upland wildlife habitat mitigation is to establish a diverse native plant understory and reduce the coverage of invasive species, with the goal of increasing the wildlife habitat and ecological integrity ratings from medium to high. Performance standards will include an 80% survival rate of planted trees and shrubs for each year of the five year maintenance and monitoring period. In addition, cover of invasive species shall not exceed 20% of the mitigation area.

F. LIST OF PREPARERS

Resumes are included in Appendix F.

Stacy Benjamin
Senior Wetland Ecologist
Fieldwork and Report Preparation

C. Mirth Walker, PWS, CWD
Senior Wetland Scientist
Report Quality Assurance/Quality Control

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APPENDIX A

Phase 2 North Villebois
Preliminary Development Plan

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LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

SROZ MITIGATION			
AREA RATIO	IMPACT AREA	REQUIRED MITIGATION AREA	PROPOSED MITIGATION AREA
2.5:1	16,255 SF	40,638 SF	46,212 SF

SCALE
60 0 30 60
1 INCH = 60 FEET

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

SROZ Impacts &
Mitigation Plan

DATE 04/15/2013

9.3

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(9)PTreeP.dwg - SHEET: SROZ May. 2, 13 - 11:31 AM jjk

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APPENDIX B

Wetland Delineation Report

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VILLEBOIS NORTH (ZION PROPERTY)
WETLAND DELINEATION REPORT
WILSONVILLE, OREGON
T3S, R1W, SECTION 15, TAX LOTS 2915 AND 2995 (portion)
CLACKAMAS COUNTY, W.M.

Prepared for

Polygon Northwest Company
109 East 13th Street
Vancouver, Washington 98660

Prepared by

SWCA®
ENVIRONMENTAL CONSULTANTS
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April 2013

SWCA Project No. 21087.02

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INTRODUCTION

SWCA Environmental Consultants (SWCA) was contracted by Polygon Northwest Company to conduct a wetland delineation for the Villebois North (Zion Property) project located in Wilsonville, Clackamas County, Oregon (Appendix A, Figure 1). The site is located east of SW Grahams Ferry Road and south of SW Boeckman-Tooze Road.

A wetland in the northwest corner of the project site was previously delineated by Pacific Habitat Services (PHS) in 2003 for the Villebois development, and the delineation received concurrence under the Oregon Department of State Lands (DSL) File WD #2002-0408. In 2007, PHS revisited the site to verify the results of the 2003 delineation and discovered an additional wetland area in the forested strip along the northern edge of the property that had not been identified in the 2003 delineation. This small forested wetland area was delineated and received concurrence under DSL File WD #2007-0706.

The study area for the Villebois North (Zion Property) wetland delineation includes tax lot 2915 and the western portion of tax lot 2995 (Appendix A, Figure 2). The total study area is approximately 2.4 acres.

A. LANDSCAPE SETTING AND LAND USE

OAR141-090-0035 (7)(a)

The study area is located immediately east of SW Grahams Ferry Road and approximately 900 feet south of SW Boeckman-Tooze Road in an undeveloped field dominated by colonial bent grass (*Agrostis capillaris*), common velvet grass (*Holcus lanatus*), bluegrass (*Poa* species), western dock (*Rumex occidentalis*), and Canadian thistle (*Cirsium arvense*). The site topography is level, and it has a subtle slope down toward the south. The waterbody closest to the site is an unnamed tributary to Corral Creek, which is located west of the project site. Corral Creek is a tributary to the Willamette River to the south.

There is a narrow forested hedgerow along the fence at the northern edge of the study area, which contains Oregon ash (*Fraxinus latifolia*) and Oregon white oak (*Quercus garryana*) in the overstory, a mix of upland and wetland shrubs, and slough sedge (*Carex obnupta*) in the herbaceous layer.

B. SITE ALTERATIONS

OAR141-090-0035 (7)(c)

The site has been in agricultural production for many decades and was also plowed and/or planted, as recently as 2008, based on aerial photographs (Appendix B). The site was definitely plowed and planted during the previous wetland delineations, conducted on the site in 2003 and 2007 for the Villebois project (DSL WD #2002-0408 and WD #2007-0706). Agricultural management activities appear to have ceased on the site several years ago, and at the time of the March 28, 2013, site visit vegetation was easily identifiable in the field due to the field being unmowed.

C. PRECIPITATION DATA AND ANALYSIS

OAR141-090-0035 (7)(l)

The WETS (short for wetlands climate analysis) station used to obtain precipitation data for the project vicinity is the Portland Weather Service Forecast Office (WSFO) station. Average annual rainfall according to the WETS table for the Portland WSFO station is 37.07 inches. Precipitation data were obtained from the Portland, Oregon, weather station via the National Weather Service (NWS). Precipitation data are shown below, and raw data are included in Appendix C. The growing season according to the WETS table is February 15 to November 29.

Table 1 shows the precipitation on the day of and for the two weeks prior to the March 28, 2013, site visit. According to the NWS Portland station, 0.96 inch of rainfall was recorded for the two weeks prior to the site visit. Rainfall received year-to-date as of the March 28 site visit was 19.27 inches. Rainfall received for the water year-to-date was 60.89 inches, which, according to the NWS, is 9.68 inches above normal.

Table 2 shows the monthly precipitation averages according to the WETS Portland WSFO station for the months prior to the March 2013 site visit. Rainfall for the three months prior to the site visit was below normal.

Table 1. Precipitation Data—Observed (inches)

Field Date	Observed Rainfall on Field Date	Observed Rainfall Two Weeks Prior to Field Date	Observed Rainfall for the Water Year-to-Date	Departure from Normal
March 28, 2013	Trace	0.96	60.89	+9.68

Data Sources: Observed precipitation data were obtained from the Preliminary Climatology Data table of the National Oceanic and Atmospheric Administration (NOAA)/NWS station at the Portland WSFO Station. Departure from normal data is based on climate period 1981 to 2010.

Table 2. Precipitation Data—Monthly Averages (inches)

Prior Months	Average	30% Chance Will Have Less Than	More Than	Observed Precipitation	Within Normal Range?
January	5.07	2.98	6.16	3.49	Yes
February	4.18	2.84	4.98	1.26	No, below normal
March	3.71	2.85	4.31	1.46	No, below normal

WETS table averages are based on climate period 1971 to 2000; within normal range data are based on climate period 1981 to 2010.

D. METHODS

OAR141-090-0035 (7)(d-e), (g-h), (16)(a-b), (f), (d) or (g), (17), and (19-20)

The methodology used for determining the presence of wetlands and delineating wetland boundaries followed the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (U.S. Army Corps of Engineers [USACE] 2010)

used by both the USACE and the Oregon DSL. Fieldwork was conducted on March 28, 2013, by Stacy Benjamin and Greg Swenson. Soils, vegetation, and indicators of hydrology were recorded at six sample plot locations to document site conditions (Appendix D).

The National Wetland Plant List (NWPL) was used as required by the USACE Portland District and the DSL. A list of vegetation observed on the site, with common and scientific names and wetland indicator status, is included in Appendix E.

The following soil unit is mapped within the study area according to the Natural Resources Conservation Service (NRCS) Clackamas County Area Soil Survey map (Appendix A, Figure 3):

- Aloha silt loam (Unit 1B): 3–6% slopes, somewhat poorly drained; hydric Huberly and Dayton inclusions (NRCS 2013a)

Representative ground-level site photographs are included in Appendix F. References cited are listed in Appendix G.

E. DESCRIPTION OF ALL WETLANDS AND OTHER NON-WETLAND WATERS

OAR141-090-0035 (2), (7)(b), and (17)

Wetlands

The delineated wetland is dominated by colonial bent grass and western dock, with common velvet grass and bluegrass as subdominants. The northern portion of the wetland also contains lamp rush (*Juncus effusus*) and scattered willow (*Salix* species), rose (*Rosa* species), and Oregon ash shrubs. Wetland soils met the Redox Dark Surface (F6) and/or the Depleted Matrix (F3) hydric soil indicator. Hydrology was directly observed within the surface 12 inches of the soils and to the surface at Plots 2 and 5. The 1.81-acre wetland extends off-site to the north, and it appears to be isolated from other wetlands and waters in the vicinity of the site.

The wetland delineated in the study area is larger than was previously delineated on the site in 2003 and 2007, and it includes both of these previously delineated small wetlands inside the wetland boundary. The wetland extends farther south than was previously delineated. The northeastern boundary of the wetland forested portion of the wetland that was delineated by PHS in 2007 was confirmed to be the same based on a visual inspection of the dominant plant community in the forested area. Vegetation in the forested wetland was dominated by Oregon ash, rose, Douglas spirea (*Spiraea douglasii*), and slough sedge.

The wetland boundary was delineated based on soils, with landscape position and subdominants providing clues for the determination of wetlands versus uplands. It is a slope/flats wetland with groundwater seeps and is classified as a palustrine emergent wetland with a seasonally saturated water regime.

Uplands

Uplands in the study area are dominated by colonial bent grass with velvet grass, bluegrass, and Canadian thistle as subdominants. Small amounts of Himalayan blackberry (*Rubus armeniacus*), bull

thistle (*Cirsium vulgare*), crane's-bill (*Geranium* species), and bedstraw (*Gallium* species) occurred along the wetland boundary. Upland soils did not meet any hydric soil indicators. Upland plots 1 and 6 contained hydrology within the surface 12 inches; however, they were determined to be upland based on the absence of hydric soil indicators.

A mixed coniferous/deciduous forest dominated by Oregon white oak along the edges and Douglas-fir (*Pseudotsuga menziesii*) in the interior is present immediately east of the study area. The forest edges are dominated by English ivy (*Hedera helix*), Himalayan blackberry, and sword fern (*Polystichum munitum*).

F. DEVIATION FROM LWI OR NWI

OAR141-090-0035 (16)(e)

The subject area is not covered by the City of Wilsonville's Local Wetland Inventory (LWI). The National Wetlands Inventory (NWI) map (Appendix A, Figure 4) does not have any wetlands mapped on the subject site (which is not surprising since agriculturally managed wetlands were not included in the U.S. Fish and Wildlife Service [USFWS] maps created in the 1980s).

G. MAPPING METHOD

OAR141-090-0035 (7)(f), (11), (12), (13), (16), and (22)

The wetland boundary and sample plot locations were professionally land surveyed by Pacific Community Design (Appendix A, Figure 5).

H. ADDITIONAL INFORMATION

OAR141-090-0035 (6)(c), (16)(c), and (21)

The wetland delineated in this study has been previously determined to be jurisdictional by the DSL (DSL WD #07-0706, WD #02-0408), and the northern portion of the wetland delineated in this study was permitted for fill in 2003 under permit numbers DSL #30721-FP and Corps #2003-408 issued to West Hills Development. The wetland was not filled under these permits due to the project being put on hold and the property later being sold by the previous developer. The permits expired in 2008. The compensatory wetland mitigation requirement for permitted wetland impacts was met by purchase of mitigation bank credits from the Mud Slough Mitigation Bank in 2008.

I. RESULTS AND CONCLUSIONS

OAR141-090-0035 (7)(j)

The wetland comprises 1.81 acres within the study area and extends north of the study area. It is a palustrine emergent wetland with a seasonally saturated water regime in the slope/flats class of the hydrogeomorphic method (HGM).

J. REQUIRED DISCLAIMER

OAR141-000-0035 (7)(K)

This report documents the investigation, best professional judgment, and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055.

K. LIST OF PREPARERS

Stacy Benjamin

Stacy Benjamin
Senior Wetland Ecologist
Fieldwork and Report Preparation

C. Mirth Walker

C. Mirth Walker, PWS, CWD
Senior Wetland Scientist
Report Quality Assurance/Quality Control

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APPENDIX A

Maps

Figure 1. Site location map.

Figure 2. Tax lot map.

Figure 3. Soils map.

Figure 4. National Wetlands Inventory map.

Figure 5. Wetland map.

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Figure 1. Site location map.

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Figure 2. Tax lot map.

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Figure 3. Soils map.

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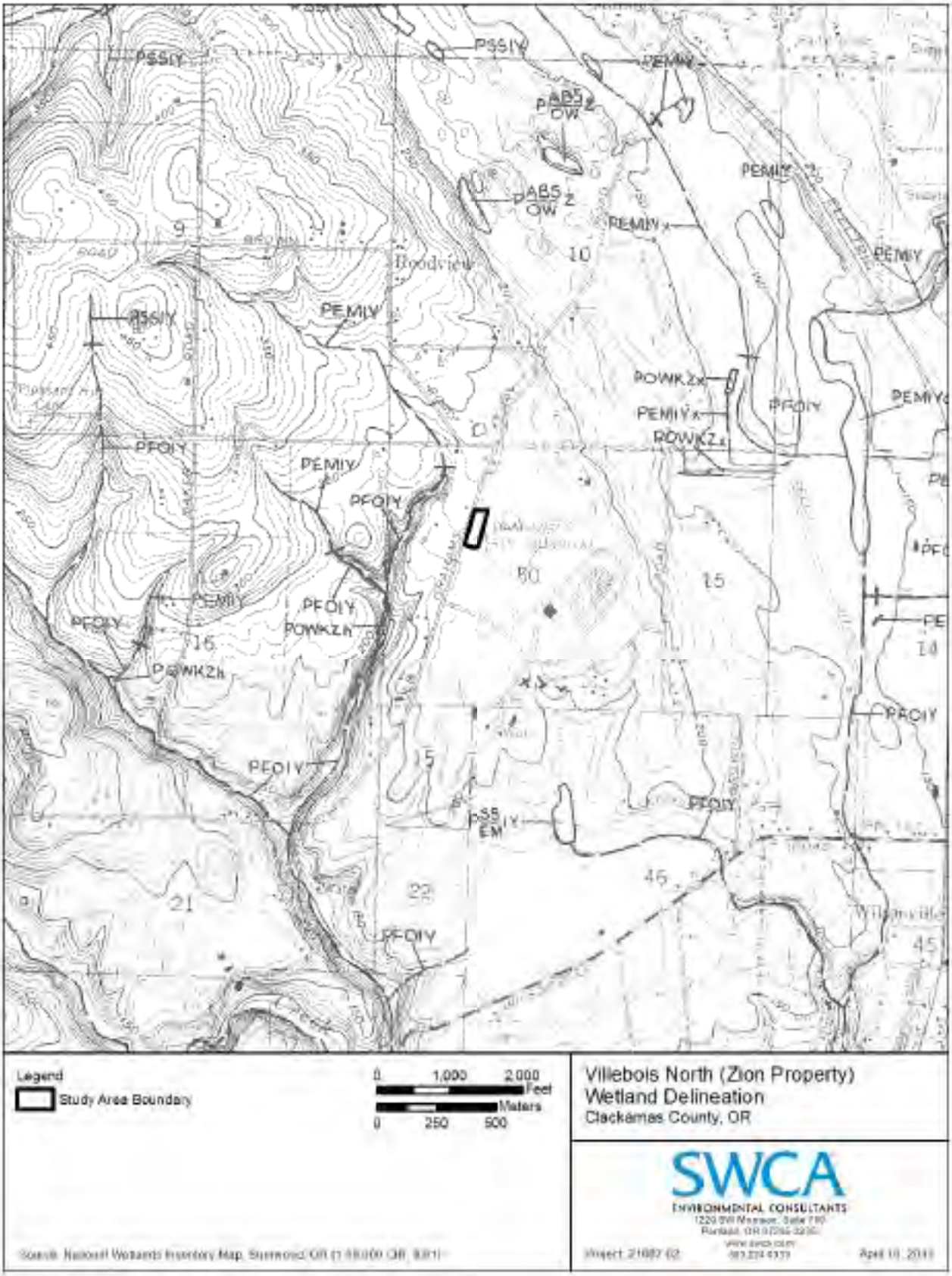

Figure 4. National Wetlands Inventory map.

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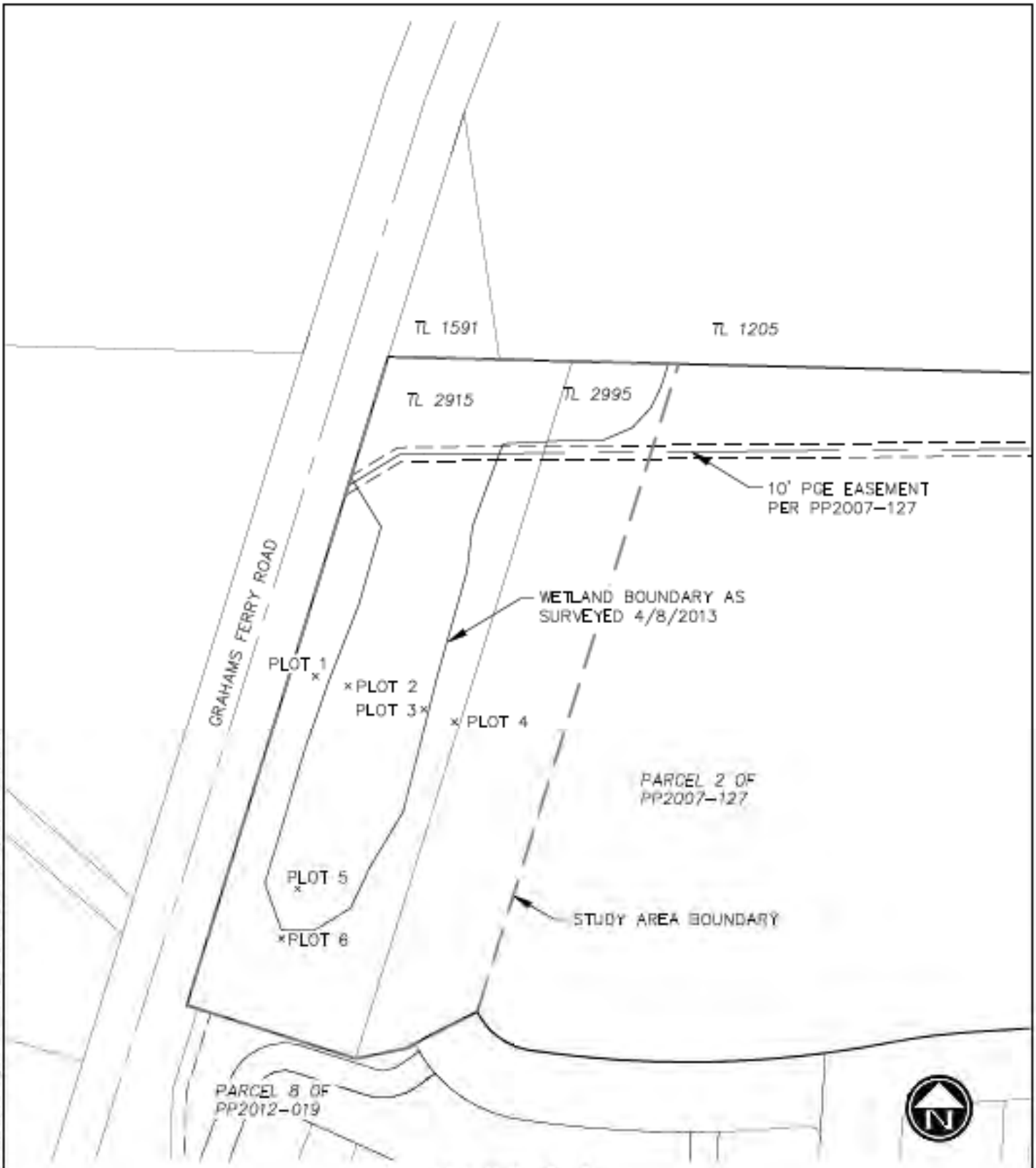

EXHIBIT "A"
WETLAND BOUNDARY

DRAWN BY: CLL DATE: 4/9/2013
REVIEWED BY: TCJ DATE: 4/9/2013
PROJECT NO.: 395-008
SCALE: 1"=100'
PAGE 1 OF 1

Pacific Community Design

[T] 503-941-9484
[F] 503-941-9485

H:\proj\395-008\09 Drawings\06 Survey\Exhibits\395008 Legal-Wetland.dwg - SHEET Legal Desc Apr 9, 13 - 4:24PM dl

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APPENDIX B

Aerial Photographs

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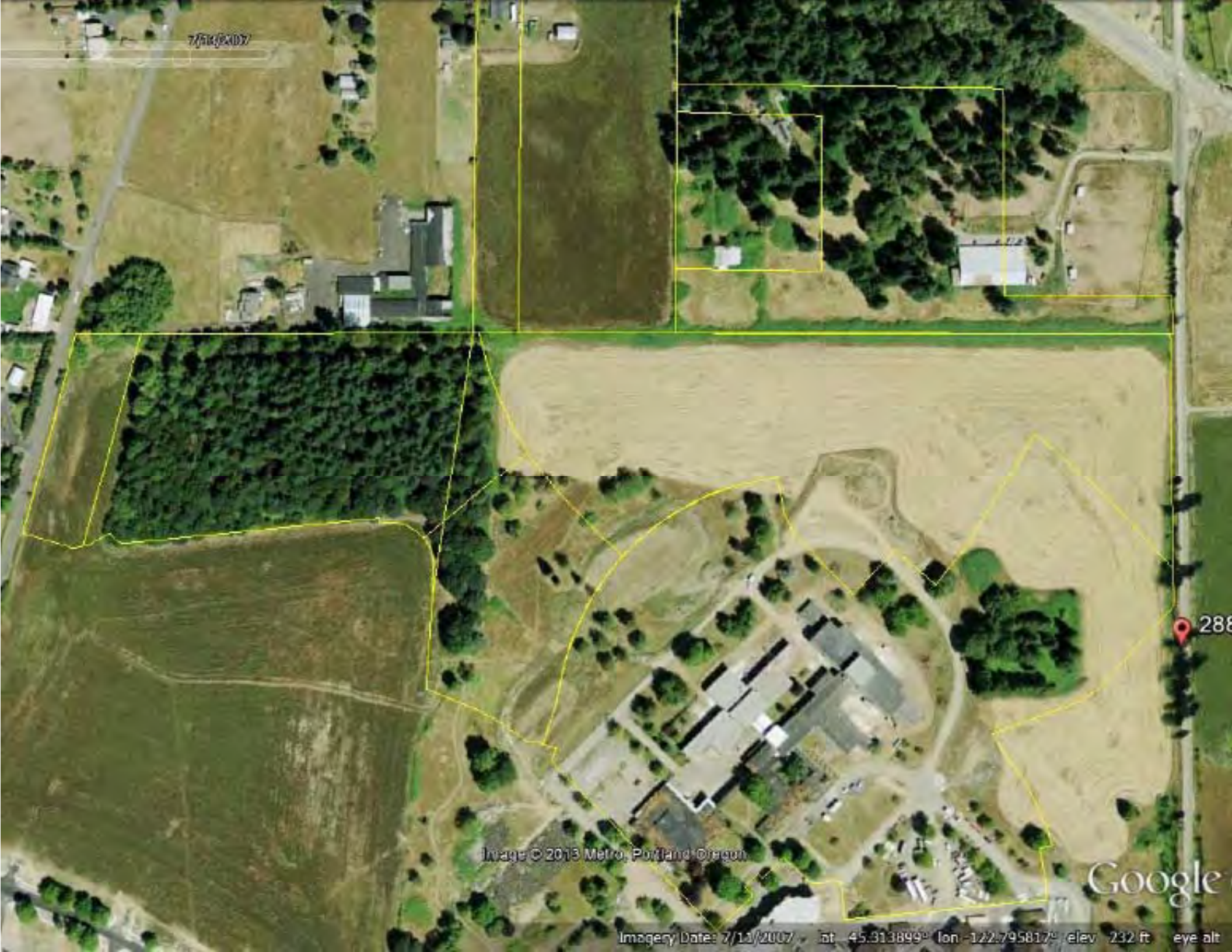
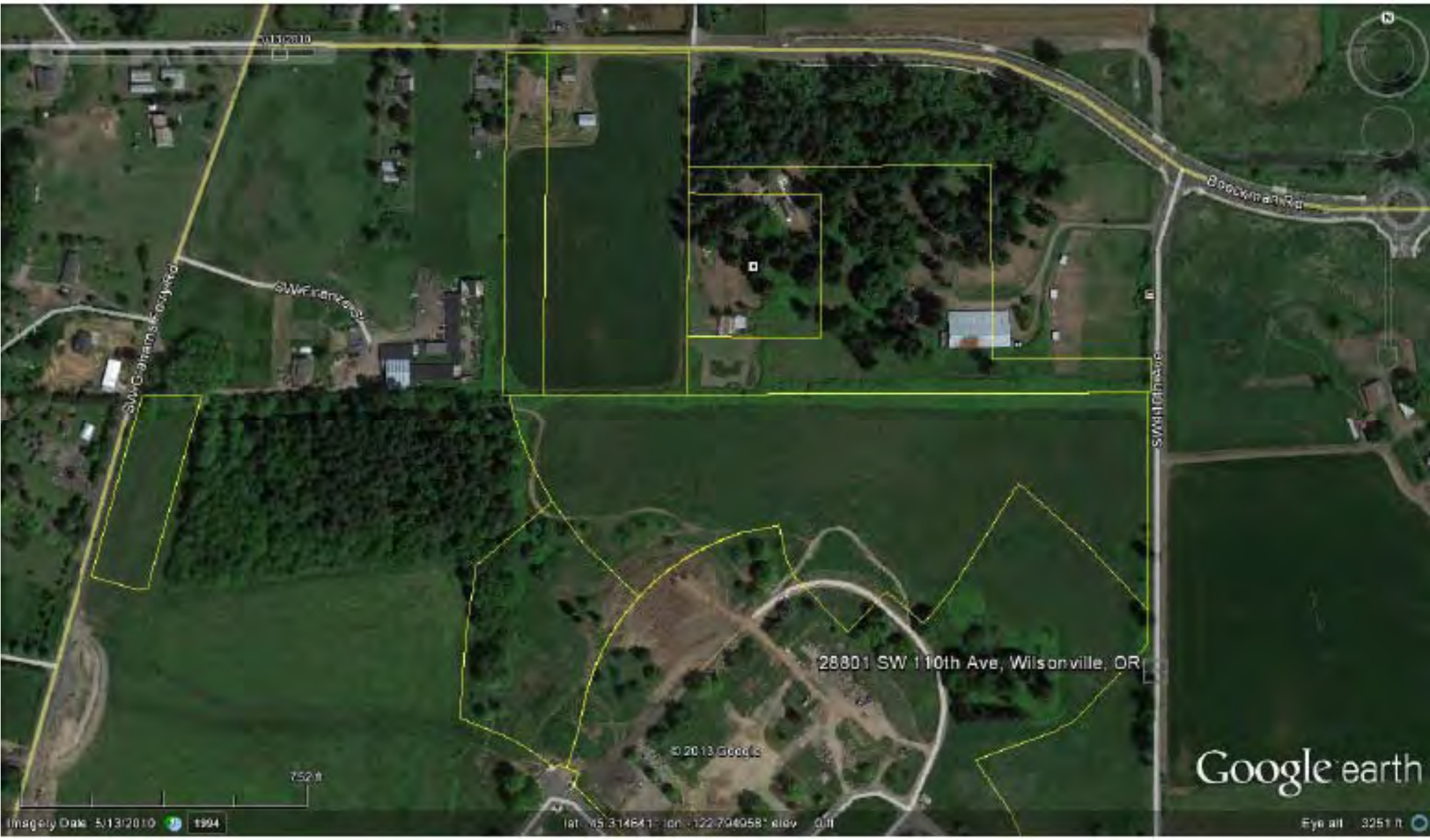
28801 SW 110th Ave, Wilsonville, OR
Google earth


7/11/2007
288
Image © 2013 Metro, Portland Oregon
Google
Imagery Date: 7/11/2007 lat 45.313899° lon -122.795817° elev 232 ft eye alt

28801 SW 110th Ave, Wilsonville, OR
Google earth



Boeckman Rd
SW Grahams Ferry Rd
SW Frankie St
SW 110th Ave
28801 SW 110th Ave, Wilsonville, OR
© 2013 Google
752 ft
Google earth
Imagery Date: 5/13/2010
1994
Eye alt 3251 ft

Boeckman Rd
SW Frances St
SW Grahams Ferry Rd
SW 110th Ave
28801 SW 110th Ave, Wilsonville, OR
© 2013 Google
Google earth
Imagery Date: 3/15/2012
1994
lat 45.314641° lon -122.794958° elev 0 ft
Eye alt 3251 ft

APPENDIX C

Precipitation Data

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WETS Station : PORTLAND WSFO, OR6751 Creation Date: 09/09/2002
Latitude: 4536 Longitude: 12236 Elevation: 00020
State FIPS/County(FIPS): 41051 County Name: Multnomah
Start yr. - 1971 End yr. - 2000

Month	Temperature (Degrees F.) avg daily max	avg daily min	avg	Precipitation (Inches) avg	30% chance will have less than	more than	avg # of days w/.1 or more	avg total snow fall
January	46.0	34.6	40.3	5.07	2.98	6.16	11	1.1
February	50.8	36.4	43.6	4.18	2.84	4.98	10	1.4
March	56.4	39.3	47.8	3.71	2.85	4.31	10	0.1
April	61.4	42.6	52.0	2.64	1.93	3.10	7	0.0
May	67.7	48.1	57.9	2.38	1.44	2.88	6	0.0
June	73.6	53.2	63.4	1.59	0.94	1.93	4	0.0
July	80.1	57.4	68.7	0.72	0.31	0.89	1	0.0
August	80.6	57.7	69.1	0.93	0.33	1.13	2	0.0

September	75.6	52.8	64.2	1.65	0.65	2.06	3	0.0
October	64.3	45.4	54.8	2.88	1.57	3.52	7	0.0
November	52.5	40.0	46.3	5.61	3.72	6.73	12	0.6
December	46.0	35.3	40.6	5.71	3.89	6.82	11	1.3
Annual	-----	-----	-----	------	32.85	40.58	--	----
Average	62.9	45.2	54.1	------	------	------	--	----
Total	-----	-----	-----	37.07	------	------	84	4.4

GROWING SEASON DATES

Probability	Temperature: 24 F or higher	28 F or higher	32 F or higher
	Beginning and Ending Dates Growing Season Length		
50 percent *	1/22 to 12/27 340 days	2/15 to 11/29 288 days	3/22 to 11/13 236 days
70 percent *	> 365 days > 365 days	2/ 6 to 12/ 8 306 days	3/15 to 11/19 249 days

* Percent chance of the growing season occurring between the Beginning and Ending dates.

total 1942-2002 prcp

Station : OR6751, PORTLAND WSFO
Unit = inches

yr	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	annl
42	3.63	M3.53	1.63								11.57	9.37	29.73
43	M5.50	3.27	5.54								M2.20	2.70	19.21
44	2.81	3.11	1.93								5.00	1.90	14.75
45	4.10	4.36	5.30								8.58	5.61	27.95
46	5.12	4.99	4.23								7.57	5.47	27.38
47	3.72	2.77	4.11								4.08	4.64	19.32
48	5.87	5.02	4.24						3.28	2.39	M6.64	M7.84	35.28
49	1.02	9.46	2.78	0.72	M2.12	0.68	0.91	0.24	1.66	2.35	5.56	4.86	32.36
50	10.10	5.77	4.76	2.74	0.57	M2.31	0.50	0.72	M1.45	M6.29	M8.55	6.31	50.07
51	7.71	M4.29	3.86	1.14	1.75	0.03	0.28	0.02	2.55	6.81	5.31	5.06	38.81
52	4.40	3.59	3.82	M2.55	0.78	2.23	M0.00	0.18	0.33	0.72	M1.25	6.76	26.61
53	12.78	3.71	M3.81	1.89	M3.41	2.04	0.03	1.79	1.16	3.56	6.46	M7.84	48.48
54	M8.85	4.57	2.55	2.54	1.83	3.58	M1.23	1.92	0.85	3.40	5.09	5.01	41.42
55	M2.03	M3.26	3.06	4.72	1.24	M1.78	0.89	0.00	2.86	M6.53	7.34	10.14	43.85
56	11.66	2.04	M3.93	0.53	M2.22	2.03	0.01	2.56	M0.73	5.10	1.47	3.64	35.92
57	M2.14	4.14	7.52	1.84	1.97	0.73	0.19	0.69	0.49	3.53	M2.79	6.15	32.18
58	6.56	5.13	2.20	3.33	1.35	3.04	0.00	0.02	1.05	1.49	6.39	5.06	35.62
59	7.57	4.18	3.22	0.92	2.89	2.38	0.56	M0.09	2.81	3.51	3.30	3.08	34.51
60	3.93	4.00	4.77	3.33	3.37	0.52	0.00	1.00	1.37	2.39	8.63	2.61	35.92

61	4.50	M6.86	M5.32	3.59	2.80	0.47	0.42	1.07	0.64	2.89	4.67	5.94	39.17
62	1.58	3.43	4.25	3.15	2.56	0.78	0.06	1.49	1.66	M3.03	9.32	2.59	33.90
63	2.27	3.48	4.69	3.78	2.74	1.71	1.17	0.87	0.75	3.04	5.64	3.60	33.74
64	9.51	0.78	2.28	1.56	1.04	1.96	0.68	0.90	1.61	0.84	6.78	9.92	37.86
65	7.44	2.22	1.10	2.20	1.31	0.83	0.44	0.73	0.01	2.03	5.64	7.34	31.29
66	5.74	1.70	4.71	0.85	0.91	1.02	1.19	0.59	1.70	3.06	5.50	6.89	33.86
67	6.21	2.02	4.31	2.17	1.02	1.01	0.00	0.00	0.76	4.72	2.27	4.75	29.24
68	4.58	6.64	2.68	1.91	3.63	2.20	0.14	4.53	2.20	5.03	6.23	11.12	50.89
69	7.61	3.14	1.13	2.28	1.61	2.99	0.14	0.04	3.86	3.02	3.18	8.12	37.12
70	11.81	4.77	2.58	2.94	1.55	0.49	0.05	0.00	1.10	2.85	5.72	7.49	41.35
71	7.09	3.36	4.87	2.72	1.00	1.76	0.26	0.95	3.53	2.37	5.76	8.05	41.72
72	5.71	4.08	5.41	2.98	2.23	0.68	0.56	0.67	3.06	0.87	3.78	8.79	38.82
73	3.69	1.94	2.45	1.33	1.43	1.45	0.06	1.41	3.29	3.14	11.55	9.93	41.67
74	8.51	4.61	5.65	1.76	1.74	0.80	2.01	0.07	0.21	2.14	6.73	6.05	40.28
75	8.43	4.75	3.45	1.88	1.35	1.13	0.43	2.10	0.00	4.76	4.10	6.68	39.06
76	5.14	4.92	2.93	2.34	2.29	0.78	0.66	3.29	0.73	1.48	0.77	1.38	26.71
77	1.07	2.49	3.50	1.04	4.30	0.83	0.39	3.26	3.33	2.28	5.56	8.98	37.03
78	4.85	3.28	1.49	3.96	3.17	1.69	1.36	2.05	2.07	0.36	3.83	2.51	30.62
79	2.59	6.53	2.51	2.47	2.41	0.64	0.25	1.18	1.75	4.85	3.38	7.23	35.79
80	8.51	4.01	3.11	2.58	2.19	2.50	0.19	0.39	1.56	1.18	6.47	9.72	42.41
81	1.47	3.86	2.33	1.79	2.25	3.23	0.24	0.15	1.86	4.12	4.62	8.37	34.29
82	6.31	5.98	2.38	3.56	0.46	1.66	0.94	1.66	3.98	4.44	3.51	8.16	43.04
83	6.23	7.78	6.80	1.87	1.30	1.95	2.68	2.29	0.39	1.95	8.65	5.30	47.19
84	2.01	3.93	3.19	3.20	3.41	4.06	0.00	0.09	1.46	3.85	9.74	2.56	37.50
85	0.06	1.79	3.08	1.07	1.52	2.34	0.55	0.48	2.76	2.75	3.89	2.19	22.48
86	4.65	5.31	2.60	1.91	2.19	0.23	1.20	0.10	4.30	1.99	6.26	4.30	35.04
87	6.93	2.45	4.91	1.94	1.63	0.14	1.03	0.35	0.30	0.27	1.96	8.00	29.91
88	4.95	1.17	3.13	4.57	2.53	2.34	0.69	0.10	1.76	0.19	7.92	2.37	31.72
89	3.30	2.84	6.73	2.08	2.87	0.78	0.91	1.07	1.48	1.73	3.18	3.08	30.05
90	7.95	3.43	2.52	2.31	2.37	1.94	0.32	0.95	0.34	4.65	3.68	2.40	32.86
91	2.56	3.65	4.64	4.05	3.34	2.31	0.07	0.70	0.02	1.51	6.36	4.34	33.55
92	4.31	4.12	1.87	3.82	0.10	0.60	0.67	0.49	1.12	2.87	4.55	4.98	29.50
93	3.06	0.72	4.39	5.26	4.36	1.69	2.41	0.37	0.00	1.59	1.50	5.01	30.36
94	3.56	4.92	1.84	1.91	0.56	1.67	0.07	0.13	1.13	8.41	5.91	4.85	34.96
95	5.56	3.19	3.82	3.49	1.65	2.62	1.23	0.81	1.31	3.15	10.74	5.91	43.48
96	7.15	10.03	3.24	5.12	4.88	0.44	0.73	0.25	3.05	5.38	9.58	13.35	63.20
97	7.32	1.63	7.14	3.73	3.63	2.83	0.52	1.58	1.98	6.40	4.02	3.03	43.81
98	6.77	5.27	4.06	1.04	5.55	1.73	0.59	0.00	1.09	2.16	11.02	6.74	46.02
99	6.63	8.73	4.03	1.56	1.97	1.73	0.51	0.75	0.10	2.44	6.81	3.62	38.88
0	5.66	4.50	3.21	1.82	2.70	1.19	0.15	0.12	1.67	3.25	2.46	3.47	30.20
1	1.47	1.29	3.11	2.85	0.91	1.79	0.95	0.74	0.70	3.12	6.89	6.62	30.44
2													

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

Climatological Report (Daily)

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CDUS46 KPQR 291149
CLIAST


CLIMATE REPORT
NATIONAL WEATHER SERVICE PORTLAND OREGON
448 AM PDT FRI MAR 29 2013


.................................

...THE ASTORIA OR CLIMATE SUMMARY FOR MARCH 28 2013...

CLIMATE NORMAL PERIOD 1981 TO 2010
CLIMATE RECORD PERIOD 1953 TO 2013


WEATHER ITEM   OBSERVED TIME   RECORD YEAR NORMAL DEPARTURE LAST
                VALUE   (LST)  VALUE       VALUE  FROM      YEAR
                                                   NORMAL
.................................................................
TEMPERATURE (F)
 YESTERDAY
  MAXIMUM         58    204 PM  75    1941  55      3       51
                                      1930
  MINIMUM         48    721 AM  28    1987  40      8       43
                                      1962
  AVERAGE         53                        47      6       47

PRECIPITATION (IN)
  YESTERDAY        0.01          2.00 1943   0.22  -0.21     0.57
  MONTH TO DATE    3.91                      6.80  -2.89    10.49
  SINCE OCT 1     60.89                     51.21   9.68    47.31
  SINCE JAN 1     19.27                     24.19  -4.92    28.09

SNOWFALL (IN)
  YESTERDAY       MM
  MONTH TO DATE    0.0
  SINCE MAR 1      0.0
  SINCE JUL 1      0.0
```

```
  SNOW DEPTH       0

DEGREE DAYS
 HEATING
  YESTERDAY       12                        18     -6       18
  MONTH TO DATE  538                       526     12      602
  SINCE MAR 1    538                       526     12      602
  SINCE JUL 1   3918                      3868     50     4080

 COOLING
  YESTERDAY        0                         0      0        0
  MONTH TO DATE    0                         0      0        0
  SINCE MAR 1      0                         0      0        0
  SINCE JAN 1      0                         0      0        0
.............................................................


WIND (MPH)
  HIGHEST WIND SPEED    12   HIGHEST WIND DIRECTION    NW (330)
  HIGHEST GUST SPEED    14   HIGHEST GUST DIRECTION     N (350)
  AVERAGE WIND SPEED     3.3


SKY COVER
  POSSIBLE SUNSHINE  MM
  AVERAGE SKY COVER 1.0


WEATHER CONDITIONS
 THE FOLLOWING WEATHER WAS RECORDED YESTERDAY.
  LIGHT RAIN
  FOG


RELATIVE HUMIDITY (PERCENT)
 HIGHEST   100          1200 AM
 LOWEST     66           300 PM
 AVERAGE    83

.......................................................


THE ASTORIA OR CLIMATE NORMALS FOR TODAY
                         NORMAL    RECORD    YEAR
 MAXIMUM TEMPERATURE (F)   55        73      1964
 MINIMUM TEMPERATURE (F)   40        28      1938


SUNRISE AND SUNSET
MARCH 29 2013.........SUNRISE   700 AM PDT   SUNSET   741 PM PDT
```

```
MARCH 30 2013.........SUNRISE   659 AM PDT   SUNSET   742 PM PDT

-  INDICATES NEGATIVE NUMBERS.
R  INDICATES RECORD WAS SET OR TIED.
MM INDICATES DATA IS MISSING.
T  INDICATES TRACE AMOUNT.
```

The U.S. Naval Observatory (USNO) computes astronomical data. Therefore, the NWS does not record, certify, or authenticate astronomical data. Computed times of sunrise, sunset, moonrise, moonset; and twilight, moon phases and other astronomical data are available from USNO's Astronomical Applications Department (http://www.usno.navy.mil). See http://www.usno.navy.mil/USNO/astronomical-applications/astronomical-information-center/litigation for information on using these data for legal purposes.

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

```
000
CXUS55 KPQR 011230
CF6PDX
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

                                          STATION:   PORTLAND OR
                                          MONTH:     JANUARY
                                          YEAR:      2013
                                          LATITUDE:   45 35 N
                                          LONGITUDE: 122 36 W
```

TEMPERATURE IN F:							:PCPN:	SNOW:		WIND			:SUNSHINE:		SKY		:PK WND	
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
									12Z	AVG	MX	2MIN						
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR
1	40	23	32	-8	33	0	0.00	0.0	0	7.3	20	100	M	M	3	12	25	110
2	41	32	37	-3	28	0	0.00	0.0	0	17.7	30	100	M	M	1		36	100
3	40	32	36	-4	29	0	T	M	0	17.8	29	100	M	M	4		35	100
4	42	34	38	-2	27	0	0.02	M	0	9.4	21	120	M	M	8	1	25	120
5	38	34	36	-4	29	0	0.02	M	0	12.3	29	100	M	M	10		33	110
6	40	34	37	-3	28	0	0.19	M	0	7.3	16	110	M	M	10	1	18	110
7	53	39	46	6	19	0	0.07	M	0	11.5	25	200	M	M	10	1	32	200
8	55	44	50	9	15	0	0.14	M	0	10.5	21	190	M	M	10	1	26	180
9	53	36	45	4	20	0	0.22	M	0	7.7	22	200	M	M	9	1	30	220
10	40	33	37	-4	28	0	0.16	M	0	2.4	8	180	M	M	9	1	9	180
11	40	29	35	-6	30	0	0.00	0.0	0	2.0	8	60	M	M	6	1	9	50
12	34	26	30	-11	35	0	0.00	0.0	0	1.9	9	300	M	M	7	18	12	280
13	34	26	30	-11	35	0	T	M	0	2.4	9	300	M	M	8	1	12	300
14	34	29	32	-9	33	0	0.03	M	0	2.7	9	170	M	M	10	18	10	180
15	38	34	36	-5	29	0	0.01	M	0	3.0	9	310	M	M	10	1	10	310
16	37	34	36	-6	29	0	0.00	0.0	0	1.2	6	300	M	M	10	18	7	300
17	44	31	38	-4	27	0	0.00	0.0	0	2.6	10	110	M	M	5	1	12	110
18	46	26	36	-6	29	0	0.00	0.0	0	0.8	6	100	M	M	3	18	7	100
19	37	25	31	-11	34	0	0.00	0.0	0	1.9	8	280	M	M	8	128	8	280
20	42	27	35	-7	30	0	0.00	0.0	0	1.5	7	140	M	M	6	128	9	110
21	42	23	33	-9	32	0	0.00	0.0	0	5.1	18	120	M	M	1	1	23	130
22	42	24	33	-9	32	0	0.00	0.0	0	6.8	16	130	M	M	6	1	21	130
23	36	32	34	-8	31	0	0.21	M	0	9.4	18	110	M	M	10	1	22	120
24	44	34	39	-3	26	0	0.26	M	0	2.8	16	130	M	M	10	12	20	130
25	46	36	41	-1	24	0	0.24	M	0	8.6	15	110	M	M	9	12	18	120
26	47	38	43	1	22	0	0.03	M	0	6.0	18	210	M	M	9	12	21	200
27	43	37	40	-2	25	0	0.15	M	0	5.2	14	220	M	M	10	1	20	220
28	45	40	43	1	22	0	1.00	M	0	2.6	8	220	M	M	10	1	12	210
29	48	43	46	4	19	0	0.47	M	0	6.8	15	200	M	M	10	1	18	220
30	50	44	47	4	18	0	0.27	M	0	5.7	18	200	M	M	10	1	23	200

```
31  52  43  48   5  17   0    T    M    0  3.3 10  80   M    M   9 12     12  90
==============================================================================
SM 1323 1022       835   0  3.49     0.0 186.2          M      241
==============================================================================
AV 42.7 33.0                                6.0 FASTST   M    M   8    MAX(MPH)
                                  MISC ---->  # 30 100               # 36  100
==============================================================================
NOTES:
# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

                                          STATION:  PORTLAND OR
                                          MONTH:    JANUARY
                                          YEAR:     2013
                                          LATITUDE:   45 35 N
                                          LONGITUDE: 122 36 W

[TEMPERATURE DATA]       [PRECIPITATION DATA]       SYMBOLS USED IN COLUMN 16

AVERAGE MONTHLY: 37.8   TOTAL FOR MONTH:   3.49    1 = FOG OR MIST
DPTR FM NORMAL:  -3.6   DPTR FM NORMAL:   -1.39    2 = FOG REDUCING VISIBILITY
HIGHEST:    55 ON  8    GRTST 24HR  1.19 ON 28-29      TO 1/4 MILE OR LESS
LOWEST:     23 ON 21, 1                            3 = THUNDER
                        SNOW, ICE PELLETS, HAIL    4 = ICE PELLETS
                        TOTAL MONTH:   0.0 INCH    5 = HAIL
                        GRTST 24HR     0.0         6 = FREEZING RAIN OR DRIZZLE
                        GRTST DEPTH:   0           7 = DUSTSTORM OR SANDSTORM:
                                                       VSBY 1/2 MILE OR LESS
                                                   8 = SMOKE OR HAZE
[NO. OF DAYS WITH]       [WEATHER - DAYS WITH]     9 = BLOWING SNOW
                                                   X = TORNADO
MAX 32 OR BELOW:   0    0.01 INCH OR MORE:  17
MAX 90 OR ABOVE:   0    0.10 INCH OR MORE:  11
MIN 32 OR BELOW:  14    0.50 INCH OR MORE:   1
MIN  0 OR BELOW:   0    1.00 INCH OR MORE:   1

[HDD (BASE 65) ]
TOTAL THIS MO.   835    CLEAR  (SCALE 0-3)   3
DPTR FM NORMAL   103    PTCLDY (SCALE 4-7)  10
TOTAL FM JUL 1  2328    CLOUDY (SCALE 8-10) 18
DPTR FM NORMAL  -136

[CDD (BASE 65) ]
TOTAL THIS MO.     0
DPTR FM NORMAL     0    [PRESSURE DATA]
TOTAL FM JAN 1     0    HIGHEST SLP 30.68 ON 16
DPTR FM NORMAL     0    LOWEST  SLP 29.70 ON  9

[REMARKS]
#FINAL-01-13#
```

Explanation of the Preliminary Monthly Climate Data (F6) Product

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WFO Monthly/Daily Climate Data

```
000
CXUS55 KPQR 011230
CF6PDX
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

                                          STATION:   PORTLAND OR
                                          MONTH:     FEBRUARY
                                          YEAR:      2013
                                          LATITUDE:   45 35 N
                                          LONGITUDE: 122 36 W

  TEMPERATURE IN F:        :PCPN:    SNOW:  WIND      :SUNSHINE: SKY     :PK WND
==============================================================================
1   2   3   4   5  6A  6B    7    8   9   10  11  12  13   14  15   16   17  18
                                     12Z  AVG MX 2MIN
DY MAX MIN AVG DEP HDD CDD  WTR  SNW DPTH SPD SPD DIR MIN PSBL S-S WX    SPD DR
==============================================================================

 1  53  38  46   3  19   0    T    M    0  3.0 12 290   M    M   7 12     14 280
 2  55  34  45   2  20   0 0.00  0.0    0  5.0 18 120   M    M   5 12     22 120
 3  47  35  41  -2  24   0 0.00  0.0    0  1.5  7 100   M    M   9 128     8 100
 4  52  41  47   4  18   0 0.00  0.0    0  1.7 10 110   M    M  10 1      12 120
 5  52  43  48   5  17   0 0.14    M    0  9.4 22 200   M    M   9        28 210
 6  52  43  48   5  17   0 0.04    M    0  9.8 24 230   M    M   9        33 230
 7  50  35  43   0  22   0 0.02    M    0  4.7 16 200   M    M   6        21 200
 8  47  30  39  -4  26   0 0.00  0.0    0  2.7 10 330   M    M   7 12     15 340
 9  45  33  39  -4  26   0 0.00  0.0    0  3.8  8 190   M    M   9 1       9 180
10  48  38  43   0  22   0 0.00  0.0    0  3.2  8 310   M    M  10 1       9 310
11  46  42  44   1  21   0    T    M    0  3.5 12 150   M    M  10 1      13 190
12  55  43  49   6  16   0 0.01    M    0  4.3 13 230   M    M  10 1      15 220
13  53  43  48   4  17   0 0.01    M    0  3.4 13 200   M    M   9 1      16 200
14  51  37  44   0  21   0 0.00  0.0    0  3.2 10 300   M    M   8 1      12 300
15  61  38  50   6  15   0 0.00  0.0    0  3.8 18 120   M    M   4 12     23 120
16  51  38  45   1  20   0 0.05    M    0  5.5 18 310   M    M   6 1      21 310
17  46  37  42  -2  23   0 0.00  0.0    0  2.6 10  90   M    M   8        12  70
18  48  35  42  -2  23   0    T    M    0  6.4 16 210   M    M   9        20 200
19  55  37  46   2  19   0 0.09    M    0  5.8 15  50   M    M   7 1      20  50
20  49  34  42  -2  23   0 0.04    M    0  4.6 18 200   M    M   9        22 240
21  46  40  43  -1  22   0 0.03    M    0  9.1 17 200   M    M  10 1      22 200
22  48  37  43  -1  22   0 0.39    M    0 12.8 24 180   M    M   9 1      35 180
23  48  36  42  -3  23   0 0.06    M    0  7.4 18 280   M    M   8 8      23 320
24  52  37  45   0  20   0 0.01    M    0  7.4 21 170   M    M   9        26 170
25  50  37  44  -1  21   0 0.12    M    0  9.2 25 310   M    M   8 18     32 310
26  49  37  43  -2  22   0 0.00  0.0    0  5.3 15 110   M    M   9        18 110
27  53  42  48   3  17   0 0.10    M    0  6.9 16 200   M    M  10 1      20 190
28  57  46  52   6  13   0 0.15    M    0  9.6 17 210   M    M  10 1      21 210
==============================================================================
SM 1419 1066       569   0  1.26     0.0 155.6          M      234
```

```
==============================================================================
AV 50.7 38.1                                5.6 FASTST   M    M   8    MAX(MPH)
                                MISC ----> # 25 310                  # 35  180
==============================================================================
NOTES:
# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

                                          STATION:  PORTLAND OR
                                          MONTH:    FEBRUARY
                                          YEAR:     2013
                                          LATITUDE:   45 35 N
                                          LONGITUDE: 122 36 W

[TEMPERATURE DATA]       [PRECIPITATION DATA]       SYMBOLS USED IN COLUMN 16

AVERAGE MONTHLY: 44.4   TOTAL FOR MONTH:   1.26    1 = FOG OR MIST
DPTR FM NORMAL:   0.6   DPTR FM NORMAL:   -2.40    2 = FOG REDUCING VISIBILITY
HIGHEST:     61 ON 15   GRTST 24HR  0.39 ON 22-22      TO 1/4 MILE OR LESS
LOWEST:      30 ON  8                              3 = THUNDER
                        SNOW, ICE PELLETS, HAIL    4 = ICE PELLETS
                        TOTAL MONTH:   0.0 INCH    5 = HAIL
                        GRTST 24HR     0.0         6 = FREEZING RAIN OR DRIZZLE
                        GRTST DEPTH:   0           7 = DUSTSTORM OR SANDSTORM:
                                                       VSBY 1/2 MILE OR LESS
                                                   8 = SMOKE OR HAZE
[NO. OF DAYS WITH]       [WEATHER - DAYS WITH]     9 = BLOWING SNOW
                                                   X = TORNADO
MAX 32 OR BELOW:   0    0.01 INCH OR MORE:  15
MAX 90 OR ABOVE:   0    0.10 INCH OR MORE:   5
MIN 32 OR BELOW:   1    0.50 INCH OR MORE:   0
MIN  0 OR BELOW:   0    1.00 INCH OR MORE:   0

[HDD (BASE 65) ]
TOTAL THIS MO.   569    CLEAR  (SCALE 0-3)   0
DPTR FM NORMAL   -25    PTCLDY (SCALE 4-7)  11
TOTAL FM JUL 1  2897    CLOUDY (SCALE 8-10) 17
DPTR FM NORMAL  -161

[CDD (BASE 65) ]
TOTAL THIS MO.     0
DPTR FM NORMAL     0    [PRESSURE DATA]
TOTAL FM JAN 1     0    HIGHEST SLP 30.58 ON 14
DPTR FM NORMAL     0    LOWEST  SLP 29.72 ON 19

[REMARKS]
#FINAL-02-13#
```

Explanation of the Preliminary Monthly Climate Data (F6) Product

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WFO Monthly/Daily Climate Data

```
000
CXUS55 KPQR 011230
CF6PDX
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

                                          STATION:   PORTLAND OR
                                          MONTH:     MARCH
                                          YEAR:      2013
                                          LATITUDE:   45 35 N
                                          LONGITUDE: 122 36 W
```

TEMPERATURE IN F:							:PCPN:	SNOW:		WIND			:SUNSHINE:	SKY		:PK WND	
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
									12Z	AVG	MX	2MIN						
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR
1	61	51	56	10	9	0	0.00	0.0	0	4.4	12	200	M	M	10		15	130
2	57	42	50	4	15	0	T	M	0	5.4	21	330	M	M	10	1	28	320
3	51	35	43	-3	22	0	T	M	0	2.4	10	280	M	M	5		13	280
4	57	29	43	-3	22	0	0.00	0.0	0	7.7	18	100	M	M	4	1	23	100
5	46	41	44	-2	21	0	0.14	M	0	10.3	18	120	M	M	9	1	22	120
6	46	41	44	-2	21	0	0.36	M	0	6.9	17	200	M	M	10	1	21	200
7	56	36	46	-1	19	0	0.00	0.0	0	4.4	10	280	M	M	3		12	280
8	59	30	45	-2	20	0	0.00	0.0	0	4.3	12	300	M	M	2	1	17	60
9	59	31	45	-2	20	0	0.00	0.0	0	2.1	6	120	M	M	3	18	8	310
10	49	34	42	-5	23	0	T	M	0	2.4	7	80	M	M	9		9	60
11	53	44	49	2	16	0	T	0.0	0	3.3	12	110	M	M	10	18	13	110
12	62	46	54	6	11	0	0.00	0.0	0	6.2	14	170	M	M	9	1	17	230
13	63	46	55	7	10	0	0.00	0.0	0	4.4	10	110	M	M	9		13	130
14	62	48	55	7	10	0	T	M	0	7.6	18	220	M	M	10		23	220
15	63	47	55	7	10	0	T	M	0	5.1	15	200	M	M	8		16	190
16	52	40	46	-2	19	0	0.05	M	0	7.8	25	290	M	M	10	18	31	290
17	50	38	44	-4	21	0	T	M	0	6.3	14	290	M	M	9		18	270
18	54	37	46	-3	19	0	0.00	0.0	0	2.9	12	210	M	M	7		17	190
19	52	36	44	-5	21	0	0.50	M	0	9.7	23	110	M	M	10	1	29	110
20	55	40	48	-1	17	0	0.39	M	0	14.2	29	260	M	M	8	15	39	250
21	50	38	44	-5	21	0	T	M	0	8.1	21	260	M	M	8		25	250
22	46	35	41	-8	24	0	0.01	M	0	3.2	15	290	M	M	8		20	280
23	50	34	42	-7	23	0	0.00	0.0	0	2.4	9	120	M	M	8	1	12	280
24	55	36	46	-3	19	0	0.00	0.0	0	7.1	20	100	M	M	8		23	90
25	62	39	51	1	14	0	0.01	M	0	2.5	9	90	M	M	8		12	100
26	54	39	47	-3	18	0	T	M	0	2.3	9	110	M	M	9		12	110
27	65	42	54	4	11	0	T	M	0	3.9	14	260	M	M	7	1	15	130
28	67	46	57	7	8	0	T	M	0	4.4	10	310	M	M	8		14	320
29	69	48	59	9	6	0	T	M	0	3.7	10	280	M	M	5		13	280
30	77	43	60	10	5	0	0.00	0.0	0	3.2	10	300	M	M	1		13	300

```
31  77  46  62  12   3   0 0.00  0.0    0  3.8 15 260   M    M   5        18 260
==============================================================================
SM 1779 1238       498   0  1.46     0.0 162.4          M      230
==============================================================================
AV 57.4 39.9                                5.2 FASTST   M    M   7    MAX(MPH)
                                  MISC ---->  # 29 260               # 39  250
==============================================================================
NOTES:
# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

                                          STATION:  PORTLAND OR
                                          MONTH:    MARCH
                                          YEAR:     2013
                                          LATITUDE:   45 35 N
                                          LONGITUDE: 122 36 W

[TEMPERATURE DATA]       [PRECIPITATION DATA]       SYMBOLS USED IN COLUMN 16

AVERAGE MONTHLY: 48.7   TOTAL FOR MONTH:   1.46    1 = FOG OR MIST
DPTR FM NORMAL:   0.5   DPTR FM NORMAL:   -2.22    2 = FOG REDUCING VISIBILITY
HIGHEST:    77 ON 31,30 GRTST 24HR  0.50 ON 19-19      TO 1/4 MILE OR LESS
LOWEST:     29 ON  4                               3 = THUNDER
                        SNOW, ICE PELLETS, HAIL    4 = ICE PELLETS
                        TOTAL MONTH:   0.0 INCH    5 = HAIL
                        GRTST 24HR     0.0         6 = FREEZING RAIN OR DRIZZLE
                        GRTST DEPTH:   0           7 = DUSTSTORM OR SANDSTORM:
                                                       VSBY 1/2 MILE OR LESS
                                                   8 = SMOKE OR HAZE
[NO. OF DAYS WITH]       [WEATHER - DAYS WITH]     9 = BLOWING SNOW
                                                   X = TORNADO
MAX 32 OR BELOW:   0    0.01 INCH OR MORE:   7
MAX 90 OR ABOVE:   0    0.10 INCH OR MORE:   4
MIN 32 OR BELOW:   3    0.50 INCH OR MORE:   1
MIN  0 OR BELOW:   0    1.00 INCH OR MORE:   0

[HDD (BASE 65) ]
TOTAL THIS MO.   498    CLEAR  (SCALE 0-3)   3
DPTR FM NORMAL   -24    PTCLDY (SCALE 4-7)  12
TOTAL FM JUL 1  3395    CLOUDY (SCALE 8-10) 16
DPTR FM NORMAL  -185

[CDD (BASE 65) ]
TOTAL THIS MO.     0
DPTR FM NORMAL     0    [PRESSURE DATA]
TOTAL FM JAN 1     0    HIGHEST SLP 30.51 ON 10
DPTR FM NORMAL     0    LOWEST  SLP 29.53 ON 20

[REMARKS]
#FINAL-03-13#
```

APPENDIX D

Wetland Determination Data Forms

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WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Villebois North - Zion Property City/County: Wilsonville/Clackamas Sampling Date: 3/28/2013

Applicant/Owner: Polygon Northwest Company State: OR Sampling Point: 1

Investigator(s): Stacy Benjamin, Greg Swenson Section, Township, Range: Sec. 15, T3S, R1W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): <3

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: (1B) Aloha silt loam, 3-6% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes X	No	

Precipitation prior to fieldwork: 0.95 inches two weeks prior in Portland

Remarks: NA means Not Applicable (used on plowed and planted agricultural crop sites in reference to the vegetation).

VEGETATION

Tree Stratum (Plot size: 30' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: 10' r)			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. *Agrostis capillaris*	65%	Yes	FAC
2. *Holcus lanatus*	10%	No	FAC
3. *Poa species*	10%	No	FAC ?
4. *Cirsium vulgare*	5%	No	FACU
5. *Rumex occidentalis*	5%	No	FACW
6. *Geranium species*	5%	No	FAC to NOL
7. *Cardamine oligosperma*	1%	No	FAC
8.			
9.			
10.			
11.			
	101% = Total Cover		
Woody Vine Stratum (Plot size: 10' r)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 0	x 1 =	0
FACW species 5	x 2 =	10
FAC species 86	x 3 =	258
FACU species 5	x 4 =	20
UPL species 0	x 5 =	0
Column Totals: 96 (A)		288 (B)
Prevalence Index = B/A =		3.00

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No

Remarks:

Entered by: SNB QC by: CMW

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/3	100	none				sicl	
9-15	10YR 3/3	98	10YR 4/4	2	C	M	cl	
15-21	10YR 4/2	90	7.5YR 3/3	10	C	M	cl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks: s = sand; si = silt; c = clay; l = loam or loamy; co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___		
Water Table Present?	Yes X	No ___	Depth (inches): 11	**Wetland Hydrology Present?**	
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 8	Yes X	No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Entered by: SNB QC by: CMW

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Villebois North - Zion Property City/County: Wilsonville/Clackamas Sampling Date: 3/28/2013

Applicant/Owner: Polygon Northwest Company State: OR Sampling Point: 2

Investigator(s): Stacy Benjamin, Greg Swenson Section, Township, Range: Sec. 15, T3S, R1W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): <3

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: (1B) Aloha silt loam, 3-6% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	Is the Sampled Area within a Wetland? Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Precipitation prior to fieldwork: 0.95 inches two weeks prior in Portland

Remarks: NA means Not Applicable (used on plowed and planted agricultural crop sites in reference to the vegetation).

VEGETATION

Tree Stratum (Plot size: 30' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: 10' r)			
1. *Salix scouleriana*	2%	Yes	FAC
2.			
3.			
4.			
5.			
	2% = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. *Agrostis capillaris*	65%	Yes	FAC
2. *Rumex occidentalis*	20%	Yes	FACW
3. *Poa species*	10%	No	FAC ?
4. *Holcus lanatus*	5%	No	FAC
5. *Epilobium ciliatum*	1%	No	FACW
6. *Juncus effusus*	1%	No	FACW
7.			
8.			
9.			
10.			
11.			
	102% = Total Cover		
Woody Vine Stratum (Plot size: 10' r)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 0	x 1 =	0
FACW species 22	x 2 =	44
FAC species 82	x 3 =	246
FACU species 0	x 4 =	0
UPL species 0	x 5 =	0
Column Totals: 104 (A)		290 (B)
Prevalence Index = B/A =		2.79

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No

Remarks:

Entered by: SNB QC by: CMW

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100	none				sicl	
8-13	10YR 3/2	95	7.5YR 3/4	5	C	M	sicl	
13-20	10YR 3/2	90	7.5YR 3/4	10	C	M	cl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks: s = sand; si = silt; c = clay; l = loam or loamy; co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___	
Water Table Present?	Yes X	No ___	Depth (inches): surface	**Wetland Hydrology Present?**
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): surface	Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Entered by: SNB QC by: CMW

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Villebois North - Zion Property City/County: Wilsonville/Clackamas Sampling Date: 3/28/2013

Applicant/Owner: Polygon Northwest Company State: OR Sampling Point: 3

Investigator(s): Stacy Benjamin, Greg Swenson Section, Township, Range: Sec. 15, T3S, R1W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): <3

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: (1B) Aloha silt loam, 3-6% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	Is the Sampled Area within a Wetland? Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Precipitation prior to fieldwork: 0.95 inches two weeks prior in Portland

Remarks: NA means Not Applicable (used on plowed and planted agricultural crop sites in reference to the vegetation).

VEGETATION

Tree Stratum (Plot size: 30' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 10' r)			
1.			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot size: 5' r)			
1. *Agrostis capillaris*	60%	Yes	FAC
2. *Holcus lanatus*	15%	No	FAC
3. *Poa species*	10%	No	FAC ?
4. *Rumex occidentalis*	5%	No	FACW
5. *Hypochaeris radicata*	5%	No	FACU
6. *Cirsium arvense*	5%	No	FAC
7. *Vicia species*	2%	No	FAC to UPL
8.			
9.			
10.			
11.			
	102%	= Total Cover	

Woody Vine Stratum (Plot size: 10' r)			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 0	x 1 =	0
FACW species 5	x 2 =	10
FAC species 90	x 3 =	270
FACU species 5	x 4 =	20
UPL species 0	x 5 =	0
Column Totals: 100 (A)		300 (B)
Prevalence Index = B/A =		3.00

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- 5 - Wetland Non-Vascular Plants[1]
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No

Remarks:

Entered by: SNB QC by: CMW

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	98	7.5YR 3/4	2	C	M	sicl	
10-12	10YR 3/2	80	7.5YR 4/4	15	C	M	sicl	
			10YR 4/1	5	D	M		
12-20+	2.5Y 4/2	80	7.5YR 4/4	20	C	M	cl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks: s = sand; si = silt; c = clay; l = loam or loamy; co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___	
Water Table Present?	Yes X	No ___	Depth (inches): 13	
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 11	

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Entered by: SNB QC by: CMW

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Villebois North - Zion Property City/County: Wilsonville/Clackamas Sampling Date: 3/28/2013

Applicant/Owner: Polygon Northwest Company State: OR Sampling Point: 4

Investigator(s): Stacy Benjamin, Greg Swenson Section, Township, Range: Sec. 15, T3S, R1W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): <3

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: (1B) Aloha silt loam, 3-6% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Precipitation prior to fieldwork: 0.95 inches two weeks prior in Portland

Remarks: NA means Not Applicable (used on plowed and planted agricultural crop sites in reference to the vegetation).

VEGETATION

Tree Stratum (Plot size: 30' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10' r)			
1. *Rubus armeniacus*	5%	Yes	FACU
2.			
3.			
4.			
5.			
	5%	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. *Agrostis capillaris*	67%	Yes	FAC
2. *Poa species*	10%	No	FAC ?
3. *Holcus lanatus*	10%	No	FAC
4. *Cirsium arvense*	10%	No	FAC
5. *Rumex occidentalis*	2%	No	FACW
6. *Galium aparine*	1%	No	FACU
7.			
8.			
9.			
10.			
11.			
	100%	= Total Cover	
Woody Vine Stratum (Plot size: 10' r)			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 0	x 1 =	0
FACW species 2	x 2 =	4
FAC species 97	x 3 =	291
FACU species 6	x 4 =	24
UPL species 0	x 5 =	0
Column Totals: 105 (A)		319 (B)

Prevalence Index = B/A = 3.04

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- 5 - Wetland Non-Vascular Plants[1]
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Entered by: SNB QC by: CMW

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100	none				sicl	
12-18	10YR 3/2	99	7.5YR 4/3	1	C	M	sicl	
18-21	10YR 3/2	80	7.5YR 4/6	10	C	M	cl	
			10YR 4/2	10	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks: s = sand; si = silt; c = clay; l = loam or loamy; co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): >21
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): >21

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Entered by: SNB QC by: CMW

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Villebois North - Zion Property City/County: Wilsonville/Clackamas Sampling Date: 3/28/2013

Applicant/Owner: Polygon Northwest Company State: OR Sampling Point: 5

Investigator(s): Stacy Benjamin, Greg Swenson Section, Township, Range: Sec. 15, T3S, R1W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): <3

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: (1B) Aloha silt loam, 3-6% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	Is the Sampled Area within a Wetland? Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Precipitation prior to fieldwork: 0.95 inches two weeks prior in Portland

Remarks: NA means Not Applicable (used on plowed and planted agricultural crop sites in reference to the vegetation).

VEGETATION

Tree Stratum (Plot size: 30' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: 10' r)			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. *Agrostis capillaris*	60%	Yes	FAC
2. *Rumex occidentalis*	20%	Yes	FACW
3. *Holcus lanatus*	10%	No	FAC
4. *Poa species*	10%	No	FAC ?
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: 10' r)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 0	x 1 =	0
FACW species 20	x 2 =	40
FAC species 80	x 3 =	240
FACU species 0	x 4 =	0
UPL species 0	x 5 =	0
Column Totals: 100 (A)		280 (B)
Prevalence Index = B/A =		2.80

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No

Remarks:

Entered by: SNB QC by: CMW

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	98	7.5YR 3/3	2	C	M	sicl	
9-20	10YR 4/2	85	7.5YR 4/4	15	C	M	sic	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks: s = sand; si = silt; c = clay; l = loam or loamy; co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___	
Water Table Present?	Yes X	No ___	Depth (inches): surface	**Wetland Hydrology Present?**
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): surface	Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Entered by: SNB QC by: CMW

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Villebois North - Zion Property City/County: Wilsonville/Clackamas Sampling Date: 3/28/2013

Applicant/Owner: Polygon Northwest Company State: OR Sampling Point: 6

Investigator(s): Stacy Benjamin, Greg Swenson Section, Township, Range: Sec. 15, T3S, R1W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): <3

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: (1B) Aloha silt loam, 3-6% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes X	No	

Precipitation prior to fieldwork: 0.95 inches two weeks prior in Portland

Remarks: NA means Not Applicable (used on plowed and planted agricultural crop sites in reference to the vegetation).

VEGETATION

Tree Stratum (Plot size: 30' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot size: 10' r)			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. *Agrostis capillaris*	60%	Yes	FAC
2. *Cirsium arvense*	20%	Yes	FAC
3. *Poa species*	10%	No	FAC ?
4. *Rumex occidentalis*	10%	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: 10' r)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 0	x 1 =	0
FACW species 10	x 2 =	20
FAC species 90	x 3 =	270
FACU species 0	x 4 =	0
UPL species 0	x 5 =	0
Column Totals: 100 (A)		290 (B)
Prevalence Index = B/A =		2.90

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No

Remarks:

Entered by: SNB QC by: CMW

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 3/2	99	10YR 3/3	1	C	M	sicl	
11-16	10YR 3/2	98	10YR 3/3	2	C	M	sicl	
16-20	10YR 3/2	95	10YR 3/4	5	C	M	cl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks: s = sand; si = silt; c = clay; l = loam or loamy; co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___	
Water Table Present?	Yes X	No ___	Depth (inches): surface	**Wetland Hydrology Present?**
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): surface	Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Entered by: SNB QC by: CMW

APPENDIX E

Vegetation Table

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Villebois (Zion Property) Vegetation Table March 28, 2013			
Common Name	**Scientific Name**	**Wetland Indicator Status**	**Native / Introduced and Invasive / Noxious**
WETLAND VEGETATION			
Colonial Bent	*Agrostis capillaris*	FAC	introduced
Little Western Bittercress	*Cardamine oligosperma*	FAC	native
Slough Sedge	*Carex obnupta*	OBL	native
Canadian Thistle	*Cirsium arvense*	FAC	noxious
Fringed Willowherb	*Epilobium ciliatum*	FACW	native
Oregon Ash	*Fraxinus latifolia*	FACW	native
Sticky-Willy	*Galium aparine*	FACU	native
Common Velvet Grass	*Holcus lanatus*	FAC	introduced
Hairy Cat's-Ear	*Hypochaeris radicata*	FACU	introduced
Lamp Rush	*Juncus effusus*	FACW	native
bluegrass	*Poa species*	FAC ?	-
rose	*Rosa species*	FACW to NOL	-
willow	*Salix species*	OBL to FAC	-
Douglas' Meadowsweet	*Spiraea douglasii*	FACW	native
vetch	*Vicia species*	FAC to UPL	-
UPLAND VEGETATION			
Colonial Bent	*Agrostis capillaris*	FAC	introduced
Little Western Bittercress	*Cardamine oligosperma*	FAC	native
Canadian Thistle	*Cirsium arvense*	FAC	noxious
Bull Thistle	*Cirsium vulgare*	FACU	noxious
Sticky-Willy	*Galium aparine*	FACU	native
crane's-bill	*Geranium species*	FAC to NOL	-
English ivy	*Hedera helix*	NOL	noxious
Common Velvet Grass	*Holcus lanatus*	FAC	introduced
Hairy Cat's-Ear	*Hypochaeris radicata*	FACU	introduced
bluegrass	*Poa species*	FAC ?	-
Pineland Sword Fern	*Polystichum munitum*	FACU	native
Oregon White Oak	*Quercus garryana*	FACU	native
Himalayan Blackberry	*Rubus armeniacus*	FACU	noxious
Western Dock	*Rumex occidentalis*	FACW	native

Wetland Indicator Status (WIS) and taxonomy for the WMVC Region per the National Wetland Plant List:
(common names are capitalized) http://rsgisias.crrel.usace.army.mil/NWPL/
Accessed 4/30/2012 and 11/26/2012

WIS for non-wetland plants and taxonomy from Reed 1988 and Reed et al. 1993, and the USDA PLANTS database:
(common names are not capitalized) http://plants.usda.gov/ Accessed multiple dates

Native per Hitchcock & Cronquist 1973 and http://plants.usda.gov/
Noxious per ODA 2012: http://www.oregon.gov/ODA/PLANT/WEEDS/lists.shtml

WETLAND INDICATOR STATUS - Western Mountains, Valleys, and Coast Region	
OBL	**Obligate Wetland** - Plants that occur almost always under natural conditions in wetlands (estimated probability >99%), but which may also rarely occur in non-wetlands. Examples: broadleaf cattail, skunk cabbage
FACW	**Facultative Wetland** - Plants that usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands. Examples: Oregon ash, red-osier dogwood
FAC	**Facultative** - Plants that are equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%). Examples: red alder, salmonberry
FACU	**Facultative Upland** - Plants that usually occur in non-wetlands (estimated probability 67-99%), but occasionally found in wetlands. Examples: bigleaf maple, Himalayan blackberry
UPL	**Upland** - Plants that occur in wetlands in another region, but occur almost always under natural conditions in non-wetlands in this region.
NOL	**Not Listed** - Plants that are not on the list and assumed to be UPL.

APPENDIX F

Ground-level Site Photographs

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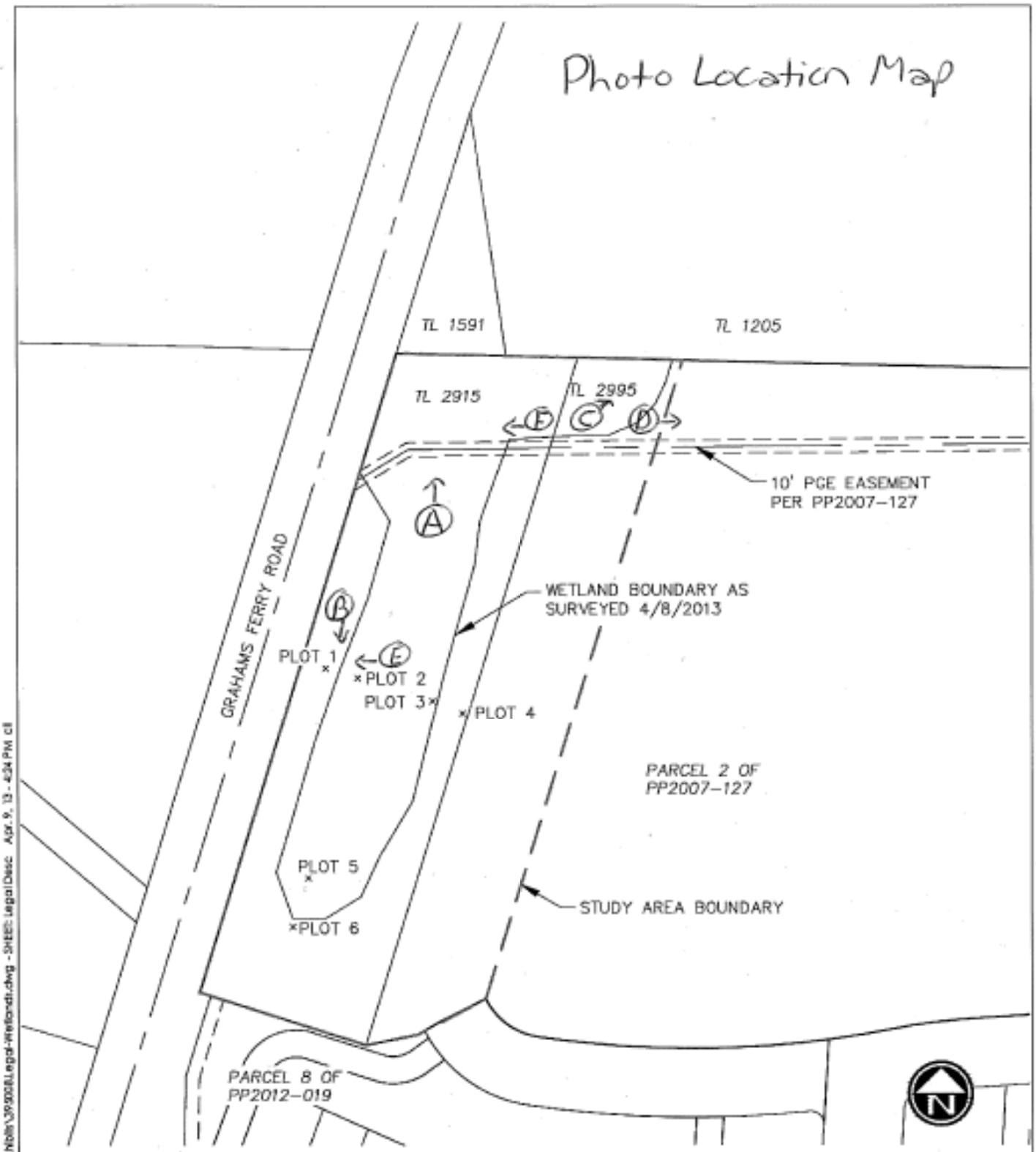

EXHIBIT "A"
WETLAND BOUNDARY

DRAWN BY: CLL DATE: 4/9/2013
REVIEWED BY: TCJ DATE: 4/9/2013
PROJECT NO.: 395-008
SCALE: 1"=100'
PAGE 1 OF 1

Pacific Community Design
[T] 503-941-9484
[F] 503-941-9485

Photo A. View north of northern portion of wetland.

Photo B. View south of southern portion of wetland and upland Plot 1 (photo right).

Photo C. View northeast of forested wetland in the northern portion of the site.

Photo D. View east of upland forest at northeast edge of study area boundary.

Photo E. View west of wetland Plot 2 (foreground) and upland Plot 1 (background).

Photo F. View west of wetland boundary in northern portion of the site (flagging placed on Oregon ash shrubs).

APPENDIX G

Literature Cited

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Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-79/31. Washington, D.C.: U.S. Fish and Wildlife Service. Available at: http://www.npwrc.usgs.gov/resource/wetlands/classwet/index.htm.

Department of State Lands (DSL). 2013. Administrative Rules for Wetland Delineation Report Requirements.

———. 2013. Administrative Rules for Jurisdictional Determinations for the Purpose of Regulating Fill and Removal within Waters of this State. Adopted January 1, 2010.

———. 2013. Local Wetland Inventories. Available at: http://www.oregon.gov/DSL/WETLAND/lwi.shtml. Accessed April 10, 2013.

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. Online edition. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. Available at: http://el.erdc.usace.army.mil/wetlands/pdfs/wlman87.pdf.

Google Earth. 2013. Aerial photographs near intersection of Boeckman-Tooze Road and SW Grahams Ferry Road. Available at: http://earth.google.com. Accessed March 2013.

Lichvar, R.W. and J.T. Kartesz. 2013. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. Accessed April 2013.

National Weather Service (NWS). 2013. Portland, OR. Available at: http://www.weather.gov/climate/index.php?wfo=pqr. Accessed March 2013.

Natural Resources Conservation Service (NRCS). 2013a. Hydric soils in Clackamas County area, Oregon. Available at: http://www.or.nrcs.usda.gov/technical/soil/hydric.html. Accessed March 2013.

———. 2013b. Official soil series descriptions. Available at: http://soils.usda.gov/technical/classification/osd/index.html Accessed March 2013.

———. 2013c. Online soil survey. Available at: http://websoilsurvey.nrcs.usda.gov/app/. Accessed March 2013.

Oregon Map. 2013. Tax lot map 31W15. Available at: www.ormap.org. Accessed March 2013.

Schoeneberger, P.J., D.A. Wysocki, E.C. Benham, and W.D. Broderson, eds. 2002. *Field Book for Describing and Sampling Soils, Version 2.0*. Lincoln, Nebraska: U.S. Department of Agriculture Natural Resources Conservation Service, National Soil Survey Center.

U.S. Army Corps of Engineers. Aerial photographs. USACE Portland District Office, Portland, Oregon.

———. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*, eds. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Fish and Wildlife Service (USFWS). No date. Sherwood, Oregon. 7.5-minute National Wetlands Inventory map. Color infrared aerial photography flown 8/81 at 1:58,000. Washington, D.C.: U.S. Fish and Wildlife Service.

U.S. Geological Survey (USGS). 1961, photorevised 1985. Sherwood, Oregon. 7.5-minute topographic quadrangle. 1:24,000. Reston, Virginia: U.S. Geological Survey.

Vasilas, L.M., G.W. Hurt, and C.V. Noble, eds. 2010. *Field Indicators of Hydric Soils in the United States. A Guide for Identifying and Delineating Hydric Soils, Version 7.0, 2010.* U.S. Department of Agriculture Natural Resources Conservation Service, Washington, D.C. Available at: ftp://ftp-fc.sc.egov.usda.gov/NSSC/Hydric_Soils/FieldIndicators_v7.pdf. Accessed March 2013.

X-Rite. 2000. Year 2000 revised washable edition, Munsell soil color charts. Grand Rapids, Michigan: X-Rite.

APPENDIX C

West Hills Development SRIR Report (2007)

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APPENDIX D

Site Photgraphs

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Photo 1. View north of non-locally significant wetland (left of pink flagging) and upland wildlife habitat URA#41U1.

Photo 2. View south showing Himalayan blackberry along the forest perimeter.

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Photo 3. View east of western edge of forest in an area heavily invaded by English ivy.

Photo 4. View east of western edge of forest with predominantly native understory.

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APPENDIX E

Natural Resource Inventory Map and Summary Sheet

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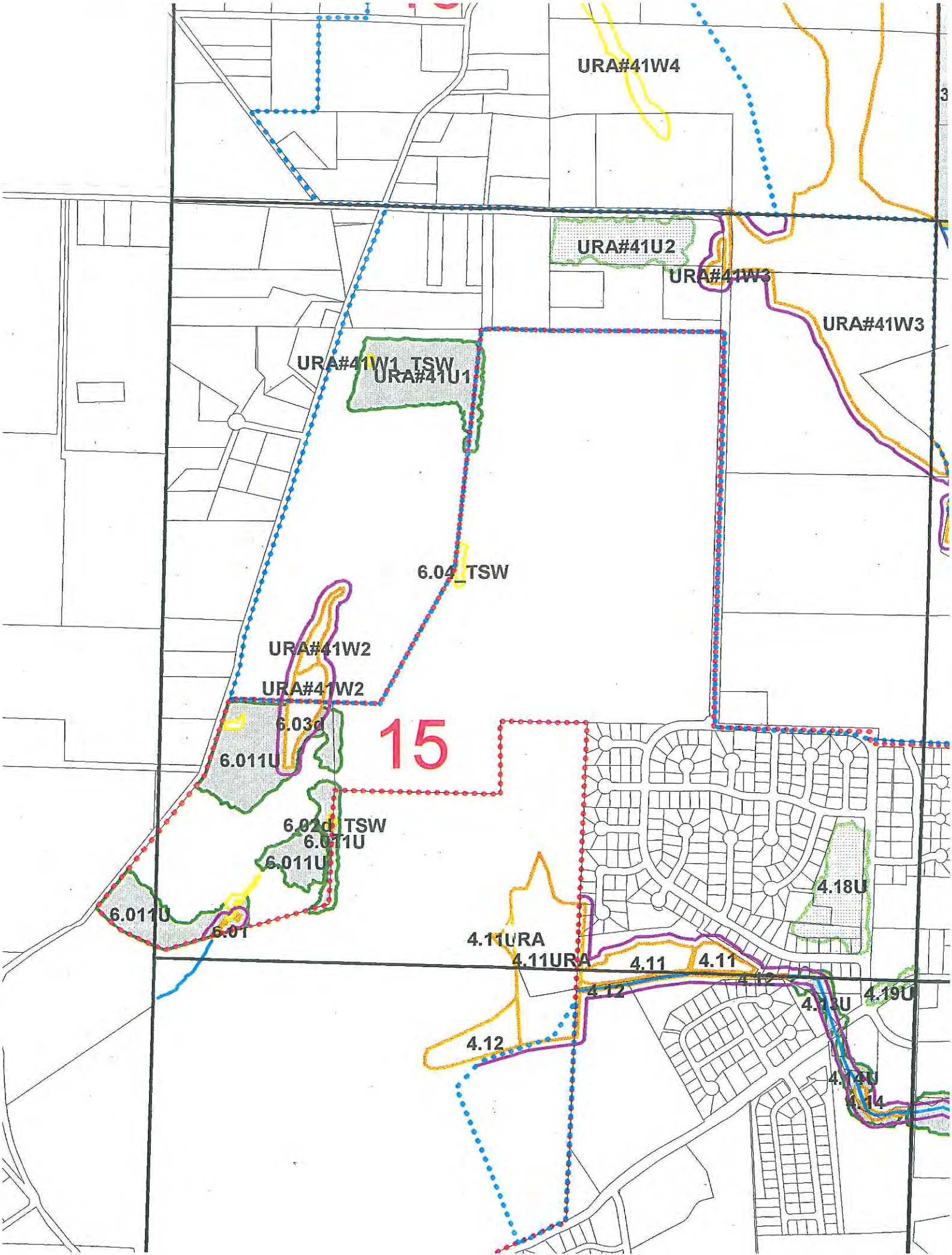
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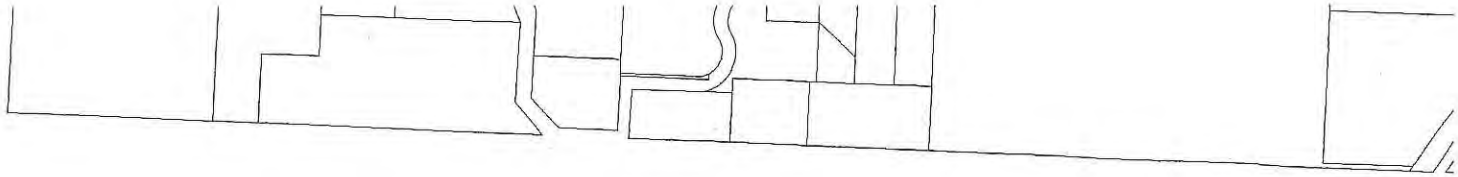

Legend

- 13 Sections
- Property Line
- Urban Reserves
- City Limits

Streams

- INTERMITTENT
- PERENNIAL
- Significant Wetlands
- Non-Significant Wetlands
- 50' Natural Resource Area Setback (75' for the Willamette)

Wildlife Habitat Resource Area

- Non-Significant
- Significant

N

800 0 800 Feet

1:9600

CITY OF WILSONVILLE NATURAL RESOURCE INVENTORY UPDATE
UPLAND SUMMARY SHEET

SITE: Dammasch Property URA - Forest **Site ID Number:** URA#41U1
Location: Northwest portion of Dammasch property immediately east of Grahams Ferry Road.
Acreage: 9.99 **'91 B&W Aerial #:** - **Field Date(s):** 9/20/99
Tax Lots / County: 15-2900,2990 / Clackamas County
Adjacent Land Use: Agricultural and mowed fields, some residential to north.
T3S R1W Quarter Section: 15NW **Zoning:** PF, EFU
Determination: EnviroScience, Inc. 1997; DEA, Inc. 1997; Kleinfelder, Inc. 1997

General Description: Mixed deciduous / coniferous (Oregon white oak / Douglas fir) upland forest with intact understory. Surrounded by agricultural land uses. Provides habitat for deer and potentially for cougar (noted to south). Note that western bluebirds were noted on the mowed - ornamental trees portion of the property. See EnviroScience Report for further information (vegetation, wildlife, and habitat survey; (vegetation list below is not complete).
Mapped Soils; On-site Soils: 1A,B Aloha silt loam, 0-3% and 3-6% slopes; not sampled.
Dominant Vegetation: (* = major dominant)

Trees	Shrubs	Herbs/Emergents
*Douglas fir	*beaked hazelnut	sword fern
*Oregon white oak	thimbleberry	English ivy
	snowberry	bracken fern
	clustered wild rose	Pacific blackberry
	ornamental hawthorn	
	cascara	
	cherry	
	poison oak	
	salal	
	sweetbriar rose	

Upland Habitat Function	Rating	Comments
Wildlife Habitat	High	Intact, diverse structure, large size
Water Quality Protection	Low	No adjacent water
Ecological Integrity	Medium	Some ivy present
Connectivity	Low	Surrounded by agricultural lands
Uniqueness	Low	-

Education Potential, Recreation, and Aesthetic Quality Comments: Not appropriate for education and recreation due to private ownership (at this time by the Department of Corrections; this could change in the future). Forest provides aesthetic viewshed from Grahams Ferry Road.

Recommendations: Control spread of English ivy, remove if possible.

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APPENDIX F

Resumes

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SWCA ENVIRONMENTAL CONSULTANTS

STACY BENJAMIN, M.S.
Senior Ecologist

Education / Training

- Oregon Rapid Wetland Assessment Protocol Training; 2010
- National Environmental Policy Act Training; 2009
- Project Management Training; 2008
- Western Mountains, Valleys & Coast Delineation Manual Regional Supplement Training; 2008
- Wetland Delineation Training, 1998
- M.S., Ecology and Evolution, University of Oregon, 1993
- B.S., Biology, University of Oregon, Robert D. Clark Honors College, 1991

Expertise

- Wetland & waters delineation
- Wetland functional assessment
- Wetland permitting & mitigation design
- Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and Endangered Species Act
- Oregon EFSC & Washington EFSEC documentation
- NEPA documentation
- Biological assessment
- Environmental assessment

Selected Projects

- Wetland Permitting for the Oregon Department of Corrections and Oregon State Hospital Replacement Project site; Junction City, Oregon
- Wetland and Waters Delineation, Habitat Mapping, and EIS Support for the Lower Snake River Wind Energy Project; Garfield and Columbia Counties, Washington
- Conditional Use Permitting for the Poplars Ranch Solar Project; Lake County, Oregon
- Raptor and Eagle Nest Surveys for the Beckwourth Pass Wind Farm; Lassen and Plumas Counties, California
- Environmental Assessment for Mormon Basin Placer Gold Mine; BLM Vale District; Malheur County, Oregon

Stacy Benjamin joined SWCA in 1996, and she is the Wetlands and Terrestrial Biology Team Lead for the Portland office. Her primary responsibilities include wetland determinations and delineations, habitat and impacts assessments, preparing permit applications and mitigation plans, and facilitation of agency review and receipt of regulatory approvals. Ms. Benjamin is also responsible for coordination of staff assignments, provides training to natural resource staff and provides QA/QC review of work products. Stacy has provided wetland and terrestrial biology services for a variety of private and public projects, ranging from residential and industrial development projects to energy projects and linear utility and infrastructure projects. Ms. Benjamin possesses 15 years of experience coordinating regulatory approvals for projects located in close proximity to wetlands and other natural resources. She works with the client and multi-disciplinary project teams during the project design and alternatives analysis phase of the project to avoid and minimize impacts to natural re-sources. She also advises clients regarding programmatic permitting requirements and mitigation measures to facilitate permitting with the state and federal regulatory agencies.

Ms. Benjamin's recent project experience includes conducting the wetland delineation of the 256 acre Oregon Department of Corrections and Oregon State Hospital Replacement Project site in Junction City as well as permitting 94 acres of wetland fill and designing 70 acres of onsite wetland mitigation for the project. She has also managed wetlands and waters delineations and habitat surveys for renewable energy projects in Oregon, Washington, and California. Stacy has prepared natural resource documentation to meet the permitting requirements of the Oregon Energy Facility Siting Council, Washington Energy Facility Site Evaluation Council, and the Washington State Environmental Policy Act. She also prepares National Environmental Policy Act (NEPA) documents including Biological Assessments and Environmental Assessments. Stacy has prepared NEPA documents to meet the requirements of many federal agencies including the U.S. Fish and Wildlife Service, U.S. Department of Agriculture Rural Development, the Bureau of Land Management, the Federal Highway Administration and Bureau of Indian Affairs.

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SWCA
ENVIRONMENTAL CONSULTANTS

C. MIRTH WALKER, B.A., PWS, CWD
Senior Wetland Scientist

Education/Training

- B.A., Biology and Psychology, Reed College; Portland, Oregon, 1979
- ORWAP, Wetland Training Institute; Portland, Oregon, 2010
- Wetland Delineation Manual Regional Supplements Workshop, PNW Chapter, SWS; Portland, Oregon, 2008
- Classifying Wetlands and Assessing Wetland Functions and Values using Hydrogeomorphic Principles; Portland State University, 2002
- Wetland Soils and Hydrology, 1991, and Basic Wetland Delineation, 1990, Wetland Training Institute; Seattle

Registration/Certification

- Professional Wetland Scientist (PWS#415), SWS PCP, 1995
- Certified Wetland Delineator, USACE Seattle District Provisional Program, 1993

Expertise

- Project management
- Preliminary jurisdictional wetland and waters determination
- Wetland and stream delineation, assessment, mitigation design, permitting, and agency coordination
- Botany of the Pacific Northwest
- Hydric soils identification
- Aerial photograph interpretation
- Agricultural lands wetland delineation
- Quality assurance review

Relevant Projects

- Graham Oaks Nature Park and Arrowhead Creek Wetlands Delineation and Permitting; Wilsonville, Oregon
- Fernhill and Jackson Bottom Agricultural Wetlands Delineation; Forest Grove and Hillsboro, Oregon
- In-Lieu-Fee Wetland Mitigation Bank Site Hydric Soil Evaluation and Wetland Delineation; Gales Creek, Oregon
- Progress Quarry Wetland Delineation, Stream and Wetland Mitigation and Restoration Plan, Permitting, and Monitoring; Beaverton, Oregon

C. Mirth Walker joined SWCA in 1994 and has over 20 years' experience in the world of wetlands and waters. She is responsible for project management and staff mentoring; conducting wetland determinations and delineations; assessing vegetation communities, wetland functions, and wildlife habitat; preparing and coordinating wetland permits at the local, state, and federal level; designing wetland and stream mitigation plans including restoration, enhancement, and creation plans; evaluating potential wetland mitigation bank opportunities and credits; conducting local wetland and natural resource inventories; and providing quality control and quality assurance review. Ms. Walker has an extensive background in wetland ecology and is considered one of the premier wetland scientists in the Pacific Northwest consulting community.

Ms. Walker has an excellent reputation and a strong track record of working with clients and regulatory agency personnel to resolve wetland and natural resource identification issues, delineation disputes, and wetland permitting and mitigation issues. She provides scientifically accurate and efficient wetland and water determinations and delineations for a variety of clients. She brings excellent fatal-flaw analysis capabilities to the table to identify potential roadblocks to permits and project development early in the design process. She also provides aerial photograph interpretation, forensic wetland determination, and expert witness testimony for clients and local jurisdictions in Oregon and Washington. Ms. Walker has many years of experience assisting clients with problem solving and finding reasonable, productive, scientifically valid, and economical solutions to natural resource issues.

Ms. Walker managed and conducted local wetland inventories (LWIs) and natural resource assessments for the cities of Ashland, Lakeside, La Grande, and Wilsonville in Oregon, and she assisted with the LWIs for Hillsboro, Tualatin, Tigard, and Stayton, Oregon. She recently completed a five-city LWI project in the Willamette Valley, Oregon for the cities of Adair Village, Harrisburg, Scio, Monroe, and Mill City.

Ms. Walker is currently the secretary/newsletter editor for the Society of Wetland Scientists (SWS) Pacific Northwest Chapter, board member of the Northwest Ecological Research Institute, property committee member of The Wetlands Conservancy, and a member of the Association of State Wetland Managers and the Audubon Society of Portland.

SUPPORTING COMPLIANCE REPORT

TENTATIVE PLAT

PDP 2N

SECTION IIIA

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I. WILSONVILLE PLANNING & LAND DEVELOPMENT ORDINANCE

SECTION 4.125. VILLAGE (V) ZONE

(.02) PERMITTED USES

Examples of principle uses that are typically permitted:

A. Single Family Detached Dwellings

D. Row Houses

H. Non-commercial parks, plazas, playgrounds, recreational facilities, community buildings and grounds, tennis courts, and other similar recreational and community uses owned and operated either publicly or by an owners association.

Response: The proposed Tentative Plat will create lots for development of single family dwellings and tracts for parks and open space. All proposed uses within the subject area are permitted pursuant to this section.

(.05) DEVELOPMENT STANDARDS APPLYING TO ALL DEVELOPMENTS IN THE VILLAGE ZONE

All development in this zone shall be subject to the V Zone and the applicable provisions of the Wilsonville Planning and Land Development Ordinance. If there is a conflict, then the standards of this section shall apply. The following standards shall apply to all development in the V zone:

A. Block, Alley, Pedestrian and Bicycle Standards:

1. Maximums Block Perimeter: 1,800 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent a block perimeter from meeting this standard.

Response: These standards are addressed within the PDP Compliance Report (see Section IIA).

2. Maximum spacing between streets for local access: 530 feet, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent street extensions from meeting this standard.

Response: These standards are addressed within the PDP Compliance Report (see Section IIA).

3. If the maximum spacing for streets for local access exceeds 530 feet, intervening pedestrian and bicycle access shall be provided, with a maximum spacing of 330 feet from those local streets, unless the Development Review Board makes a finding that barriers such as existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions from meeting this standard.

Response: These standards are addressed within the PDP Compliance Report (see Section IIA).

B. Access: All lots with access to a public street, and an alley, shall take vehicular access from the alley to a garage or parking area, except as determined by the City Engineer.

Response: All of the lots within the proposed PDP that have frontage on a public street and an alley will take vehicular access from an alley to a garage or parking area.

Table V-1 Development Standards

Response: The *Tentative Plat* (see Section IIB in this Notebook) depicts proposed lot sizes and dimensions. All of the lots will be developed with single family dwelling units. All of the lots meet applicable requirements, as addressed below. No buildings are proposed with this application. Final compliance with these standards will be reviewed at building permit submittal.

Single-Family Dwellings

Minimum lot size: 2,250 square feet

Minimum lot width: 35 feet

Minimum lot depth: 50 feet

Response: All of the lots within the proposed tentative plat meet the applicable minimum lot size requirement and meet the applicable minimum lot width and depth specified for Small Cottage, Small, Medium or Standard lots in the applicable Pattern Book, with allowed variations for road curvatures.

(.07) GENERAL REGULATIONS – OFF-STREET PARKING, LOADING & BICYCLE PARKING

Table V-2: Off-Street Parking Requirements

Category	Min. Vehicle Spaces	Max. Vehicle Spaces	Bicycle Short Term	Bicycle Long Term
Single Family Detached Dwelling Units	1.0 / DU	NR	NR	NR
Row Houses	1.0 / DU	NR	NR	NR

Response: Each of the homes will provide a minimum of a one-car garage in compliance with this standard.

(.08) OPEN SPACE

Open space shall be provided as follows:

A. In all residential developments and in mixed-use developments where the majority of the developed square footage is to be in residential use, at least twenty-five percent (25%) of the area shall be open space, excluding street pavement and surface parking. In multi-phased developments, individual phases are not required to meet the 25% standard as long as an approved Specific Area Plan demonstrates that the overall development shall provide a minimum of 25% open space. Required front yard areas shall not be counted towards the required open space area. Required rear yard areas and other landscaped areas that are not within required front or side yards may be counted as part of the required open space.

B. Open space area required by this Section may, at the discretion of the Development Review Board, be protected by a conservation easement or dedicated to the City, either rights in fee or easement, without altering the density or other development standards of the proposed development. Provided that, if the dedication is for public park purposes, the size and amount of the proposed dedication shall meet the criteria of the City of Wilsonville standards. The square footage of any land, whether dedicated or not, which is used for open space shall be deemed a part of the development site for the purpose of computing density or allowable lot coverage. See SROZ provisions, Section 4.139.10.

C. The Development Review Board may specify the method of assuring the long-term protection and maintenance of open space and/or recreational areas. Where such protection or maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review and approve any pertinent bylaws, covenants, or agreements prior to recordation.

Response: The Parks *Master Plan* for Villebois states that there are 57.87 acres of parks and 101.46 acres of open space for a total of 159.33 acres within Villebois, approximately 33%. SAP North includes parks and open space areas consistent with *Master Plan*. PDP 1B N includes parks and open space areas consistent with the *Master Plan*, as described in more detail in the PDP compliance report (see Section IIA).

(.09) STREET & ACCESS IMPROVEMENT STANDARDS

A. Except as noted below, the provisions of Section 4.177 apply within the Village zone:

1. General Provisions:

a. All street alignment and access improvements shall conform to the Villebois Village Master Plan, or as refined in the Specific Area Plan, Preliminary Development Plan, or Final Development Plan and the following standards:

Response: The street alignments and access improvements within this PDP are generally consistent with those approved in the *Villebois Village Master Plan* and SAP North, as refined by the PDP application (see the PDP Supporting Compliance Report for further description of refinements to the street network – Section IIA of Notebook).

i. All street improvements shall conform to the Public Works Standards and shall provide for the continuation of streets through proposed developments to adjoining properties or subdivisions, according to the Master Plan.

Response: All street improvements within this Preliminary Development Plan will comply with the applicable Public Works Standards. The street system within this Preliminary Development Plan is designed to provide for the continuation of streets within Villebois and to adjoining properties or subdivisions according to the *Master Plan*. The street system is illustrated on the *Circulation Plan* located in Section IIB of this Notebook.

ii. All streets shall be developed with curbs, landscape strips, bikeways or pedestrian pathways, according to the Master Plan.

Response: All streets within this Preliminary Development Plan will be developed with curbs, landscape strips, sidewalks, and bikeways or pedestrian pathways as depicted on the *Circulation Plan* (Section IIB of this Notebook) and in accordance with the *Master Plan*.

2. Intersections of streets

a. Angles: Streets shall intersect one another at angles not less than 90 degrees, unless existing development or topography makes it impractical.

b. Intersections: If the intersection cannot be designed to form a right angle, then the right-of-way and paving within the acute angle shall have a minimum of thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than ninety (90) degrees shall require approval by the City Engineer after consultation with the Fire District.

Response: The plan sheets located in Section IIB of this Notebook demonstrate that all proposed streets will intersect at angles consistent with the above standards (see the *Tentative Plat)*.

c. Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections shall be separated by at least:

i. 1000 ft. for major arterials

ii. 600 ft. for minor arterials

iii. 100 ft. for major collector

iv. 50 ft. for minor collector

Response: The plan sheets located in Section IIB of this Notebook demonstrate that opposing intersections on public streets are offset, as appropriate, so that no danger to the traveling public is created (see the *Tentative Plat* in Section IIIB).

d. Curb Extensions:

i. Curb extensions at intersections shall be shown on the Specific Area Plans required in subsection 4.125(.18)(C) through (F), below, and shall:

ii. Not obstruct bicycle lanes on collector streets.

iii. Provide a minimum 20 foot wide clear distance between curb extensions all local residential street intersections shall have, shall meet minimum turning radius requirements of the Public Works Standards, and shall facilitate fire truck turning movements as required by the Fire District.

Response: Curb extensions are shown on the *Circulation Plan* (see Section IIB). Curb extensions will not obstruct bicycle lanes on collector streets (Barber Street & Costa Circle). The attached drawings illustrate that all street intersections will have a minimum 20 foot wide clear distance between curb extensions on all local residential street intersections.

3. Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate, grades in excess of 8%, but not more than 12%, may be permitted for short distances, as approved by the City Engineer, where topographic conditions or existing improvements warrant modification of these standards.

Response: The *Grading & Erosion Control Plan* located in Section IIB, demonstrates that proposed streets can comply with this standard.

4. Centerline Radius Street Curves:

The minimum centerline radius street curves shall be as follows:

a. Arterial streets: 600 feet, but may be reduced to 400 feet in commercial areas, as approved by City Engineer.

b. Collector streets: 600 feet, but may be reduced to conform with the Public Works Standards, as approved by the City Engineer.

c. Local streets: 75 feet

Response: The *Tentative Plat* (see Section IIIB) demonstrates that all streets will comply with the above standards.

5. Rights-of-way:

a. See (.09) (A), above.

Response: Proposed rights-of-way are shown on the plan sheets located in Section IIIB of this Notebook. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with recordation of a final plat in accordance with Section 4.177.

6. **Access drives.**
    a. **See (.09) (A), above.**
    b. **16 feet for two-way traffic.**

Response: Access drives (alleys) will be paved at least 16-feet within a 20-foot tract, as shown on the *Circulation Plan* in Section IIB of this Notebook. In accordance with Section 4.177, all access drives will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions

7. **Clear Vision Areas**
    a. **See (.09) (A), above.**

Response: Clear vision areas will be provided and maintained in compliance with the Section 4.177.

8. **Vertical clearance:**
    a. **See (.09) (A), above.**

Response: Vertical clearance will be provided and maintained in compliance with the Section 4.177.

9. **Interim Improvement Standard:**
    a. **See (.09) (A), above.**

Response: Subsequent construction plans will include interim improvements as needed to provide for adequate street access until the future vacation of 110th Avenue, construction of the roundabout at Villebois Drive and Costa Circle, and the corresponding street connections/extensions can be built with adjacent phases in PDP 3E.

(.18) VILLAGE ZONE DEVELOPMENT PERMIT PROCESS

G. Preliminary Development Plan Approval Process:

1. **An application for approval of a Preliminary Development Plan for a development in an approved SAP shall:**
    f) **Include a preliminary land division (concurrently) per Section 4.400, as applicable.**

Response: This application includes a request for preliminary land division approval. This request for approval of a Tentative Plat can be seen in Section III of this Notebook. This section includes a Supporting Compliance Report, the proposed Tentative Plat, draft CC&R's, a copy of the certification of liens & assessments form, and the subdivision name approval from the County Surveyor's Office.

SECTION 4.177. STREET IMPROVEMENT STANDARDS

Response: Proposed rights-of-way are shown on the plan sheets in Section IIIB. Rights-of-way will be dedicated and a waiver of remonstrance against the formation of a local improvement district will be recorded with the final plat.

The drawings located in Section IIB demonstrate that all proposed access drives (alleys) within the Preliminary Development Plan area will have a minimum improvement width of 16 feet and will provide two-way travel. All access drives (alleys) will be constructed with a hard surface capable of carrying a 23-ton load. Easements for fire access will be dedicated as required by the fire department. All access drives will be designed to provide a clear travel lane free from any obstructions.

Clear vision areas will be maintained in accordance with the standards of Subsection 4.177(.01)(I). Vertical clearance will be maintained over all streets and access drives in accordance with Subsection 4.177(.01)(J).

LAND DIVISIONS

SECTION 4.210. APPLICATION PROCEDURE

A. Preparation of Tentative Plat. The Planning Staff shall provide information regarding procedures and general information having a direct influence on the proposed development, such as elements of the Comprehensive Plan, existing and proposed streets, road and public utilities. The applicant shall cause to be prepared a tentative plat, together with improvement plans and other supplementary material as specified in this Section. The Tentative Plat shall be prepared by an Oregon licensed professional land surveyor or engineer. An affidavit of the services of each surveyor or engineer shall be furnished as part of the submittal.

Response: A Tentative Plat has been prepared by an Oregon licensed professional engineer as required. The Tentative Plat can be seen in Section IIIB of this Notebook. Improvement plans can be seen in Section IIB of this application Notebook. The Introductory Narrative located in Section IA includes a listing of the services provided by each design team member.

B. Tentative Plat Submission. The purpose of the Tentative Plat is to present a study of the proposed subdivision to the Planning Department and Development Review Board and to receive approval recommendations for revisions before preparation of a final Plat. The design and layout of this plan plat shall meet the guidelines and requirements set forth in this Code. The Tentative Plat shall be submitted to the Planning Department with the following information:

1. **Site development application form completed and signed by the owner of the land or a letter of authorization signed by the owner. A preliminary title report or other proof of ownership is to be included with the application form.**
2. **Application fees as established by resolution of the City Council.**

Response: Copies of the application form and the application fee are included in Sections IB and IC, respectively, of this Notebook.

3. **Ten (10) copies and one (1) sepia or suitable reproducible tracing of the Tentative Plat shall be submitted with the application. Paper size shall be eighteen inch (18") by twenty-four inch (24"), or such other size as may be specified by the City Engineer.**

Response: The balance of the 10 copies of the Tentative Plat (see Section IIIB) will be provided when the application is determined complete; three (3) of which have been provided with initial submittal.

4. **Name of the subdivision. No subdivision shall duplicate or resemble the name of any other subdivision in Clackamas or Washington County. Names may be checked through the county offices.**

Response: The name of the proposed subdivision for the first phase is "Tonquin Woods at Villebois No. 4" (see Section IIIE for documentation of subdivision name approval from the Clackamas County Surveyor's Office).

5. **Names, address, and telephone numbers of the owners and applicants, and engineer or surveyor.**

Response: The names, addresses and telephone numbers of the owner, applicant, engineer and surveyor are listed in the Introductory Narrative, which can be seen in Section IA of this Notebook, and are listed on the *Cover Sheet* (see Section IIB of Notebook).

6. **Date, north point and scale drawing.**
7. **Location of the subject property by Section, Township, and Range.**
8. **Legal road access to subject property shall be indicated as City, County, or other public roads.**
9. **Vicinity map showing the relationship to the nearest major highway or street.**
10. **Lots: Dimensions of all lots, minimum lot size, average lot size, and proposed lot and block numbers.**
11. **Gross acreage in proposed plat.**

Response: The above information is provided on the plan sheets located in Section IIB of this Notebook. The location of the subject property by Section, Township and Range and the gross acreage of the proposed plat are also listed in the Introductory Narrative, located in Section IA of this Notebook, and are listed on the *Cover Sheet* (see Section IIB of Notebook).

12. **Proposed uses of the property, including sits, if any, for multi-family dwellings, shopping centers, churches, industries, parks, and playgrounds or other public or semi-public uses.**

Response: The proposed plat does not include any multi-family dwelling sites, shopping centers, churches, or industries. Park and open space areas are indicated on the plan sheets located in Section IIB. Proposed uses within the subject park and open space areas are detailed on the FDP Plans included in Section VIB of this Notebook.

13. **Improvements: Statement of the improvements to be made or installed including streets, sidewalks, lighting, tree planting, and times such improvements are to be made or completed.**

Response: Proposed improvements are shown on the plan sheets in Section IIB. The *Circulation Plan* shows proposed streets and sidewalks. The *Street Tree/Lighting Plan* shows proposed street trees and proposed street lights.

14. **Trees. Locations, types, sizes, and general conditions of all existing trees, as required in Section 4.600.**

Response: The requirements of Section 4.600 can be seen in Section V of this Notebook. The *Tree Preservation Plan* (see Section IIB) shows existing tree locations, types, sizes and general conditions, pursuant to the requirements of Section 4.600.

15. **Utilities such as electrical, gas, telephone, on and abutting the tract.**

Response: The *Composite Utility Plan* shows existing and proposed utilities. These sheets can be seen in Section IIB of this Notebook.

16. **Easements: Approximate width, location, and purpose of all existing and proposed easements on, and known easements abutting the tract.**
17. **Deed Restrictions: Outline of proposed deed restrictions, if any.**
18. **Written Statement: Information which is not practical to be shown on the maps may be shown in separate statements accompanying the Tentative Plat.**
19. **If the subdivision is to be a "Planned Development," a copy of the proposed Home Owners Association By-Laws must be submitted at the time of submission of the application. The Tentative Plat shall be considered as the Stage I Preliminary Plan. The proposed By-Laws must address the maintenance of any parks, common areas, or facilities.**

Response: The *Existing Conditions* plan, located in Section IIB, shows the approximate width, location, and purpose of all existing easements. The *Tentative Plat*, located in Section IIIB, show proposed easements. No deed restrictions are proposed at this time. A draft of the CC&R's is included in Section IIIC of this Notebook.

20. Any plat bordering a stream or river shall indicate areas subject to flooding and shall comply with the provisions of Section 4.172.

Response: The proposed plat areas do not border a stream or river.

21. Proposed use or treatment of any property designated as open space by the City of Wilsonville.

Response: The proposed plat includes an area designated as Open Space 2 on the Villebois Village Master Plan. This area will be retained in a tract that will be owned and maintained by the homeowners association for the first 5 years and then transferred to the City. Proposed use of the tract for Open Space 2 is shown in the FDP plans included in Section VIB of this Notebook.

22. A list of the names and addresses of the owners of all properties within 250 feet of the subject property, printed on self-adhesive mailing labels. The list shall be taken from the latest available property ownership records of the Assessor's Office of the affected county.

Response: The required mailing list has been submitted with this application. A copy is provided in Section ID.

23. A completed "liens and assessments" form, provided by the City Finance Department.

Response: A copy of this form is provided in Exhibit IIID.

24. Locations of all areas designated as a Significant Resource Overlay Zone by the City, as well as any wetlands shall be shown on the tentative plat.

Response: The Existing Conditions plan shows the location of wetland areas, as well as the SROZ and Impact Area boundaries. The wetland areas are proposed to be filled with the development plan. The SROZ will be retained with Open Space 2 in a tract as shown on the Tentative Plat, which will be owned and maintained by the homeowners association for the first 5 years and then transferred to the City.

25. Locations of all existing and proposed utilities, including but not limited to domestic water, sanitary sewer, storm drainage, streets, and any private utilities crossing or intended to serve the site. Any plans to phase the construction or use of utilities shall be indicated.

Response: The *Existing Conditions* plan shows all existing utilities. The *Composite Utility Plan* shows all proposed utilities. The *Grading and Erosion Control Plan* show proposed streets and storm drainage facilities. These plan sheets can be seen in Section IIB of this Notebook.

26. A traffic study, prepared under contract with the City, shall be submitted as part of the tentative plat application process,

unless specifically waived by the Community Development Director.

Response: A copy of the Traffic Impact Analysis is attached in Section IID of this Notebook.

C. Action on proposed tentative plat:

1. Consideration of tentative subdivision plat. The Development Review Board shall consider the tentative plat and the reports of City staff and other agencies at a regular Board meeting no more than ninety (90) days after tentative plat application has been accepted as complete by the City. Final action on the proposed tentative plat shall occur within the time limits specified in Section 4.013. The tentative plat shall be approved if the Development Review Board determines that the tentative plat conforms in all respects to the requirements of this Code.

Response: The proposed Tentative Plat located in Section IIIB, is included with this application for review by the Development Review Board.

2. Consideration of tentative partition plat. The Planning Director shall review and consider any proposed land partition plat through the procedures for Administrative Reviews specified in Section 4.030 and 4.035.

Response: This request is for a Tentative Subdivision Plat. This code section does not apply.

3. The Board shall, by resolution, adopt its decision, together with findings and a list of all Conditions of Approval or required changes to be reflected on the Final Plat

Response: Any Conditions of Approval adopted by the Board shall be reflected on the Final Plat.

4. Board may limit content of deed restrictions. In order to promote local, regional and state interests in affordable housing, the Board may limit the content that will be accepted within proposed deed restrictions or covenants. In adopting conditions of approval for a residential subdivision or condominium development, the Board may prohibit such things as mandatory minimum construction costs, minimum unit sizes, prohibitions or manufactures housing, etc.

Response: The applicant recognizes the authority of the Board to limit the content of the deed restrictions or covenants.

5. Effect of Approval. After approval of a tentative plat, the applicant may proceed with final surveying, improvement construction and preparation of the final plat. Approval shall be effective for a period of two (2) years, and if the final plat is not submitted to the Planning Department within such time, the

tentative plat shall be submitted again and the entire procedure shall be repeated for consideration of any changes conditions which may exist. Except, however, that the Development Review Board may grant a time extension as provided in Section 4.023.

Response: After approval of the Tentative Plat, a final plat will be prepared and submitted to the Planning Department within two years if an extension is not provided.

D. Land division phases to be shown. Where the applicant intends to develop the land in phases, the schedule for such phasing shall be presented for review at the time of the tentative plat. In acting on an application for tentative plat approval, the Planning Director or Development Review Board may set time limits for the completion of the phasing schedule which, if not met, shall result in an expiration of the tentative plat approval.

Response: The PDP is proposed to be executed as shown on the *PDP Phasing Plan* (see Section IIB of this Notebook).

E. Remainder tracts to be shown as lots or parcels. Tentative plats shall clearly show all effected property as part of the application for land division. All remainder tracts, regardless of size, shall be shown and counted among the parcels or lots of the division.

Response: Any remainder tracts that would be developed with subsequent phases on adjacent land.

SECTION 4.236. GENERAL REQUIREMENTS – STREETS.

(.01) Conformity to the Master Plan Map: Land divisions shall conform to and be in harmony with the Transportation Master Plan (Transportation Systems Plan), the bicycle and Pedestrian Master Plan, the Parks and Recreation Master Plan, the Official Plan or Map and especially to the Master Street Plan.

Response: The proposed land division complies with Specific Area Plan – North and the *Villebois Village Master Plan* with the refinements described in the PDP Supporting Compliance Report (see Section IIA of this Notebook), and thereby conforms to the applicable Master Plans.

(.02) Relation to Adjoining Street System.

A. A land division shall provide for the continuation of the principal streets existing in the adjoining area, or of their proper projection when adjoining property is not developed, and shall be of a width not less than the minimum requirements for streets set forth in these regulations. Where, in the opinion of the Planning Director or Development Review Board, topographic conditions make such continuation or conformity impractical, an exception may be made. In cases where the Board or Planning Commission has adopted a

plan or plat of a neighborhood or area of which the proposed land division is a part, the subdivision shall conform to such adopted neighborhood or area plan.

B. Where the plat submitted covers only a part of the applicant's tract, a sketch of the prospective future street system of the unsubmitted part shall be furnished and the street system of the part submitted shall be considered in the light of adjustments and connections with the street system of the part not submitted.

C. At any time when an applicant proposes a land division and the Comprehensive Plan would allow for the proposed lots to be further divided, the city may require an arrangement of lots and streets such as to permit a later resubdivision in conformity to the street plans and other requirements specified in these regulations.

Response: The street system proposed in this land division generally conforms to the street system in SAP North and the *Villebois Village Master Plan* with refinements described in the PDP Supporting Compliance Report (see Section IIA of this Notebook).

(.03) All streets shall conform to the standards set forth in Section 4.177 and the block size requirements of the zone.

Response: Previous sections of this report have demonstrated compliance with the standards of Section 4.177 and the applicable block size requirements.

(.04) Creation of Easements: The Planning Director or Development Review Board may approve an easement to be established without full compliance with these regulations, provided such an easement is the only reasonable method by which a portion of a lot large enough to allow partitioning into two (2) parcels may be provided with vehicular access and adequate utilities. If the proposed lot is large enough to divide into more than two (2) parcels, a street dedication may be required. Also, within a Planned Development, cluster settlements may have easement driveways for any number of dwelling units when approved by the Planning Director or Development Review Board.

Response: Any necessary easements will be identified on the final plat.

(.05) Topography: The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of these regulations.

Response: The proposed grading plan sheets located in Section IIB show how the proposed grading will occur in consideration of the limitations that result from the natural terrain of the site in relation to property lines. Grading cannot extend onto the Chang property north of the PDP 2N area since property owner authorization cannot be obtained. For this reason, it is necessary to construct a retaining wall along the north property line of PDP 2N bordering the Chang property. Cross sections are included with the grading plan to show how grading in this area will work with fill being placed on the PDP 2N side of the retaining wall to allow the proposed lots to be built and how future development on the Chang side of the

retaining wall will add fill to develop the remainder of the block. The retaining wall will be buried in place as fill on the Chang property occurs. Within this block, lots on the southwest side of the alley will be split level and lots on the northeast side of the block will be graded to be flat. There are fixed elevation points at the street and the alley which limit what can occur in between these points when building 2-story homes. The lots on the southwest side of the alley are suited to split level homes with the garage on the lower level; however, lots on the northeast side are not suitable for split level homes as it would not be practical to have the garage on the upper level. Grading in this portion of PDP 2N is planned to occur either in conjunction with or following development of the Costa Circle/Villebois Drive roundabout and extensions and PDP 3E. Proposed grading shows maximum regard to the natural terrain and topography, and is what is necessary to establish the proposed development.

All subsequent grading, filling and excavating will be done in accordance with the Uniform Building Code. Disturbance of soils and removal of trees and other native vegetation will be limited to the extent necessary to construct the proposed development. Construction will occur in a manner that gives suitable recognition to surrounding topographical conditions.

(.06) <u>Reserve Strips</u>: The Planning Director or Development Review Board may require the applicant to create a reserve strip controlling the access to a street. Said strip is to be placed under the jurisdiction of the City Council, when the Director or Board determine that a strip is necessary:

A. To prevent access to abutting land at the end of a street in order to assure the proper extension of the street pattern and the orderly development of land lying beyond the street; or

B. To prevent access to the side of a street on the side where additional width is required to meet the right-of-way standards established by the City; or

C. To prevent access to land abutting a street of the land division but not within the tract or parcel of land being divided; or

D. To prevent access to land unsuitable for building development.

<u>Response:</u> Reserve strips will be provided as appropriate.

(.07) <u>Future Expansion of Street</u>: When necessary to give access to, or permit a satisfactory future division of, adjoining land, streets shall be extended to the boundary of the land division and the resulting dead-end street may be approved without a turn-around. Reserve strips and street plugs shall be required to preserve the objective of street extension.

<u>Response:</u> Streets that will be expanded in the future will occur in compliance with this standard.

(.08) <u>Existing Streets</u>: Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall conform to the designated width in this Code or in the Transportation Systems Plan.

Response: Rights-of-way will be dedicated in accordance with the *Villebois Village Master Plan* and the Transportation System Plan.

(.09) Street Names: No street names will be used which will duplicate or be confused with the names of existing streets, except for extensions of existing streets. Street names and numbers shall conform to the established name system in the City, and shall be subject to the approval of the City Engineer.

Response: No street names will be used that duplicate or could be confused with the names of existing streets. Street names and numbers will conform to the established name system in the City, as approved by the City Engineer.

SECTION 4.237. GENERAL REQUIREMENTS – OTHER.

(.01) Blocks:

A. The length, width, and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control, and safety of pedestrian, bicycle, and motor vehicle traffic, and recognition of limitations and opportunities of topography.

B. Sizes: Blocks shall not exceed the sizes and length specified for the zone in which they are located unless topographical conditions or other physical constraints necessitate larger blocks. Larger blocks shall only be approved where specific findings are made justifying the size, shape, and configuration.

Response: The PDP compliance report demonstrates compliance with the applicable block size requirements (see Section IIA). The street system proposed in with the PDP 2N land division generally conforms to the street system in SAP North and the *Villebois Village Master Plan* with refinements described in the PDP Supporting Compliance Report (see Section IIA of this Notebook). PDP 2N includes implementation of a portion of the *Villebois Village Master Plan* that is subject to constraints associated with the natural terrain of the subject area in relation to the property lines. Grading cannot extend onto the Chang property north of the PDP 2N area since property owner authorization cannot be obtained. For this reason, it is necessary to construct a retaining wall along the north property line of PDP 2N bordering the Chang property. Cross sections are included with the grading plan to show how grading in this area will work with fill being placed on the PDP 2N side of the retaining wall to allow the proposed lots to be built and how future development on the Chang side of the retaining wall will add fill to develop the remainder of the block. The retaining wall will be buried in place as fill on the Chang property occurs. Within this block, lots on the southwest side of the alley will be split level and lots on the northeast side of the block will be graded to be flat. There are fixed elevation points at the street and the alley which limit what can occur in between these points when building 2-story homes. The lots on the southwest side of the alley are suited to split level homes with the garage on the lower level; however, lots on the northeast side are not suitable for split level homes as it would not be practical to have the garage on the upper level. Grading in this portion of PDP 2N is

planned to occur either in conjunction with or following development of the Costa Circle/Villebois Drive roundabout and extensions and PDP 3E. The subject block that spans PDP 2N, PDP 3E and future development of the Chang property is designed to provide adequate building sites for the uses contemplated in the Master Plan in consideration of circulation, access and safety needs while recognizing the limitations and opportunities of the topography.

(.02) <u>Easements:</u>

A. Utility lines. Easements for sewers, drainage, water mains, electrical lines or other public utilities shall be dedicated wherever necessary. Easements shall be provided consistent with the City's Public Works Standards, as specified by the City Engineer or Planning Director. All the utility lines within and adjacent to the site shall be installed with underground services within the street and to any structures. All utilities shall have appropriate easements for construction and maintenance purposes.

B. Water Courses. Where a land division is traversed by a water course, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the water course, and such further width as will be adequate for the purposes of conveying storm water and allowing for maintenance of the facility or channel. Streets or parkways parallel to water courses may be required.

<u>Response:</u> The final plat will include the appropriate easements.

(.03) <u>Pedestrian and bicycle pathways</u>. An improved public pathway shall be required to transverse the block near its middle if that block exceeds the length standards of the zone in which it is located.

A. Pathways shall be required to connect to cul-de-sacs to pass through unusually shaped blocks.

B. Pathways required by this subsection shall have a minimum width of ten (10) feet unless they are found to be unnecessary for bicycle traffic, in which case they are to have a minimum width of six (6) feet.

<u>Response:</u> Any mid-block pathways required due to block size will be provided in conformance with this standard.

(.04) <u>Tree planting</u>. Tree planting plans for a land division must be submitted to the Planning Director and receive the approval of the Director or Development Review Board before the planning is begun. Easements or other documents shall be provided, guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property.

<u>Response:</u> The *Street Tree/Lighting Plan* shows proposed street tree planting. This plan sheet can be seen in Section IIB of this Notebook.

(.05) <u>Lot Size and shape</u>. The lot size, width, shape and orientation shall be appropriate for the location of the land division and for the type of development and use contemplated. Lots shall meet the requirements of the zone where they are located.

A. In areas that are not served by public sewer, an on-site sewage disposal permit is required from the City. If the soil structure is adverse to on-site sewage disposal, no development shall be permitted until sewer service can be provided.

B. Where property is zoned or deeded for business or industrial use, other lot widths and areas may be permitted at the discretion of the Development Review Board. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated.

C. In approving an application for a Planned Development, the Development Review Board may waive the requirements of this section and lot size, shape, and density shall conform to the Planned Development conditions of approval.

<u>Response:</u> Proposed lot sizes, widths, shapes and orientations are appropriate for the proposed development and are in conformance with the Village Zone requirements as demonstrated by this report.

(.06) <u>Access</u>. The division of land shall be such that each lot shall have a minimum frontage on a public street, as specified in the standards of the relative zoning districts. This minimum frontage requirement shall apply with the following exceptions:

A. A lot on the outer radius of a curved street or facing the circular end of a cul-de-sac shall have frontage of not less than twenty-five (25) feet upon a street, measured on the arc.

B. The Development Review Board may waive lot frontage requirements where in its judgment the waiver of frontage requirements will not have the effect of nullifying the intent and purpose of this regulation or if the Board determines that another standard is appropriate because of the characteristics of the overall development.

<u>Response:</u> The proposed lots comply with the applicable access requirements of the Village Zone as demonstrated in previous sections of this report.

(.07) <u>Through lots</u>. Through lots shall be avoided except where essential to provide separation of residential development from major traffic arteries or adjacent non-residential activity or to overcome specific disadvantages of topography and orientation. A planting screen easement of at least ten (10) feet, across which there shall be no access, may be required along the line of lots abutting such a traffic artery or other disadvantageous use. Through lots with planting screens shall have a minimum average depth of one hundred (100) feet. The Development Review Board may require

assurance that such screened areas be maintained as specified in Section 4.176.

Response: No through lots are proposed by this application.

(.08) Lot side lines. The side lines of lots, as far as practicable for the purpose of the proposed development, shall run at right angles to the street upon which the lots face.

Response: All side lines of lots will run at right angles to the street upon which the lots face.

(.09) Large lot land divisions. In dividing tracts which at some future time are likely to be re-divided, the location of lot lines and other details of the layout shall be such that re-division may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of buildings within future street locations shall be made a matter of record if the Development Review Board considers it necessary.

Response: This request does not include any tracts which may be divided at a future time.

(.10) Building line. The Planning Director or Development Review Board may establish special building setbacks to allow for the future redivision or other development of the property or for other reasons specified in the findings supporting the decision. If special building setbacks lines are established for the land division, they shall be shown on the final plat.

Response: No building lines are proposed by this application.

(.11) Build-to line. The Planning Director or Development Review Board may establish special build-to lines for the development, as specified in the findings and conditions of approval for the decision. If special build-to lines are established for the land division, they shall be shown on the final plat.

Response: No build-to lines are proposed by this application.

(.12) Land for public purposes. The Planning Director or Development Review Board may require property to be reserved for public acquisition, or irrevocably offered for dedication, for a specified period of time.

Response: This land division does not include land to be dedicated for public purposes except for the dedication of street right-of-way.

(.13) Corner lots. Lots on street intersections shall have a corner radius of not less than ten (10) feet.

Response: All lots on street intersections will have a corner radius of not less than ten (10) feet. This is demonstrated on the *Tentative Plat*, located in Section IIIB following this Supporting Compliance Report.

SECTION 4.262. IMPROVEMENTS - REQUIREMENTS.

(.01) Streets. Streets within or partially within the development shall be graded for the entire right-of-way width, constructed and surfaced in accordance with the Transportation Systems Plan and City Public Works Standards. Existing streets which abut the development shall be graded, constructed, reconstructed, surfaced or repaired as determined by the City Engineer.

Response: The *Grading and Erosion Control Plan,* located in Section IIB of this Notebook, shows compliance with this standard.

(.02) Curbs. Curbs shall be constructed in accordance with standards adopted by the City.

Response: Curbs will be constructed in accordance with City standards.

(.03) Sidewalks. Sidewalks shall be constructed in accordance with standards adopted by the City.

Response: Sidewalks will be constructed in accordance with City standards.

(.04) Sanitary sewers. When the development is within two hundred (200) feet of an existing public sewer main, sanitary sewers shall be installed to serve each lot or parcel in accordance with standards adopted by the City. When the development is more than two hundred (200) feet from an existing public sewer main, the City Engineer may approve an alternate sewage disposal system.

Response: The *Composite Utility Plan,* located in Section IIB of this Notebook, illustrate proposed sanitary sewer lines.

(.05) Drainage. Storm drainage, including detention or retention systems, shall be provided as determined by the City Engineer.

Response: The *Grading and Erosion Control Plan,* located in Section IIIB of this Notebook, illustrate the proposed storm drainage facilities. A supporting utility report is provided (see Section IIC) that demonstrates that the proposed storm drainage facilities will meet City standards.

(.06) Underground utility and service facilities. All new utilities shall be subject to the standards of Section 4.300 (Underground Utilities). The developer shall make all necessary arrangements with the serving utility to provide the underground services in conformance with the City's Public Works Standards.

Response: Proposed utilities will be placed underground pursuant to Section 4.300 and City Public Works Standards.

(.07) Streetlight standards. Streetlight standards shall be installed in accordance with regulations adopted by the City.

Response: Proposed streetlights are shown on the *Street Tree/Lighting Plan,* located in Section IIB of this Notebook. Streetlights will be installed in accordance with City standards.

(.08) Street signs. Street name signs shall be installed at all street intersections and dead-end signs at the entrance to all dead-end streets and cul-de-sacs in accordance with standards adopted by the City. Other signs may be required by the City Engineer.

Response: Street name and dead-end signs will be installed in accordance with City standards.

(.09) Monuments. Monuments shall be placed at all lot and block corners, angle points, points of curves in streets, at intermediate points and shall be of such material, size, and length as required by State Law. Any monuments that are disturbed before all improvements are completed by the developer and accepted by the City shall be replaced to conform to the requirements of State Law.

Response: Monuments will be placed at all lot and block corners, angle points, points of curves in streets, at intermediate points and will be of such material, size, and length as required by State Law.

(.10) Water. Water mains and fire hydrants shall be installed to serve each lot in accordance with City standards.

Response: Water mains and fire hydrants will be installed to serve each lot in accordance with City standards (see the *Composite Utility Plan),* located in Section IIB of this Notebook).

II. CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for the requested Tentative Subdivision Plat. Therefore, the applicant respectfully requests approval of this application.

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.1

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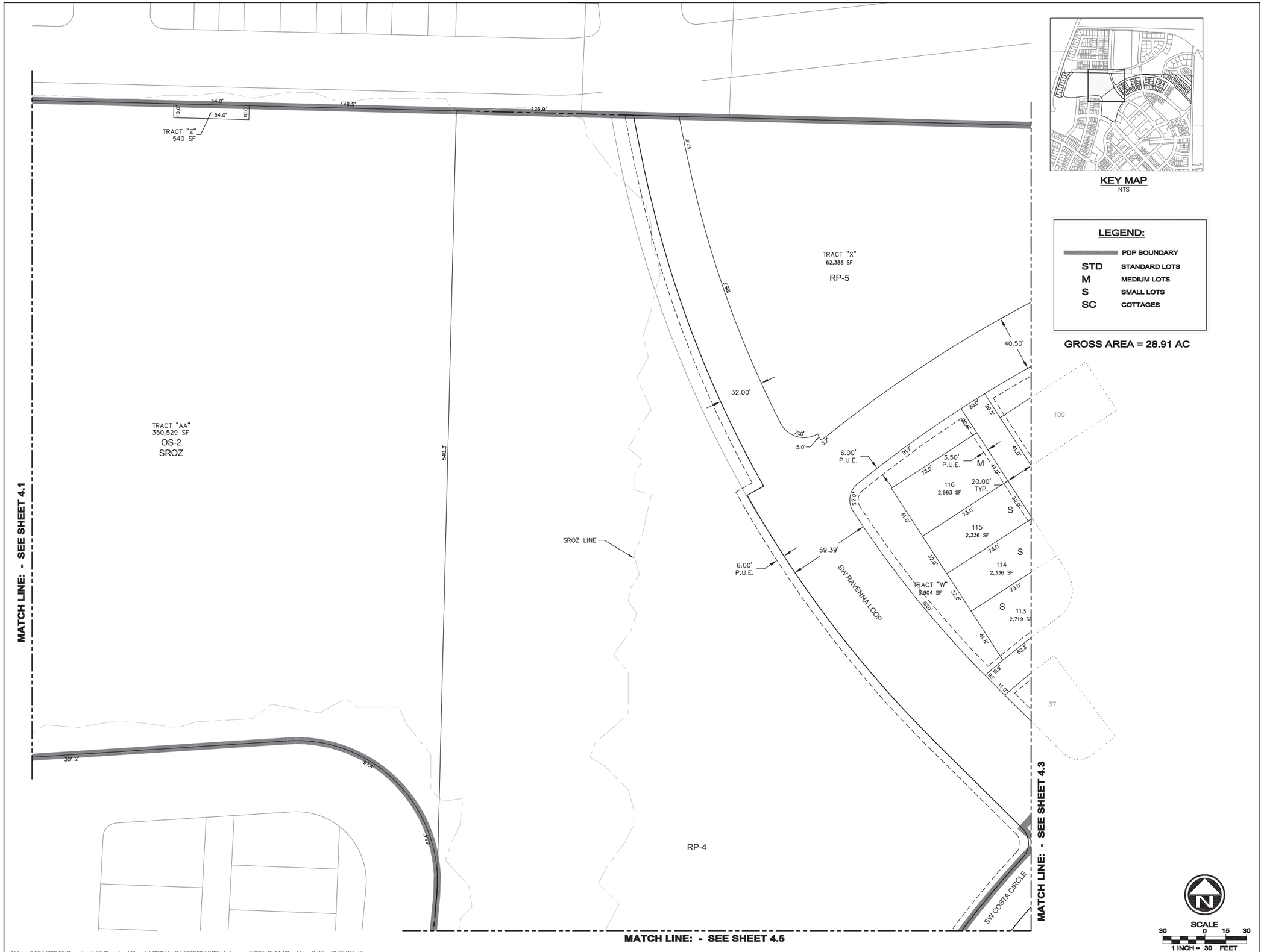

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.2

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

SCALE
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1 INCH = 30 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.3

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.4

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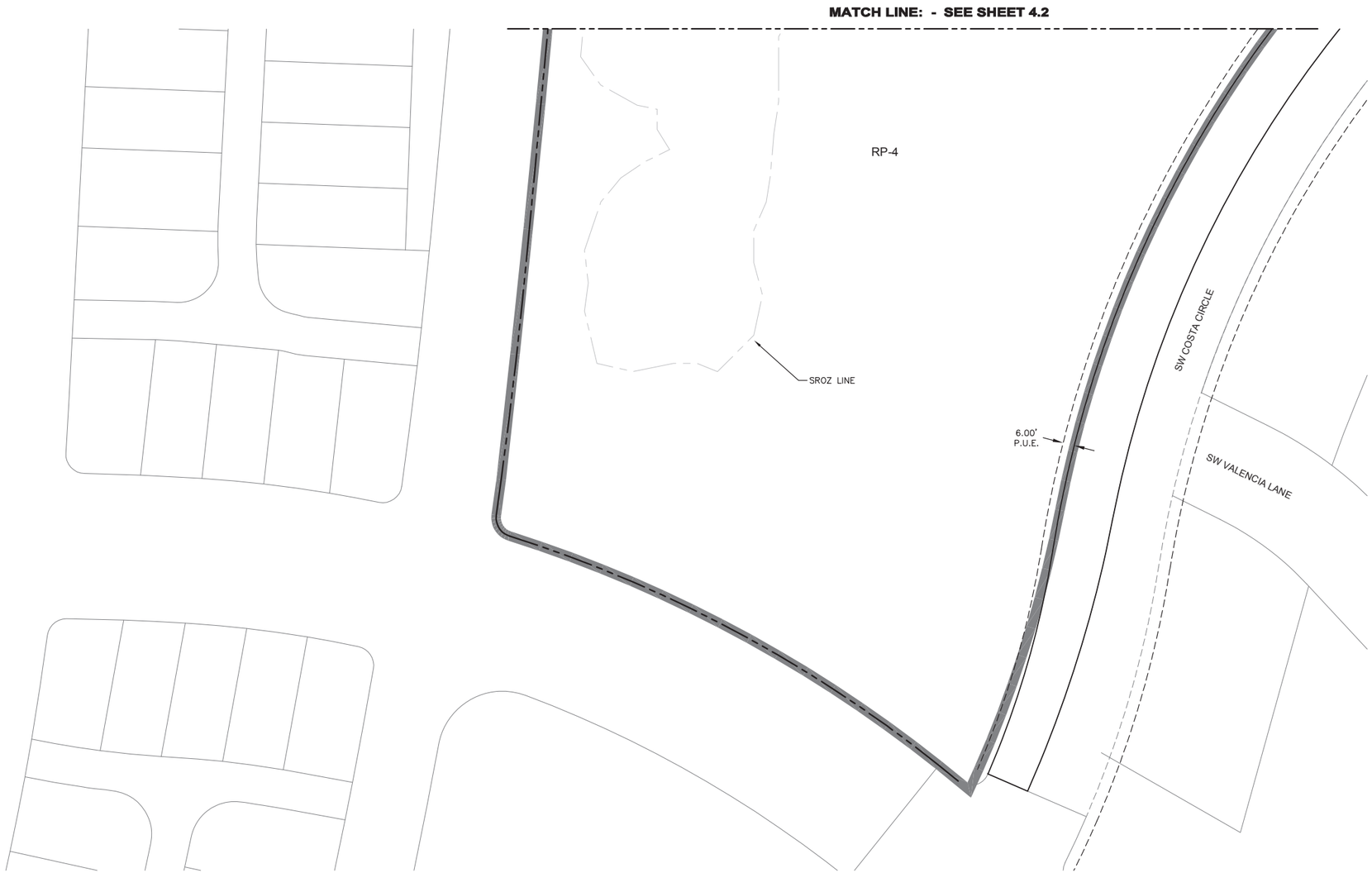

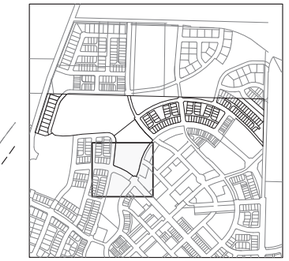

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

SCALE
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1 INCH = 30 FEET

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.5

PRELIMINARY DRAFT
TO BE MODIFIED

After Recording Return To:
Ball Janik LLP
101 SW Main Street, Suite 1100
Portland, OR 97204-3219
Attn.: Barbara Radler

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR

_____

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR _____ is made and executed on this ___ day of _____ 20___ by _____, a _____.

Declarant is the owner of the real property located in the City of Wilsonville, Clackamas County, Oregon and legally described on the attached Exhibit A. Declarant desires to establish a planned community on the property known as "_____," which shall also be part of the master planned development known as "Villebois," which was established and is governed by the Master Plan approved by the City of Wilsonville.

NOW THEREFORE, Declarant hereby declares that the real property described on the attached Exhibit A shall be held, sold and conveyed subject to the covenants, conditions and restrictions declared below, which shall run with the real property and shall benefit and be binding upon all parties having or acquiring any right, title or interest in the real property or any part thereof.

1. DEFINITIONS

The terms specified below shall have the following meanings when used in this Declaration:

1.1 ACC. "ACC" shall mean the Architectural Control Committee of the Association formed pursuant to Section 12.

1.2 Articles. "Articles" shall mean the Articles of Incorporation of the Association filed with the Corporation Division of the Oregon Secretary of State, as amended from time to time.

1.3 Assessment. "Assessment" shall mean any assessment levied against one or more Owners by the Association for payment of expenses relating to the Property and shall include Regular Assessments, Special Assessments, Limited Assessments and Reserve Assessments as those terms are defined herein.

1.4 Association. "Association" shall mean _____ Homeowners Association, an Oregon nonprofit mutual benefit corporation, formed for the purposes set forth in this Declaration, the Bylaws and the Articles.

1.5 Association Landscaping. "Association Landscaping" shall mean all landscaping and all irrigation systems and utilities pertaining to landscaping located in the Common Areas and the front yard areas of the Lots, including all grass, sod, ground cover, flower and plant beds, planter strips, trees, shrubs, bushes and other plantings located in the front yard areas of the Lots, but excluding all sidewalks, driveways, fencing and other non-landscaping improvements located in the front yard areas of the Lots. The front yard areas of the Lots include those portions of the Lots located between the front of the Homes and any public or private street.

1.6 Board. "Board" shall mean the duly elected Board of Directors of the Association.

1.7 Bylaws. "Bylaws" shall mean the Bylaws of the Association, as amended from time to time. The Bylaws shall be adopted pursuant to ORS 94.625 and recorded in the official records of Clackamas County, Oregon.

1.8 City. "City" shall mean the City of Wilsonville, Oregon.

1.9 Common Areas. "Common Areas" shall mean those portions of the Property legally described on the attached Exhibit B which shall be owned by the Association for the common benefit of the Owners.

1.10 Common Maintenance Areas. "Common Maintenance Areas" shall mean the Common Areas and any other property that the Association is required to maintain pursuant to this Declaration or that the Board deems necessary or appropriate for the Association to maintain for the common benefit of the Owners, including without limitation, those areas described in Section 11.1.

1.11 Declarant. "Declarant" shall mean _____, a _____, and its successors and assigns who are designated as such in writing by Declarant and who consent in writing to the transfer or assumption of any rights or obligations of Declarant under this Declaration or the Bylaws. If less than all of Declarant's rights and obligations under this Declaration or the Bylaws are transferred to a successor or assign, then the successor or assign shall only be deemed a Declarant with respect to those rights or obligations that are specifically assigned or assumed by the successor or assign. One or more persons or entities may be a Declarant.

1.12 Declaration. "Declaration" shall mean this Declaration of Covenants, Conditions and Restrictions for _____, as amended from time to time in accordance with its terms.

1.13 Design Guidelines. "Design Guidelines" shall mean the design guidelines described in Section 13.

1.14 Home. "Home" shall mean a dwelling unit located on a Lot and any associated Improvements.

1.15 Improvement. "Improvement" shall mean every structure or improvement of any kind, including without limitation, buildings, sidewalks, driveways, fences, walls, works of art, trees, hedges, plantings and other landscaping, changes in exterior color or shape, site work (such as, without limitation, excavation, grading and utility improvements), and all other product of construction efforts (such as, without limitation, alterations, renovations and reconstruction) on or with respect to the Property or any portion thereof.

1.16 Limited Assessment. "Limited Assessment" shall mean an assessment levied against an Owner by the Association for costs and expenses incurred by the Association for corrective action performed pursuant to this Declaration that is required as a result of the willful or negligent actions or omissions of the Owner or the Owner's tenants, family members, guests, contractors, or invitees. "Limited Assessment" also includes assessments for a common expense or any part of a common expense that benefits fewer than all of the Lots, as determined in the sole discretion of the Board.

1.17 Lot. "Lot" shall mean each of Lots 1 through 81, inclusive, as depicted on the Plat.

1.18 Master Plan. "Master Plan" shall mean the Master Plan of Villebois approved by the City.

1.19 Member. "Member" shall mean each member of the Association and shall include every Owner of a Lot. There shall be two (2) classes of membership in the Association, Class A and Class B, as described in Section 3.3 below.

1.20 Nonprofit Corporation Act. "Nonprofit Corporation Act" shall mean the Oregon Nonprofit Corporation Act (ORS 65.001 to 65.990), as amended from time to time.

1.21 Operation and Maintenance Agreement. "Operation and Maintenance Agreement" shall mean the Villebois Operation and Maintenance Agreement between the City and Declarant executed in connection with the recordation of the Plat.

1.22 Owner. "Owner" shall mean any person or entity, including Declarant, at any time owning a Lot, including any vendee under a recorded land sale contract to whom possession has passed, but does not include a tenant or holder of a leasehold interest, a person holding only a security interest in a Lot or a vendor under a recorded land sale contract who has surrendered possession.

1.23 Pattern Book. "Pattern Book" shall mean the design requirements for each area within Villebois adopted and applied by the City and which will be a condition to the City's approving building permits.

1.24 Planned Community Act. "Planned Community Act" shall mean the Oregon Planned Community Act (ORS 94.550 to 94.783), as amended from time to time.

1.25 Plat. "Plat" shall mean the Plat of _____ recorded in the official records of Clackamas County, Oregon on _____, 20___ as Document No. _____ and any amendments thereto.

1.26 Property. "Property" shall mean the real property located in the City of Wilsonville, Clackamas County, Oregon and legally described on the attached Exhibit A.

1.27 Regular Assessment. "Regular Assessment" shall mean an assessment by the Association against all Owners to provide for the payment of all estimated normal expenses of the Association for the performance of the Association's duties as provided in this Declaration or the Bylaws.

1.28 Reserve Assessment. "Reserve Assessment" shall mean an assessment by the Association against all Owners to establish and maintain the reserve funds pursuant to Section 6.

1.29 Special Assessment. "Special Assessment" shall mean an assessment against all Owners in the event that the Regular Assessment for any particular year is or will become inadequate to meet the expenses of the Association.

1.30 Special Declarant Rights. "Special Declarant Rights" shall mean those rights reserved for Declarant in Section 15.

1.31 Turnover Meeting. "Turnover Meeting" shall mean the meeting of the Owners called pursuant to the Bylaws for the purpose of turning over control of the Association to the Class A Members.

1.32 Villebois. "Villebois" shall mean all of the property subject to the Master Plan.

2. DECLARATION

2.1 Property Covered. The property that is covered by and is hereby made subject to this Declaration is the Property.

2.2 Purpose. The purpose of this Declaration is to provide for the maintenance, restoration, repair, improvement and upkeep of the Common Maintenance Areas and to set forth other terms and conditions governing the use and enjoyment of the Property.

2.3 Declaration. The Property shall be subject to all of the conditions, covenants, restrictions, and provisions contained in this Declaration, which shall benefit and burden each Lot and all other portions of the Property. Such conditions, covenants, restrictions, and provisions shall be binding on all parties having any right, title or interest in or to the Property, or any part thereof, and each of their respective heirs, personal representatives, successors and assigns. The Property shall be a Class I planned community as defined in the Planned Community Act and shall be subject to all of the terms and provisions of the Planned Community Act. The Property shall be known as "_____."

2.4 Improvements. Declarant does not agree to build any particular Improvements on the Property, but may elect, at Declarant's option, to build any such Improvements. Declarant elects not to limit Declarant's rights to add Improvements not described in this Declaration.

3. THE ASSOCIATION

3.1 Organization. Declarant shall, concurrently with the execution and recording of this Declaration, organize the Association as a nonprofit mutual benefit corporation pursuant to the Nonprofit Corporation Act under the name "_____ Homeowners Association" The Articles shall provide for the Association's perpetual existence, but in the event the Association is at any time dissolved, whether inadvertently or deliberately, it shall automatically be succeeded by an unincorporated association of the same name. All of the property, powers and obligations of the Association existing immediately prior to its dissolution shall thereupon automatically vest in the successor unincorporated association. Such vesting shall thereafter be confirmed as evidenced by appropriate conveyances and assignments by the Association to the successor unincorporated association. To the greatest extent possible, any successor unincorporated association shall be governed by the Articles and Bylaws as if they had been drafted to constitute the governing documents of the unincorporated association.

3.2 Membership. Every Owner of a Lot shall, immediately upon creation of the Association and thereafter during the entire period of such Owner's ownership of a Lot, be a Member of the Association. Such membership shall commence, exist and continue simply by virtue of such ownership, shall expire automatically upon termination of such ownership, and need not be confirmed or evidenced by any certificate or acceptance of membership.

3.3 Voting Rights. The Association shall have the following two (2) classes of voting membership:

3.3.1 Class A Members. Class A Members shall be all Owners other than Declarant (except that beginning on the date on which the Class B membership is converted to Class A membership, and thereafter, Class A Members shall be all Owners, including Declarant). Class A Members shall be entitled to one (1) vote for each Lot owned. When more than one (1) person holds an interest in a Lot, all such persons shall be Members. However, only one (1) vote shall be exercised for the Lot. The vote for the Lot shall be exercised as the Owners of the Lot

determine among themselves. If the Owners of the Lot cannot agree upon how to exercise the vote, then the vote for that Lot shall be disregarded in determining the proportion of votes with respect to the particular matter at issue.

3.3.2 Class B Members. The Class B Member shall be Declarant. The Class B Member shall be entitled to three (3) votes for each Lot owned. The Class B membership shall cease and be converted to Class A membership on the election in writing by Declarant to terminate the Class B membership.

3.4 Powers and Obligations. The Association shall have, exercise and perform all of the following powers, duties and obligations:

3.4.1 Declaration. The powers, duties and obligations granted to the Association by this Declaration, including, without limitation, the authority to levy Assessments against the Owners for the costs of operating and managing the Association and performing the Association's responsibilities under this Declaration and the Bylaws, as well as the operating costs and expenses of the ACC.

3.4.2 Statutory Powers. The powers and obligations of a nonprofit corporation pursuant to the Nonprofit Corporation Act, and of a homeowners association pursuant to ORS 94.630, as either may be amended from time to time, except as provided otherwise by this Declaration or the Bylaws.

3.4.3 General. Any additional or different powers, duties and obligations necessary or desirable for the purpose of carrying out the functions of the Association pursuant to this Declaration and the Bylaws or otherwise promoting the general benefit of the Members. The powers and obligations of the Association may from time to time be amended, repealed, enlarged or restricted by changes to this Declaration made in accordance with the provisions herein, accompanied by changes to the Articles or Bylaws made in accordance with such instruments, as applicable, and with the Planned Community Act and Nonprofit Corporation Act.

3.5 Liability. Neither the Association, members of the Board, officers of the Association nor members of committees established under or pursuant to the Bylaws shall be liable to any Owner for any damage, loss, injury or prejudice suffered or claimed on account of any action or failure to act by the Association or any Board member, officer or committee member, provided that the Association, Board member, officer or committee member acted or failed to act, in good faith, within the scope of his or her authority, and in a manner reasonably believed to be in the best interest of the Association and its Members, with regard to the act or omission at issue.

3.6 Interim Board. Declarant shall have the right to appoint an interim Board consisting of one (1) to three (3) directors, who shall serve as the Board until replaced by Declarant or until their successors have been elected by the Owners at the Turnover Meeting.

3.7 Transitional Advisory Committee. Declarant shall form a transitional advisory committee as provided in the Bylaws to provide for the transition of administrative responsibility for the Association from Declarant to the Class A Members.

3.8 Association Rules and Regulations. The Board from time to time may adopt, modify, or revoke such rules and regulations governing the conduct of persons and the operation and use of the Lots and Common Areas as it may deem necessary or appropriate in order to assure the safe, peaceful and orderly use and enjoyment of the Property, without unduly infringing on the privacy or enjoyment of any Owner or occupant of any part of the Property. A copy of the rules and regulations, upon adoption, and a copy of each amendment, modification or revocation thereof, shall be delivered by the Board promptly to each Owner and shall be binding upon all Owners and occupants of all Lots upon the date of delivery. The method of adoption of such rules shall be as provided in the Bylaws.

4. ALLOCATION OF COMMON PROFITS AND EXPENSES

4.1 Method of Allocation. The common profits of the Association shall be distributed among, and the common expenses of the Association shall be charged to, the Lots on an equal basis, except as provided in Section 5.4 below. The common expenses of the Association may be assessed on a monthly, quarterly or annual basis as determined by the Board.

4.2 No Exception. No Owner may claim exemption from liability for contribution toward the common expenses of the Association by waiving his or her use or enjoyment of the Common Areas or by abandoning his or her Lot. No Owner may claim an offset against such liability for failure of the Association or the Board to perform its obligations.

5. ASSESSMENTS

5.1 Creation of Lien and Personal Obligation of Assessments. Declarant, for each Lot it owns, does hereby covenant, and each Owner of a Lot by acceptance of a conveyance thereof, whether or not so expressed in the conveyance, shall be deemed to covenant to pay to the Association all Assessments or other charges as may be fixed, established and collected from time to time in the manner provided in this Declaration or the Bylaws. Such Assessments and charges, together with any interest, expenses or attorneys' fees imposed pursuant to Section 7.4, shall be a charge on the land and shall be a continuing lien upon the Lot against which the Assessment or charge is made. Assessments, charges and other costs shall also be the personal obligation of the person who was the Owner of the Lot at the time when the Assessment or charge becomes due. Such liens and personal obligations shall be enforced in the manner set forth in Section 7 below.

5.2 Regular Assessments.

5.2.1 Commencement. Regular Assessments for each Lot shall commence upon the sale of the Lot to an Owner other than a Declarant. Regular Assessments shall not be levied against Declarant-owned Lots.

5.2.2 Amount of Regular Assessments. The Regular Assessments shall be based upon an annual budget prepared by the Board with respect to projected expenses of the Association, including, without limitation, the following:

(a) maintenance, repair, replacement, and upkeep of the Common Maintenance Areas;

(b) premiums for all insurance policies that the Association is required or permitted to maintain pursuant to the Bylaws;

(c) any deficits remaining from the previous fiscal year of the Association;

(d) reserves for the major maintenance, repair and replacement of the Common Maintenance Areas and the Improvements located thereon for which the Association has maintenance responsibility and such other reasonable contingency reserves as may be established from time to time at the discretion of the Board;

(e) costs related to the preparation, review and update of the reserve study and maintenance plan described in Section 6; and

(f) such other and further costs, expenses, obligations, and liabilities as the Board, in its discretion, may incur for the management, operation, and maintenance of the Property and the Association in accordance with this Declaration and the Bylaws.

5.2.3 Allocation of Regular Assessments. The Regular Assessments shall be allocated equally among all Lots subject to assessment pursuant to Section 5.2.1.

5.3 Special Assessments. In addition to the Regular Assessments, the Association shall have the authority to levy Special Assessments to satisfy any actual or projected deficiency between the expenses of the Association and the amounts realized through Regular Assessments; provided, however, that prior to the Turnover Meeting, any special assessment for capital improvements or additions shall be approved by not less than fifty percent (50%) of the total voting power of the Association, determined on the basis of one vote per Lot notwithstanding the special voting rights of Declarant under Section 3.3.2 hereof. Special Assessments shall be allocated equally among all Lots. Special Assessments are payable as the Board may from time to time determine, but no sooner than thirty (30) days after mailing notice thereof to the Owners.

5.4 Limited Assessments. The Association shall have the authority levy against any Owner a Limited Assessment equal to the costs and expenses incurred by the Association, including legal fees, for corrective action performed pursuant to this Declaration or the Bylaws that is required as a result of the willful or negligent actions or omissions of the Owner or the Owner's tenants, family members, guests, contractors, or invitees, or for a common expense or any part of a common expense that benefits a particular Lot or Lots rather than all the Lots, as determined in the sole discretion of the Board.

5.5 Reserve Assessments. The Association shall have the authority to levy Reserve Assessments necessary to fund the reserve account created under Section 6. The Reserve Assessments for each Lot shall commence upon the sale of the Lot to an Owner other than a Declarant. Reserve Assessments shall not be levied against Declarant-owned Lots. The Reserve Assessments shall be allocated equally among all Lots subject to assessment pursuant to this Section 5.5.

5.6 Statement of Account. Upon the request of an Owner or an Owner's agent, for the benefit of a prospective purchaser, the Board shall make and deliver a written statement of any unpaid Assessments against the Owner's Lot through the date specified in the statement and the purchaser in that case shall not be liable for any unpaid assessments against the Lot that are not included in the statement provided by the Board. The Association is not required to provide a statement of outstanding Assessments if the Association has commenced litigation by filing a complaint against the Owner and the litigation is pending when the statement would otherwise be due.

6. RESERVE ACCOUNT; RESERVE STUDY AND MAINTENANCE PLAN

6.1 Reserve Account. Declarant shall establish a reserve account in the name of the Association for the major maintenance, repair and replacement, in whole or in part, of the Common Maintenance Areas and any Improvements located in, on, or under the Common Maintenance Areas for which the Association has maintenance responsibility pursuant to this Declaration, including exterior painting, if the Common Maintenance Areas include any exterior painted surfaces, that will normally require major maintenance, repair or replacement in more than one (1) year and fewer than thirty (30) years. The reserve account need not include those items that could reasonably be funded from the maintenance fund or for which one or more Owners are responsible for maintenance or replacement under this Declaration or the Bylaws. The reserve account shall be funded by the Reserve Assessments. The reserve funds shall be kept separate from other funds of the Association and may be used only for maintenance, repair, and replacement of the Common Maintenance Areas for which reserves have been established as specified in this Section 6.1. However, after the Turnover Meeting, the Board may borrow funds from the reserve account to meet high seasonal demands on the regular operating funds or to meet other unexpected increases in expenses. Funds borrowed to meet unexpected increases in expenses under this Section shall be repaid from Regular or Special Assessments if the Board has adopted a resolution, which may be an annual continuing resolution, authorizing the

borrowing of funds. Not later than the adoption of the budget for the following year, the Board shall adopt by resolution a written payment plan providing for repayment of the borrowed funds within a reasonable period. The Board shall administer the reserve fund and may adjust the amount of the Reserve Assessments to reflect changes in current maintenance, repair or replacement costs over time as indicated by the reserve study or update (as discussed in Section 6.2 below), and may provide for other reserve items that the Board, in its discretion, deems appropriate. If, after reviewing the reserve study or reserve study update, the Board determines that the reserve account will be adequately funded for the following year, then the Board may vote to reduce or eliminate funding of the reserve account for that particular year. Additionally, following the Turnover Meeting, on an annual basis, the Board, with the approval of all Owners, may elect not to fund the reserve account for the following year regardless of whether or not the reserve account is fully funded. Any funds established for any of the purposes mentioned in this Section shall be deemed to be a reserve fund notwithstanding that it may not be so designated by the Board. The amount of the reserve fund shall constitute an asset of the Association and shall not be refunded or distributed to any Owner. An Owner may treat his or her outstanding share of the reserve fund as a separate item in a sales contract.

6.2 Reserve Study. The Board shall annually conduct a reserve study, or review and update an existing study, of the Common Maintenance Areas and other reserve items set forth in Section 6.1 to determine the requirements of the reserve fund described in Section 6.1. The reserve study shall: (a) identify all items for which reserves are or will be established; (b) include the estimated remaining useful life of each item as of the date of the reserve study; and (c) include for each item, as applicable, an estimated cost of maintenance, repair and replacement at the end of the item's useful life.

6.3 Maintenance Plan. The Board shall prepare a maintenance plan for the maintenance, repair and replacement of all property for which the Association has maintenance, repair or replacement responsibility under this Declaration, the Bylaws or the Planned Community Act. The maintenance plan shall: (a) describe the maintenance, repair and replacement to be conducted; (b) include a schedule for the maintenance, repair and replacement; (c) be appropriate for the size and complexity of the maintenance, repair and replacement responsibility of the Association; and (d) address issues that include, but are not limited to, warranties and the useful life of the items for which the Association has maintenance, repair and replacement responsibility. The Board shall review and update the maintenance plan as necessary.

7. ENFORCEMENT

7.1 Default in Payment of Assessments; Enforcement of Lien. If an Assessment or any other charge levied under this Declaration or the Bylaws is not paid within ten (10) days after its due date, such Assessment or charge shall become delinquent and shall bear interest from the due date until paid at the rate set forth in Section 7.4 below and, in addition, the

Association may exercise any or all of the following remedies as allowed under the Planned Community Act:

7.1.1 Lien. The Association shall have a lien against each Lot for any Assessment levied against the Lot and any fines or other charges imposed under this Declaration or the Bylaws against the Owner of the Lot from the date on which the Assessment, fine or charge is due. The provisions regarding the attachment, notice, recordation and duration of liens established on real property under ORS 94.709 shall apply to the Association's lien. The lien shall be foreclosed in accordance with the provisions regarding the foreclosure of liens under ORS 94.709 through 94.719. The Association, through its duly authorized agents, may bid on the Lot at a foreclosure sale, and may acquire and hold, lease, mortgage and convey the Lot.

7.1.2 Suit or Action. The Association may bring an action to recover a money judgment for unpaid Assessments, fines and charges under this Declaration without foreclosing or waiving the lien described in Section 7.1.1. Recovery on any such action, however, shall operate to satisfy the lien, or the portion thereof, for which recovery is made.

7.1.3 Fines. In addition to any other remedies available to the Association hereunder and subject to the requirements of ORS 94.630(1)(n), the Association shall have the right to impose reasonable fines upon an Owner who violates the Declaration, Bylaws or any rules and regulations of the Association, in the manner and amount the Board deems appropriate in relation to the violation.

7.1.4 Other Remedies. The Association shall have any other remedy available to it by law or in equity.

7.2 Notification of First Mortgagee. Upon the advance written request of the first mortgagee of any Lot, the Board shall notify the first mortgagee of any default in the performance of the terms of this Declaration by the Lot's Owner that is not cured within sixty (60) days.

7.3 Subordination of Lien to First Mortgages. The Association's lien for the Assessments and other charges provided for in this Declaration shall be subordinate to the lien of any first mortgage or deed of trust of record. The sale or transfer of any Lot shall not affect the Association's lien. However, the sale or transfer of a Lot pursuant to the foreclosure of a first mortgage lien or the execution of a deed in lieu of foreclosure of a first mortgage lien shall extinguish the Association's lien with respect to Assessments and other charges that became due prior to such sale or transfer. No sale, foreclosure or transfer of a Lot shall extinguish the personal obligation of the Owner who owned the Lot at the time the Assessment or other charge became due.

7.4 Interest, Expenses and Attorneys' Fees. Any amount not paid to the Association when due in accordance with this Declaration shall bear interest from the due date until paid at a

rate of twelve percent (12%) per annum, or at such other rate as may be established by the Board, but not to exceed the lawful rate of interest under the laws of the State of Oregon. A late charge may be charged for each delinquent Assessment in an amount established from time to time by resolution of the Board. If the Association files a notice of lien, the lien amount shall also include the recording fees associated with filing the notice, and a fee for preparing the notice of lien established from time to time by resolution of the Board. If the Association brings any suit or action to enforce this Declaration, or to collect any money due hereunder or to foreclose a lien, the defaulting Owner shall pay to the Association all costs and expenses incurred by the Association in connection with such suit or action, including a foreclosure title report, and the prevailing party in such suit or action shall recover such amount as the court may determine to be reasonable as attorneys' fees at trial and upon any appeal or petition for review thereof.

7.5 Nonexclusiveness and Accumulation of Remedies. An election by the Association to pursue any remedy provided in this Section 7 for a violation of this Declaration shall not prevent the concurrent or subsequent exercise of any other remedy permitted hereunder. The remedies provided in this Declaration are not exclusive, but shall be in addition to all other remedies, including actions for damages and suits for injunctions and specific performance, that are available under applicable law to the Association. In addition, any aggrieved Owner may bring an action against another Owner or the Association to recover damages or to enjoin, abate, or remedy any violation of this Declaration by appropriate legal proceedings.

8. PROPERTY RIGHTS AND EASEMENTS

8.1 Owners' Use and Occupancy. Except as otherwise expressly provided in this Declaration, the Bylaws, the Plat or any easement, covenant or any other instrument of record, the Owner of a Lot shall be entitled to the exclusive use and benefit of his or her Lot. Declarant and any representative of the Association authorized by the Association may at any reasonable time, upon reasonable notice to the Owner, enter upon any Lot for the purpose of determining whether or not the use of and/or the Improvements on the Lot are then in compliance with this Declaration, the Bylaws, the Design Guidelines or the rules and regulations of the Association. No such entry shall be deemed to constitute a trespass or otherwise create any right of action in the Owner of the Lot. Declarant or the Association may grant or assign easements over or with respect to any Lot to municipalities or other utilities performing utility services and to communications companies.

8.2 Owners' Easements of Enjoyment. Subject to any restrictions contained in this Declaration, the Bylaws, the Plat, the Operation and Maintenance Agreement or any easement, covenant or other instrument of record, every Owner and the Owner's family members, tenants, guests, and invitees shall have a right and easement of enjoyment in and to the Common Areas, which easement shall be appurtenant to and shall pass with the title to every Lot. Use of the Common Areas shall not result in unreasonable disturbance of the Owners and occupants of the

other Lots and shall be subject to the rules and regulations as may be adopted by the Board from time to time pursuant to Section 3.8.

8.3 Title to Common Areas. Declarant shall convey fee title to the Common Areas to the Association free and clear of liens and encumbrances no later than the Turnover Meeting.

8.4 Extent of Owners' Rights. The rights and use of enjoyment in the Property shall be subject to the following easements and all other provisions of this Declaration:

8.4.1 Association's and Owners' Easements. Declarant reserves for itself and grants to the Association and the Board and their duly authorized agents and representatives for the benefit of the Association and all Owners of Lots within the Property the following easements:

(a) An easement under and upon the Common Areas, for installation and maintenance of power, gas, electric, sewer, water and other utility and communication lines and other utility and communication lines and services installed by Declarant or with the approval of the Board;

(b) An easement under and upon the Common Areas, for construction, maintenance, repair, and use of the Common Areas and any Improvements thereon;

(c) The right to have access to the Common Areas and to all Lots as may be necessary for the installation, maintenance, repair, upkeep or replacement of the Common Maintenance Areas, for determining whether or not the use of and/or the Improvements on a Lot are then in compliance with this Declaration, the Bylaws, the Design Guidelines or the rules and regulations of the Association, or to make emergency repairs thereon necessary for the public safety or to prevent damage to the Common Maintenance Areas or to another Lot or Home. In case of an emergency originating in or threatening any Lot or Home or the Common Maintenance Areas, each Owner hereby grants the right of entry to any person authorized by the Board or the Association, whether or not the Owner is present at the time;

(d) Such easements as are necessary to perform the duties and obligations of the Association set forth in this Declaration, the Bylaws and Articles, as the same may be amended or supplemented;

(e) Each Lot shall have an easement over any adjoining Lot as may be required to perform maintenance, repair or reconstruction of the Home located on the benefited Lot. The Owner of the benefited Lot shall be responsible for restoring any damage to the burdened Lot resulting from such use and shall indemnify and hold harmless the owner of the burdened Lot for, from and against any damage, claim, loss or liability resulting from such use; and

(f) Pursuant to ORS 94.733(3), each Lot, Home and all Common Areas shall have an easement over all adjoining Lots, Homes and the Common Areas for the purpose of accommodating any present or future encroachment as a result of engineering errors, construction, reconstruction, repairs, settlement, shifting, or movement of any portion of the Property, or any other similar cause, and any encroachment due to building overhang or projection. There shall be valid easements for the maintenance of the encroaching Lots, Homes and the Common Areas so long as the encroachments shall exist, and except as otherwise provided, the rights and obligations of Owners shall not be altered in any way by the encroachment, nor shall the encroachment be construed to be encumbrances affecting the marketability of title to any Lot, Home or Common Areas.

8.4.2 Declarant's Easements. So long as Declarant owns any Lot, and in addition to any other easements to which Declarant may be entitled, Declarant reserves an easement over, under and across the Common Areas in order to carry out development, construction, sales and rental activities necessary or convenient for the development of the Property or the sale or rental of Lots and for such other purposes as may be necessary or convenient for discharging Declarant's obligations or for exercising any of Declarant's rights hereunder.

8.4.3 Utility and Other Municipal Easements. Declarant or the Association may (and, to the extent required by law, shall) grant or assign easements to municipalities or other utilities performing utility services and to communications companies, and the Association may grant free access thereon to police, fire, and other public officials and to employees of utility companies and communications companies serving the Property.

8.4.4 Villebois Easements. All Common Area parks and trail systems with the Property may be used and enjoyed by the owners and occupants of other portions of Villebois on the same basis as the Owners. Such use shall be subject to all conditions and restrictions set forth in this Declaration, which may be enforced as provided in this Declaration. Such owners and occupants shall pay, indemnify and hold harmless the Association and all Owners for, from and against any damage, loss, claim or liability arising out of such use.

8.4.5 Transfer of the Common Areas. The Association may not sell, transfer or grant a security interest in any portion of the Common Areas unless the Owners holding at least eighty percent (80%) of the total voting power of the Association, including eighty percent (80%) of the votes not held by Declarant, and the Class B Member, if any, approve the sale, transfer or grant of security interest. A sale, transfer or grant of security interest in any portion of the Common Areas in accordance with this Section 8.4.5 may provide that the Common Areas so conveyed shall be released from any restrictions imposed on such Common Areas by this Declaration or the Bylaws. No such sale, transfer, or grant of security interest may, however, deprive any Lot of such Lot's right of access or support without the written consent of the Owner of such Lot.

8.4.6 Authority to Grant Easements and Other Property Interests in Common Areas. The Association may execute, acknowledge and deliver leases, easements, rights of way, licenses, and other similar interests affecting the Common Areas and consent to vacation of roadways within and adjacent to the Common Areas. Except for those matters described in ORS 94.665(4)(b), which the Board may approve without Owner consent, the granting of any interest pursuant to this Section 8.4.6 must be approved by at least seventy-five percent (75%) of the Owners present at a meeting of the Association or with the consent of at least seventy-five percent (75%) of all Owners solicited by any means the Board determines is reasonable. If a meeting is held to conduct the vote, the meeting notice shall include a statement that the approval of the granting of an interest in the Common Areas will be an item of business on the agenda of the meeting.

8.5 Maintenance and Reconstruction Easements. An easement is hereby reserved in favor of the Association and its successors, assigns, contractors, agents, and employees over and across each Lot, for purposes of accomplishing the repair and restoration of the Common Maintenance Areas pursuant to Section 14.

9. GENERAL PROVISIONS FOR AND RESTRICTIONS ON USE OF LOTS

9.1 Each Lot, including the Home and all other Improvements located thereon, shall be maintained in a clean and attractive condition, in good repair, and in such a manner as not to create a fire hazard.

9.2 No Lot shall be used except for residential purposes. No building shall be erected, altered, placed, or permitted to remain on any Lot other than one detached single-family dwelling and a private garage or carport. The Home and any other Improvements on a Lot shall comply with all applicable City height restrictions.

9.3 A greenhouse of noncommercial type, or a garden tool shed or other residential accessory buildings or improvements, may be erected, provided that these types of Improvements are of an acceptable architectural design (as determined by the ACC in accordance with Section 12), shall have the exterior painted and, if such structure is separate from the Home, shall be located within the fenced-in patio or courtyard. Such accessory buildings or improvements shall comply with applicable requirements of the City. All Homes shall provide a garage or carport sufficient to accommodate a minimum of two (2) vehicles.

9.4 All garbage, trash, cuttings, refuse, garbage and refuse containers, oil tanks, clothes lines or other service facilities, stored trailers, and recreational vehicles ("RV's") shall be screened from the view of neighboring Homes and from the Common Areas in a manner approved by the ACC. No RV's shall be visibly parked on a Lot for more than five (5) continuous days in a calendar month. The intent of this provision is to minimize the negative visual impact caused by the visible parking or storage of RV's.

9.5 No noxious or offensive activity shall take place on any Lot, nor shall anything be done or placed on any Lot that interferes with or jeopardizes enjoyment of other Lots or within the Property.

9.6 If any tree, shrub, or other vegetation blocks or substantially obscures the view from any Home, the Owner of the Home may petition the ACC for the trimming, topping, or removal of such tree, shrub, or other vegetation. Upon receipt of such petition, the ACC shall investigate the matter and make a determination in writing whether such view is actually blocked or substantially obscured. If the ACC makes such a determination, the Owner of the offending tree, shrub, or other vegetation shall have ten (10) days from the date the ACC made such determination to elect whether the offending tree, shrub, or other vegetation should be trimmed, topped, or entirely removed. If the offending tree, shrub, or other vegetation is not part of the Association Landscaping, then the Owner of the Lot on which the offending tree, shrub, or other vegetation is located shall bear sole responsibility for the entire cost of such trimming, topping, or removal and shall be solely responsible for obtaining any approvals from the City prior to proceeding with topping or removal.

9.7 The maintenance and replacement (if removed) of trees planted in the rear and side yards of all Lots shall be the responsibility of each Owner; provided, that no tree may be removed without the prior approval of the ACC and any required governmental approvals. Customary trimming and pruning in accordance with professional arboriculture industry standards of trees shall be permitted in the rear and side yards of the Lots without prior approval.

9.8 All fences, walls, hedges, landscaping and other Improvements installed on any Lot shall comply with the City vision clearance requirements and height restrictions. Owners who desire a fence are encouraged to use the same or similar material in style as fencing in the areas near the Property. Prior to construction, design of all fences, hedges or walls must be approved in writing by the ACC.

10. GENERAL RESTRICTIONS ON USE OF PROPERTY

10.1 Common Areas. No person shall construct or reconstruct any Improvements, or alter or refinish any Improvements, make any excavation or fill, make any change in the natural or existing surface drainage, or install a utility line in the Common Areas without the prior written approval of the Board or a duly appointed committee to which the Board has delegated such responsibility and, if required, the City.

10.2 Association Landscaping. No person shall remove, alter, modify or replace any Association Landscaping without the prior written approval of the Board or a duly appointed committee to which the Board has delegated such responsibility and, if required, the City.

11. MAINTENANCE OBLIGATIONS

11.1 Association Maintenance Obligations. The Association shall be responsible for the maintenance, repair, upkeep and replacement of the following Common Maintenance Areas:

(a) Tracts A, C, D, E, G, J and L, as shown on the Plat, including all paved street surfaces, mountable curbs, street signs, lighting, landscaping, irrigation systems and other Improvements located thereon, to be maintained as private streets and/or alleys;

(b) Tracts B, F, H, I, K, M and N, as shown on the Plat, including all landscaping, irrigation systems, sidewalks, lighting and other Improvements located thereon, to be maintained as a recreational areas, parks, open space tracts and/or linear/buffer tracts;

(c) The Association Landscaping;

(d) [Include City-owned park tract to be maintained by Association??];

(e) All entry monument signage for the Property, including any landscaping, lighting and irrigation systems related thereto;

(f) All cluster mailboxes serving the Lots; and

(g) Any other area determined by the Board to be in the interest of the Association to maintain.

The Association shall regularly inspect, maintain, repair and keep the Common Maintenance Areas in good condition and provide for all necessary services and cause all acts to be done which may be necessary or proper to assure the maintenance of the Common Maintenance Areas. The Association shall perform all maintenance obligations set forth in this Declaration or the Bylaws, any maintenance manual provided by Declarant or the maintenance plan described Section 6 above and shall employ all other commonly accepted maintenance practices intended to prolong the life of the materials and construction of Improvements within the Common Maintenance Areas. Additionally, the Association shall be responsible for performing all maintenance required of the "Obligor" under the Operation and Maintenance Agreement.

11.2 Owner's Maintenance Obligations. Except to the extent Association Landscaping is maintained by the Association, each Owner shall maintain his or her Lot and the Improvements located thereon in a clean and attractive condition, in good repair and in such a fashion as not to create a hazard of any kind. Such maintenance shall include, without limitation, painting or staining, repair, replacement and care of roofs, gutters, downspouts, surface water drainage, walks, driveways, landscaping and other exterior Improvements. In addition, each Owner shall keep his or her Lot free of trash and other unsightly materials. The provisions of the preceding sentence include the areas between the property line of any Lot and

the nearest curb, including sidewalks and street trees unless otherwise included in the Association Landscaping.

11.3 Damage or Destruction By Owner. If damage to the Common Maintenance Areas, including any Improvements located thereon, beyond ordinary wear and tear is directly attributable to an Owner or the family members, invitees, licensee, or guest of an Owner, then that Owner shall be responsible for the cost of repairing the damage and the Association may levy a Limited Assessment against the Owner for the repair cost.

12. ARCHITECTURAL CONTROL COMMITTEE

12.1 Creation of Committee. The ACC with the powers and authority described in this Section 12 shall be created as a committee of the Association. The ACC shall have three (3) members, who shall be appointed by Declarant until the Turnover Meeting, after which the ACC members shall be appointed by the Board and shall serve at the pleasure of the Board. Members of the ACC must be Owners. Board members may also serve as ACC members. Appointed members of the ACC shall remain in office until new members are appointed by the Board unless they sooner resign or are disqualified.

12.2 Operations. The members of the ACC shall elect a chairperson, who shall conduct all meetings and shall provide for reasonable notice to each member of the ACC prior to any meeting. The notice shall set forth the time and place of the meeting. Notice may be waived by any member.

12.3 Majority Action. The affirmative vote of a majority of the members of the ACC shall govern its actions and constitute the act of the ACC. A quorum of the ACC shall consist of a majority of the ACC members. The ACC may render its decision only by written instrument setting forth the action taken by the members consenting thereto.

12.4 Review Procedures. If the ACC fails to provide written approval or disapproval of plans and specifications within thirty (30) days after such complete plans and specifications have been submitted, approval of the ACC shall not be required and the related covenants shall be deemed to have been satisfied, unless within twenty (20) days of receipt of the complete plans and specifications, the ACC notifies the Owner of the ACC's intention to extend the approval period by an additional fifteen (15) days to a total of forty-five (45) days after receipt of complete plans and specifications. The ACC shall, from time to time, adopt application forms and rules specifying those requirements necessary to constitute a complete application.

12.5 Approval of Plans by ACC. No Home, building, garage, structure, or other Improvement of any kind or nature, including, without limitation, landscaping, shall be commenced, erected, placed, or altered on any Lot until the construction plans and specifications, and a plan showing the nature, shape, height, materials, and colors, together with detailed plans showing the proposed location of the same on the particular building site and

proposed landscaping has been submitted to and approved in writing by the ACC. All such Improvements and alterations shall be in conformance with the Design Guidelines, the Pattern Book adopted by the City for each area within Villebois and all other applicable governmental laws, ordinances, conditions of approval, rules and regulations. To the extent that the requirements contained in the Pattern Book or in any applicable governmental laws, ordinances, rules and regulations may be in conflict with the Design Guidelines, the more restrictive standard shall apply. Complete plans and specifications for approval by the ACC must include all material required by the rules of the ACC as provided in Section 12.4 above. In no case shall any plans and specifications be accepted for approval that are inconsistent with the requirements of Section 9.2. The ACC may approve or disapprove plans and specifications as submitted or may approve such plans and specifications with specific conditions to such approval.

12.6 Damages Inadequate. Damages are hereby declared to be inadequate compensation for any breach of the covenants, conditions, and restrictions imposed by this Declaration. Declarant, the ACC, or any Owner may, by appropriate proceedings, enjoin, abate, and remedy any such breach and the continuance

12.7 Nuisance. The result of every act of omission or commission or the violation thereof, whether such covenants, conditions, and restrictions are violated in whole or in part, shall constitute a nuisance, and every remedy allowed by law or equity against such nuisance, either public or private, shall be applicable against every such result and may be exercised by Declarant, the ACC, or by any Owner, and may be prohibited or enjoined.

12.8 Non-Waiver. The provisions contained in this Declaration shall inure to the benefit of and be enforceable by Declarant, the ACC, or any Owner, and each of their legal representatives, heirs, successors, and assigns. Failure by Declarant, the ACC or any Owner or their legal representatives, heirs, successors, and assigns to enforce any of the provisions contained herein shall in no event be deemed a waiver of the right to do so thereafter.

12.9 Estoppel Certificate. Within fifteen (15) business days after an Owner delivers a written request to the ACC, the ACC shall provide the Owner with an estoppel certificate executed by a member of the ACC. The estoppel certificate shall state whether or not the Improvements located on the Lot owned by the requesting Owner comply with the provisions of this Declaration. If the estoppel certificate indicates that the Improvements are not in compliance, then it shall identify the specific non-conforming Improvements and set forth with particularity the nature of the noncompliance. Any purchaser in due course from the Owner, and any mortgagee, beneficiary, or secured party having any interest in the Lot and any associated Improvements, may rely on the estoppel certificate with respect to the matters set forth therein, and the estoppel certificate shall be conclusive as between the ACC, all Owners, and such purchaser, mortgagee, beneficiary, or secured party.

12.10 Defenses. The issuance of an estoppel certificate as described in Section 12.9 shall constitute an absolute defense to claims brought against an Owner pursuant to this Section

12 with respect to matters within the purview of the ACC, where the Improvement at issue was in existence at the time of the issuance of the estoppel certificate.

12.11 Liability. The ACC shall use reasonable judgment in accepting or disapproving all plans and specifications submitted to it. Neither the ACC nor any individual ACC member shall be liable to any person for any official act of the ACC in connection with submitted plans and specifications, except to the extent the ACC or any individual ACC member acted with malice or wrongful intent. Approval by the ACC does not necessarily assure approval by any governmental authority. Notwithstanding that the ACC has approved plans and specifications, neither the ACC nor any of its members shall be responsible or liable to any Owner, occupant, builder, developer, or contractor with respect to any loss, liability, claim, or expense which may arise by reason of such approval. Review or analysis of structural, geophysical, engineering, or other similar considerations shall be outside the scope of the ACC's review. Neither the Board, the ACC, or any agent thereof, nor Declarant or any of its members, managers, employees, agents, or consultants, shall be responsible in any way for any defects in any plans or specifications submitted, revised, or approved in accordance with the provisions of this Declaration, nor for any structural or other defects in any work done according to such plans and specifications. The Association shall indemnify, hold harmless, and defend the ACC and its members in any suit or proceeding which may arise by reason of any of the ACC's decisions, provided that the ACC members acted in good faith, within the scope of their authority, and in a manner reasonably believed to be in the best interest of the Association and its Members. The Association shall use reasonable efforts to procure errors and omissions insurance coverage with respect to the ACC members, in accordance with the provisions of the Bylaws.

12.12 Activities of Declarant. This Section 12 shall not apply to the activities of Declarant or its affiliates.

13. DESIGN GUIDELINES

13.1 Paint Requirement. The exterior of any Home erected on a Lot shall be fully completed and painted within one (1) year after construction of the Home has commenced.

13.2 Designs, Materials, and Construction Quality. The external designs and materials of all Homes shall harmonize with each other and shall be reasonably harmonious with those employed on the Homes on other Lots. All auxiliary buildings on a Lot shall be of the same general design and materials as the Home on the Lot. The primary exterior color tone of all buildings shall blend with the natural environment. Bright, unnatural exterior colors are prohibited, except for limited use as trim and accent panels. All Homes, auxiliary buildings, fences, retaining walls, and other Improvements shall comply with the requirements of the Pattern Book and shall be constructed in a good, quality manner in accordance with locally accepted professional building practices.

13.3 Home Size. The ground floor area of each Home, exclusive of one story open porches, garages, and carports, shall not be less than that required by the City Building Code.

13.4 Foundations. All structures erected shall have full, concrete masonry or concrete or wooden piers and piling foundations as approved by the City and designed to accommodate the surrounding terrain. Foundations and exterior walls of all buildings shall be finished in a suitable and customary manner for each such type of building.

13.5 Height Restrictions. All Homes and other Improvements constructed on the Lots shall comply with the applicable City height restrictions. Any height adjustment granted by the City shall be approved by the ACC, unless the ACC determines that the building will unreasonably restrict the view of neighboring Lots.

13.6 Environmental Conditions. Owners shall insure that design and construction of structures in the Property shall properly withstand environmental conditions, including the protection of the flora on the Property.

13.7 Factory Built Homes. All Homes shall be constructed on the Lots. Mobile homes, factory built homes, or manufactured homes shall not be permitted. Notwithstanding the foregoing, panels constructed off-site but assembled on the Lot shall be permitted.

13.8 Additional Design Guidelines. The ACC shall have the authority, but not the obligation, to promulgate and issue, and thereafter to amend from time to time, additional design guidelines supplementing and/or interpreting, but not contradicting, the design guidelines set forth in this Section 13 or elsewhere in this Declaration. Such guidelines shall be supplied in writing to all Owners and shall be fully binding upon all parties as if set forth in this Declaration and shall be applied by the ACC in reviewing and approving or denying proposed improvements or modifications. The ACC shall take into account any proposed building site envelope in order to minimize any impact on neighboring Lots and shall have authority to establish and modify guidelines as necessary or convenient to further this purpose.

13.9 Activities of Declarant. This Section 13 shall not apply to the activities of Declarant or its affiliates.

14. CASUALTY AND CONDEMNATION

14.1 Casualty. The Owner of each Home shall repair, reconstruct, and rebuild the damaged or destroyed portions of his or her Home to substantially the same condition that existed prior to the damage or destruction. In the event of damage to or destruction of the Common Areas or Association Landscaping, the Association shall repair and restore the damaged portion of the Common Areas, unless the holders of at least 75% of the Class A Member voting power of the Association and the Class B Member, if any, agree that the damaged or destroyed portions shall not be repaired or restored. All repair, reconstruction,

rebuilding, or restoration shall begin within six (6) months following the damage or destruction and shall be diligently pursued to completion within twelve (12) months following the damage or destruction, unless work is delayed by causes beyond the reasonable control of the Owner or the Association, as the case may be. If the proceeds of the insurance policies held by the Association are insufficient to fund the full cost of repair and/or restoration of the Common Areas or Association Landscaping, the difference between the amount of such proceeds and such cost shall be charged to all Owners by means of a Special Assessment.

14.2 Condemnation. If any part of the Common Areas are taken by any authority having the power of condemnation or eminent domain (or shall be sold under threat of condemnation), each Owner shall be entitled to notice of such event. The Association shall represent the Owners in negotiations with the condemning authority. The condemnation award shall be applied first to restoration of the Common Areas not taken (unless holders of at least 75% of the Class A Member voting power of the Association and the Class B Member, if any, agree that the remaining Common Areas shall not be restored) and then to such other purposes as the Board may determine in its discretion (including payment to the Owners).

15. SPECIAL DECLARANT RIGHTS

15.1 Declarant shall have the following Special Declarant Rights:

15.1.1 Responsibility and control of the ACC and the Association until the Turnover Meeting, including the right to appoint, remove and replace members of the Board and the ACC.

15.1.2 The right to maintain a sales and management office on the Property.

15.1.3 The right to reserve easement and access rights across the Common Areas for use of future development.

15.1.4 The right to construct Improvements in the Common Areas, whether or not such Improvements are described in this Declaration.

15.1.5 The right to approve amendments to this Declaration and the Bylaws prior to the Turnover Meeting and for a period of ten (10) years thereafter regardless of whether Declarant still owns a Lot.

15.1.6 The right to approve Special Assessments for capital improvements or additions for so long as Declarant owns a Lot.

15.1.7 The right to receive notice of and to attend all Owner meetings and Board meetings for a period of ten (10) years following the Turnover Meeting regardless of whether Declarant still owns a Lot. Meeting notices to Declarant shall be given in the same manner as notices to the Owners; provided, however, that any notice of a Board meeting that is posted at

the Property pursuant to the Bylaws must also be given to Declarant by mail or any other delivery method described in Section 17.4 within the time period prescribed in the Bylaws.

15.1.8 The right to review and make copies of all inspection, maintenance and other records of the Association regardless of whether the Turnover Meeting has occurred or Declarant still owns a Lot.

15.1.9 The rights of Declarant under the Planned Community Act, including but not limited to those under ORS 94.550(21), and all other rights reserved for Declarant elsewhere in this Declaration or in the Bylaws.

16. DISPUTE RESOLUTION.

16.1 Required Procedure. To the fullest extent allowed by law, all claims, controversies, or disputes, whether they are statutory, contractual, tort claims, and/or counterclaims between or among Declarant, Declarant's successors and assigns, the Association, and/or Owner(s) (collectively, the "Parties" and individually, a "Party") which arise out of or are related to the Property, the Lots, the Homes, the Planned Community Act, this Declaration, the Bylaws, the Articles, the Design Guidelines or the rules and regulations of the Association, or which relate to the interpretation or breach of the Planned Community Act, this Declaration or the Bylaws, the Articles, the Design Guidelines or the rules and regulations of the Association (collectively referred to as "Claims") shall be resolved in accordance with the procedures specified herein. Except as otherwise required by the Planned Community Act, the following matters are excluded from this dispute resolution clause and do not constitute Claims: (i) judicial or non-judicial foreclosure or any other action or proceeding to enforce assessments, fines, interest or a trust deed, mortgage, Association lien, or land sale contract; (ii) a forcible entry and detainer action; (iii) actions by the Association or any Owner related to removal of a structure or other condition that violates this Declaration, the Bylaws, the Design Guidelines or any rules and regulations of the Association; (iv) actions for the appointment of a receiver; (v) provisional remedies such as injunctions or the filing of a lis pendens; or (vi) the filing or enforcement of a mechanic's lien. The filing of a notice of pending action (lis pendens) or the application to any court having jurisdiction thereof for the issuance of any provisional process remedy described in Rules 79 through 85 of the Oregon Rules of Civil Procedure (or corresponding federal statutory remedies), including a restraining order, attachment, or appointment of receiver, shall not constitute a waiver of the right to mediate or arbitrate under this Section, nor shall it constitute a breach of the duty to mediate or arbitrate. The proceeds resulting from the exercise of any such remedy shall be held by the Party obtaining such proceeds for disposition as may be determined by an agreement of the Parties pursuant to a mediation or by the arbitration award.

16.2 Negotiated Resolution. The Parties will seek a fair and prompt negotiated resolution of Claims and shall meet at least once to discuss and seek to resolve such Claims, but if this is not successful, all Claims shall be resolved by mediation, in small claims court, or by binding arbitration as set forth in Sections 16.3, 16.4 or 16.5, as applicable.

16.3 Mediation. Prior to mediation of any Claim, the Parties shall endeavor to resolve disputes through the process set forth in Section 16.2 above. All Claims that are not resolved by such process shall be subject to mediation as a condition precedent to arbitration or the filing of a small claims complaint. The request for mediation may be made concurrently with the filing of a demand for arbitration as set forth in Section 16.5 below, but, in such event, mediation shall proceed in advance of arbitration, which shall be stayed pending mediation for a period of sixty (60) days from the date of filing, unless stayed for a longer period by agreement of the parties. All mediation shall be in Clackamas County, Oregon with any dispute resolution program available that is in substantial compliance with the standards and guidelines adopted under ORS 36.175, as it may be amended. The foregoing requirement does not apply to circumstances in which irreparable harm to a Party will occur due to delay or litigation or an administrative proceeding initiated to collect assessments, other than assessments attributable to fines.

16.4 Small Claims. All Claims that have not been resolved by mediation and which are within the jurisdiction of the Small Claims Department of the Circuit Court of the State of Oregon shall be brought and determined there, and all Parties shall be deemed to have waived their right to a jury trial with respect to such Claims.

16.5 Arbitration. Prior to arbitration of any Claim, the Parties shall endeavor to resolve disputes through the processes set forth in Section 16.2, 16.3 and 16.4 above, as applicable. All Claims that have not been resolved by such processes shall be resolved by binding arbitration. Such arbitration shall be conducted by and pursuant to the then effective arbitration rules of Construction Arbitration Services, Inc., or another reputable arbitration service selected by Declarant. If Declarant is not a Party to such dispute, the arbitration service shall be selected by the Board. Any judgment upon the award rendered pursuant to such arbitration may be entered in any court having jurisdiction thereof.

16.6 No Attorneys' Fees. Unless otherwise specifically provided for in this Declaration, the Bylaws or the Planned Community Act, no party in the arbitration, mediation or other proceeding shall be entitled to recover costs or attorneys' fees in connection therewith. To the fullest extent allowed by law and except for Claims in an amount less than or equal to $7,500, no Claim shall be initiated by the Association without approval from the Owners holding seventy-five percent (75%) of the total voting power of the Association. The foregoing vote requirement shall not be required to institute or respond to the following: (i) actions to collect delinquent Assessments, fines or other charges under the Declaration, these Bylaws or any rules and regulations adopted by the Association; (ii) actions initiated by the Association prior to the Turnover Meeting; (iii) actions challenging ad valorem taxation or condemnation proceedings; (iv) actions initiated against any contractor or vendor hired by the Association or supplier of goods and services to the Association; (v) the defense of claims filed against the Association or the assertion of counterclaims in proceedings instituted against it (except for non-mandatory counterclaims); (vi) actions by the Association to appoint a receiver; or (vi) actions to summarily abate, enjoin and remove a structure or condition that violates this Declaration, the Bylaws, the Design Guidelines or any rules and regulations of the Association.

16.7 Confidentiality. The Parties shall keep all discussions of disputes, all settlements and arbitration awards and decisions confidential and shall not disclose any such information, whether directly or indirectly, to any third parties unless compelled to do so by an order of a court of competent jurisdiction. The Parties agree that if a Party breaches its confidentiality obligation then the other Party or Parties to the dispute shall be entitled to seek and obtain any and all equitable remedies, including injunctive relief and specific performance and each Party hereby waives any claim or defense that the other Party has an adequate remedy at law for any such breach and the Parties agree that the aggrieved Party shall not be required to post any bond or other security in connection with any such equitable relief.

17. MISCELLANEOUS

17.1 Term. The covenants, conditions and restrictions of this Declaration shall run for a term of thirty (30) years from the date this Declaration is recorded, after which time they shall be automatically extended for successive periods of ten (10) years each, unless amended, modified or terminated by a vote of the Owners holding at least seventy-five percent (75%) of the total voting power of the Association.

17.2 Amendment and Repeal.

17.2.1 This Declaration, or any provision thereof, as from time to time in effect with respect to all or any part of the Property, may be amended or repealed by the vote or written consent of Owners holding at least seventy-five percent (75%) of the total voting power of the Association and the written consent of Declarant prior to the Turnover Meeting and for a period of ten (10) years thereafter. To the extent any amendment relates to the preservation or maintenance of the Common Areas, such amendment shall also be approved by the zoning administrator of the City.

17.2.2 Upon approval of an amendment as provided herein, the president and secretary of the Association shall execute an instrument amending this Declaration and certifying that the amendment was adopted in accordance with this Declaration and ORS 94.590, which certification shall be properly acknowledged in the manner of acknowledgment of deeds, and the Board, or other duly appointed and authorized persons, shall record the instrument amending this Declaration.

17.2.3 In no event shall an amendment to this Declaration create, limit or diminish any Special Declarant Rights without Declarant's written consent. Additionally, no amendment to this Declaration shall change the boundaries of a Lot, any uses to which a Lot is restricted, the method for determining liability for common expenses, the method for determining the right to common profits or the method of determining voting rights unless the Owners of the affected Lots unanimously consent to the amendment.

17.3 Regulatory Amendments. Notwithstanding the provisions of Section 17.2, until the Turnover Meeting, Declarant shall have the right to amend this Declaration or the Bylaws without any other Owner approval in order to comply with the requirements of any applicable statute, ordinance, regulation or guideline of the Federal Housing Administration, the Veterans Administration, the Farmers Home Administration of the United States, the Federal National Mortgage Association, the Government National Mortgage Association, the Federal Home Loan Mortgage Corporation, any department, bureau, board, commission or agency of the United States or the State of Oregon, or any corporation wholly owned, directly or indirectly, by the United States or the State of Oregon that insures, guarantees or provides financing for a planned community or lots in a planned community.

17.4 Notices. Any notices permitted or required to be delivered as provided herein shall be in writing and may be delivered by: (i) messenger service (or hand delivery); (ii) overnight courier service; (iii) regular U.S. Mail; or (iv) electronic mail, facsimile transmission or any other form of electronic communication acceptable to the Board and permissible under the Planned Community Act. Notices delivered by messenger service (or hand delivery), overnight courier service or regular U.S. Mail shall be sent to each Member's mailing address last appearing on the books of the Association. Notices delivered by facsimile or email shall be sent to the Member's email address or facsimile number last appearing on the books of the Association. Notwithstanding the foregoing, electronic mail, facsimile or other form of electronic communication may not be used to give notice of: (i) failure to pay an assessment; (ii) foreclosure of an Association lien under ORS 94.709; or (iii) an action the Association may take against a Member. Additionally, a Member may decline to receive notice by electronic mail, facsimile or other form of electronic communication by giving written notice thereof to the Board. Notices shall be deemed given on the date the notices are sent in accordance with the procedures outlined herein.

17.5 Right of Enforcement. Except as otherwise provided herein, each Owner of a Lot shall have the right to enforce any or all of the provisions of this Declaration. Additionally, the provisions of this Declaration relating to the preservation and maintenance of the Common Areas shall be deemed to be for the benefit of the City as well as the Association and Owners and the City may enforce such provisions by appropriate proceedings at law or in equity, or may cause such maintenance to be performed, the costs of which shall be a lien upon the Property.

17.6 Remedies Cumulative. Each remedy provided herein is cumulative and not exclusive.

17.7 Joint Owners. If two or more persons share the ownership of any Lot, regardless of the form of ownership, the responsibility of such persons to comply with this Declaration shall be a joint and several responsibility and the act or consent of any one or more of the co-Owners shall constitute the act or consent of the entire ownership interest; provided, however, that if the co-Owners disagree among themselves as to the manner in which any vote or right of consent held by them shall be exercised with respect to a pending matter, any co-Owner may deliver

written notice of such disagreement to the Association, and the vote or right of consent involved shall then be disregarded completely in determining the proportion of votes or consents given with respect to such matter.

17.8 Lessees and Other Invitees. Lessees, invitees, contractors, family members and other persons entering the Property under rights derived from an Owner shall comply with all of the provisions of this Declaration restricting or regulating the Owner's use, improvement or enjoyment of such Owner's Lot and other areas within the Property. The Owner shall be responsible for ensuring such compliance and shall be liable for any failure of compliance by such persons in the same manner and to the same extent as if the failure had been committed by the Owner.

17.9 Non-Waiver. The failure to enforce any of the provisions of this Declaration at any time shall not constitute a waiver of the right to subsequently enforce such provision.

17.10 Restrictions Construed Together. All of the provisions of this Declaration shall be liberally construed together to promote and effectuate the general plan and scheme of the Property.

17.11 Restrictions Severable. Each of the provisions of this Declaration shall be deemed independent and severable, and the invalidity or partial invalidity of any provision or portion thereof shall not affect the validity or enforceability of any other provision.

17.12 Singular Includes Plural. Unless the context requires a contrary construction, the singular shall include the plural and the plural the singular; and the masculine, feminine or neuter shall each include the masculine, feminine and neuter.

17.13 Captions. All captions and titles used in this Declaration are intended solely for convenience of reference and shall not affect that which is set forth in any of the provisions hereof.

(Remainder of Page Intentionally Left Blank;
Signature Page Follows)

PRELIMINARY DRAFT
TO BE MODIFIED

IN WITNESS WHEREOF, the undersigned has executed this Declaration as of the date first written above.

DECLARANT: _____, a
_____

By:_____

Name:_____

Title:_____

STATE OF _____)
) ss.
County of_____)

The foregoing instrument was acknowledged before me on this ____ day of _____ 20___, by _____, who is the _____ of _____, a _____, on behalf of said_____.

_____
Notary Public for_____
My Commission Expires:_____

PRELIMINARY DRAFT
TO BE MODIFIED

EXHIBIT A

Legal Description of Property

Lots 1 through 81, inclusive, and Tracts A through N, inclusive, of _____, Clackamas County, Oregon, the plat of which was recorded in the official records of Clackamas County, Oregon on _____, 20___ as Document No. _____.

PRELIMINARY DRAFT
TO BE MODIFIED

EXHIBIT B

Legal Description of Common Areas

Tracts A through N, inclusive, _____, Clackamas County, Oregon, the plat of which was recorded in the official records of Clackamas County, Oregon on _____, 20___ as Document No. _____.

City of
WILSONVILLE
In OREGON

29799 SW Town Center Loop E
Wilsonville, Oregon 97070
(503) 682-1011
(503) 682-1015 Fax

CERTIFICATION OF ASSESSMENTS AND LIENS

"It is the policy of the City of Wilsonville that no permits of any kind shall either be issued or application processed for any applicant who owes or for any property for which there is any payment which is past due owing to the City of Wilsonville until such time as said sums owed are paid." (Resolution #796)

Project/Property Address: N/A - Grahams Ferry Road / 110th Avenue

Aka Tax Lot(s) 2915, 2916, 2919, 2922, 2991, 2992, 2995 & 2996 on Map(s) 3S 1W 15

Applicant: Pacific Community Design, Inc. (Stacy Connery)

Address: PMB # 519, 13500 SW Pacific Hwy, Ste. 58
Tigard, OR 97223

Property Owner: Polygon Northwest Company

Address: 109 E. 13th Street
Vancouver, WA 98660

In reference to the above, the City of Wilsonville records show that the following amount is due to the City:

Principal Amnt Due $ Ø ☐ Current ☐ Non-Current

Comments:

Dated: 3/21/13

Finance Department: Vance McCoin

(This certification shall be null and void 120 days following the Finance Department date of signature)

395-008

Stacy Connery

From: Fuller, Debbie [DebbieFul@co.clackamas.or.us]
Sent: Wednesday, March 27, 2013 11:48 AM
To: Stacy Connery
Cc: Travis Jansen
Subject: RE: Three (3) requests for plat name reservations

Hi Stacy,

Thank you for the clarification. All three requested names, "Tonquin Woods at Villebois No. 3", Tonquin Woods at Villebois No. 4, and "Tonquin Woods at Villebois No. 5" are all approved. Thank you for the updated map as well.

Debbie

SAP North
PDP 1B N
1st phase
→ Tonquin Woods at Villebois No. 4

Debbie Fuller
Office Manager - Engineering/Surveyor
Development Services Building
150 Beavercreek Rd.
Oregon City, OR 97045

ph: 503.742.4492 | fax: 503.742.4481

Our office hours are 7:00 a.m. to 6:00 p.m. ~ We are closed on Fridays

---

From: Stacy Connery [mailto:stacy@pacific-community.com]
Sent: Wednesday, March 27, 2013 9:53 AM
To: Fuller, Debbie
Cc: Travis Jansen
Subject: RE: Three (3) requests for plat name reservations

Hi Debbie,

Sorry, my mistake. I didn't realize we had not yet reserved 'Tonquin Woods at Villebois No. 3.' Here is the request for No. 3 and the requests for No. 4 and No. 5 with 'at Villebois' added to the name. I've also attached a map showing relationship of the areas proposed to be platted with these names. Please let me know if you have any questions.

Thank you,
Stacy Connery, AICP
(503) 828-5052

Pacific Community Design

Mailing Address:
PMB 519, 13500 SW Pacific Hwy, Ste. 58, Tigard, OR 97223

Please consider the environment before printing this e-mail

REQUEST TO RESERVE SUBDIVISION / CONDOMINIUM NAME

Clackamas County Surveyor's Office
150 Beavercreek Rd.
Oregon City, OR 97045
(503) 742-4475 / FAX (503) 742-4481
E-mail address: www.surveyor@clackamas.us

PLAT NAME REQUESTED:

Tonquin Woods at Villebois No. 4

	TWP/RANGE:	SECTION#:	TAX LOT#(s):
Location of Plat:	3S / 1W	15	2922 & part of TL 2916

I understand that if the above name plat is not pending or recorded within two years, the name will be removed from the reserved list.

RESERVED BY: Stacy Connery

DATE:	TELEPHONE:	FAX:
3/26/13	(503) 941 - 9484	(503) 941 - 9485

EMAIL ADDRESS: stacy@pacific-community.com

PLAT SURVEYOR: #

Travis Jansen, #57751

NAME OF DEVELOPER:

Polygon Northwest Company

ADDRESS:

109 E. 13th Street, Vancouver, WA 98660

DATE:	TELEPHONE:	FAX:
3/26/13	(360) 695 - 7700	(360) 693 - 4442

EMAIL ADDRESS: fred.gast@polygonhomes.com

APPROVED BY:	APPROVAL DATE:

SUPPORTING COMPLIANCE REPORT
ZONE CHANGE
PDP 2N

SECTION IVA

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I. CITY OF WILSONVILLE COMPREHENSIVE PLAN

COMPACT URBAN DEVELOPMENT – IMPLEMENTATION MEASURES

IMPLEMENTATION MEASURE 4.1.6. A

Development in the "Residential – Village" Map area shall be directed by the Villebois Village Concept Plan (depicting the general character of proposed land uses, transportation, natural resources, public facilities, and infrastructure strategies), and subject to relevant Policies and Implementation Measures in the Comprehensive Plan; and implemented in accordance with the Villebois Village Master Plan, the "Village" Zone District, and any other provisions of the Wilsonville Planning and Land Development Ordinance that may be applicable.

Response: This application is being submitted and reviewed concurrently with a Preliminary Development Plan for Phase 1B of SAP-North.

IMPLEMENTATION MEASURE 4.1.6.C

The "Village" Zone District shall be applied in all areas that carry the Residential – Village Plan Map Designation.

Response: The application proposes a zone change to "Village" for the subject property area, which includes the "Residential-Village" Comprehensive Plan Map Designation.

IMPLEMENTATION MEASURE 4.1.6.D

The "Village" Zone District shall allow a wide range of uses that benefit and support an "urban village", including conversion of existing structures in the core area to provide flexibility for changing needs of service, institutional, governmental and employment uses.

Response: This application seeks zone change approval from EFU - Exclusive Farm Use and PF - Public Facilities to V – Village Zone on a portion of Villebois located within SAP Central. The subject property is 28.627 acres in size. The plan for subject property includes single family residential lots and park and open space areas. The 'Introductory Narrative' (see Section IA of Notebook) lists the proposed range of residential units which are interspersed to provide a diverse mix of housing. The proposed residential land use and housing types in this area are consistent with those portrayed in the *Villebois Village Master Plan*, which this regulation is intended to implement.

II. CITY OF WILSONVILLE LAND DEVELOPMENT ORDINANCE

SECTION 4.029 ZONING CONSISTENT WITH THE COMPREHENSIVE PLAN

If a development, other than a short-term temporary use, is proposed on a parcel or lot which is not zoned in accordance with the comprehensive plan, the applicant must receive approval of a zone change prior to, or concurrently with the approval of an application for a Planned Development.

Response: This zone change application is being requested concurrent with a PDP application and Tentative Plat for the site in conformance with the code. The PDP application material is located in Section II of this Notebook and the Tentative Plat application material is in Section III.

SECTION 4.110 ZONING – ZONES

(.01) The following Base Zones are established by this Code:

H. Village, which shall be designated "V" [per Section 4.125 enabling amendments (File No. 02PC08)]

Response: The subject property is within the city limits of Wilsonville. The area has a City of Wilsonville Comprehensive Plan designation of "Residential – Village." The site is currently zoned Exclusive Farm Use and Public Facilities. This request is for a zone change to "Village," which is permitted within the area designated "Residential – Village" on the Comprehensive Plan Map.

SECTION 4.125 VILLAGE (V) ZONE

(.01) The Village (V) zone is applied to lands within the Residential Village Comprehensive Plan Map designation. The Village zone is the principal implementing tool for the Residential Village Comprehensive Plan designation. It is applied in accordance with the Villebois Village Master Plan and the Residential Village Comprehensive Plan designation as described in the Comprehensive Plan.

Response: The subject property lies within the area designated "Residential – Village" on the Comprehensive Plan Map. This request is for a zone change to "V – Village."

(.02) Permitted Uses

Response: The proposed uses listed in the associated application for a Preliminary Development Plan (see Section II of this Notebook) are consistent with the land uses permitted under the Village zone. The PDP, located in Section II of this Notebook, states that the proposed development will create lots for single family residential homes as well as parks, open spaces and linear greens. These uses are permitted under the Village zone.

(.18) Village Zone Development Permit Process

B. Unique Features and Processes of the Village (V) Zone

2. …Application for a zone change shall be made concurrently with an application for PDP approval…

Response: The application for a zone change is being made concurrent with an application for PDP approval (see Section II of this Notebook).

SECTION 4.197 ZONE CHANGES AND AMENDMENTS TO THIS CODE – PROCEDURES.

(.02) In recommending approval or denial of a proposed zone map amendment, the Planning Commission or Development Review Board shall at a minimum, adopt findings addressing the following criteria:

A. That the application before the Commission or Board was submitted in accordance with the procedures set forth in Section 4.008 or, in the case of a Planned Development, Section 4.140; and

Response: This application has been submitted in accordance with the procedures set forth in Section 4.140, which requires that:

(A) All parcels of land exceeding two (2) acres in size that are to be used for residential, commercial or industrial development, shall, prior to the issuance of building permit: 1. Be zoned for planned development; and

(B) Zone change and amendment to the zoning map are governed by the applicable provisions of the Zoning Sections, inclusive of Section 4.197.

This zone change application will establish the appropriate zone for this development and will be governed by the appropriate Zoning Sections.

B. That the proposed amendment is consistent with the Comprehensive Plan map designation and substantially complies with the applicable goals, policies and objectives, set forth in the Comprehensive Plan Text; and

Response: Comprehensive Plan Implementation Measure 4.1.6.c. states, *"the "Village" Zone District shall be applied in all areas that carry the Residential-Village Plan Map Designation."* Since the "Village" zone must be applied to areas designated Residential Village on the Comprehensive Plan Map, its application to these areas is consistent with the Comprehensive Plan.

C. In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with Implementation Measure 4.1.4.b, d, e, q, and x of Wilsonville's Comprehensive Plan text; and

Response: As noted above, Comprehensive Plan Implementation Measure 4.1.6.c. states, *"the "Village" Zone District shall be applied in all areas that carry the Residential-Village Plan Map Designation."* Since the Village Zone must be applied to areas designated "Residential Village" on the Comprehensive Plan Map and is the only zone that may be applied to these areas, its application is consistent with the Comprehensive Plan.

D. That the existing primary public facilities, i.e., roads and sidewalks, water, sewer and storm sewer are available and are of adequate size to serve the proposed development; or, that adequate facilities can be provided in conjunction with project development. The Planning Commission and Development Review

Board shall utilize any and all means to insure that <u>all</u> primary facilities are available and are adequately sized; and

<u>Response:</u> The Preliminary Development Plan compliance report and the plan sheets demonstrate that the existing primary public facilities are available and can be provided in conjunction with the project. Section IIC of this Notebook includes supporting utility and drainage reports. In addition, the applicant will fund the completion of a Traffic Impact Analysis, which is attached as Exhibit IID.

E. That the proposed development does not have a significant adverse effect upon Significant Resource Overlay Zone areas, an identified natural hazard, or an identified geologic hazard. When Significant Resource Overlay Zone areas or natural hazard, and/ or geologic hazard are located on or about the proposed development, the Planning Commission or Development Review Board shall use appropriate measures to mitigate and significantly reduce conflicts between the development and identified hazard or Significant Resource Overlay Zone; and

<u>Response:</u> The northwestern portion of the property includes a forested area in the Significant Resource Overlay Zone. The PDP Supporting Compliance Report (see Exhibit IIA) demonstrates that the proposed development does not have a significant adverse effect on the SROZ.

F. That the applicant is committed to a development schedule demonstrating that the development of the property is reasonably expected to commence within two (2) years of the initial approval of the zone change; and

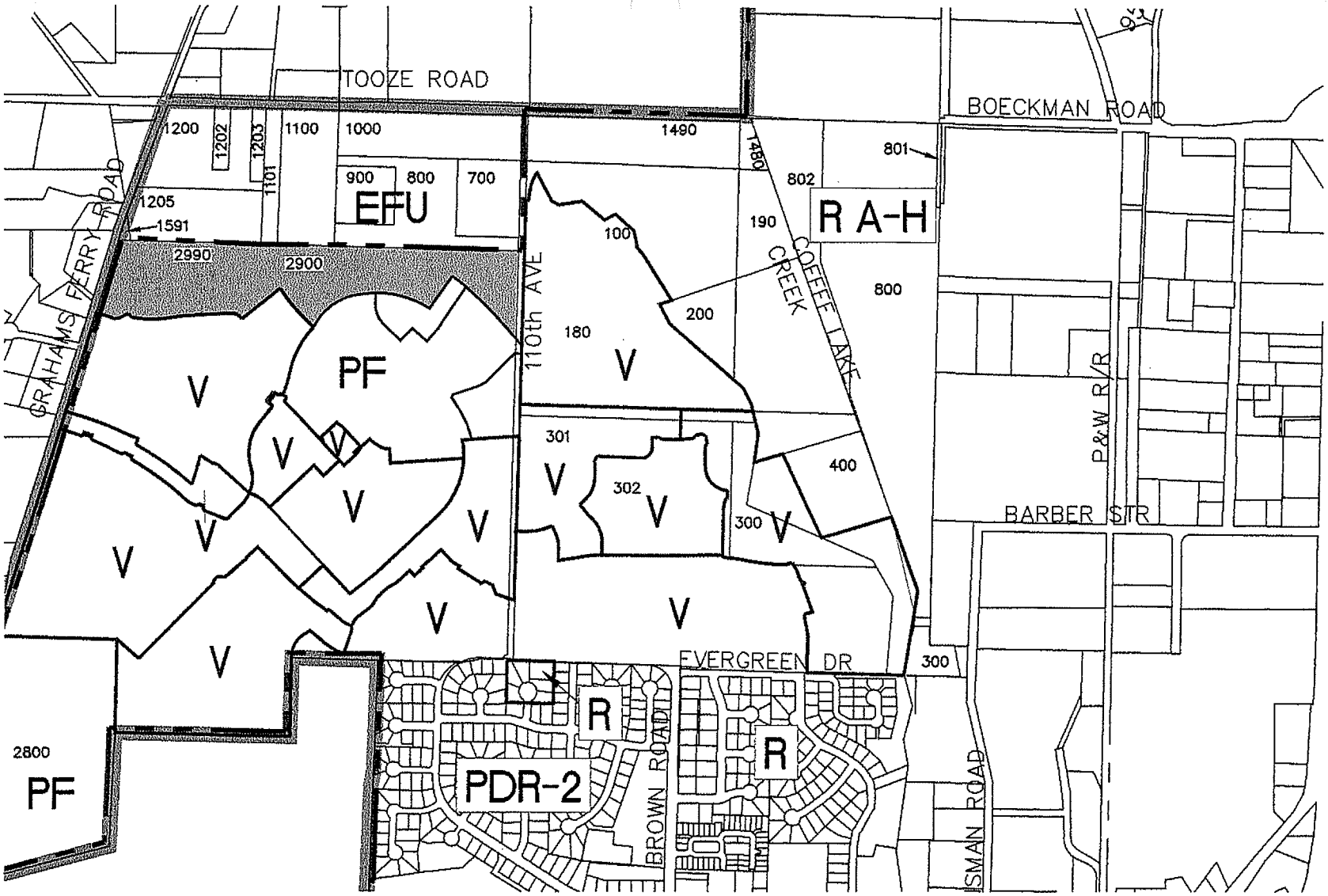
<u>Response:</u> The applicant is committed to a schedule demonstrating that the development of the subject property is reasonably expected to commence within two (2) years of the initial approval of the zone change.

G. That the proposed development and use(s) can be developed in compliance with the applicable development standards or appropriate conditions are attached to insure that the project development substantially conforms to the applicable development standards.

<u>Response:</u> The proposed development can be developed in compliance with the applicable development standards, as demonstrated by this report and the Preliminary Development Plan (Section II) and Tentative Plat (Section III) applications.

III. PROPOSAL SUMMARY & CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for the requested Zone Change. Therefore, the applicant requests approval of this application.



LEGEND

SUBJECT AREA – PROPOSED VILLAGE (V) ZONE (25.56 AC)

ZONE LINE

EXISTING UGB

EXISTING CITY BOUNDARY

PF EXISTING ZONING DESIGNATION

1" = 1000'

PROPOSED ZONE MAP AMENDMENT

N:\proj\395-008\09 Drawings\03 Planning\Exhibits\395011.Zoning Plan Exhibit PDP 1B North.dwg – SHEET: 8x11 Mar 29, 2013 – 3:18pm jjk

Pacific Community Design

EXHIBIT "A"

April 9, 2013

LEGAL DESCRIPTION Job No. 395-008

A portion of Parcel 2 and Parcel 3 of Partition Plat No. 2007-127, and Parcel 10 of Partition Plat No. 2012-019, Clackamas County Plat Records, situated in the Northwest and Northeast Quarters of Section 15, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, more particularly described as follows:

BEGINNING at the northwest corner of Parcel 2, Partition Plat No. 2007-127;

thence along the northerly line of said Partition Plat No. 2007-127, South 88°34'09" East, a distance of 2620.32 feet;

thence leaving said line, South 01°36'50" West, a distance of 123.84 feet;

thence South 50°46'32" East, a distance of 19.42 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence along said right-of-way line, South 01°35'01" West, a distance of 165.77 feet;

thence leaving said right-of-way line, South 39°14'35" West, a distance of 159.78 feet;

thence South 43°18'22" East, a distance of 138.32 feet to a point on the westerly right-of-way line of SW 110th Avenue;

thence South 01°35'01" West, a distance of 46.64 feet to the southeast corner of said Parcel 3;

thence along the southerly line of said Parcel 3, North 41°30'04" West, a distance of 226.09 feet;

thence continuing along said line, on a 900.00 foot radius tangential curve to the left, arc length of 99.96 feet, central angle of 06°21'49", chord bearing of North 44°40'59" West, and chord distance of 99.91 feet;

thence continuing along said line and its extension line, North 47°51'53" West, a distance of 222.76 feet;

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thence leaving said extension line, along a 172.50 foot radius tangential curve to the left, arc length of 21.36 feet, central angle of 07°05'37", chord bearing of North 51°24'42" West, and chord distance of 21.34 feet;

thence North 54°57'30" West, a distance of 19.36 feet;

thence South 34°32'15" West, a distance of 263.51 feet;

thence along a 638.00 foot radius non-tangential curve, concave southerly, with a radius point bearing South 32°41'46" West, arc length of 872.67 feet, central angle of 78°22'13", chord bearing of South 83°30'40" West, and chord distance of 806.21 feet to a point on the easterly line of Parcel 10, Partition Plat No. 2012-019;

thence along said line, South 45°15'25" East, a distance of 20.00 feet;

thence leaving said line, along a 618.00 foot radius non-tangential curve, concave southeasterly, with a radius point bearing South 45°41'13" East, arc length of 381.48 feet, central angle of 35°22'04", chord bearing of South 26°37'45" West, and chord distance of 375.45 feet;

thence along a 482.00 foot radius reverse curve to the right, arc length of 121.62 feet, central angle of 14°27'26", chord bearing of South 16°10'26" West, and chord distance of 121.30 feet to an angle point of the northerly right-of-way line of Barber Street;

thence along said right-of-way line, on a 10.00 foot radius compound curve to the right, arc length of 18.58 feet, central angle of 106°25'35", chord bearing of South 76°36'50" West, and chord distance of 16.02 feet;

thence continuing along said right-of-way line, on a 688.00 foot radius reverse curve to the left, arc length of 12.99 feet, central angle of 01°04'55", chord bearing of North 50°42'51" West, and chord distance of 12.99 feet to the most easterly corner of Parcel 9, Partition Plat No. 2012-019;

thence along the northerly line of said Parcel 9, on a 688.00 foot radius compound curve to the left, arc length of 255.82 feet, central angle of 21°18'17", chord bearing of North 61°54'27" West, and chord distance of 254.35 feet;

thence continuing along said line, on a 10.00 foot radius reverse curve to the right, arc length of 14.07 feet, central angle of 80°36'47", chord bearing of North 32°15'13" West, and chord distance of 12.94 feet;

thence along the easterly line of said Parcel 9, on a 2967.00 foot radius reverse curve to the left, arc length of 143.19 feet, central angle of 02°45'54", chord bearing of North 06°40'13" East, and chord distance of 143.18 feet;

thence continuing along said line, North 05°17'16" East, a distance of 138.59 feet;

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thence continuing along said line, on a 101.00 foot radius tangential curve to the left, arc length of 174.43 feet, central angle of 98°57'15", chord bearing of North 44°11'21" West, and chord distance of 153.55 feet;

thence along the northerly line of said Partition Plat No. 2012-019, South 86°20'01" West, a distance of 301.18 feet;

thence continuing along said line, on a 510.00 foot radius tangential curve to the left, arc length of 64.43 feet, central angle of 07°14'19", chord bearing of South 82°42'52" West, and chord distance of 64.39 feet;

thence continuing along said line, on a 770.00 foot radius reverse curve to the right, arc length of 261.94 feet, central angle of 19°29'28", chord bearing of South 88°50'26" West, and chord distance of 260.68 feet;

thence continuing along said line, on a 51.50 foot radius compound curve to the right, arc length of 49.48 feet, central angle of 55°02'48", chord bearing of North 53°53'26" West, and chord distance of 47.60 feet;

thence continuing along said line, South 63°37'58" West, a distance of 39.50 feet;

thence continuing along said line, South 59°27'30" West, a distance of 17.54 feet;

thence continuing along said line, South 78°43'40" West, a distance of 38.94 feet;

thence continuing along said line, North 72°29'33" West, a distance of 128.85 feet to the northwest corner of said Partition Plat No. 2012-019;

thence along the easterly right-of-way line of Grahams Ferry Road, North 17°14'42" East, a distance of 495.02 feet to the POINT OF BEGINNING.

Containing 28.627 acres, more or less.

Basis of bearings per Partition Plat No. 2007-127, Clackamas County Plat Records.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
TRAVIS C. JANSEN
57751

RENEWS: 6/30/2013

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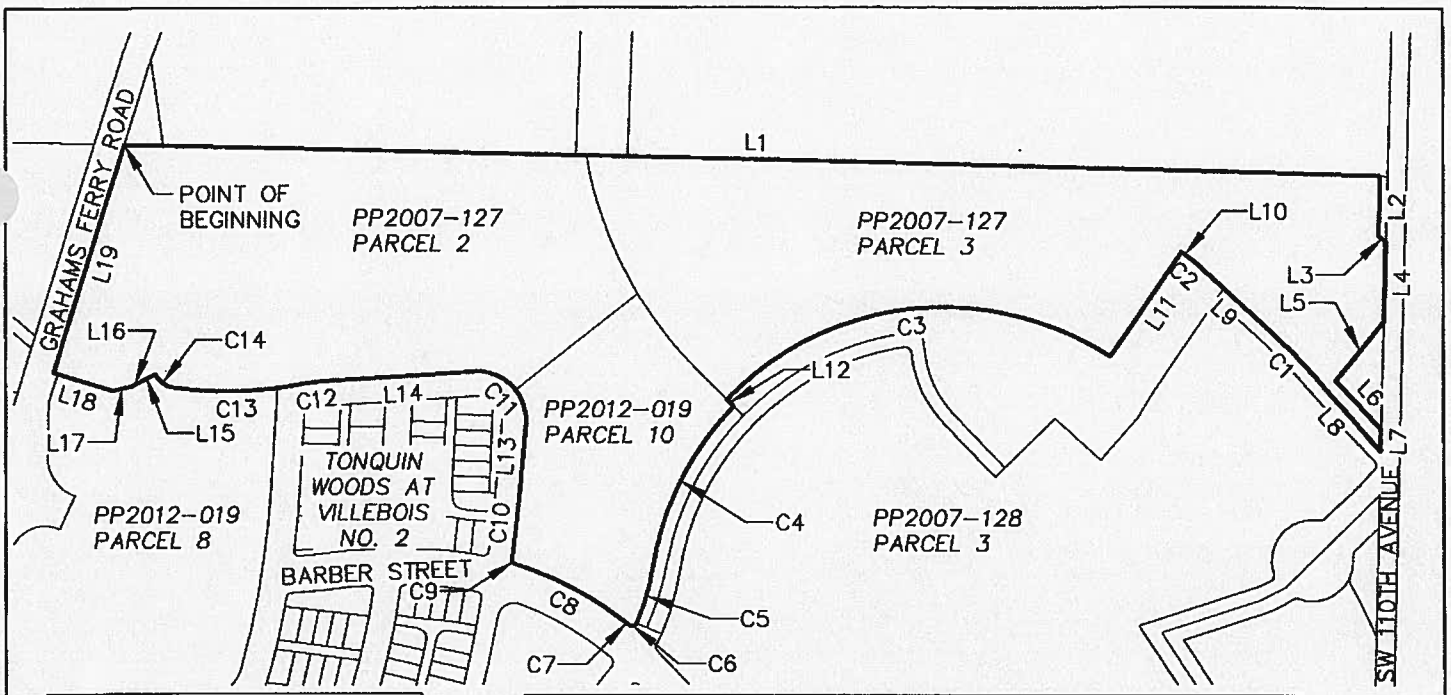
13500 SW Pacific Highway PMB #519, Tigard, OR 97223 ♦ [T] 503-941-9484 [F] 503-941-9485



LINE TABLE		
LINE	BEARING	LENGTH
L1	S88°34'09"E	2620.32'
L2	S01°36'50"W	123.84'
L3	S50°46'32"E	19.42'
L4	S01°35'01"W	165.77'
L5	S39°14'35"W	159.78'
L6	S43°18'22"E	138.32'
L7	S01°35'01"W	46.64'
L8	N41°30'04"W	226.09'
L9	N47°51'53"W	222.76'
L10	N54°57'30"W	19.36'
L11	S34°32'15"W	263.51'
L12	S45°15'25"E	20.00'
L13	N05°17'16"E	138.59'
L14	S86°20'01"W	301.18'
L15	S63°37'58"W	39.50'
L16	S59°27'30"W	17.54'
L17	S78°43'40"W	38.94'
L18	N72°29'33"W	128.85'
L19	N17°14'42"E	495.02'

CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	CHORD	BEARING
C1	900.00'	99.96'	6°21'49"	99.91'	N44°40'59"W
C2	172.50'	21.36'	7°05'37"	21.34'	N51°24'42"W
C3	638.00'	872.67'	78°22'13"	806.21'	S83°30'40"W
C4	618.00'	381.48'	35°22'04"	375.45'	S26°37'45"W
C5	482.00'	121.62'	14°27'26"	121.30'	S16°10'26"W
C6	10.00'	18.58'	106°25'35"	16.02'	S76°36'50"W
C7	688.00'	12.99'	1°04'56"	12.99'	N50°42'51"W
C8	688.00'	255.82'	21°18'17"	254.35'	N61°54'27"W
C9	10.00'	14.07'	80°36'47"	12.94'	N32°15'13"W
C10	2967.00'	143.19'	2°45'54"	143.18'	N06°40'13"E
C11	101.00'	174.43'	98°57'15"	153.55'	N44°11'21"W
C12	510.00'	64.43'	7°14'19"	64.39'	S82°42'52"W
C13	770.00'	261.94'	19°29'28"	260.68'	S88°50'26"W
C14	51.50'	49.48'	55°02'48"	47.61'	N53°53'26"W

EXHIBIT "A"

DRAWN BY: CLL DATE: 4/9/13
REVIEWED BY: TCJ DATE: 4/9/13
PROJECT NO.: 395-008
SCALE: 1"=400'
PAGE 4 OF 4

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[F] 503-941-9485

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SUPPORTING COMPLIANCE REPORT
TYPE "C" TREE REMOVAL PLAN/PERMIT
PDP 2N

SECTION VA

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I. WILSONVILLE PLANNING AND LAND DEVELOPMENT ORDINANCE

SECTION 4.610.10. STANDARDS FOR TREE REMOVAL, RELOCATION OR REPLACEMENT

(.01) Except where an application is exempt, or where otherwise noted, the following standards shall govern the review of an application for a Type A, B, C or D Tree Removal Permit:

A. Standard for the Significant Resource Overlay Zone. The standard for tree removal in the Significant Resource Overlay Zone shall be that removal or transplanting of any tree is not inconsistent with the purposes of this chapter.

Response: The northwestern portion of the project includes an area within the Significant Resource Overlay Zone (SROZ). Proposed tree removal is shown on the *Tree Preservation Plan* (see Section VC of Notebook) and described in the Tree Report (see Section VB of Notebook). Mitigation for impacts within the SROZ will occur as described in Section IIG.

B. Preservation and Conservation. No development application shall be denied solely because trees grow on the site. Nevertheless, tree preservation and conservation as a principle shall be equal in concern and importance as other design principles.

Response: The design of this Preliminary Development Plan has taken into account the preservation of trees on site. The *Tree Preservation Plan* in Section VC shows the existing trees to be retained and removed on site.

C. Development Alternatives. Preservation and conservation of wooded areas and trees shall be given careful consideration when there are feasible and reasonable location alternatives and design options on-site for proposed buildings, structures or other site improvements.

Response: The preservation and conservation of trees on site was carefully considered during the planning for onsite improvements. The *Tree Preservation Plan)*, shown in Section VC, depicts the trees that are to be removed and likely to be removed during construction due to homes, site improvements or due to tree condition.

D. Land Clearing. Where the proposed activity requires land clearing, the clearing shall be limited to designated street rights-of-way and areas necessary for the construction of buildings, structures or other site improvements.

Response: The clearing of land will be limited to areas necessary for the construction of on site improvements. The *Grading and Erosion Control Plan* in Section IIB of the Notebook depicts the extent of grading activities proposed on the site.

E. Residential Development. Where the proposed activity involves residential development, residential units shall, to the extent reasonably feasible, be designed and constructed to blend into the natural setting of the landscape.

Response: A Pattern Book was developed for the general design of residential structures within SAP – North. These homes are designed to blend into the landscape as much as feasible. The design of homes within this phase of SAP – North will be in accordance with the Pattern Book for SAP - North. This is assured through review of compliance with the Pattern Book at the time of Building Permit application.

F. Compliance with Statutes and Ordinances. The proposed activity shall comply with all applicable statutes and ordinances.

Response: The development in PDP 1B North will comply with all applicable statutes and ordinances.

G. Relocation or Replacement. The proposed activity shall include necessary provisions for tree relocation or replacement, in accordance with WC 4.620.00, and the protection of those trees that are not removed, in accordance with WC 4.620.10.

Response: No relocation of trees is proposed. Tree replacement will occur in accordance with the necessary provisions from WC 4.620.00 and WC 4.620.10. As shown on in the Tree Report prepared by Morgan Holan of Walter H. Knapp & Associates, LLC (see Section VB), the tree mitigation proposed with the planting of street trees and trees within park areas exceeds the required amount of mitigation.

H. Limitation. Tree removal or transplanting shall be limited to instances where the applicant has provided completed information as required by this chapter and the reviewing authority determines that removal or transplanting is necessary based on the criteria of this subsection.

1. **Necessary for Construction. Where the applicant has shown to the satisfaction of the reviewing authority that removal or transplanting is necessary for the construction of a building, structure or other site improvement and that there is no feasible and reasonable location alternative or design option on-site for a proposed building, structure or other site improvement; or a tree is located too close to an existing or proposed building or structures, or creates unsafe vision clearance.**
2. **Disease, Damage, or Nuisance, or Hazard. Where the tree is diseased, damaged, or in danger of falling, or presents a hazard as defined in WC 6.208, or is a nuisance as defined in WC 6.200 it seq., or creates unsafe vision clearance as defined in this code.**
3. **Interference. Where the tree interferes with the healthy growth of other trees, existing utility service or drainage, or utility work in a previously dedicated right-of-way, and it is not feasible to preserve the tree on site.**
4. **Other. Where the applicant shows that tree removal or transplanting is reasonable under the circumstances.**

Response: Morgan Holan of Walter H. Knapp & Associates, LLC has prepared a Tree Report for PDP 1B North. This report can be seen in Section VB following this Supporting Compliance Report. This Tree Report calls out trees to be removed and retained within the PDP. The determination to remove trees was based upon an

assessment of what trees were necessary to remove due to construction, the health of the tree, and whether or not they interfered with the health of other trees or utility work. A listing of all the trees to be removed is included in the attached Tree Report (see Section VB).

I. Additional Standards for Type C Permits.

1. Tree Survey. For all site development applications reviewed under the provisions of Chapter 4 Planning and Zoning, the developer shall provide a Tree Survey before site development as required by WC 4.610.40 , and provide a Tree Maintenance and Protection Plan, unless specifically exempted by the Planning Director or DRB, prior to initiating site development.

Response: The *Tree Preservation Plan* (see Section VC) along with the tree report (see Section VB) provide a tree survey with the location, species and health of each tree in the PDP area.

2. Platted Subdivisions. The recording of a final subdivision plat whose preliminary plat has been reviewed and approved after the effective date of Ordinance 464 by the City and that conforms with this subchapter shall include a Tree Survey and Maintenance and Protection Plan, as required by this subchapter, along with all other conditions of approval.

Response: The final subdivision plat will include this information, as necessary.

3. Utilities. The City Engineer shall cause utilities to be located and placed wherever reasonably possible to avoid adverse environmental consequences given the circumstances of existing locations, costs of placement and extensions, the public welfare, terrain, and preservation of natural resources. Mitigation and/or replacement of any removed trees shall be in accordance with the standards of this subchapter.

Response: The *Composite Utility Plans* for the site have been designed to minimize the impact upon the environment to the extent feasible given existing conditions. These plans can be seen in Section IIB of this Notebook. Any trees to be removed due to the placement of utilities will be replaced and/or mitigated in accordance with the provisions in this subchapter.

J. Exemption. Type D permit applications shall be exempt from review under standards D, E, H and I of this subsection.

Response: This application requests a Type C Tree Removal Permit, therefore this standard is not applicable.

SECTION 4.610.40. TYPE C PERMIT

(.01) Approval to remove any trees on property as part of a site development application may be granted in a Type C permit. A Type C permit application shall be reviewed by the standards of the subchapter and all applicable review criteria of Chapter 4. Application of the standards of this section shall not result in a reduction of square footage or loss of

density, but may require an applicant to modify plans to allow for buildings of greater height. If an applicant proposes to remove trees and submits a landscaping plan as part of a site development application, an application for a Tree Removal Permit shall be included. The Tree Removal Permit application will be reviewed in the Stage II development review process, and any changes made that affect trees after Stage II review of a development application shall be subject to review by DRB. Where mitigation is required for tree removal, such mitigation may be considered as part of the landscaping requirements as set forth in this Chapter. Tree removal shall not commence until approval of the required Stage II application and the expiration of the appeal period following that decision. If a decision approving a Type C permit is appealed, no trees shall be removed until the appeal has been settled.

Response: This application includes a request for approval of a Type "C" Tree Removal Plan for approval by the Development Review Board so that a Tree Removal Permit may be issued. Proposed tree removal is identified on The *Tree Preservation Plan* included in Section VC of this Notebook.

(.02) The applicant must provide ten copies of a Tree Maintenance and Protection Plan completed by an arborist that contains the following information:

A. A plan, including a topographical survey bearing the stamp and signature of a qualified, registered professional containing all the following information:

1. Property Dimensions. The shape and dimensions of the property, and the location of any existing and proposed structure or improvement.

2. Tree Survey. The survey must include:

a) An accurate drawing of the site based on accurate survey techniques at a minimum scale of one inch (1") equals one hundred feet (100') and which provides a) the location of all trees having six inches (6") or greater d.b.h. likely to be impacted, b) the spread of canopy of those trees, c) the common and botanical name of those trees, and d) the approximate location and name of any other trees on the property.

b) A description of the health and condition of all trees likely to be impacted on the site property. In addition, for trees in a present or proposed public street or road right-of-way that are described as unhealthy, the description shall include recommended actions to restore such trees to full health. Trees proposed to remain, to be transplanted or to be removed shall be so designated. All trees to remain on the site are to be designated with metal tags that are to remain in place throughout the development. Those tags shall be numbered, with the numbers keyed to the tree survey map that is provided with the application.

c) **Where a stand of twenty (20) or more contiguous trees exist on a site and the applicant does not propose to remove any of those trees, the required tree survey may be simplified to accurately show only the perimeter area of that stand of trees, including its drip line. Only those trees on the perimeter of the stand shall be tagged, as provided in "b", above.**

d) **All Oregon white oaks, native yews, and any species listed by either the state or federal government as rare or endangered shall be shown in the tree survey.**

3. **Tree Protection. A statement describing how trees intended to remain will be protected during development, and where protective barriers are necessary, that they will be erected before work starts. Barriers shall be sufficiently substantial to withstand nearby construction activities. Plastic tape or similar forms of markers do not constitute "barriers".**

4. **Easements and Setbacks. Location and dimension of existing and proposed easements, as well as all setback required by existing zoning requirements.**

5. **Grade Changes. Designation of grade proposed for the property that may impact trees.**

6. **Cost of Replacement. A cost estimate for the proposed tree replacement program with a detailed explanation including the number, size, and species.**

7. **Tree Identification. A statement that all trees being retained will be identified by numbered metal tags, as specified in subsection "A," above in addition to clear identification on construction documents.**

Response: The attached plan sheets (see the *Tree Preservation Plan)* located in Section VC) identify the proposed tree removal. The *Tree Preservation Plans* provide information required by Section 4.610.40(.02). Morgan Holan of Walter H. Knapp & Associates, LLC has also prepared a Tree Report (see Section VB) that provides information required by Section 4.610.40(.02).

SECTION 4.620.00. TREE RELOCATION, MITIGATION, OR REPLACEMENT

(.01) Requirement Established. A Type B or C Tree Removal Permit grantee shall replace or relocate each removed tree having six (6) inches or greater d.b.h. within one year of removal.

Response: No relocation of trees is proposed. Tree replacement will occur in accordance with the necessary provisions from WC 4.620.00 and WC 4.620.10. As shown in the Tree Report prepared by Morgan Holan of Walter H. Knapp & Associates, LLC (see Section VB), the tree mitigation proposed with the planting of street trees and trees within park areas exceeds the required amount of mitigation.

(.02) <u>Basis For Determining Replacement.</u> The permit grantee shall replace removed trees on a basis of one (1) tree replaced for each tree removed. All replacement trees must measure two inches (2") or more in diameter. Alternatively, the Planning Director or Development Review board may require the permit grantee to replace removed trees on a per caliper inch basis, based on a finding that the large size of the trees being removed justifies an increase in the replacement trees required. Except, however, that the Planning Director or Development Review Board may allow the use of replacement Oregon white oaks and other uniquely valuable trees with a smaller diameter.

<u>Response:</u> Trees to be removed will be replaced in accordance with this criterion. The attached Tree Report (see Section VB) prepared by Morgan Holan of Walter H. Knapp & Associates, LLC includes mitigation analysis for planting replacement trees.

(.03) <u>Replacement Tree Requirements.</u> A mitigation or replacement tree plan shall be reviewed by the City prior to planting and according to the standards of this subsection.

A. Replacement trees shall have shade potential or other characteristics comparable to the removed trees, shall be appropriately chosen for the site from an approved tree species list supplied by the City, and shall be state Department of Agriculture nursery Grade No. 1 or better.

B. Replacement trees must be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date.

C. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced.

D. Diversity of tree species shall be encouraged where trees will be replaced, and diversity of species shall also be maintained where essential to preserving a wooded area or habitat.

<u>Response:</u> The attached Tree Report (see Section VB) prepared by Morgan Holan of Walter H. Knapp & Associates, LLC includes mitigation analysis for planting replacement trees.

(.04) All trees to be planted shall consist of nursery stock that meets requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade.

<u>Response:</u> All trees to be planted will meet the requirements as stated in this criterion.

(.05) <u>Replacement Tree Location.</u>

A. City Review Required. The City shall review tree relocation or replacement plans in order to provide optimum enhancement, preservation, and protection of wooded areas. To the extent feasible and desirable, trees shall be relocated or replaced on-site and within the same general area as trees removed

B. Relocation or Replacement Off-Site. When it is not feasible or desirable to relocate or replace trees on-site, relocation or replacement may be made at another location – approved by the city.

Response: Trees will be replaced within the same general area as the trees removed. The attached Tree Report (see Section VB) prepared by Morgan Holan of Walter H. Knapp & Associates, LLC includes a mitigation analysis for planting replacement trees.

(.06) City Tree Fund. Where it is not feasible to relocate or replace trees on site or at another approved location in the City, the Tree Removal Permit grantee shall pay into the City Tree Fund, which fund is hereby created, an amount of money approximately the value as defined by this subchapter, of the replacement trees that would otherwise be required by this subchapter. The City shall use the City Tree Fund for the purpose of producing, maintaining and preserving wooded areas and heritage trees, and for planting trees within the City.

Response: All trees removed will be replaced within PDP 1B North. The attached Tree Report (see Section VB) prepared by Morgan Holan of Walter H. Knapp & Associates, LLC includes a mitigation analysis for planting replacement trees.

(.07) Exception. Tree replacement may not be required for applicants in circumstances where the Director determines that there is good cause to not so require. Good cause shall be based on a consideration of preservation of natural resources, including preservation of mature trees and diversity of ages of trees. Other criteria shall include consideration of terrain, difficulty of replacement and impact on adjacent property.

Response: No exception to the tree replacement requirements is requested with this application.

SECTION 4.620.10. TREE PROTECTION DURING CONSTRUCTION

(.01) Where tree protection is required by a condition of development under Chapter 4 or by a Tree Maintenance and Protection Plan approved under this subchapter, the following standards apply:

A. All trees required to be protected must be clearly labeled as such.

B. Placing Construction Materials Near Tree. No person may conduct any construction activity likely to be injurious to a tree designated to remain, including, but not limited to, placing solvents, building material, construction equipment, or depositing soil, or placing irrigated landscaping, within the drip line, unless a plan for such construction activity has been approved by the Planning Director or Development Review Board based upon the recommendations of an arborist.

C. Attachments to Trees During Construction. Notwithstanding the requirement of WC 4.620.10(1)(A), no person shall attach any device or wire to any protected tree unless needed for tree protection.

D. Protective Barrier. Before development, land clearing, filling or any land alteration for which a Tree Removal Permit is required, the developer shall erect and maintain suitable barriers as identified by an arborist to protect remaining trees. Protective barriers shall remain in place until the City authorizes their removal or issues a final certificate of occupancy, whichever occurs first. Barriers shall be sufficiently substantial to withstand nearby construction activities. Plastic Tape or similar forms of markers do not constitute "barriers". The most appropriate and protective barrier shall be utilized. Barriers are required for all trees designated to remain, except in the following cases.

1. Rights-of-ways and Easements.

2. Any property area separate from the construction or land clearing area onto which no equipment may venture.

Response: Trees to be retained will be protected to the greatest extent possible during construction. Additional details about tree protection during construction will be provided with the construction drawings.

SECTION 4.620.20. MAINTENANCE AND PROTECTION STANDARDS

(.01) The following standards apply to all activities affecting trees, including, but not limited to, tree protection as required by a condition of approval on a site development application brought under this chapter or as required by an approved Tree Maintenance and Protection Plan.

A. Pruning activities shall be guided by the most recent version of the ANSI 300 Standards for Tree, Shrub and Other Woody Plant Maintenance.

B. Topping is prohibited

1. Exception from this section may be granted under a Tree Removal Permit if necessary for utility work or public safety.

Response: All pruning activities will comply with ANSI 300 standards. Additional details about the pruning activities proposed for trees during construction will be further addressed in the construction drawings. Any topping necessary will be applied for with the Tree Removal Permit.

SECTION 4.640.00. APPLICATION REVIEW PROCEDURES

(.03) Reviewing Authority

B. Type C. Where the site is proposed for development necessitating site plan review or plat approval by the Development Review Board, the Development Review Board shall be responsible for granting or denying the application for a Tree Removal Permit, and that decision may be subject to affirmance, reversal or modification by the City Council, if subsequently reviewed by the Council.

Response: This application includes *Tree Preservation Plans*, located in Section VC for review by the Development Review Board. The applicant is requesting that

the Development Review Board approve this plan so that a Tree Removal Permit may be issued.

II. CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable criteria of the City of Wilsonville Land Development Ordinance for the requested review of the Type "C" Tree Removal Plan and Permit. Therefore, the applicant respectfully requests approval of this application.

Walter H. Knapp & Associates, LLC
Consultants in Arboriculture, Silviculture, and Forest Ecology

MEMORANDUM

DATE: May 19, 2013

TO: Stacy Connery (Pacific Community Design)

FROM: Morgan Holen, Project Arborist

RE: Villebois PDP 1B – Supplemental Arborist Recommendations

At your request, this memorandum provides arborist recommendations supplemental to the April 10, 2013 Tree Maintenance and Protection Plan for the Zion property in SAP North at Villebois. This report specifically addresses 13 trees located in proposed Regional Park 4.

Trees 4737, 3851 3852, 3842, 3843, 3844, 3845, 3846, 3847, 3848, and two unnumbered trees are all recommended for removal because of poor condition. These trees are not sustainable or suitable for retention with construction.

Tree 257 has been well protected throughout construction and was recently pruned to remove dead wood. Retention with regular monitoring is recommended; however, this tree could be noted as "likely to be removed", accounted for as removed, re-evaluated during construction in terms of long-term sustainability, and retained or removed at that time. The tree will be protected during construction, but if the arborist determines that the tree is not sustainable, the arborist shall submit a brief memorandum to the City documenting the change in condition to seek written authorization to proceed with removal and mitigation. If the tree is protected throughout construction, no mitigation will be required for this tree.

Removal of these 13 trees will require planting 13 trees for mitigation. If tree 257 is preserved, the number of replacement trees required may be reduced by one tree.

Tree protection fencing is recommended at the dripline of important tree 3850, at a minimum.

Please contact us if you have questions or need any additional information.

Morgan E. Holen

Morgan E. Holen
Morgan Holen & Associates, LLC
ISA Certified Arborist, PN-6145A
ISA Tree Risk Assessment Qualified
Forest Biologist

Walter H. Knapp & Associates, LLC
Consultants in Arboriculture, Silviculture, and Forest Ecology

April 10, 2013

VILLEBOIS SAP NORTH – ZION
TREE MAINTENANCE AND PROTECTION PLAN

1315

Purpose

This Tree Maintenance and Protection Plan for Villebois SAP North – Zion in Wilsonville, Oregon, is provided pursuant to the City of Wilsonville Development Code, Section 4.610.40. This report describes the existing trees located on the project site, as well as recommendations for tree removal, retention, protection, and mitigation.

General Description

The Zion Property in SAP North at Villebois spans the southern SAP North boundary and includes Open Space Tract 2 and Regional Parks 4 and 5, which are heavily treed. We visited the site on April 5, 2013 in order to verify existing tree inventory data and to evaluate trees in terms of potential construction impacts. In densely forested areas, only trees located along the outer boundaries of intact groves were included in the tree survey and therefore inventoried. The groves are composed of native Oregon white oak (*Quercus garryana*), Douglas-fir (*Pseudotsuga menziesii*), and Oregon ash (*Fraxinus latifolia*) in wetter areas. Non-native and invasive tree species are also growing within the relatively natural area, including sweet cherry (*Prunus avium*), English hawthorn (*Crataegus monogyna*), European mountain ash (*Sorbus aucuparia*), and European white birch (*Betula pendula*).

Complete assessment was inhibited by thickets of Himalayan blackberry (*Rubus discolor*) and English ivy (*Hedera helix*) growing aggressively up tree trunks, but in general the trees appear in variable condition. Large Oregon white oaks and Douglas-firs appear in the best condition. In the relatively natural area, the trees are undergoing natural forest stand succession, whereby trees compete with one another and some grow to dominate and suppress others. The grove is best retained intact, with selective removal of high risk hazardous trees and trees that must be removed for the purposes of construction.

The tree inventory includes 79 (38%) Oregon white oak (*Quercus garryana*), but no native yews (*Taxus* spp.) or any species listed by either the state or federal government as rare or endangered were found on the site.

A complete description of individual trees is provided in the enclosed tree inventory data.

7615 SW Dunsmuir Lane, Beaverton, OR 97007
Phone: (503) 646-4349 Fax: (503) 747-4863

Tree Plan Recommendations

In all, 208 trees were inventoried on the Zion property in SAP Central, including one tree located on neighboring property (#15493). Twenty-one trees are recommended for removal and 187 trees are recommended for retention. Table 1 provides a count of trees by species and treatment recommendation.

Table 1. Count of Trees by Species and Treatment Recommendation.

Common Name	Species Name	Remove	Retain	Total
bigleaf maple	*Acer macrophyllum*	5	2	7 (3%)
black cottonwood	*Populus trichocarpa*	1		1 (<1%)
Deciduous	unknown		26	26 (13%)
Douglas-fir	*Pseudotsuga menziesii*	5	11	16 (8%)
English hawthorn	*Crataegus monogyna*		9	9 (4%)
European mountain ash	*Sorbus aucuparia*	2		2 (1%)
European white birch	*Betula pendula*	1		1 (<1%)
incense cedar	*Calocedrus decurrens*	2	1	3 (1%)
Oregon ash	*Fraxinus latifolia*	2	42	44 (21%)
Oregon white oak	*Quercus garryana*	2	77	79 (38%)
Scouler's willow	*Salix scouleriana*		6	6 (3%)
Spruce	*Picea* spp.		1	1 (<1%)
sweet cherry	*Prunus avium*	1	12	13 (6%)
Grand Total		**21** (10%)	**187** (90%)	**208 trees**

During construction—following site clearing and once the pathways proposed through the open space have been staked—the protected trees will need to be re-evaluated in terms of risk potential and safety. The project arborist should evaluate trees in terms of risk potential along the proposed pathways, adjust pathways to avoid tree hazards where feasible, document hazardous trees recommended for removal, if any, and provide supplemental recommendations for tree protection as needed.

The inventory data identifies four trees identified for retention with regular monitoring. This includes trees 967, 257, 21589, and 21590, one Douglas-fir, two Oregon ashes, and one Oregon white oak all with moderate defects that should be monitored regularly for change, or an increase in the probability for failure, over time. While these trees are not in excellent condition, there is low target potential and they are suitable for retention with the project.

The trees to be retained will be protected with tree protection fencing. However, additional recommendations are provided for tree 1316 including a modified profile for paving beneath the dripline of this important tree.

Pruning for clearance and to remove dead and defective branches will likely be necessary. Pruning should be performed by a Qualified Tree Service. Prune the

minimum amount needed and prune prior to construction activity in order to provide clearance and avoid crown damage.

In addition, the open space could be enhanced by removing invasive trees and plants, including English ivy growing up tree trunks. Native trees, shrubs, and ground covers could be replanted to increase species, age class, and structural diversity within the grove. Standing dead trees should remain standing for wildlife habitat where safe to do so. Large woody debris may be left on site following tree removal activities to provide wildlife habitat and soil nutrients; place large wood in direct contact with the ground surface and remove small woody debris from the site to avoid fire hazard.

Mitigation Requirements

The 21 trees recommended for removal all measured larger than 6-inches in diameter and require mitigation per Section 4.620.00; removed trees shall be replaced on a basis of one tree planted for each tree removed. Therefore, 21 trees measuring at least 2-inch in diameter will be planted as mitigation for tree removal.

Tree Protection Standards

Trees designated for retention will need special consideration to assure their protection during construction. We recommend a preconstruction meeting with the owner, contractors and project arborist to review tree protection measures and address questions or concerns on site. Tree protection measures include:

- **Fencing.** Trees to remain will be protected by installation of tree protection fencing to prevent injury to tree trunks or roots, or soil compaction within the root protection area, which generally coincides with the tree dripline. Fences will be 6-foot high steel on concrete blocks. The project arborist will determine the exact location of tree protection fencing. Trees located more than 30-feet from construction activity will not require fencing. Without authorization from the Project Arborist, none of the following will occur within root protection zones:
    1. New buildings;
    2. Grade change or cut and fill, during or after construction;
    3. New impervious surfaces;
    4. Utility or drainage field placement;
    5. Staging or storage of materials and equipment during construction;
    6. Vehicle maneuvering during construction.

  Root protection zones may be entered for tasks like surveying, measuring and sampling. Fences must be closed upon completion of these tasks.
- **Soil protection.** The stripping of topsoil around retained trees will be restricted, except under the guidance of the project arborist. No fill (including temporary storage of spoils) will be placed within the root protection area, except as otherwise directed by the project arborist.
- **Excavation.** The project arborist should provide on-site consultation during all excavation activities beneath the dripline of protected trees. Excavation

immediately adjacent to roots larger than 2-inches in diameter within the root protection zone of retained trees shall be by hand or other non-invasive techniques to ensure that roots are not damaged. Where feasible, major roots shall be protected by tunneling or other means to avoid destruction or damage. Exceptions can be made if, in the opinion of the project arborist, unacceptable damage will not occur to the tree. Where soil grade changes affect the root protection area, the grade line should be meandered wherever practicable. This will require on-site coordination to ensure a reasonable balance between engineering, construction, and the need for tree protection.

- **Surfacing.** Where surfacing is proposed beneath the dripline of protected trees, coordinate with the project arborist to provide recommendations for adjustments to protection fencing and to monitor construction in the tree protection zone. Avoid excavation and use a modified profile to build up from existing grade (Figure 1). The profile includes a layer of permeable geotextile fabric on the ground surface and crushed rock to raise the grade as needed. Surfacing may include asphalt, concrete, or other materials. If excavation is necessary, work shall be performed under arborist supervision.

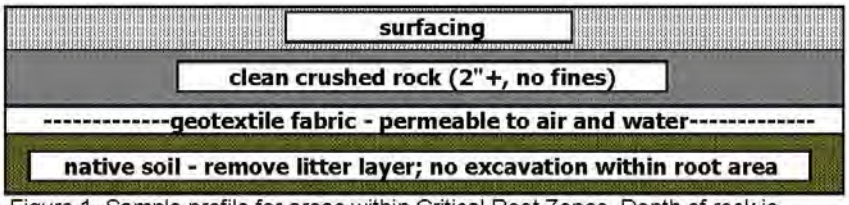

Figure 1. Sample profile for areas within Critical Root Zones. Depth of rock is dependent on grading. Technique based on best management practices.

- **Landscaping.** Following construction, apply approximately 3-inches of mulch beneath the dripline of protected trees, but not directly against tree trunks. Shrubs and ground covers may be planted within tree protection areas. If irrigation is used, use drip irrigation only beneath the driplines of protected trees.
- **Quality Assurance.** The project arborist will supervise proper execution of this plan during construction activities that could encroach on retained trees. Tree protection site inspection monitoring reports will be provided to the Client and City on a regular basis throughout construction.

Please contact us if you have questions or need any additional information.

Morgan E. Holen
Morgan Holen & Associates, LLC
ISA Certified Arborist, PN-6145A
ISA Tree Risk Assessment Qualified
Forest Biologist

Enclosure: Villebois SAP North Zion - Tree Data 4-5-13

1314 Villebois SAP North Zion
Tree Data 4-5-13

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
16458	257	Oregon ash	*Fraxinus latifolia*	22,14	18	dead branches	P	retain, monitor
16459	258	Oregon ash	*Fraxinus latifolia*	24	15	no major defects	G	retain
15332	281	Douglas-fir	*Pseudotsuga menziesii*	50		included bark, basal swelling, one broken top, hazardous	P	remove
16105	297	Douglas-fir	*Pseudotsuga menziesii*	24		low vigor	P	remove
16106	298	Douglas-fir	*Pseudotsuga menziesii*	24	18	no major defects	F	remove
16107	299	Douglas-fir	*Pseudotsuga menziesii*	38		low vigor	P	remove
17459	314	Oregon ash	*Fraxinus latifolia*	18	25		G	retain
16141	401	European mountain ash	*Sorbus aucuparia*	2*10		invasive species, low vigor	P	remove
16142	402	bigleaf maple	*Acer macrophyllum*	36		verticillium wilt	P	remove
16164	403	bigleaf maple	*Acer macrophyllum*	24		verticillium wilt	P	remove
	405	Oregon white oak	*Quercus garryana*	14			F	retain
16234	408	bigleaf maple	*Acer macrophyllum*	18	20	dead branches, verticillium wilt	F	remove
16233	409	bigleaf maple	*Acer macrophyllum*	24	26	dead branches, verticillium wilt	F	remove
21623	410	Oregon white oak	*Quercus garryana*	14, 10	25		I	retain
21622	411	Oregon white oak	*Quercus garryana*	16			F	retain
21621	412	Oregon white oak	*Quercus garryana*	16	30		G	retain
	412	Oregon white oak	*Quercus garryana*	12			F	retain
21620	413	Oregon white oak	*Quercus garryana*	24	30	dead branches	G	retain
21619	414	Oregon white oak	*Quercus garryana*	16	12		F	retain
21617	415	Oregon white oak	*Quercus garryana*	12	8	low vigor	P	retain
21618	416	Oregon white oak	*Quercus garryana*	8		low vigor	P	retain
21624	417	Oregon white oak	*Quercus garryana*	22	30		I	retain
21615	418	Oregon white oak	*Quercus garryana*	36	30	dead branches	F	retain
19804	419	Oregon white oak	*Quercus garryana*	10			F	retain
21614	420	Oregon white oak	*Quercus garryana*	22			F	retain
	420	Oregon white oak	*Quercus garryana*	10			F	retain
21611	421	Oregon white oak	*Quercus garryana*	12	12		I	retain
21612	422	Oregon ash	*Fraxinus latifolia*	8		excess lean	F	retain
21613	423	Oregon ash	*Fraxinus latifolia*	8		excess lean	F	retain
21610	424	Oregon white oak	*Quercus garryana*	28	30		I	retain
21609	425	Oregon white oak	*Quercus garryana*	6			P	retain
	428	Oregon white oak	*Quercus garryana*	14			F	retain
21605	430	Oregon white oak	*Quercus garryana*	32	20		I	retain
21602	431	Oregon white oak	*Quercus garryana*	24	25	dead branches	I	retain
21603	432	Oregon white oak	*Quercus garryana*	14, 10	12		I	retain
21604	433	Oregon white oak	*Quercus garryana*	24, 12, 16	25	dead branches	F	retain
21601	434	Oregon white oak	*Quercus garryana*	28	30		I	retain
21600	435	Oregon white oak	*Quercus garryana*	44	35	good condition, remove ivy	I	retain
21596	436	Oregon white oak	*Quercus garryana*	2*16,20	30		I	retain
21595	437	Oregon white oak	*Quercus garryana*	22	15		I	retain
21594	438	Oregon white oak	*Quercus garryana*	20	25		I	retain
21597	439	Oregon white oak	*Quercus garryana*	18	20		I	retain
21598	440	Oregon white oak	*Quercus garryana*	14, 10	15		I	retain
21599	441	Oregon white oak	*Quercus garryana*	32	30		I	retain

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
21593	442	Oregon white oak	*Quercus garryana*	12	8		I	retain
21591	443	Oregon white oak	*Quercus garryana*	16	15		I	retain
21592	444	Oregon white oak	*Quercus garryana*	10			I	retain
21586	447	Oregon ash	*Fraxinus latifolia*	3*8,10			G	retain
21585	448	Oregon white oak	*Quercus garryana*	2*18,22	25	one-sided crown	I	retain
21588	449	Oregon ash	*Fraxinus latifolia*	12			G	retain
21587	450	Oregon ash	*Fraxinus latifolia*	16			G	retain
16262	451	incense cedar	*Calocedrus decurrens*	36	14	no major defects	I	retain
16263	452	European white birch	*Betula pendula*	18	15	invasive species, thin crown, dead top	P	remove
16264	453	incense cedar	*Calocedrus decurrens*	26	10	thin crown, not viable	F	remove
16265	454	incense cedar	*Calocedrus decurrens*	24	12	thin crown, not viable	F	remove
21951	766	deciduous		14			F	retain
21952	768	Oregon white oak	*Quercus garryana*	14			F	retain
21953	769	Oregon white oak	*Quercus garryana*	10			F	retain
21957	771	Oregon white oak	*Quercus garryana*	2*10,12			F	retain
21955	772	deciduous		22			F	retain
21958	773	bigleaf maple	*Acer macrophyllum*	18			F	retain
21960	774	deciduous		6			F	retain
21959	775	deciduous		16			F	retain
21961	776	Oregon white oak	*Quercus garryana*	10			F	retain
21956	777	deciduous		14			F	retain
21969	781	spruce	*Picea* spp.	20			F	retain
21970	782	Oregon white oak	*Quercus garryana*	12			F	retain
21979	786	deciduous		8			F	retain
21977	787	deciduous		6			P	retain
21978	788	English hawthorn	*Crataegus monogyna*	6		invasive species	P	retain
21971	789	Oregon white oak	*Quercus garryana*	6			F	retain
21972	790	deciduous		18			F	retain
21973	791	Oregon white oak	*Quercus garryana*	12			F	retain
21974	792	Oregon white oak	*Quercus garryana*	14			F	retain
17336	808	Oregon ash	*Fraxinus latifolia*	10				retain
17337	809	Oregon ash	*Fraxinus latifolia*	2*18,22				retain
17333	821	Oregon ash	*Fraxinus latifolia*	10				retain
17331	822	Oregon ash	*Fraxinus latifolia*	20				retain
17330	826	Oregon ash	*Fraxinus latifolia*	12				retain
17329	827	Oregon ash	*Fraxinus latifolia*	6				retain
17327	828	Oregon ash	*Fraxinus latifolia*	10				retain
21950	899	deciduous		14			F	retain
21949	900	Oregon white oak	*Quercus garryana*	2*14			F	retain
17325	920	Oregon ash	*Fraxinus latifolia*	10				retain
17465	921	English hawthorn	*Crataegus monogyna*	8		invasive species	G	retain
18012	959	Douglas-fir	*Pseudotsuga menziesii*	24	20		G	retain
18011	960	bigleaf maple	*Acer macrophyllum*	12		lean	P	retain
18018	961	English hawthorn	*Crataegus monogyna*	6		invasive species	F	retain

1314 Villebois SAP North Zion
Tree Data 4-5-13

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
18010	962	Douglas-fir	*Pseudotsuga menziesii*	12	15	one-sided crown	F	retain
18008	964	Douglas-fir	*Pseudotsuga menziesii*	10	15	one-sided crown	F	retain
18009	965	Douglas-fir	*Pseudotsuga menziesii*	15	15	one-sided crown	F	retain
18006	967	Douglas-fir	*Pseudotsuga menziesii*	36	15	one-sided crown, re-evaluate with removal of 17838	F	retain, monitor
18014	971	Oregon white oak	*Quercus garryana*	12	10		F	retain
18027	1134	Oregon white oak	*Quercus garryana*	12			F	retain
18026	1135	sweet cherry	*Prunus avium*	16		invasive species	F	retain
18022	1137	sweet cherry	*Prunus avium*	8		invasive species	F	retain
17480	1252	Douglas-fir	*Pseudotsuga menziesii*	24			F	retain
17478	1255	sweet cherry	*Prunus avium*	8		invasive species	F	retain
17476	1256	Oregon white oak	*Quercus garryana*	12		no major defects	G	retain
	1257	Oregon white oak	*Quercus garryana*	4*10,24		no major defects	I	retain
17472	1258	Oregon white oak	*Quercus garryana*	2*12,24	30	no major defects	G	retain
17358	1310	Oregon ash	*Fraxinus latifolia*	12	10		G	retain
17460	1315	Oregon ash	*Fraxinus latifolia*	14	20		G	retain
17359	1316	Oregon white oak	*Quercus garryana*	18	25		I	retain, use modified profile
17348	1317	Oregon ash	*Fraxinus latifolia*	16				retain
17347	1318	Oregon ash	*Fraxinus latifolia*	18				retain
17346	1320	Oregon ash	*Fraxinus latifolia*	2*12,15				retain
17344	1321	Oregon ash	*Fraxinus latifolia*	24				retain
17343	1322	Oregon ash	*Fraxinus latifolia*	12				retain
17341	1323	Oregon ash	*Fraxinus latifolia*	10				retain
17340	1324	Oregon ash	*Fraxinus latifolia*	15				retain
17338	1325	Oregon ash	*Fraxinus latifolia*	18				retain
17349	1348	Oregon ash	*Fraxinus latifolia*	8				remove
15493		English hawthorn	*Crataegus monogyna*	3*8	8	invasive species, poor structure and condition	P	protect adjacent tree
16165		bigleaf maple	*Acer macrophyllum*	16	20	verticillium wilt	P	remove
16227		European mountain ash	*Sorbus aucuparia*	6		invasive species, poor condition	P	remove
16944		Oregon ash	*Fraxinus latifolia*	24	25	no major defects	G	retain
16945		Oregon ash	*Fraxinus latifolia*	6		suppressed	F	retain
16946		Oregon ash	*Fraxinus latifolia*	10	30	lean	F	retain
16947		Oregon ash	*Fraxinus latifolia*	12	30	lean	F	retain
16948		Oregon ash	*Fraxinus latifolia*	14	30	lean	F	retain
16949		Oregon ash	*Fraxinus latifolia*	3*14,24	35	dead branches, broken top	F	retain
16950		Oregon ash	*Fraxinus latifolia*	18		suppressed	F	retain
16957		Scouler's willow	*Salix scouleriana*	3*6,14		decay	P	retain
16958		Scouler's willow	*Salix scouleriana*	12		decay	P	retain
16959		Oregon ash	*Fraxinus latifolia*	3*8,12	20	wetland	G	retain
16960		Oregon ash	*Fraxinus latifolia*	8*8,16	25	some dead branches	G	retain
17324		Oregon ash	*Fraxinus latifolia*	2*6				retain
17334		Oregon ash	*Fraxinus latifolia*	10				retain
17339		Oregon ash	*Fraxinus latifolia*	6				retain
17351		sweet cherry	*Prunus avium*	6		invasive species, inherent limitations	F	remove
17352		Oregon white oak	*Quercus garryana*	8			F	remove

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
17353		Oregon white oak	*Quercus garryana*	8			F	remove
17357		Oregon ash	*Fraxinus latifolia*	6			G	remove
17461		Scouler's willow	*Salix scouleriana*	8		inherent species limitations	P	retain
17462		Oregon white oak	*Quercus garryana*	18			G	retain
17466		Scouler's willow	*Salix scouleriana*	2*6		inherent species limitations	P	retain
17467		English hawthorn	*Crataegus monogyna*	8		invasive species	P	retain
17469		Scouler's willow	*Salix scouleriana*	2*6,8		inherent species limitations	P	retain
17470		Oregon white oak	*Quercus garryana*	10		no major defects	F	retain
17473		Oregon white oak	*Quercus garryana*	14		no major defects	F	retain
17475		Scouler's willow	*Salix scouleriana*	6		inherent species limitations	P	retain
17479		sweet cherry	*Prunus avium*	2*161253		invasive species	F	retain
17481		sweet cherry	*Prunus avium*	6		invasive species	F	retain
17482		sweet cherry	*Prunus avium*	6		invasive species	F	retain
17483		sweet cherry	*Prunus avium*	6		invasive species	F	retain
17838		Douglas-fir	*Pseudotsuga menziesii*	2*30,36	25	remove for construction	G	remove
18015		sweet cherry	*Prunus avium*	8		invasive species	P	retain
18017		sweet cherry	*Prunus avium*	10		invasive species	F	retain
18020		sweet cherry	*Prunus avium*	6		invasive species	F	retain
18021		black cottonwood	*Populus trichocarpa*	30		inherent species limitations, high target potential	F	remove
21589		Oregon ash	*Fraxinus latifolia*	2*16		basal decay	F	retain, monitor
21590		Oregon white oak	*Quercus garryana*	24		one-sided crown	F	retain, monitor
21606		Oregon ash	*Fraxinus latifolia*	2*14,16	20		I	retain
21608		Oregon white oak	*Quercus garryana*	3*14,26	20	dead branches	F	retain
21648		Oregon white oak	*Quercus garryana*	2*12,18			F	retain
21649		English hawthorn	*Crataegus monogyna*	8		invasive species	P	retain
21650		deciduous		3*6,10			F	retain
21651		deciduous		3*6,10			F	retain
21652		deciduous		6			F	retain
21653		deciduous		6			F	retain
21654		deciduous		10			F	retain
21655		deciduous		6			F	retain
21656		deciduous		12			F	retain
21658		Oregon white oak	*Quercus garryana*	18			F	retain
21665		deciduous		20			F	retain
21666		deciduous		2*8,20			F	retain
21668		Oregon white oak	*Quercus garryana*	3*12,18			F	retain
21670		Oregon white oak	*Quercus garryana*	4*6,12			F	retain
21672		Oregon white oak	*Quercus garryana*	2*16,18			F	retain
21673		Oregon white oak	*Quercus garryana*	2*8,18			F	retain
21674		Oregon white oak	*Quercus garryana*	2*12,20			F	retain
21675		Oregon white oak	*Quercus garryana*	18			F	retain
21676		Oregon white oak	*Quercus garryana*	8			F	retain
21677		Oregon white oak	*Quercus garryana*	2*8,14			F	retain
21678		deciduous		12			F	retain

1314 Villebois SAP North Zion
Tree Data 4-5-13

No.	Tree Tag	Common Name	Species Name	DBH (inch)	C-RAD (feet)	Condition	Rating	Recommendation
21679		deciduous		6			F	retain
21680		Oregon white oak	*Quercus garryana*	2*6,12			F	retain
21681		Oregon white oak	*Quercus garryana*	3*8,14			F	retain
21682		Oregon white oak	*Quercus garryana*	8			F	retain
21686		Oregon white oak	*Quercus garryana*	2*14			F	retain
21687		Oregon white oak	*Quercus garryana*	2*8,12			F	retain
21927		Oregon white oak	*Quercus garryana*	8			F	retain
21930		English hawthorn	*Crataegus monogyna*	6		invasive species	P	retain
21931		English hawthorn	*Crataegus monogyna*	4*4,8		invasive species	P	retain
21932		deciduous		6			F	retain
21933		Oregon white oak	*Quercus garryana*	8			F	retain
21937		English hawthorn	*Crataegus monogyna*	8			F	retain
21938		Oregon white oak	*Quercus garryana*	2*8,14			F	retain
21939		Oregon white oak	*Quercus garryana*	3*4,10			F	retain
21940		Oregon white oak	*Quercus garryana*	14			F	retain
21944		deciduous		2*4,6			F	retain
21945		deciduous		6			F	retain
21946		Oregon white oak	*Quercus garryana*	24			F	retain
21947		Oregon white oak	*Quercus garryana*	14			F	retain
21954		Oregon white oak	*Quercus garryana*	28			F	retain
21975		deciduous		6			P	retain
21980		deciduous		8			F	retain
23337		Douglas-fir	*Pseudotsuga menziesii*	2*18		overtopped	F	retain
23338		Douglas-fir	*Pseudotsuga menziesii*	18		excess lean	P	retain
23340		Douglas-fir	*Pseudotsuga menziesii*	20	15		F	retain
23341		deciduous		6,12			P	retain
23343		Douglas-fir	*Pseudotsuga menziesii*	36		ivy, thin crown	F	retain
23345		Oregon ash	*Fraxinus latifolia*	6,8			F	retain
23346		Oregon ash	*Fraxinus latifolia*	10			P	retain
23348		sweet cherry	*Prunus avium*	10		invasive species	F	retain
23350		sweet cherry	*Prunus avium*	4,6,8		invasive species	F	retain
23358		Douglas-fir	*Pseudotsuga menziesii*	36			F	retain

*DBH: Diameter at Breast Height (measured 4.5-feet above ground level in inches)
^C-Rad: Crown Radius, the distance from the center of the tree to the edge of the dripline (measured in feet)
#Condition Codes:

- I: Special Importance
- G: Good
- F: Fair
- P: Poor

NOTES

ALL CONSTRUCTION AND GRADING WITHIN TREE PROTECTION ZONE IS TO BE COMPLETED UNDER DIRECT SUPERVISION OF PROJECT ARBORIST.
CONTACT: MORGAN HOLEN
PHONE: 503-646-4349

THE INTENT OF THE PLAN IS TO RETAIN AND INCORPORATE THE MAXIMUM QUANTITY OF TREES WITH IMPORTANT, GOOD, AND MODERATE CLASSIFICATIONS. THE FOLLOWING CLASSIFICATION SYSTEM WAS USED:

CLASSIFICATION METHOD:
TREES WERE RATED BASED ON THE FOLLOWING CONSIDERATIONS:
1. HEALTH
2. SPECIES (NATIVES WITH HABITAT AND ECOSYSTEM VALUE)
3. COMPATIBILITY WITH DEVELOPMENT
4. FORM / VISUAL INTEREST / MATURE SIZE

TREES RANKED AS IMPORTANT WERE RATED HIGH IN ALL FOUR AREAS.

TREES IN THE GOOD CATEGORY HAD GOOD HEALTH AND WERE A DESIRABLE SPECIES, BUT HAD IRREGULAR FORM OR LESS COMPATIBILITY WITH DEVELOPMENT.

TREES IN THE MODERATE CATEGORY HAD GOOD TO MODERATE HEALTH AND FORM, BUT WERE A LESS DESIRABLE SPECIES OR MAY BE LESS COMPATIBLE WITH DEVELOPMENT.

TREES IN THE POOR CATEGORY HAD POOR HEALTH AND/OR SUBSTANTIAL DAMAGE.

NOTES:
1. THE INFORMATION PROVIDED WITHIN THE PROJECT BOUNDARY IS BASED ON AN ON-SITE EVALUATION OF THE EXISTING TREES BY ARBORIST MORGAN HOLAN AND WAS PROVIDED IN A TREE REPORT DATE 4/10/2013 INCLUDED WITH THE APPLICATION MATERIALS.

LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

SCALE
60 0 30 60
1 INCH = 60 FEET

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tree Preservation Plan

DATE 04/15/2013

9.1

PALRS

EI I VAPSLCFVLMAP EPT ZCETNPZ WNLDNP LCRR MCALRVLMAP KAPRNS LA BR VA: MI RLRT FPTRC TNDRVL SFMRCONSMAP A1 MCAJRVL ECBACNBL(VAPLEVL.: ACZEP DAI RP
MDAPR. 503-646-4349

LDR NPLRPL A1 LDR MI EP NS LA CRLENP EPT NPVACMACELR LDR: EXN F: QFEPLNLGA1 LCRRS WNLD N MACLEPL, ZAAT, EPT: ATRCELR VI ESSNNVELMAPS(LDR 1AI I AWNPZ VI ESSNNVELMAP SGSLR: WES FSRT.

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LCRRS NP LDR ZAAT VELRZACGDET ZAAT DREI LD EPT WRCR E TRSNDEBI R SMRVNRS, BFL DET NCCRZFI EC 1AC: AC I RSS VA: MELNBNNLG WNLD TRORI AM RPL(

LCRRS NP LDR: ATRCELR VELRZACGDET ZAAT LA : ATRCELR DREI LD EPT 1AC: , BFL WRCR E I RSS TRSNDEBI R SMRVNRS AC: EG BR I RSS VA: MELNBI R WNLD TRORI AM RPL(

LCRRS NP LDR MAAC VELRZACGDET MAAC DREI LD EPT/AC SFBSLEPLNEI TE: EZR(

PALRS.
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LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

SCALE
60 0 30 60
1 INCH = 60 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Treet Preservation Plan

DATE 04/15/2013

9.2

SUPPORTING COMPLIANCE REPORT

FINAL DEVELOPMENT PLAN 2N

SECTION VIA

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I. WILSONVILLE PLANNING & LAND DEVELOPMENT ORDINANCE

SECTION 4.125. VILLAGE (V) ZONE

(.02) Permitted Uses

Examples of principle uses that typically permitted:

H. Non-commercial parks, plazas, playgrounds, recreational facilities, community buildings and grounds, tennis courts, and other similar recreational and community uses owned and operated either publicly or by an owners association.

Response: The parks proposed within PDP 1B N are permitted uses. These are non-commercial parks to be owned and operated by a homeowners association for the first five (5) years, and then will be dedicated to and maintained by the City.

(.07) General Regulations – Off-Street Parking, Loading & Bicycle Parking

Response: The proposed parks within PDP 1B N do not include any off-street parking. These areas are not planned to provide amenities that require off-street parking. All proposed parks include pathways for pedestrians and bicycle travel.

(.08) Open Space.

Response: The Parks *Master Plan* for Villebois states that there are 57.87 acres of parks and 101.46 acres of open space for a total of 159.33 acres within Villebois, approximately 33%. SAP North includes parks and open space areas consistent with *Master Plan*. PDP 1B N includes the parks and open space shown in the *Villebois Village Master Plan*.

(.09) Street and Access Improvement Standards.

Response: The Supporting Compliance Report for the PDP demonstrates that streets and access improvement standards are met (See Section IIA). This code section does not apply to the proposed parks, except to assure that vision clearance standards are met in proposed planting schemes for these areas. Proposed landscaping is sited to meet vision clearance standards (see Exhibit VIB).

(.10) Sidewalk and Pathway Improvement Standards.

Response: This code section refers directly to code Section 4.176, which is addressed in subsequent sections of this report.

(.11) Landscaping, Screening and Buffering

A. Except as noted below, the provisions of Section 4.176 shall apply in the Village zone:

1. Streets in the Village zone shall be developed with street trees as described in the Community Elements Book.

Response: The applicable provisions of Section 4.176 are addressed in the subsequent sections of this report. The PDP provides information regarding street trees for the proposed streets (See Section IIB). This FDP application reflects the provision of street trees consistent with that shown in the PDP application.

(.12) Master Signage and Wayfinding

Response: The SAP North *Signage & Wayfinding Plan* does not show any required signage or monumentation within the subject area.

(.14) Design Standards Applying to the Village Zone

A. The following design standards implement the Design Principles found in (.13), above, and enumerate the architectural details and design requirements applicable to buildings and other features within the Village (V) zone. The Design Standards are based primarily on the features, types, and details of the residential traditions in the Northwest, but are not intended to mandate a particular style or fashion. All development within the Village zone shall incorporate the following:

2. Building and site design shall include:

b. Materials, colors and architectural details executed in a manner consistent with the methods included in an approved Architectural Pattern Book, Community Elements Book or approved Village Center Design.

Response: The materials proposed for the parks of the subject PDP are consistent with the approved *Community Elements Book* as shown in the FDP Approval Criteria section of this report. The *Pattern Book* is not applicable to the proposed park uses. The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent with the design shown in the *Community Elements Book* on Pages 11-12. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP North; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

f. The protection of existing significant trees as identified in an approved Community Elements Book.

Response: The design of the parks will protect existing significant trees consistent with the Tree Protection component of the *Community Elements Book* and the *Tree Preservation Plan* (see Section IIB of this Notebook). The FDP plans (Exhibit VIB) show retention of existing significant trees.

g. A landscape plan in compliance with Sections 4.125(.07) and (.11), above.

Response: A detailed landscape plan is provided with this FDP application in accordance with the requirements of Section 4.125 (.07) and (.11), 4.176(.09), and 4.440(.01)B (see attached plans in Exhibit VIB).

3. Lighting and site furnishings shall be in compliance with the approved Community Elements Book.

Response: Lighting and site furnishings as identified in the approved *Community Elements Book* for SAP – North are addressed in the FDP Approval Criteria section of this report. The FDP plans include the locations of mailbox kiosks (see Exhibit VIB),

which will be consistent with the design shown in the *Community Elements Book* on Pages 11-12. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP North; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

(.18) Village Zone Development Permit Process

L. Final Development Plan Approval Procedures (Equivalent to Site Design Review):

1. Unless an extension has been granted by the Development Review Board as enabled by Section 4.023, within two (2) years after the approval of a PDP, an application for approval of a FDP shall:

a. Be filed with the City Planning Division for the entire FDP, or when submission of the PDP in phases has been authorized by the development Review Board, for a phase in the approved sequence.

b. Be made by the owner of all affected property or the owner's authorized agent.

c. Be filed on a form prescribed by the City Planning Division and filed with said division and accompanied by such fee as the City Council may prescribe by resolution.

d. Set forth the professional coordinator and professional design team for the project.

Response: This application has been made by the owner and applicant of the affected property and has been filed on the prescribed form and accompanied by the prescribed fee (copies of the application form and fee payment are included in Sections IB and IC, respectively, of this Notebook). The professional coordinator and professional design team for the project are listed in the Introductory Narrative (see Section IA of this Notebook).

M. FDP Application Submittal Requirements:

1. An application for approval of a FDP shall be subject to the provisions of Section 4.034.

Response: Section 4.034(.08), states that "Applications for development approvals within the Village zone shall be reviewed in accordance with the standards and procedures set forth in Section 4.125." The proposed FDP is reviewed in accordance with the standards and procedures set forth in Section 4.125, as demonstrated by this report.

N. FDP Approval Procedures

1. An application for approval of a FDP shall be subject to the provisions of Section 4.421.

Response: The provisions of Section 4.421 are addressed in the following sections of this report.

O. FDP Refinements to an Approved Preliminary Development Plan

Response: This FDP is submitted for review and approval concurrent with the PDP. Thus, the FDP is consistent with the PDP and does not propose any refinements or amendments to the PDP.

P. FDP Approval Criteria

1. An application for approval of a FDP shall be subject to the provisions of Section 4.421.

Response: The provisions of Section 4.421 are addressed in the following sections of this report.

2. An application for an FDP shall demonstrate that the proposal conforms to the applicable Architectural Pattern Book, Community Elements Book, Village Center Design and any other conditions of a previously approved PDP.

Response: This FDP addresses parks within PDP 1B N. The *Architectural Pattern Book* is not applicable to this FDP as no architecture is proposed. The Village Center Design is not applicable as the FDP is outside the Village Center. The FDP is submitted for review and approval concurrent with the PDP; therefore, there are no conditions of a previously approved PDP that apply to this request. Conformance of the proposed FDP with the *Community Elements Book* for SAP – North is demonstrated as follows.

LIGHTING MASTER PLAN

Response: The lighting shown on the attached plans (see Exhibit VIB) is consistent with the Lighting Master Plan Diagram shown on page 4 of the *Community Elements Book* for SAP North.

CURB EXTENSIONS

Response: PDP 1B N will be developed with curb extensions shown on the Curb Extension Concept Plan Diagram located on page 5 of the *Community Elements Book* for SAP – North. This has been demonstrated in the concurrent PDP application in Section II of this Notebook. The FDP is consistent with the PDP.

STREET TREE MASTER PLAN

Response: The location and species of street trees shown on the attached plans (see Exhibit VIB) is consistent with the Street Tree Master Plan Diagram and List shown on pages 7-10 of the *Community Elements Book*. These tree species will be planted along the perimeter of the parks in the FDP where streets are located.

SITE FURNISHINGS

Response: The furnishings shown the attached plans (see Exhibit VIB) were selected to maintain the identity and continuity of Villebois. The site furnishings shown in the parks are consistent with those described in the Site Furnishings Concept shown on pages 11-17 of the *Community Elements Book*.

The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent with the design shown in the *Community Elements Book* on Pages 11-12. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP North; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

PLAY STRUCTURES

Response: The *Master Plan* does not identify play structures within the subject area. A child creative play feature and sports courts are identified within Regional Park 4 on the *Master Plan*. The attached FDP plans (see Exhibit VIB) shows proposed locations the child creative play feature and sports courts. Images of these features are also included in the FDP plans (see Exhibit VIB).

TREE PROTECTION

Response: The Tree Protection component shown on page 18 of the *Community Elements Book* for SAP – North describes the goal, policies, and implementation measures that were used to promote the protection of existing trees in the design of the PDP area. Tree preservation and removal is shown in conjunction with the concurrent PDP and *Tree Removal Plan* applications (see Sections II and Section V, respectively, of this Notebook). The proposed FDP, which includes numerous parks, is consistent with the tree protection shown in PDP and *Tree Removal Plan*.

PLANT LIST

Response: The *Community Elements Book* for SAP – North contains a Plant List (pages 19-21) of non-native and native trees, shrubs, and herbs/grasses for species to be used within Villebois. The attached plans (see Exhibit VIB) list the plants that will be planted in the proposed parks. The proposed plantings are consistent with the Plant List in the SAP – North *Community Elements Book*.

GENERAL DEVELOPMENT REGULATIONS

SECTION 4.156. SIGN REGULATIONS

Response: The SAP North *Signage & Wayfinding Plan* does not show any required signage or monumentation within the subject area.

SECTION 4.176. LANDSCAPING, SCREENING & BUFFERING

(.02) Landscaping and Screening Standards.

Response: As shown on the attached plans (see Exhibit VIB), the parks will be landscaped with a mixture of ground cover, lawn areas, shrubs, and trees. The Open Space will be planted with native vegetation appropriate to natural features within the Open Space consistent with the provisions of the mitigation plan included in Section IIG. Streets and public right-of-way improvements, including street trees, are reviewed with the PDP (see Section II of this Notebook). This FDP consistently reflects street trees shown in the PDP.

(.03) Landscape Area.

Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable.

Response: The proposed parks are nearly 100% landscaped as shown in the attached plans (see Exhibit VIB), except for walkways, play structures, and areas beneath the understory of existing trees.

(.04) Buffering and Screening.

Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.

A. All intensive or higher density developments shall be screened and buffered from less intense or lower density developments.

B. Activity areas on commercial and industrial sites shall be buffered and screened from adjacent residential areas. Multi-family developments shall be screened and buffered from single-family areas.

C. All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties.

D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit.

E. In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking.

F. In any zone any fence over six (6) feet high measured from soil surface at the outside of fenceline shall require Development Review Board approval.

Response: None of the above-listed areas or uses exist within the proposed parks. Therefore, no buffering or screening is required in relation to the FDP.

(.05) Sight-Obscuring Fence or Planting.

The use for which a sight-obscuring fence or planting is required shall not begin operation until the fence or planting is erected or in place and approved by the City. A temporary occupancy permit may be issued upon a posting of a bond or other security equal to one hundred ten percent (110%) of the cost of such fence or planting and its installation. (See Sections 4.400 to 4.470 for additional requirements.)

Response: No sight-obscuring fence or planting is required in this FDP area.

(.06) Plant Materials.

A. Shrubs and Ground Cover. All required ground cover plants and shrubs must be of sufficient size and number to meet these standards within three (3) years of planting. Non-horticultural plastic sheeting or other impermeable surface shall not be placed under mulch. Surface mulch or bark dust are to be fully raked into soil of appropriate depth, sufficient to control erosion, and are confined to areas around plantings. Areas exhibiting only surface mulch, compost or barkdust are not to be used as substitutes for plants areas.

1. Shrubs. All shrubs shall be well branched and typical of their type as described in current AAN Standards and shall be equal to or better than 2-gallon containers and 10" to 12" spread.

Response: As shown on the attached plans (see Exhibit VIB) all shrubs will be equal to or better than 2-gallon size with a 10 to 12 inch spread. All shrubs will be well branched and typical of their type as described in current AAN standards.

2. Ground cover. Shall be equal to or better than the following depending on the type of plant materials used: Gallon containers spaced at 4 feet on center minimum, 4" pot spaced 2 feet on center minimum, 2-1/4" pots spaced at 18 inch on center minimum. No bare root planting shall be permitted. Ground cover shall be sufficient to cover at least 80% of the bare soil in required landscape areas within three (3) years of planting. Where wildflower seeds are

designated for use as a ground cover, the City may require annual re-seeding as necessary.

Response: As shown on the attached plans (see Exhibit VIB) all ground covers will be at least 4" pots and spaced appropriately. These plants will be installed as required.

3. **Turf or lawn in non-residential developments. Shall not be used to cover more than ten percent (10%) of the landscaped area, unless specifically approved based on a finding that, due to site conditions and availability of water, a larger percentage of turf or lawn area is appropriate. Use of lawn fertilizer shall be discouraged. Irrigation drainage runoff from lawns shall be retained within lawn areas.**

Response: The subject FDP area is within a residential development; therefore this criterion does not apply.

4. **Plant materials under trees or large shrubs. Appropriate plant materials shall be installed beneath the canopies of trees and large shrubs to avoid the appearance of bare ground in those locations.**

Response: As shown on the attached plans (see Exhibit VIB) appropriate plant materials will be installed beneath the canopies of trees and large shrubs. Areas that are not appropriate to plant beneath the canopies of existing trees will be mulched with bark.

B. **Trees. All trees shall be well-branched and typical of their type as described in current American Association of Nurserymen (AAN) Standards and shall be balled and burlapped. The trees shall be grouped as follows:**

1. **Primary trees which define, outline or enclose major spaces, such as Oak, Maple, Linden, and Seedless Ash, shall be a minimum of 2" caliper.**
2. **Secondary trees which define, outline or enclose interior areas, such as Columnar Red Maple, Flowering Pear, Flame Ash, and Honeylocust, shall be a minimum of 1-3/4" to 2" caliper.**
3. **Accent trees which, are used to add color, variation and accent to architectural features, such as Flowering Pear and Kousa Dogwood, shall be 1-3/4" minimum caliper.**
4. **Large conifer trees such as Douglas Fir or Deodar Cedar shall be installed at a minimum height of eight (8) feet.**
5. **Medium-sized conifers such as Shore Pine, Western Red Cedar or Mountain Hemlock shall be installed at a minimum height of five to six (5 to 6) feet.**

Response: As shown on the attached plans (see Exhibit VIB), proposed tree species have been selected from the Villebois Plant List in the *Community Elements*

Book. All proposed trees meet the minimum 2" caliper code requirement or the minimum height requirement for conifers as appropriate. All proposed trees will be well-branched, typical of their type as described in current AAN, and balled and burlapped.

C. Where a proposed development includes buildings larger than twenty-four (24) feet in height or greater than 50,000 square feet in footprint area, the Development Review Board may require larger or more mature plant materials:

Response: This standard does not apply to the subject FDP as no buildings are proposed in the parks.

D. Street Trees.

Response: Review of streets and rights-of-way, including street trees, occurs with the PDP (see Section II of this Notebook). Street trees shown in the plans for this FDP are consistent with those shown in the PDP application. Compliance with the Street Tree Master Plan is demonstrated in the PDP (Section II of Notebook).

E. Types of Plant Species.

1. Existing landscaping or native vegetation may be used to meet these standards, if protected and maintained during the construction phase of the development and if the plant species do not include any that have been listed by the City as prohibited. The existing native and non-native vegetation to be incorporated into the landscaping shall be identified.

Response: As shown on the attached plans (see Exhibit VIB), there are existing trees in the FDP area to be retained. The existing trees will be protected and maintained during the construction phase and are incorporated into the landscaping as appropriate.

2. Selection of plant materials. Landscape materials shall be selected and sited to produce hardy and drought-tolerant landscaping. Selection shall be based on soil characteristics, maintenance requirements, exposure to sun and wind, slope and contours of the site, and compatibility with other vegetation that will remain on the site. Suggested species lists for street trees, shrubs and groundcovers shall be provided by the City of Wilsonville.

Response: All proposed landscaping materials are selected from the Villebois Plant List in the *Community Elements Book*. Specific materials were selected to best meet the site characteristics of the subject property.

3. Prohibited plant materials. The City may establish a list of plants that are prohibited in landscaped areas. Plants may be prohibited because they are potentially damaging to sidewalks, roads, underground utilities, drainage

improvements, or foundations, or because they are known to be invasive to native vegetation.

Response: No plant materials listed as "Prohibited Plant Species" on the Villebois Plant List are included in the proposed landscaping.

F. Tree Credit.

Response: Tree credits are not applicable to this FDP application.

G. Exceeding Standards. Landscape materials that exceed the minimum standards of this Section are encouraged, provided that height and vision clearance requirements are met.

H. Compliance with Standards. The burden of proof is on the applicant to show that proposed landscaping materials will comply with the purposes and standards of this Section.

Response: The attached plans (see Exhibit VIB) and this report demonstrate that the proposed landscaping complies with the standards of the Wilsonville Development Code and the *Community Elements Book*.

(.07) Installation and Maintenance.

A. Installation. Plant materials shall be installed to current industry standards and shall be properly staked to assure survival. Support devices (guy wires, etc.) shall not be allowed to interfere with normal pedestrian or vehicular movement.

B. Maintenance. Maintenance of landscaped areas is the on-going responsibility of the property owner. Any landscaping installed to meet the requirements of this Code, or any condition of approval established by a City decision-making body acting on an application, shall be continuously maintained in a healthy, vital and acceptable manner. Plants that die are to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City. Failure to maintain landscaping as required in this Section shall constitute a violation of this Code for which appropriate legal remedies, including the revocation of any applicable land development permits, may result.

C. Irrigation. The intent of this standard is to assure that plants will survive the critical establishment period when they are most vulnerable due to a lack of watering and also to assure that water is not wasted through unnecessary or inefficient irrigation. Approved irrigation system plans shall specify one of the following:

1. A permanent, built-in, irrigation system with an automatic controller. Either a spray or drip irrigation system, or a combination of the two, may be specified.

2. A permanent or temporary system designed by a landscape architect licensed to practice in the State of Oregon, sufficient to assure that the plants will become established and drought-tolerant.

3. **Other irrigation system specified by a licensed professional in the field of landscape architecture or irrigation system design.**

4. **A temporary permit issued for a period of one year, after which an inspection shall be conducted to assure that the plants have become established. Any plants that have died, or that appear to the Planning Director to not be thriving, shall be appropriately replaced within one growing season. An inspection fee and a maintenance bond or other security sufficient to cover all costs of replacing the plant materials shall be provided, to the satisfaction of the Community Development Director. Additionally, the applicant shall provide the City with a written license or easement to enter the property and cause any failing plant materials to be replaced.**

Response: Plants will be installed and maintained properly. A permanent-built-in irrigation system with an automatic controller will be installed underground to irrigate the proposed landscaping. Additional details about the irrigation system will be provided with construction plans.

D. **Protection. All required landscape areas, including all trees and shrubs, shall be protected from potential damage by conflicting uses or activities including vehicle parking and the storage of materials.**

Response: The attached planting plans demonstrate that all landscape areas will be protected from potential damage by vehicle travel along streets and alleys.

(.08) Landscaping on Corner Lots.

All landscaping on corner lots shall meet the vision clearance standards of Section 4.177. If high screening would ordinarily be required by this Code, low screening shall be substituted within vision clearance areas. Taller screening may be required outside of the vision clearance area to mitigate for the reduced height within it.

Response: All landscaping at corners will meet the vision clearance standards of Section 4.177.

(.09) Landscape Plans.

Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated. Landscape plans shall divide all landscape areas into the following categories based on projected water consumption for irrigation:

A. High water usage areas (+/- two (2) inches per week): small convoluted lawns, lawns under existing trees, annual and perennial flower beds, and temperamental shrubs;

B. Moderate water usage areas (+/- one (1) inch per week): large lawn areas, average water-using shrubs, and trees;

C. Low water usage areas (Less than one (1) inch per week, or gallons per hour): seeded field grass, swales, native plantings, drought-tolerant shrubs, and ornamental grasses or drip irrigated areas.

D. Interim or unique water usage areas: areas with temporary seeding, aquatic plants, erosion control areas, areas with temporary irrigation systems, and areas with special water-saving features or water harvesting irrigation capabilities.
These categories shall be noted in general on the plan and on the plant material list.

Response: The attached plans (see Exhibit VIB) include the required information listed in Section 4.176(.09).

(.10) Completion of Landscaping.

The installation of plant materials may be deferred for a period of time specified by the Board or Planning Director acting on an application, in order to avoid hot summer or cold winter periods, or in response to water shortages. In these cases, a temporary permit shall be issued, following the same procedures specified in subsection (.07)(C)(3), above, regarding temporary irrigation systems. No final Certificate of Occupancy shall be granted until an adequate bond or other security is posted for the completion of the landscaping, and the City is given written authorization to enter the property and install the required landscaping, in the event that the required landscaping has not been installed. The form of such written authorization shall be submitted to the City Attorney for review.

Response: The applicant does not anticipate deferring the installation of plant materials. Should it be necessary to defer installation of plant materials, the applicant will apply for a temporary permit.

(.11) Street Trees Not Typically Part of Site Landscaping.

Street trees are not subject to the requirements of this Section and are not counted toward the required standards of this Section. Except, however, that the Development Review Board may, by granting a waiver or variance, allow for special landscaping within the right-of-way to compensate for a lack of appropriate on-site locations for landscaping. See subsection (.06), above, regarding street trees.

Response: Street trees are not counted toward the required standards of this Section.

(.12) Mitigation and Restoration Plantings.

Response: No additional tree removal is proposed with the FDP. The PDP includes a concurrent Tree Removal Plan (see Section V of this Notebook) which

addresses required tree mitigation. The Open Space will be planted with native vegetation appropriate to natural features within the Open Space consistent with the provisions of the mitigation plan included in Section IIG.

SECTION 4.177. STREET IMPROVEMENT STANDARDS

(.01) Except as specifically approved by the Development Review Board, all street and access improvements shall conform to the Street System Master Plan, together with the following standards:

H. Access drives and lanes.

Response: The proposed parks are accessible from the adjacent street rights-of way and/or pathways as shown on the attached plans. All streets and alleys accommodate 2-way traffic.

I. Corner or clear vision area.

1. A clear vision area shall be maintained on each corner of property at the intersection of any two streets, a street and a railroad or a street and a driveway. No structures, plantings, or other obstructions that would impede visibility between the height of 3- inches and 10 feet shall be allowed within said area. Measurements shall be made from the top of the curb, or, when there is no curb, from the established street center line grade. However, the following items shall be exempt:

a. Light and utility poles with a diameter less than 12 inches.

b. An existing tree, trimmed to the trunk, 10 feet above the curb.

c. Official warning or street sign.

d. Natural contours where the natural elevations are such that there can be no cross-visibility at the intersection and necessary excavation would result in an unreasonable hardship on the property owner or deteriorate the quality of the site.

Response: Landscaping at the corners of the parks will be less than 30 inches in height to assure that visibility is not blocked.

SECTION 4.178. SIDEWALK & PATHWAY STANDARDS

(.01) Sidewalks. All sidewalks shall be concrete and a minimum of five (5) feet in width, except where the walk is adjacent to commercial storefronts. In such cases, they shall be increased to a minimum of ten (10) feet in width.

Response: All sidewalks and pathways in the subject FDP area are at least 5 feet in width and concrete.

(.03) Pavement surface.

A. All bike paths shall be paved with asphalt to provide a smooth riding surface. Where pathways are adjacent to and accessible from improved public streets, the Public Works Director may require a concrete surface. At a minimum the current AASHTO "Guide for the Development of Bicycle Facilities" and the State "Oregon Bicycle Plan" shall be used to design all bicycle facilities within the City of Wilsonville. Any deviation from the AASHTO, ODOT, and City standards will require approval from the City Engineer prior to implementation of the design.

B. To increase safety, all street crossings shall be marked and should be designed with a change of pavement such as brick or exposed aggregate. All arterial crossings should be signalized.

C. All pathways shall be clearly posted with standard bikeway signs.

D. Pedestrian and equestrian trails may have a gravel or sawdust surface if not intended for all weather use.

Response: There are no bicycle pathways in this FDP area. Details about sidewalks in the public right-of-way were addressed in the PDP application (Section II of this Notebook). Major and Minor pathways are included and designed to be consistent with the locations and cross-sections in the *Villebois Village Master Plan*.

(.06) Pathway Clearance.

A. Vertical clearance of at least 8 feet 6 inches shall be maintained above the surface of all pathways. The clearance above equestrian trails shall be a minimum of ten feet.

B. All landscaping, signs and other potential obstructions shall be set back at least (1) foot from the edge of the pathway surface. No exposed rock should be permitted within two (2) feet of the path pavement and all exposed earth within two (2) feet of the pavement shall be planted with grass, sod or covered with 2" of barkdust.

Response: As shown on the attached plans, all potential obstructions are at least one foot from the edge of the pathway surfaces, and vertical clearance will be maintained.

SITE DESIGN REVIEW

SECTION 4.400. PURPOSE.

(.01) Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of

property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefore.

Response: No buildings are proposed within park areas. The SAP North *Signage & Wayfinding Plan* does not identify any required signage or monumentation within the subject area. The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent with the design shown in the *Community Elements Book* on Page 11-12. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP North; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

The proposed landscaping within the parks is designed in compliance with the standards for the rest of Villebois, so the entire development will have a cohesive, harmonious appearance, creating a desirable place of residence and adding to the overall quality of life in the City.

(.02) The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:

A. Assure that Site Development Plans are designed in a manner that insures proper functioning of the site and maintains a high quality visual environment.

Response: The parks in the FDP area have been designed to assure proper functioning of the site and to maintain an aesthetically pleasing environment. The proposed landscaping and park design will add to the quality of the environment as well as the functioning of the site.

B. Encourage originality, flexibility and innovation in site planning and development, including the architecture, landscaping and graphic design of said development;

Response: The FDP includes landscaping as shown on the attached plans (Exhibit VIB), which will enhance the visual environment of the site. Pedestrian connections to sidewalks, trails, and adjacent residences will be provided to enhance the site's connectivity to surrounding uses.

C. Discourage monotonous, drab, unsightly, dreary and inharmonious developments;

Response: The FDP area will include landscaping as shown on the attached plans (see Exhibit VIB). Landscaping will consist of an appropriate mixture of ground cover, shrubs, and trees selected from the Villebois Plant List to create a harmonious appearance throughout the larger Villebois development. The proposed landscaping will contribute to an interesting and aesthetically appealing development.

D. Conserve the City's natural beauty and visual character and charm by assuring that structures, signs and other improvements are properly related to their sites, and to surrounding sites and

structures, with due regard to the aesthetic qualities of the natural terrain and landscaping, and that proper attention is given to exterior appearances of structures, signs and other improvements;

Response: The parks will incorporate landscaping that makes sense for a Pacific Northwest community, while matching the City's natural beauty and visual character.

E. Protect and enhance the City's appeal and thus support and stimulate business and industry and promote the desirability of investment and occupancy in business, commercial and industrial purposes;

Response: The parks, along with their pedestrian connections to adjacent residences and streets, will help to maintain the appeal of Villebois as a unique and attractive community in which to live, work, and recreate. Residents of Villebois will stimulate the local economy by opening new businesses and thus creating jobs and by spending money in existing businesses.

F. Stabilize and improve property values and prevent blighted areas and, thus, increase tax revenues;

Response: The proposed parks will create neighborhood amenities that will help to maintain property values in this new community. A Home Owners Association will ensure that these areas are properly maintained over time.

G. Insure that adequate public facilities are available to serve development as it occurs and that proper attention is given to site planning and development so as to not adversely impact the orderly, efficient and economic provision of public facilities and services.

Response: The process used to plan for Villebois incorporates a tiered system that originates at the *Villebois Village Master Plan*. The *Master Plan* shows how facilities, including parks and open space, are distributed and available to residents throughout Villebois. *Figure 5 – Parks & Open Space Plan* of the *Master Plan* shows that approximately 33% of Villebois will be in parks and open space. Phase 1B North is consistent with the park areas originally shown for this area with SAP – North, as demonstrated in the PDP (see Section II of this Notebook). This FDP is consistent with the PDP, SAP – North, and the *Villebois Village Master Plan*, and therefore, complies with this criterion.

H. Achieve the beneficial influence of pleasant environments for living and working on behavioral patterns and, thus, decrease the cost of governmental services and reduce opportunities for crime through careful consideration of physical design and site layout under defensible space guidelines that clearly define all areas as either public, semi-private, or private, provide clear identity of structures and opportunities for easy surveillance of the site that maximize resident control of behavior -- particularly crime;

Response: The *Villebois Village Master Plan* shows that the community will include a variety of housing options (living) and the Village Center will contain

places for employment (working). This FDP shows a living environment in Phase 1B North that is enhanced by proximity to park and open space areas. Residents who will surround the parks and open spaces will provide on-going surveillance and control.

I. Foster civic pride and community spirit so as to improve the quality and quantity of citizen participation in local government and in community growth, change and improvements;

Response: The design of the Villebois Village has been created to develop a community that is truly unique. The City and Villebois Master Planner, as well as the Applicant, are working in partnership with nearby residents, property owners, and local and regional governments to create a complete, livable, pedestrian-oriented community that will be an asset to the City of Wilsonville and Portland region. This partnership has generated citizen participation in the project and the unique design shall foster civic pride and community spirit amongst the residents of Villebois.

J. Sustain the comfort, health, tranquillity and contentment of residents and attract new residents by reason of the City's favorable environment and, thus, to promote and protect the peace, health and welfare of the City.

Response: The design of the Villebois Village revolves around three guiding principles: connectivity, diversity, and sustainability. These principles are intended to sustain the comfort, health, tranquility, and contentment of Villebois residents, while also promoting and protecting the peace, health and welfare of the City. *Connectivity* refers to creating connections between Villebois neighborhoods and between Villebois and other parts of the City and region for multiple modes of transportation. *Diversity* includes multiple choices of housing styles, housing affordability, recreation, employment, goods and services, and infrastructure for transportation. *Sustainability* involves the protection of natural resources and open space, energy conservation, and storm and rainwater management.

SECTION 4.421. CRITERIA AND APPLICATION OF DESIGN STANDARDS.

(.01) The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural styles is not included in these standards. (Even in the Boones Ferry Overlay Zone, a range of architectural styles will be encouraged.)

A. Preservation of Landscape. The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soils removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.

Response: As shown in the attached plans (see Exhibit VIB), proposed plant materials are drawn from the Villebois Plant List, which includes native species, to ensure consistency of general appearance within the Villebois community.

B. Relation of Proposed Buildings to Environment. Proposed structures shall be located and designed to assure harmony with the natural environment, including protection of steep slopes, vegetation and other naturally sensitive areas for wildlife habitat and shall provide proper buffering from less intensive uses in accordance with Sections 4.171 and 4.139 and 4.139.5. The achievement of such relationship may include the enclosure of space in conjunction with other existing buildings or other proposed buildings and the creation of focal points with respect to avenues of approach, street access or relationships to natural features such as vegetation or topography.

Response: Chapter 3 of the *Villebois Village Master Plan* takes into account scenic views, topography, existing vegetation, and other natural features in the design and location of parks and open spaces in the Villebois development. The FDP area does not include any steep slopes or flood plains. The subject area includes some wetland areas in the northwestern portion of the site that do not meet the City's criteria for inclusion in the SROZ. The development plan presumes filling of these wetland areas. The subject area includes a forested wildlife habitat area that is designated as an SROZ in the northwestern portion of the site. This SROZ area is shown as Open Space 2 on the *Master Plan*. The FDP includes all elements specified for the subject parks and open space within the Master Plan, as described and refined in the PDP Supporting Compliance Report (see Section IIA of this Notebook). Existing trees within the parks are maintained to the extent possible as reviewed in the concurrent PDP and Tree Removal Plan applications (see Sections II and V, respectively, of this Notebook).

C. Drives, Parking and Circulation. With respect to vehicular and pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the design of proposed buildings and structures and the neighboring properties.

Response: No driveways or parking areas are proposed or required with this FDP. The parks included in the FDP are all accessible from adjacent streets and pathways, as shown on the FDP plans (see Reduced Drawings in Section VIB).

D. Surface Water Drainage. Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties of the public storm drainage system.

Response: Surface water drainage is addressed in the PDP application (see Section II of Notebook). The FDP is consistent with grading and drainage shown in

the PDP. This system has been carefully designed so as not to adversely affect neighboring properties.

E. Utility Service. Any utility installations above ground shall be located so as to have an harmonious relation to neighboring properties and site. The proposed method of sanitary and storm sewage disposal from all buildings shall be indicated.

Response: The PDP application addresses utility installation (see Section II of Notebook). The FDP is consistent with the PDP.

F. Advertising Features. In addition to the requirements of the City's sign regulations, the following criteria should be included: the size, location, design, color, texture, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties.

Response: No advertising features are proposed in this FDP.

G. Special Features. Exposed storage areas, exposed machinery installations, surface areas, truck loading areas, utility buildings and structures and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall be required to prevent their being incongruous with the existing or contemplated environment and its surrounding properties. Standards for screening and buffering are contained in Section 4.176.

Response: This FDP does not propose any exposed storage areas, exposed machinery installations, surface areas, truck loading areas, utility buildings and structures or other accessory areas and structures. Compliance with Section 4.176 is addressed earlier in this report.

(.02) The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures.

Response: No accessory buildings or structures are proposed.

(.03) The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards.

Response: Compliance with the purpose of Section 4.400 has been addressed earlier in this report.

SECTION 4.440. PROCEDURE.

(.01) Submission of Documents.

A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:

A. A site plan, drawn to scale, showing the proposed layout of all structures and other improvements including, where appropriate, driveways, pedestrian walks, landscaped areas, fences, walls, off-street parking and loading areas, and railroad tracks. The site plan shall indicate the location of entrances and exits and direction of traffic flow into and out of off-street parking and loading areas, the location of each parking space and each loading berth and areas of turning and maneuvering vehicles. The site plan shall indicate how utility service and drainage are to be provided.

B. A Landscape Plan, drawn to scale, showing the location and design of landscaped areas, the variety and sizes of trees and plant materials to be planted on the site, the location and design of landscaped areas, the varieties, by scientific and common name, and sizes of trees and plant materials to be retained or planted on the site, other pertinent landscape features, and irrigation systems required to maintain trees and plant materials. An inventory, drawn at the same scale as the Site Plan, of existing trees of 4" caliper or more is required. However, when large areas of trees are proposed to be retained undisturbed, only a survey identifying the location and size of all perimeter trees in the mass in necessary.

C. Architectural drawings or sketches, drawn to scale, including floor plans, in sufficient detail to permit computation of yard requirements and showing all elevations of the proposed structures and other improvements as they will appear on completion of construction. Floor plans shall also be provided in sufficient detail to permit computation of yard requirements based on the relationship of indoor versus outdoor living area, and to evaluate the floor plan's effect on the exterior design of the building through the placement and configuration of windows and doors.

D. A Color Board displaying specifications as to type, color, and texture of exterior surfaces of proposed structures. Also, a phased development schedule if the development is constructed in stages.

E. A sign plan, drawn to scale, showing the location, size, design, material, color and methods of illumination of all exterior signs.

F. The required application fee.

Response: Section VIB of this notebook includes FDP plans that meet the requirements of Section 4.440 (.01). A copy of the application fee submitted is included in Exhibit IB of this notebook. Architectural drawings, etc., and a color board are not required as no buildings are proposed with this FDP. The FDP plans include the locations of mailbox kiosks (see Exhibit VIB), which will be consistent

with the design shown in the *Community Elements Book* on Pages 11-12. The proposed locations and design of the mailbox kiosks are generally consistent with those approved for SAP North; while specific location of mailbox kiosks are updated, their locations and service areas remain consistent with the original intent.

The SAP North *Signage & Wayfinding Plan* does not show any required signage or monumentation within the subject area. A copy of the required application fee is included in Exhibit IC.

SECTION 4.450. INSTALLATION OF LANDSCAPING.

(.01) All landscaping required by this section and approved by the Board shall be installed prior to issuance of occupancy permits, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned to the applicant.

Response: The applicant understands that they must provide a security to guarantee installation of the proposed landscaping.

(.02) Action by the City approving a proposed landscape plan shall be binding upon the applicant. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, as specified in this Code.

Response: The applicant understands that changes to the landscape plan included in this application cannot be made without official action of the Planning Director or the Development Review Board.

(.03) All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered with Board approval.

Response: The applicant understands that they are responsible for the ongoing maintenance of the proposed landscaping.

(.04) If a property owner wishes to add landscaping for an existing development, in an effort to beautify the property, the Landscape Standards set forth in Section 4.176 shall not apply and no Plan approval

or permit shall be required. If the owner wishes to modify or remove landscaping that has been accepted or approved through the City's development review process, that removal or modification must first be approved through the procedures of Section 4.010.

Response: This FDP does not include any existing development; therefore this criterion does not apply.

II. CONCLUSION

This Supporting Compliance Report demonstrates compliance with the applicable requirements of the City of Wilsonville Planning & Land Development Ordinance for the requested Final Development Plan. Therefore, the applicant requests approval of this application.

PHASE 2 NORTH
VILLEBOIS
FINAL DEVELOPMENT PLAN

TL 2915, PART OF 2916, 2922 & 2995, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

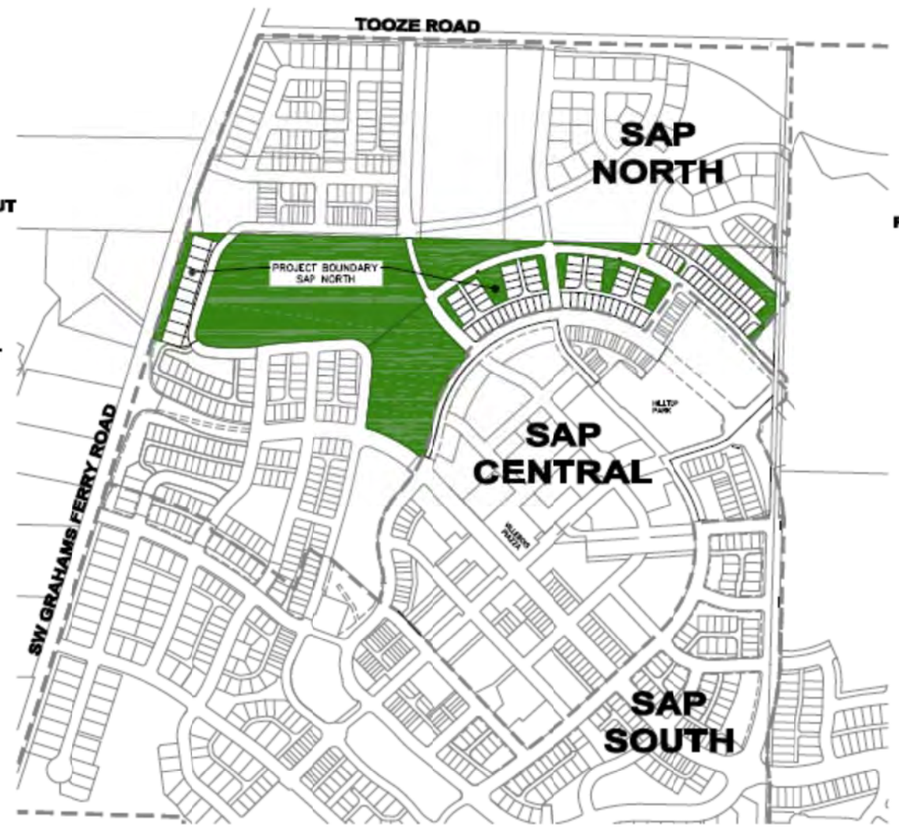
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE



PROJECT SITE

VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1 COVER SHEET
L1.0 LANDSCAPE PLAN
L2.0 LANDSCAPE PLAN
L3.0 LANDSCAPE PLAN
L4.0 LANDSCAPE PLAN
L5.0 LANDSCAPE PLAN
L6.0 LANDSCAPE DETAILS

N

SCALE
300 0 150 300
1 INCH = 300 FEET

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

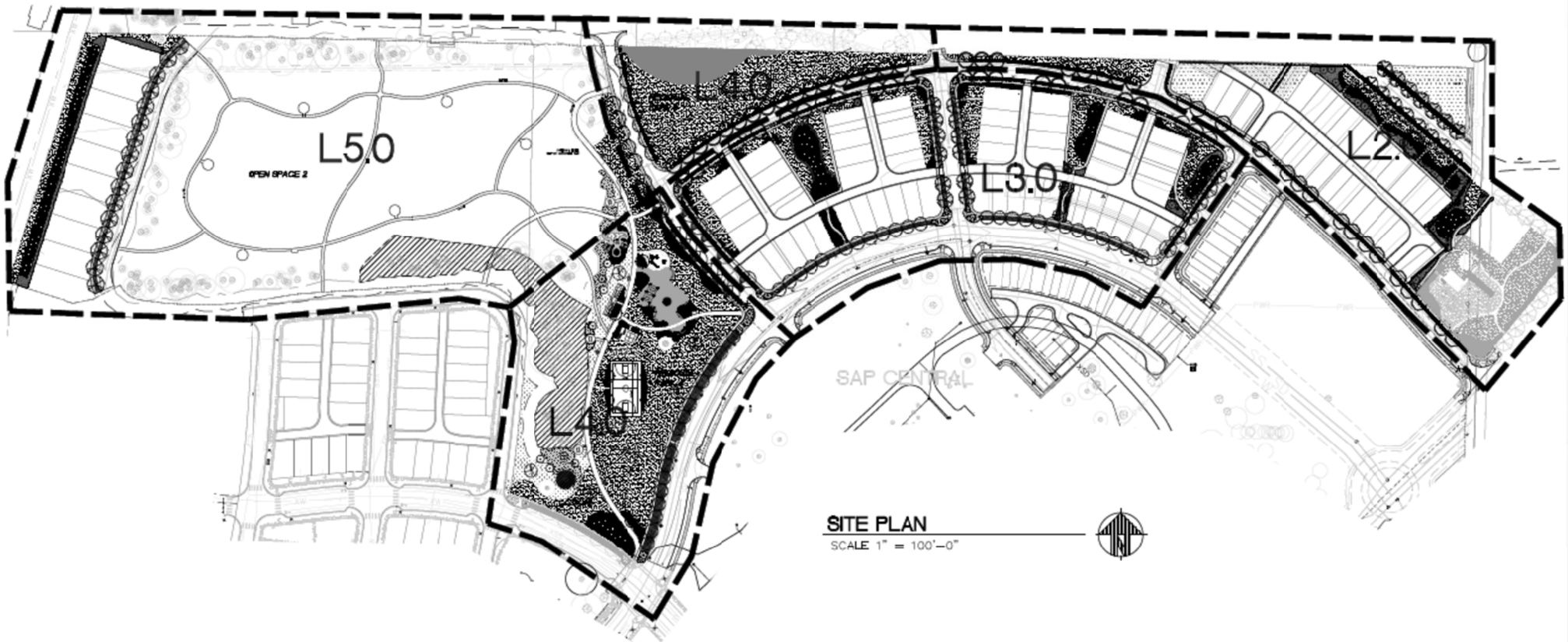
PHASE 2
NORTH
VILLEBOIS

Final Development Plan

Cover Sheet

DATE 04/17/2013

1



SITE PLAN
SCALE 1" = 100'-0"

GENERAL NOTES:
1. Contractor is to verify all plant quantities.
2. Adjust plantings in the field as necessary.
3. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. System is to be design/build by Landscape Contractor. Guarantee system for a minimum one year. Show drip systems as alternate bid only.
4. All plants are to be fully foliaged, well branched and true to form.

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT
JANET L. OTTEN
OREGON

PHASE 2
NORTH
VILLEBOIS

Final Development Plan

Landscape Plan

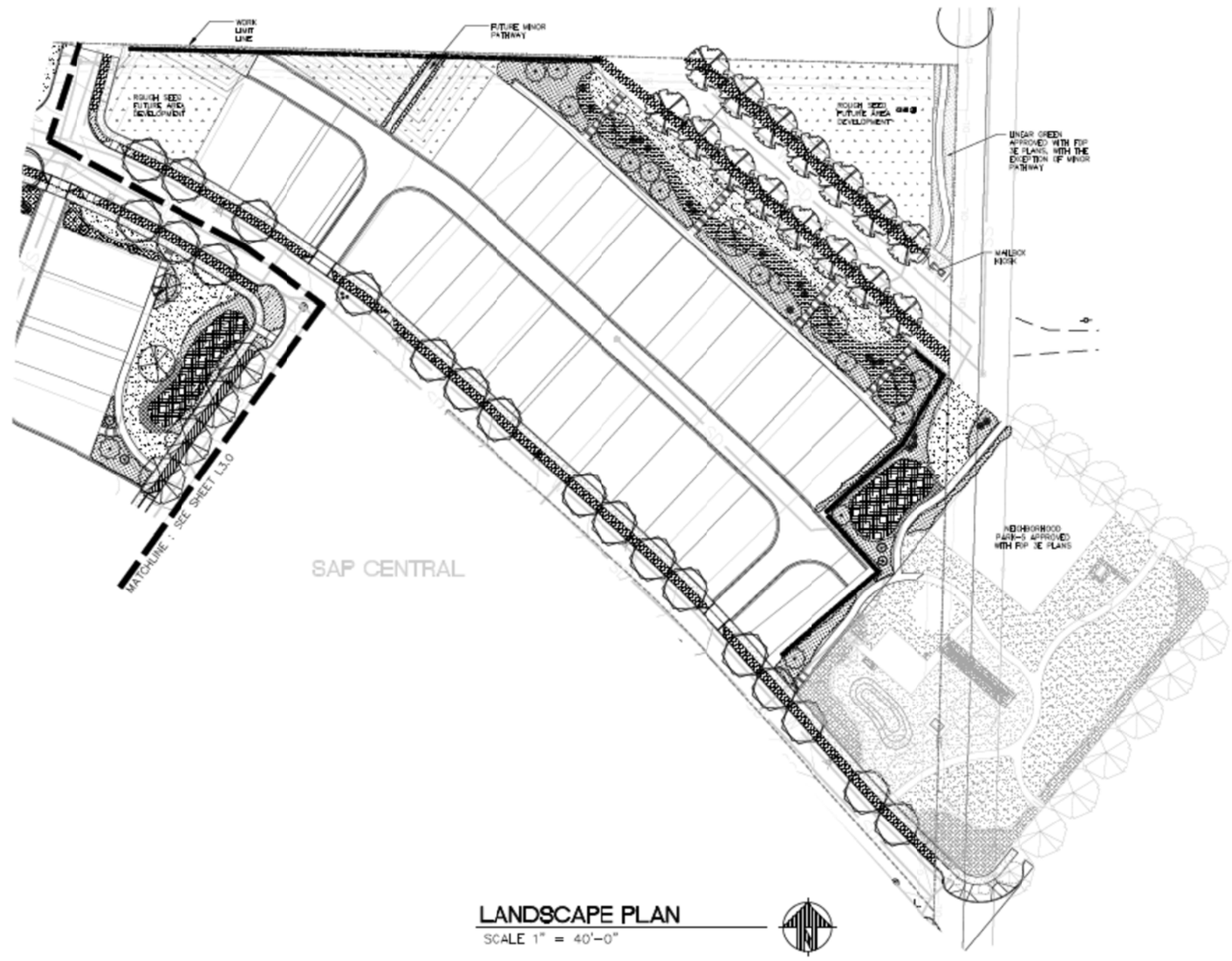
DATE 04/15/2013

L1.0

1 OF 6

SUGGESTED PLANT LIST: SAP NORTH

SYM.	LATIN NAME/ Common Name	SIZE	SPACING
	STREET TREES		
	ACER X FREMANI 'AUTUMN BLAZE' Autumn Blaze Maple	2" cal.	30" o.c.
	CLADRASTIS KENTUKEA Yellowwood	2" cal.	30" o.c.
	FAGUS SYLVATICA European Beech	2" cal.	30" o.c.
	LIRIODENDRON TULIPIFERA Tulip Tree	2 1/2" cal.	25" o.c.
	QUERCUS ALBA White Oak	2" cal.	30" o.c.
	TILIA X EUCHLORA Crimean Linden	2" cal.	30" o.c.
	ZELKOVA SERRATA 'GREEN VASE' Green Vase Zelkova	2" cal.	30" o.c.
	Shade Tree — Quercus rubra; Quercus garryana; Fagus sylvatica; Acer rubrum	2" cal.	As shown
	Small Columnar or Ornamental Trees — Malus 'Snowdrift'; Stewartia pseudocamellia; Magnolia stellata 'Royal Star'; Acer circinatum	1 3/4" cal.	As shown
	Conifer Tree — Pseudotsuga menziesii; Calocedrus decurrens; RP-4: Transplant Existing Trees	6' ht.; 5-6' ht.	As shown
	Large Flowering Deciduous Shrubs — Hamamelis mollis 'Coombe Wood'; Viburnum plic. fam. 'Narkeni'; Syringa microphylla 'Superba'; Hydrangea macrophylla 'Nikko Blue'	5 gal.	5-6' o.c.
	Medium Ornamental Shrubs — Abelia grandiflora 'Edward Goucher'; Berberis thunbergii; Ilex crenata; Euonymus japonica 'Silver Princess'; Lonicera nitida; Pieris 'Forest Flame'; Rhododendron; Spiraea bumalda 'Anthony Waterer'; Weigela florida; Mahonia aquifolium	2-5 gal.	3-4' o.c.
	Small Ornamental Shrubs — Cornus stolonifera 'Kelseyi'	2 gal.	30" o.c.
	Native Shrubs — Ribes sanguineum; Mahonia aquifolium 'Compacta'; Symphoricarpus albus; Gaultheria shallon; Oemleria cerasiformis	2 gal.	30" o.c.
	Groundcover — Fragaria chilensis; Rubus calycinoides; Arctostaphylos uva-ursi; Cotoneaster horizontalis	1 gal.	18"-7" o.c.
	Lawn — Fine Seed Lawn	Seed	5 lbs./1,000 sq.ft.
	Rough Seed — Low-Growing Eco-Lawn with Color	Seed	See Specifications
	Water Quality Facilities — To be Planted per City of Wilsonville Standards: 3 Evergreen trees/ 1,000 SF; 2 Deciduous trees/ 1,000 SF; 30 Shrubs/ 1,000 SF; 1 Wetland Plant/ 2 SF Pond Emergent Zone	Trees - 6' ht./1.5" cal.; Shrubs - 1 gal.; Aquatic Plants- Plugs	As shown; As shown; As shown
	Existing Trees To Remain		



LANDSCAPE PLAN

SCALE 1" = 40'-0"

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT JANET L. OTTEN OREGON

PHASE 2 NORTH VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L2.0

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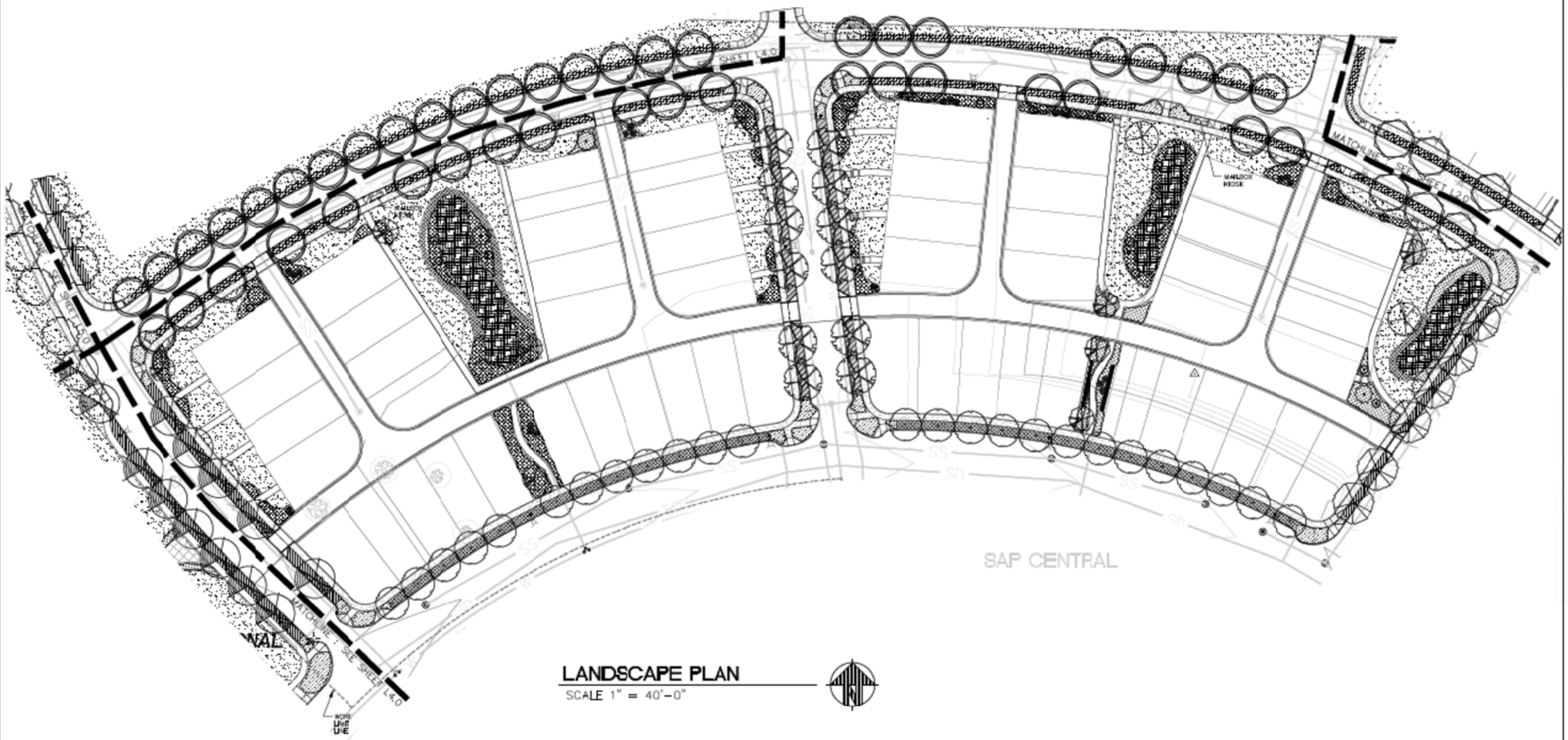

LANDSCAPE PLAN

SCALE 1" = 40'-0"

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT OREGON

PHASE 2
NORTH
VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

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PICNIC TABLE

TIMBERFORM / MODEL 2242–8
TIMBERFORM / MODEL 2241–8
(ACCESSIBLE)

BIKE RACK

Manufacturer: Function First Bike Security
Model: The Bike Rib
Material: Steel Pipe (Black)

CONCEPTUAL SHELTER

PLAY AREA SCHEMATIC VIEW

EQUIPMENT TO BE NON–PRIMARY COLORS

DRINKING FOUNTAIN

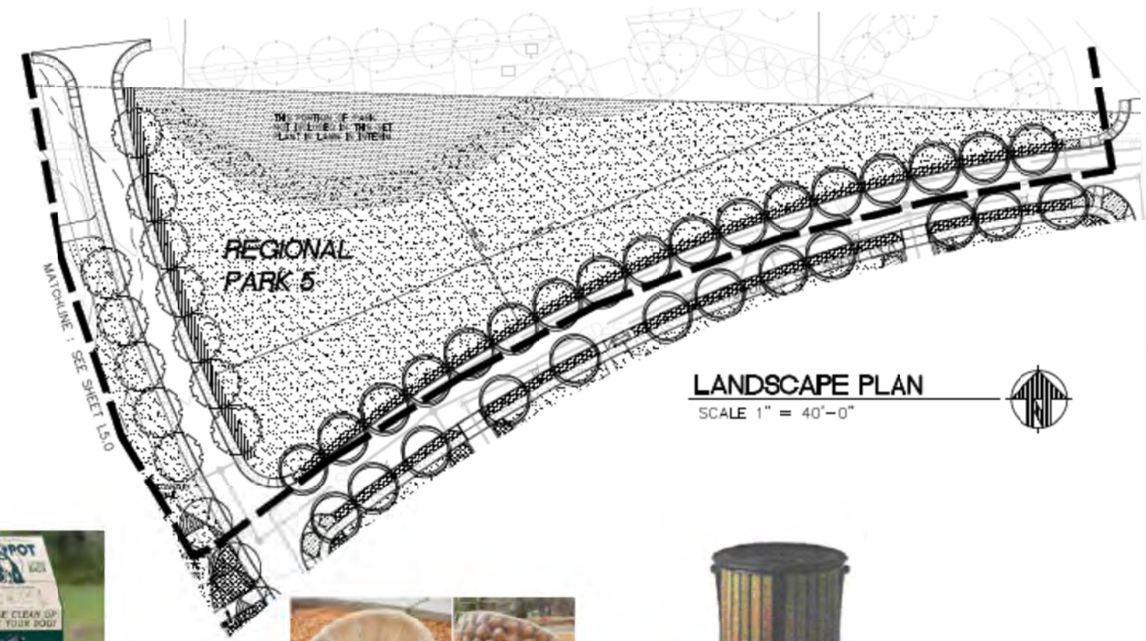
MURDOCK / MC–76–2 (BLACK)

PARK BENCH

LANDSCAPE FORMS / PLAINWELL SERIES
LENGTH : 7'–10"

LANDSCAPE PLAN

SCALE 1" = 40'–0"



LANDSCAPE PLAN

SCALE 1" = 40'–0"

DOGIPOT PET STATION

MODEL #1002–2
BAG STORAGE COMPONENET TO BE INSTALLED AT 48" MAXIMUM HEIGHT

ACORN SEAT

TRASH RECEPTACLE

LANDSCAPE FORMS / PLAINWELL SERIES WITH DOME LID

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT OREGON

PHASE 2
NORTH
VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

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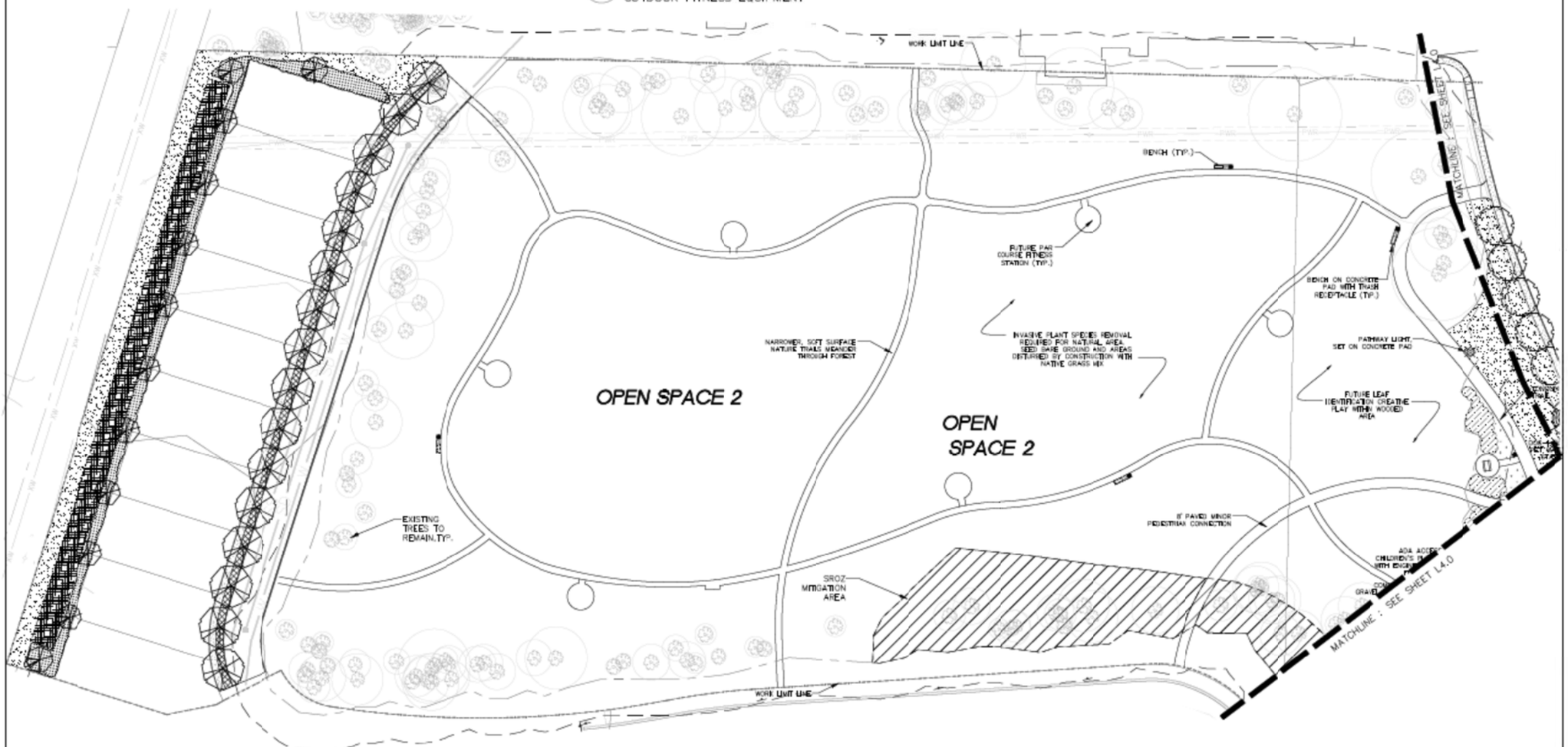
'FUTURE' PAR COURSE EXAMPLES

OUTDOOR FITNESS EQUIPMENT



LANDSCAPE PLAN

SCALE 1" = 40'-0"

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT OREGON JANET L. OTTEN

PHASE 2
NORTH
VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L5.0

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OUTLINE SPECIFICATIONS PLANTING AND SEEDING:

GENERAL: All plants shall conform to all applicable standards of the latest edition of the "American Association of Nurserymen Standards", A.N.S.I. Z60.1 – 1973. Meet or exceed the regulations and laws of Federal, State, and County regulations, regarding the inspection of plant materials, certified as free from hazardous insects, disease, and noxious weeds, and certified fit for sale in Oregon.

The apparent silence of the Specifications and Plans as to any detail, or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of first quality are to be used. All interpretations of these Specifications shall be made upon the basis above stated.

Landscape contractor shall perform a site visit prior to bidding to view existing conditions.

PERFORMANCE QUALITY ASSURANCE: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary horticultural practices and who are completely familiar with the specified requirements and methods needed for the proper performance of the work of this section.

NOTIFICATION: Give Landscape Architect minimum of 2 days advance notice of times for inspections. Inspections at growing site does not preclude Landscape Architect's right of rejection of deficient materials at project site. Each plant failing to meet the above mentioned "Standards" or otherwise failing to meet the specified requirements as set forth shall be rejected and removed immediately from the premises by the Contractor and at his expense, and replaced with satisfactory plants or trees conforming to the specified requirements.

SUBSTITUTIONS: Only as approved by the Landscape Architect or the Owner's Representative.

GUARANTEE AND REPLACEMENT: All plant material shall be guaranteed from final acceptance for one full growing season or one year, whichever is longer. During this period the Contractor shall replace any plant material that is not in good condition and producing new growth (except that material damaged by severe weather conditions, due to Owner's negligence, normally unforeseen peculiarities of the planting site, or lost due to vandalism). Guarantee to replace, at no cost to Owner, unacceptable plant materials with plants of same variety, age, size and quality as plant originally specified. Conditions of guarantee on replacement plant shall be same as for original plant.

Landscape Contractor shall keep on site for Owner's Representative's inspection, all receipts for soil amendment and topsoil deliveries.

PROTECTION: Protect existing roads, sidewalks, and curbs, landscaping, and other features remaining as final work. Verify location of underground utilities prior to doing work. Repair and make good any damage to service lines, existing features, etc. caused by landscaping installation.

PLANT QUALITY ASSURANCE: Deliver direct from nursery. Maintain and protect roots of plant material from drying or other possible injury. Store plants in shade and protect them from weather immediately upon delivery, if not to be planted within four hours.

Nursery stock shall be healthy, well branched and rooted, formed true to variety and species, full foliaged, free of disease, injury, defects, insects, weeds, and weed roots. Trees shall have straight trunks, symmetrical tips, and have an intact single leader. Any trees with double leaders will be rejected upon inspection. All Plants: True to name, with one of each bundle or lot tagged with the common and botanical name and size of the plants in accordance with standards of practice of the American Association of Nurserymen, and shall conform to the Standardized Plant Names, 1942 Edition.

Container grown stock: Small container–grown plants, furnished in removable containers, shall be well rooted to ensure healthy growth. **Grow container plants in containers a minimum of one year** prior to delivery, with roots filling container but not root bound. Bare root stock: Roots well–branched and fibrous. Balled and burlapped (B&B): Ball shall be of natural size to ensure healthy growth. Ball shall be firm and the burlap sound. No loose or made ball will be acceptable.

TOPSOIL AND FINAL GRADES: Landscape Contractor is to verify with the General Contractor if the on site topsoil is or is not conducive to proper plant growth. Supply alternate bid for imported topsoil.

Landscape Contractor is to supply and place 12" of topsoil in planting beds and 6" in lawn areas. If topsoil stockpiled on site is not conducive to proper plant growth, the Landscape Contractor shall import the required amount. Landscape Contractor is to submit samples of the imported soil and/or soil amendments to the Landscape Architect. The topsoil shall be a sandy loam, free of all weeds and debris inimical to lawn or plant growth.

Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated. Planting bed grades shall be approximately 3" below adjacent walks, paving, finished grade lines, etc., to allow for bark application. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

PLANTING SPECIFICATIONS:

HERBICIDES: Prior to soil preparation, all areas showing any undesirable weed or grass growth shall be treated with Round–up in strict accordance with the manufacturer's instructions. Nuisance plant removal in Open Space 2 shall be done by hand, cutting/pulling out at the base. Limited spot application of approved herbicide directly on the cut area of the stem is acceptable.

SOIL PREPARATION: Work all areas by rototilling to a minimum depth of 8". Remove all stones (over 1½" size), sticks, mortar, large clumps of vegetation, roots, debris, or extraneous matter turned up in working. Soil shall be of a homogeneous fine texture. Level, smooth and lightly compact area to plus or minus .10 of required grades.

In groundcover areas add 2" of compost (or as approved) and till in to the top 6" of soil.

PLANTING HOLE: Lay out all plant locations and excavate all soils from planting holes to 2 1/2 times the root ball or root system width. Loosen soil inside bottom of plant hole. Dispose of any "subsoil" or debris from excavation. Check drainage of planting hole with water, and adjust any area showing drainage problems.

SOIL MIX: Prepare soil mix in each planting hole by mixing:
2 part native topsoil (no subsoil)
1 part compost (as approved)

Thoroughly mix in planting hole and add fertilizers at the following rates:
Small shrubs – 1/8 lb./ plant
Shrubs – 1/3 to 1/2 lb./ plant
Trees – 1/3 to 1 lb./ plant

FERTILIZER: For trees and shrubs use Commercial Fertilizer "A" Inorganic (5–4–3) with micro–nutrients and 50% slow releasing nitrogen. For initial application in fine seed lawn areas use Commercial Fertilizer "B" (8–16–8) with micro–nutrients and 50% slow–releasing nitrogen. For lawn maintenance use Commercial Fertilizer "C" (22–16–8) with micro–nutrients and 50% slow–releasing nitrogen. DO NOT apply fertilizer to Water Quality Swale.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Place 6" minimum, lightly compacted layer of prepared planting soil under root system. Loosen and remove twine binding and burlap from top 1/2 of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with soil mix while working each layer to eliminate voids.

When approximately 2/3 full, water thoroughly, then allow water to soak away. Place remaining backfill and dish surface around plant to hold water. Final grade should keep root ball slightly above surrounding grade, not to exceed 1". Water again until no more water is absorbed. Initial watering by irrigation system is not allowed.

STAKING OF TREES: Stake or guy all trees. Stakes shall be 2" X 2" (nom.) quality tree stakes with point. They shall be of Douglas Fir, clear and sturdy. Stake to be minimum 2/3 the height of the tree, not to exceed 8'–0". Drive stake firmly 1'–6" below the planting hole. Tree ties for deciduous trees shall be "Chainlock" (or better). For Evergreen trees use "Gro–Strait" Tree Ties (or a reinforced rubber hose and guy wires) with guy wires of a minimum 2 strand twisted 12 ga. wire. Staking and guying shall be loose enough to allow movement of tree while holding tree upright.

MULCHING OF PLANTINGS: Mulch planting areas with dark, aged, medium grind fir or hemlock bark (aged at least 6 months) to a depth of 2" in ground cover areas and 2½" in shrub beds. Apply evenly, not higher than grade of plant as it came from the nursery, and rake to a smooth finish. Water thoroughly, then hose down planting area with fine spray to wash leaves of plants.

FINE LAWN AREAS: In fine lawn area apply Commercial Fertilizer Mix "B" at 4.5 lbs. Per 1,000 sq.ft. and rake into soil surface. Establish an even, fine textured seedbed meeting grades, surfaces and texture. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

ROUGH SEED AREA: In rough seeded area, establish an evenly graded seedbed. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
Fine Lawn Seed Mix: To contain 50% Top Hat Perennial Ryegrass, 30% Derby Supreme Ryegrass, 20% Longfellow Chewings Fescue (Hobbs and Hopkins Pro–Time 303 Lawn Mix or as approved) Sow Seed at 5 lbs. / 1000 sq. ft.
Rough Seed Mix: To Contain: 60% Perennial Ryegrass, 15% Eureka Hard Fescue, and 20% Herbaceous Plants and Clover (Hobbs and Hopkins Pro–Time 705 PDX, or approved equal). Sow at 2 lbs. Per 1,000 sq.ft.

MAINTENANCE OF SEEDED AREAS:
Fine Lawn Areas: The lawn areas shall be maintained by watering, mowing, reseeding, and weeding for a minimum of 60 days after seeding. After 30 days, or after the second mowing, apply Commercial Fertilizer Mix "C" at 5 lbs. per 1,000 sq. ft. Mow and keep at 1½" to 2" in height. Remove clippings and dispose of off site.

GENERAL MAINTENANCE: Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance. Replace plants not in normal healthy condition at the end of this period. Water, weed, cultivate, mulch, reset plants to proper grade or upright position, remove dead wood and do necessary standard maintenance operations. Irrigate when necessary to avoid drying out of plant materials, and to promote healthy growth.

CLEAN–UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.

CITY OF WILSONVILLE WATER QUALITY FACILITY SPECIFICATIONS:

SOIL PREPARATION: Remove all nonnative plant materials, including plants, roots, and seeds prior to adding topsoils. Till the sub–grade in these areas to a depth of at least four inches. Water Quality Swale area shall be over–excavated and filled to final grade with 4 iches of topsoil in areas where topsoil has been removed or not adequate. Topsoil shall be tested for the following characteristics provide a good growing medium:
A) Texture
B) Fertility
C) Microbial

Incorporate 2" garden compost, free of conventional fertilizer, to a depth of 4" on all areas of the water quality facility. DO NOT apply fertilizer to the Water Quality Facility.

TIMING: Plantings should be installed between February 1 and May 1 or between October 1 and November 15. Bare root stock shall be installed only from December 15 through April 15. When plantings must be installed outside these times, additional measures may be needed to assure survival.

EROSION CONTROL: Grading, soil preparation, and seeding shall be performed during optimal weather conditions and at low flow levels to minimize sediment impacts. Site disturbance shall be minimized and desirable vegetation retained, where possible. Slopes shall be graded to support the establishment of vegetation. Where seeding is used for erosion control, an appropriate native grass, Regreen (or its equivalent), or sterile wheat shall be used to stabilize slopes until permanent vegetation is established. Biodegradable fabrics (coir, coconut or approved jute matting (minimum 1/4" square holes) may be used to stabilize slopes and channels. Fabrics such as burlap may be used to secure plant plugs in place and to discourage floating upon inundation.

A biodegradable Erosion Control Matting shall be placed over the topsoil throughout the swale cross section, fabric shall be held in place in accordance with the manufacturer's installation requirements. Use high density jute matting in the treatment area (Geojute Plus or approved equal). In all other areas use low density jute matting (Econojute or approved equal). Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated on civil plans. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

HERBICIDES: Removal of invasive non–native species is required by hand for the entire wetland buffer area. If necessary, excessive weed growth may be treated with Rodeo or Garlon 3–A (or approved equals) in strict accordance with the manufacturer's instructions.

FERTILIZER: Do not apply fertilizer to any plantings within the Wetland Buffer or Water Quality Facilities.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Loosen and remove twine binding and burlap from top one–half of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with native soil mix while working each layer to eliminate voids.

MULCHING: Trees, shrubs, and groundcovers planted in upland areas shall be mulched a minimum of 3" in depth and 18" in diameter, to retain moisture and discourage weed growth around newly installed plant material. Appropriate mulches are made from composted bark or leaves that have not been chemically treated. The use of mulch in frequently inundated areas shall be limited, to avoid any possible water quality impacts including the leaching of tannins and nutrients, and the migration of mulch into waterways.

WILDLIFE PROTECTION: Appropriate measures shall be taken to discourage wildlife browsing. Biodegradable plastic mesh tubing, or other substitute approved by the City, shall be placed around individual trees and shrubs to prevent browsing by wildlife, including beaver, nutria, deer, mice and voles.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
Moist Area Seed Mix: To contain 47% Blue Wildry, 40% Meadow Barley, 10% Tufted Hairgrass, 2% Western Mannagrass and 1% American Sloughgrass (Hobbs & Hopkins Pro–Time 840 Native Wetland Mix) Sow Seed at 20–40 lbs./acre.
Dry Area Seed Mix: To contain 60% Blue Wildry, 30% Meadow Barley and 10% Native California Brome (Hobbs & Hopkins Pro–Time 400 Native Grass Mix) Sow Seed at 15–30 lbs./acre.

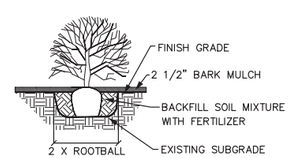
IRRIGATION: Is to be provided as per a separate plan design/build by Landscape Contractor. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. Guarantee system for a minimum one year.

MAINTENANCE: The permitee is responsible for the maintenance of this facility for a minimum of two years following the acceptance of the facility by the City of Wilsonville. The City's authorized representative shall inspect the condition of all landscaping located within the water quality facility, at the end of the of the firest year of the post–construction period. The authorized representative shall provide a report describing any deficiencies to the applicant.

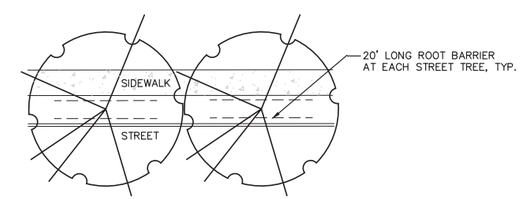
If, at any time during the warranty period, the landscaping falls below 90% survival of trees and shrubs or 90% aerial coverage, the Owner shall remove the undesirable vegetation and reinstall all deficient planting at the next appropriate time. Prior to replanting, the cause of the plant loss shall be determined and corrected. The two–year maintenance period shall begin again from the date of replanting.

Water Quality Facility is to be kept free of debris and maintained to insure water flow and proper functioning. Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance.

CLEAN–UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.



SHRUB PLANTING DETAIL
NOT TO SCALE



ROOT BARRIER DETAIL
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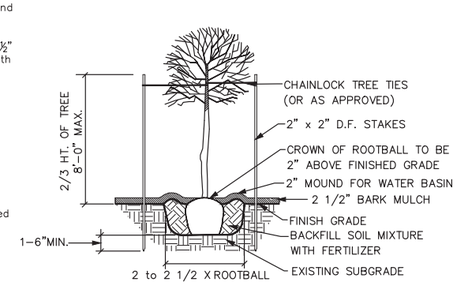

DECIDUOUS TREE PLANTING DETAIL
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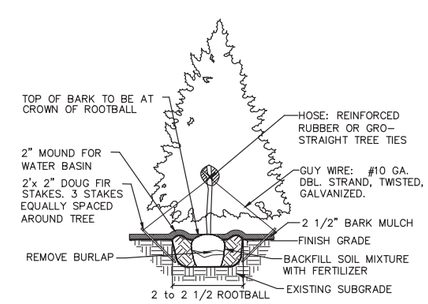


EVERGREEN TREE STAKING DETAIL
NOT TO SCALE

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT OREGON JANET L. OTTEN 212

PHASE 2
NORTH
VILLEBOIS

Final Development Plan

Landscape Specifications & Details

DATE 04/15/2013

L6.0

PHASE 2 NORTH
VILLEBOIS
PRELIMINARY DEVELOPMENT PLAN

TL 2915, PART OF 2916, 2922 & 2995, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

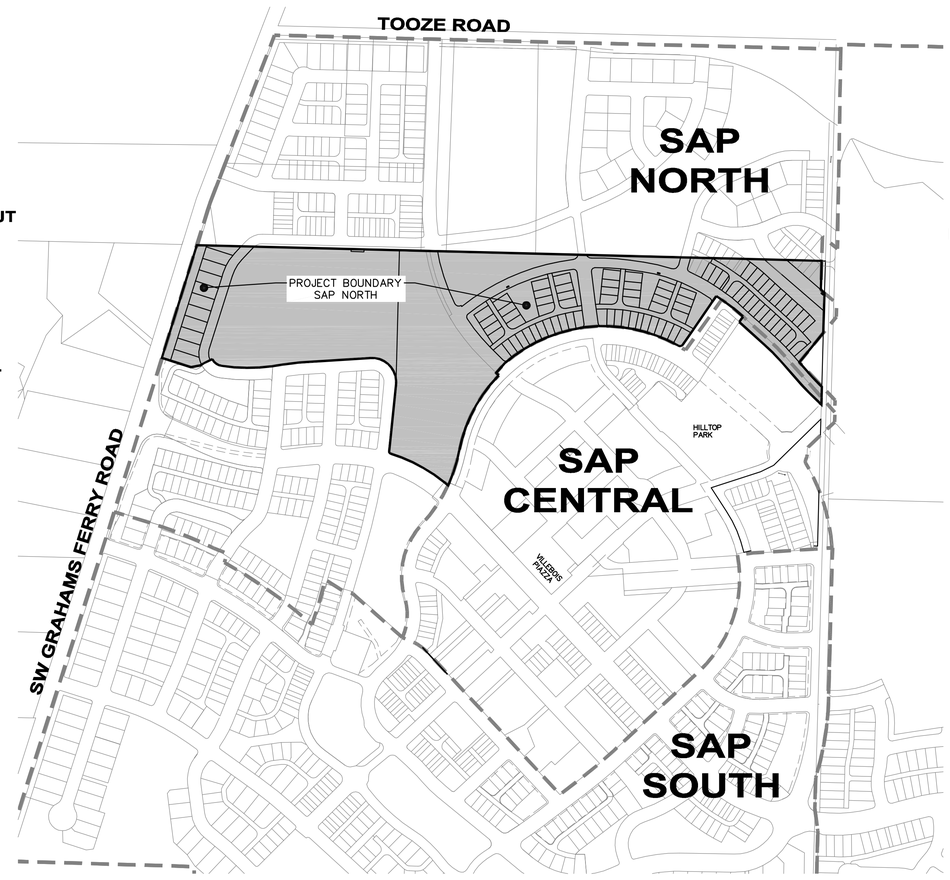
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

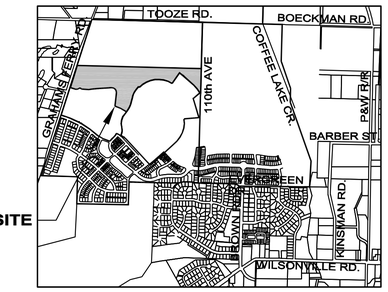
CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE





PROJECT SITE

VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1	COVER SHEET
2.1	EXISTING CONDITIONS
2.2	EXISTING CONDITIONS
3.1	AERIAL PHOTOGRAPH
3.2	AERIAL PHOTOGRAPH
4.1	TENTATIVE PLAT
4.2	TENTATIVE PLAT
4.3	TENTATIVE PLAT
4.4	TENTATIVE PLAT
4.5	TENTATIVE PLAT
5.1	GRADING / EROSION CONTROL PLAN
5.2	GRADING / EROSION CONTROL PLAN
6.1	COMPOSITE UTILITY PLAN
6.2	COMPOSITE UTILITY PLAN
7.1	CIRCULATION PLAN
7.2	CIRCULATION PLAN
7.3	STREET SECTIONS
8.1	SITE / LAND USE PLAN
8.2	SITE / LAND USE PLAN
8.3	TYPICAL LOT PLAN
9.1	TREE PRESERVATION PLAN
9.2	TREE PRESERVATION PLAN
9.3	SROZ IMPACTS & MITIGATION PLAN
10.1	STREET TREE / LIGHTING PLAN
10.2	STREET TREE / LIGHTING PLAN
11.1	PHASING PLAN
11.2	PHASING PLAN

SCALE
300 0 150 300
1 INCH = 300 FEET

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

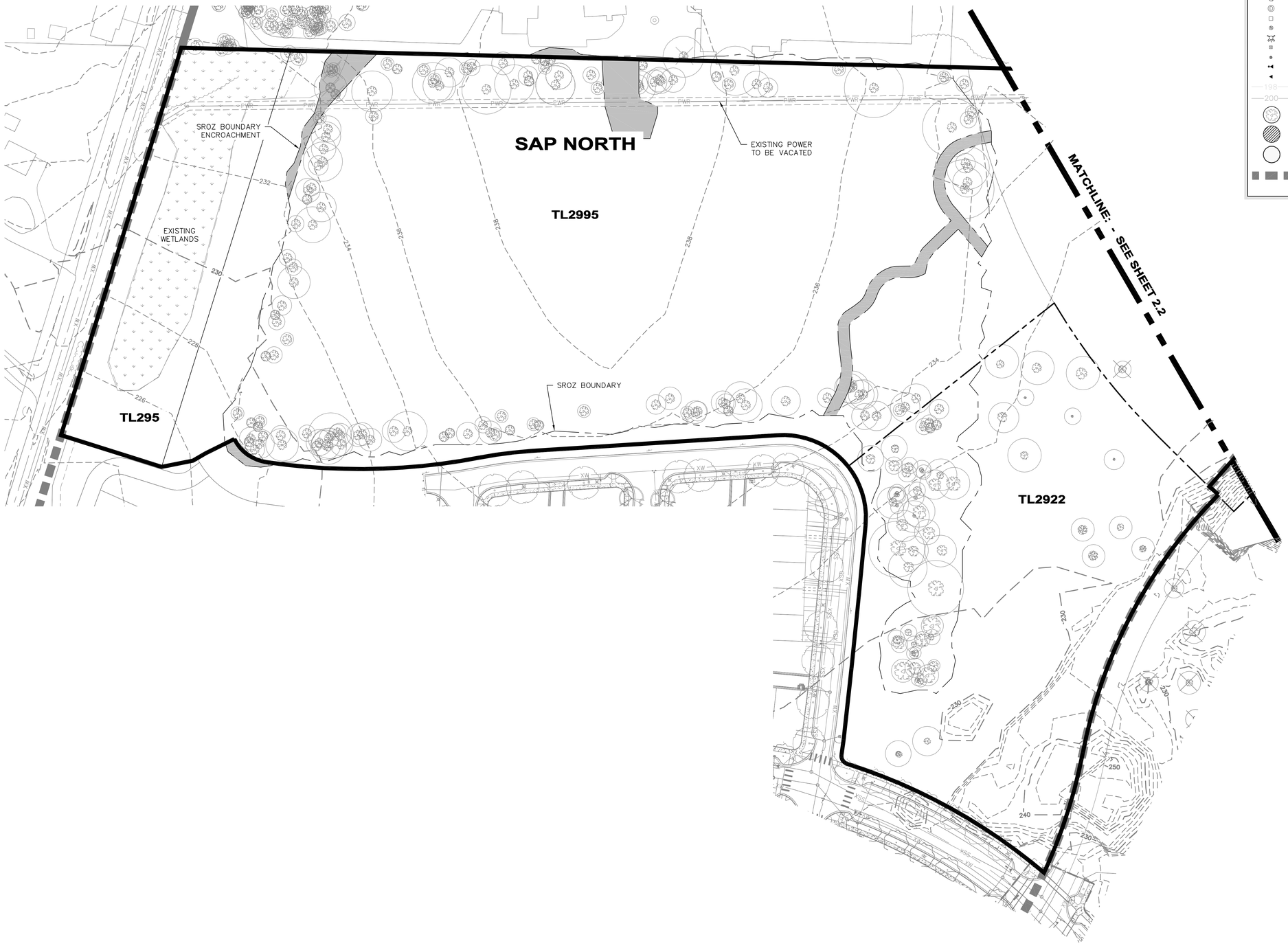
Preliminary
Development Plan

City of Wilsonville
EXHIBIT B2 DB13-0020 et al

Cover Sheet

DATE 04/15/2013

1



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GEODESIGN, INC

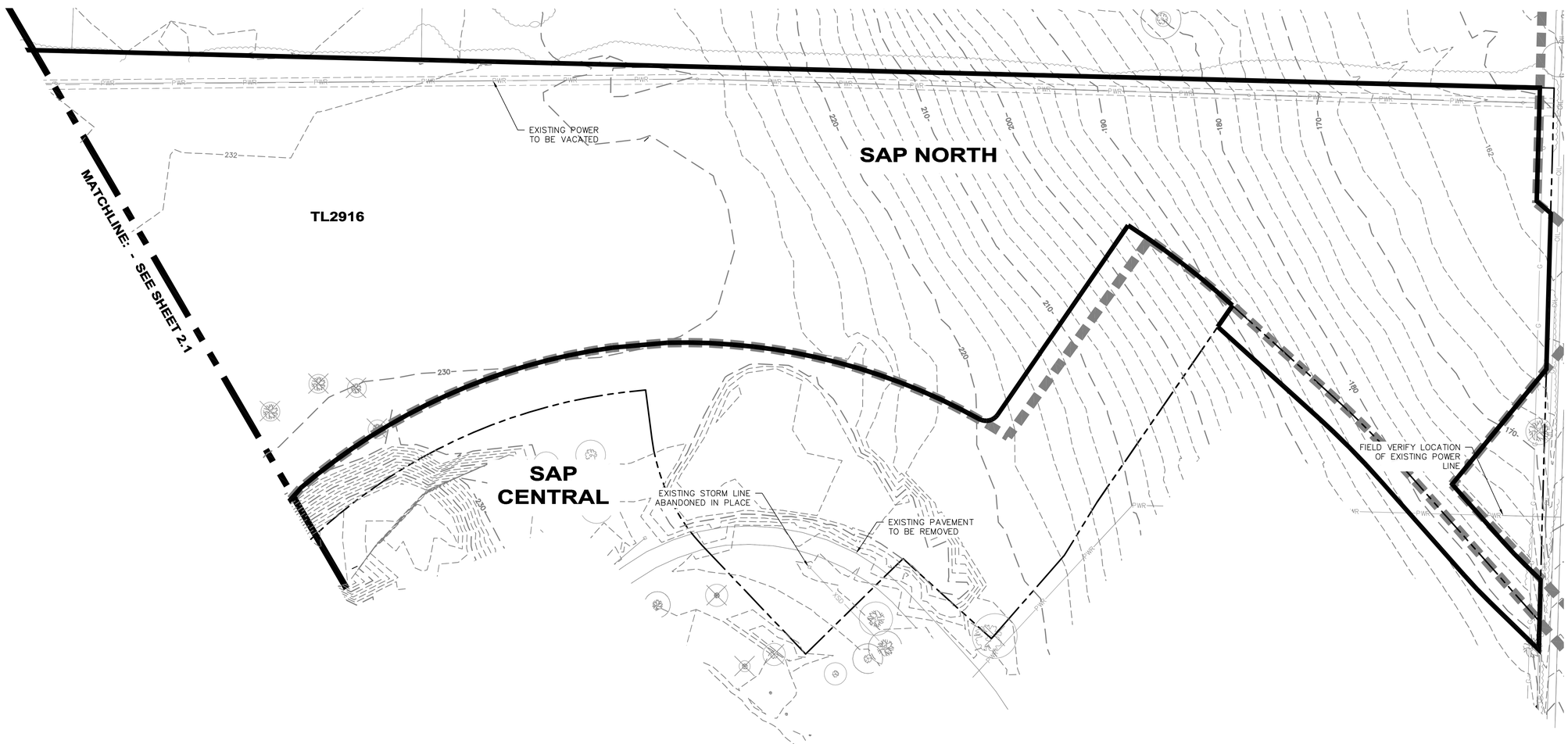
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Existing Conditions

DATE 04/15/2013

2.1



LEGEND

- EASEMENT LINES
- XSS — EX SANITARY SEWER
- XSD — EX STORM DRAIN
- XW — EX WATER LINE
- GAS — EX GAS LINE
- OIL — EX FUEL LINE
- XOH — EX OVERHEAD POWER LINE
- EX SANITARY MANHOLE
- EX SANITARY CLEANOUT
- EX STORM MANHOLE
- EX CATCH BASIN
- EX STORM CLEANOUT
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX BLOW-OFF
- EX THRUST BLOCK
- 198 — EX 2-FT CONTOUR
- 200 — EX 10-FT CONTOUR
- EX TREE TO REMAIN
- EX TREE MOST LIKELY TO BE REMOVED
- EX TREE TO BE REMOVED
- SAP BOUNDARY

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GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Existing Conditions

DATE 04/15/2013

2.2

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OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

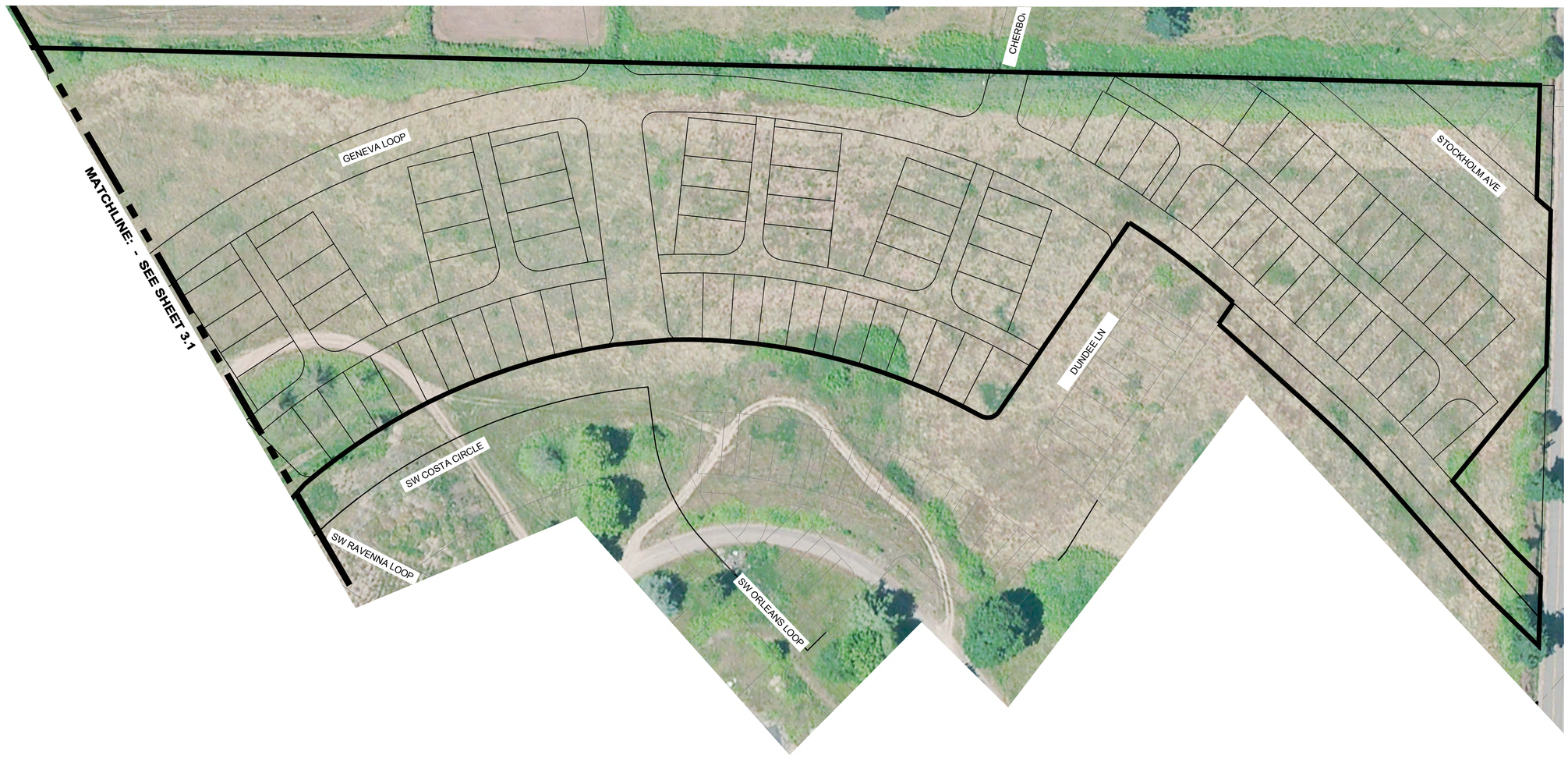
PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Aerial
Photograph

DATE 04/15/2013

3.1



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GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Aerial Photograph

DATE 04/15/2013

3.2

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.1

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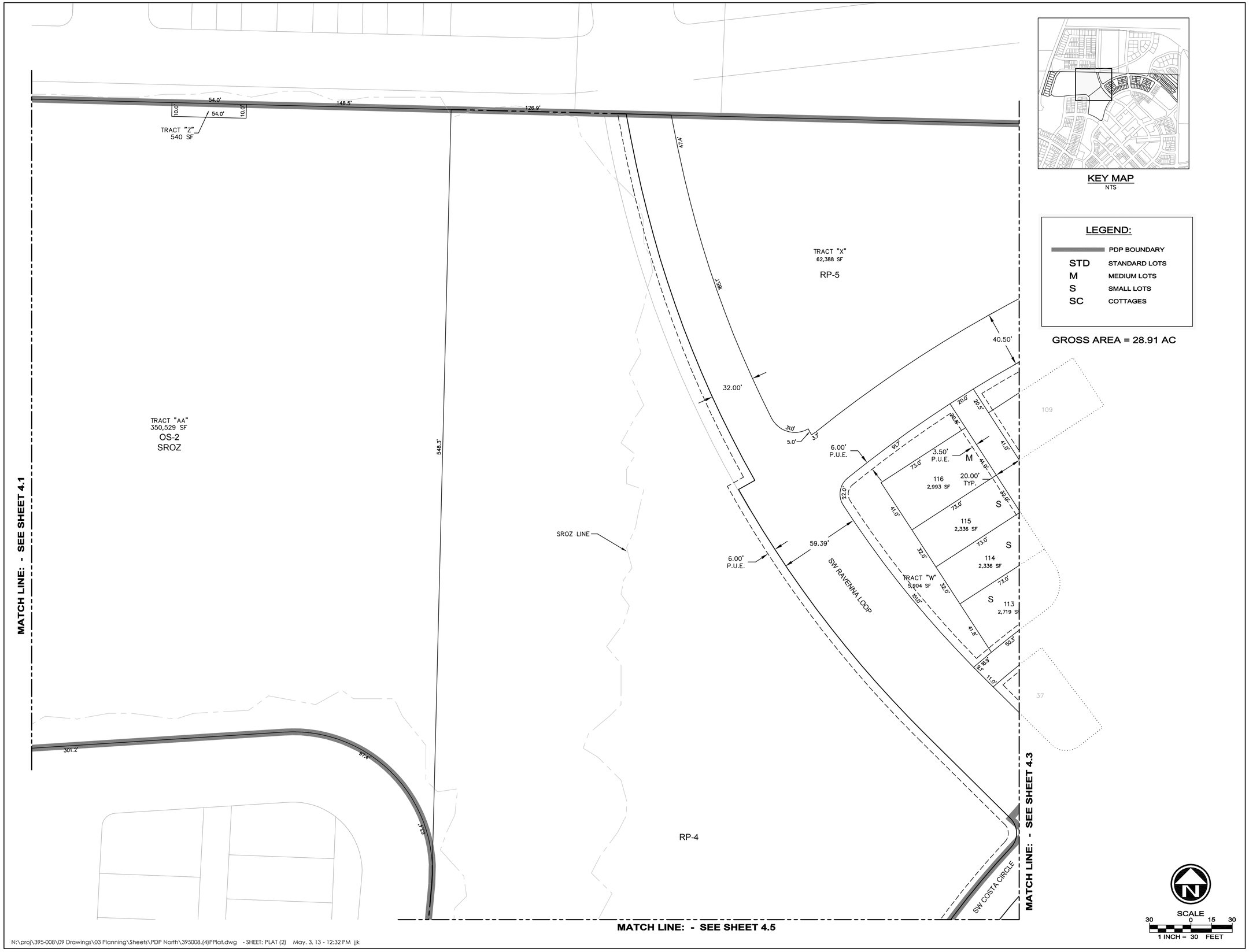

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

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GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Tentative
Plat

DATE 04/15/2013

4.2

KEY MAP
NTS

LEGEND:

PDP BOUNDARY	
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

SCALE
30 0 15 30
1 INCH = 30 FEET

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PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.3

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

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PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

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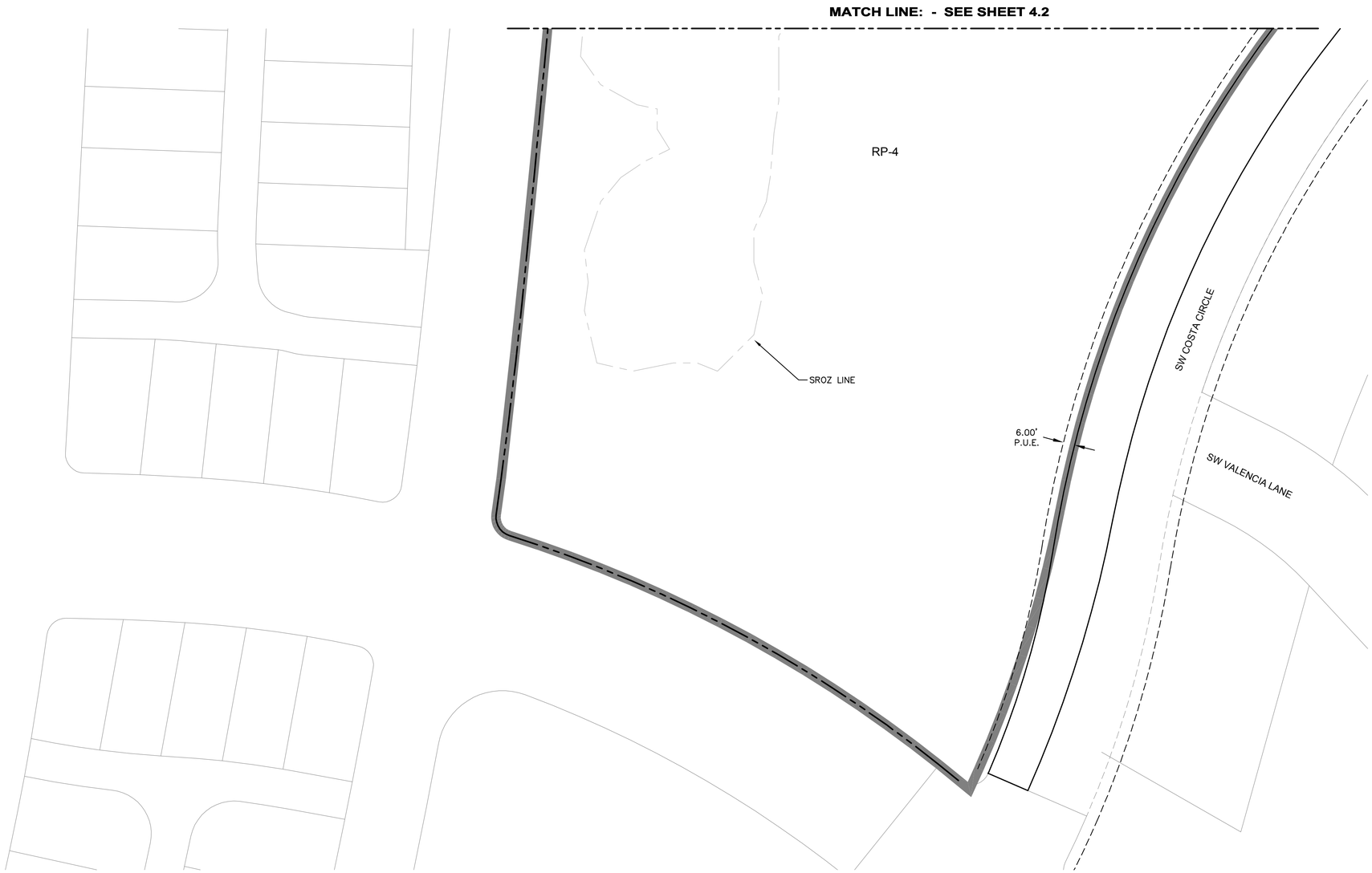

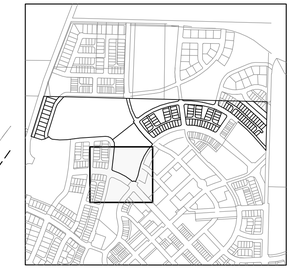

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

SCALE
30 0 15 30
1 INCH = 30 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(4)PPlat.dwg - SHEET: PLAT (5) May, 3, 13 - 12:33 PM jjk

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

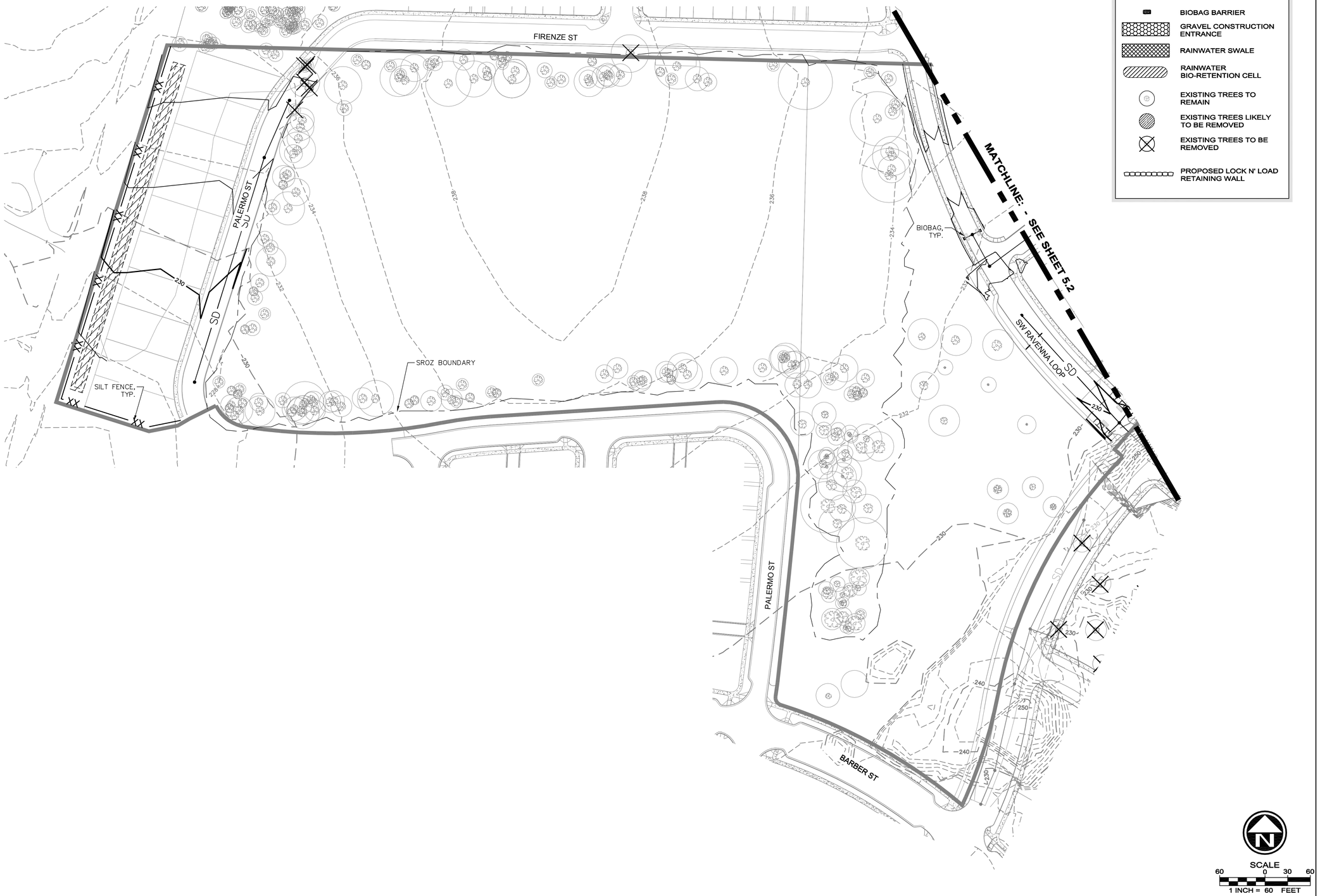
PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Tentative
Plat

DATE 04/15/2013

4.5



LEGEND:

- SD — PROPOSED STORM DRAIN
- 224 — PROPOSED 2-FT CONTOUR
- 230 — PROPOSED 10-FT CONTOUR
- TREE PROTECTION FENCE
- XX — SEDIMENT FENCE
- BIOBAG BARRIER
- GRAVEL CONSTRUCTION ENTRANCE
- RAINWATER SWALE
- RAINWATER BIO-RETENTION CELL
- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- EXISTING TREES TO BE REMOVED
- PROPOSED LOCK N' LOAD RETAINING WALL

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

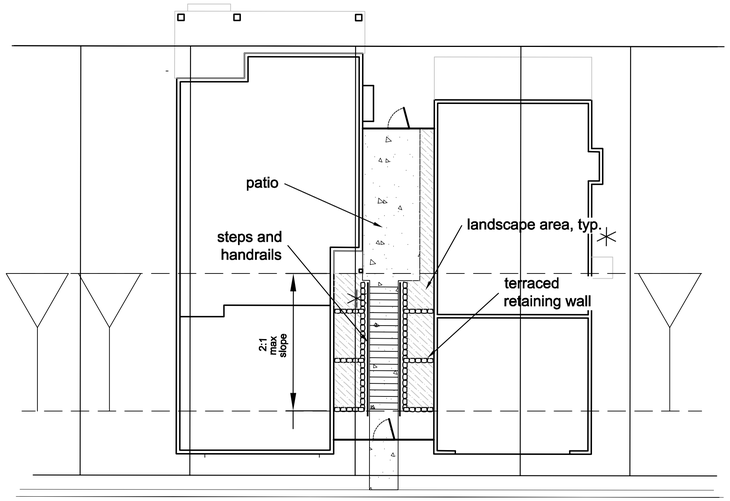
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Grading & Erosion Control Plan

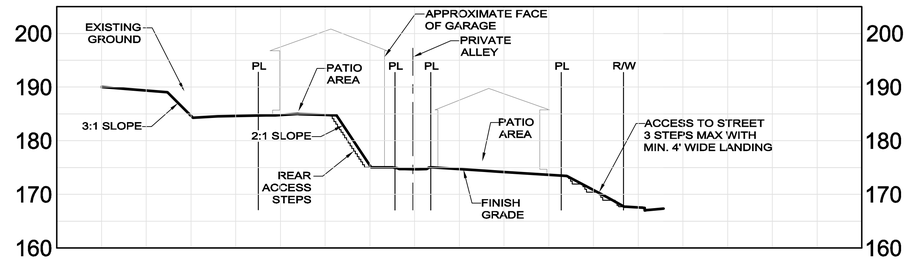
DATE 04/15/2013

5.1



SPLIT LOT - TYPICAL SHARED YARD LAYOUT

SCALE: 1" = 10'



TYPICAL SPLIT LOT CROSS SECTION

HORIZONTAL SCALE: 1"=40'; VERTICAL: N.T.S.

LEGEND:

- SD — PROPOSED STORM DRAIN
- 224 — PROPOSED 2-FT CONTOUR
- 230 — PROPOSED 10-FT CONTOUR
- TREE PROTECTION FENCE
- xx — SEDIMENT FENCE
- BIOBAG BARRIER
- GRAVEL CONSTRUCTION ENTRANCE
- RAINWATER SWALE
- RAINWATER BIO-RETENTION CELL
- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- EXISTING TREES TO BE REMOVED
- PROPOSED LOCK N' LOAD RETAINING WALL

LOCK N' LOAD RETAINING WALL

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Grading & Erosion
Control Plan

DATE 04/15/2013

5.2

LEGEND:

- SS — PROPOSED SANITARY SEWER
- XSS — EX SANITARY SEWER
- SD — PROPOSED STORM DRAIN
- XSD — EX STORM DRAIN
- W — PROPOSED WATER LINE
- XW — EX WATER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED FIRE HYDRANT
- RAINWATER SWALE
- RAINWATER BIO-RETENTION CELL

NOTES:

1. ALL SANITARY TO BE 8" DIAMETER PIPE.
2. ALL WATER MAINS TO BE 8" DIAMETER PIPE, UNLESS OTHERWISE NOTED.
3. ALL STORM DRAIN TO BE 12" DIAMETER PIPE, UNLESS OTHERWISE NOTED.

SCALE
60 0 30 60
1 INCH = 60 FEET

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Composite Utility
Plan

DATE 04/15/2013

6.1

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(6)PComp.dwg - SHEET: COMP May. 3, 13 - 12:35 PM jjk

LEGEND:

- SS — PROPOSED SANITARY SEWER
- XSS — EX SANITARY SEWER
- SD — PROPOSED STORM DRAIN
- XSD — EX STORM DRAIN
- W — PROPOSED WATER LINE
- XW — EX WATER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM MANHOLE
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- RAINWATER BIO-RETENTION CELL

NOTES:

1. ALL SANITARY TO BE 8" DIAMETER PIPE.
2. ALL WATER MAINS TO BE 8" DIAMETER PIPE, UNLESS OTHERWISE NOTED.
3. ALL STORM DRAIN TO BE 12" DIAMETER PIPE, UNLESS OTHERWISE NOTED.

SCALE
60 0 30 60
1 INCH = 60 FEET

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Composite Utility
Plan

DATE 04/15/2013

6.2

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(6)PComp.dwg - SHEET: COMP (2) May. 3, 13 - 12:36 PM jjk

LEGEND:

E1 ROAD SECTION TYPE SEE SHEET 7.3 FOR DETAILS

PROJECT BOUNDARY LINE

SCALE
60 0 30 60
1 INCH = 60 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(7)PCirc.dwg - SHEET: CIRC May. 3, 13 - 12:37 PM jjk

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Circulation
Plan

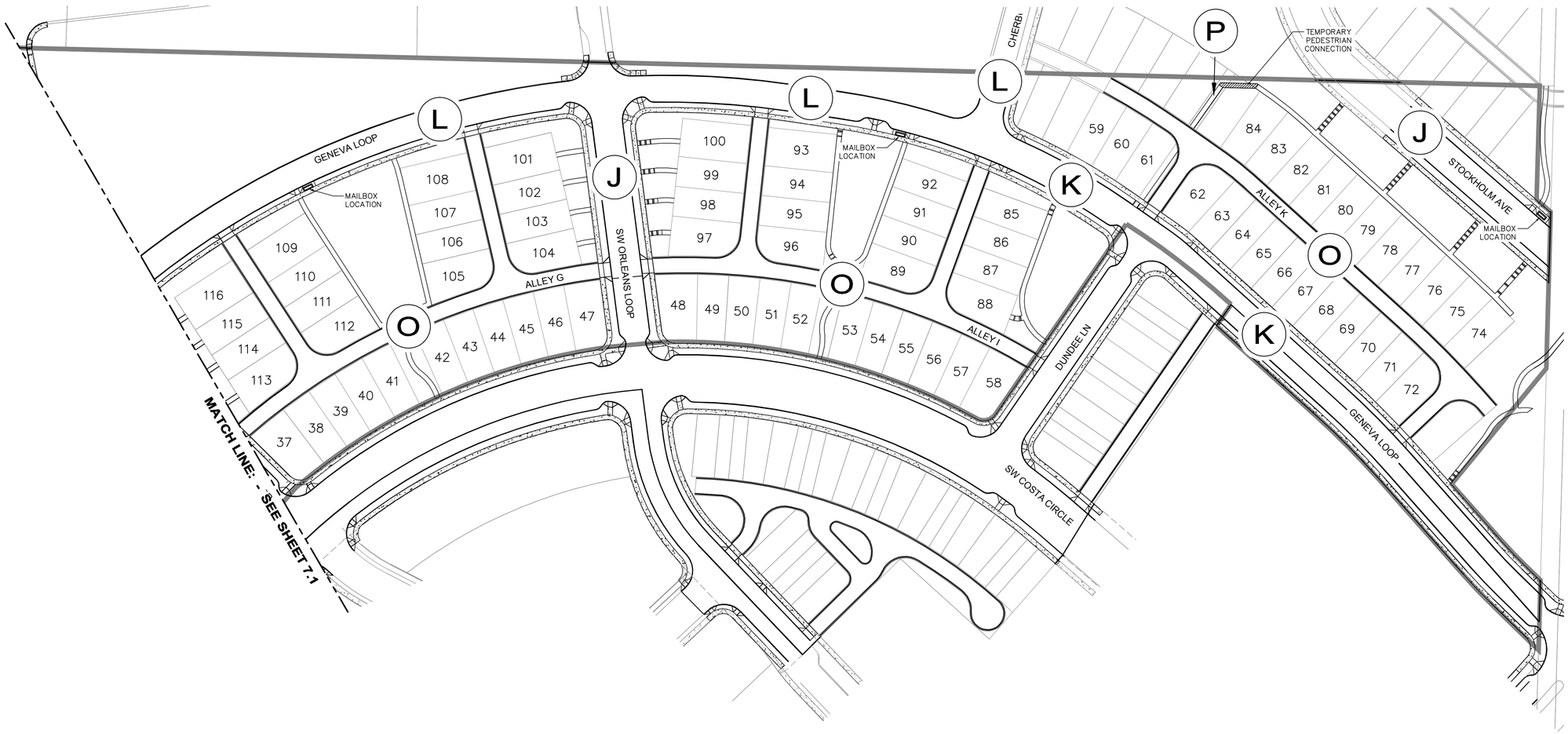
DATE 04/15/2013

7.1

LEGEND:

E1 — ROAD SECTION TYPE SEE SHEET 7.3 FOR DETAILS

PROJECT BOUNDARY LINE



SCALE
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1 INCH = 60 FEET

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

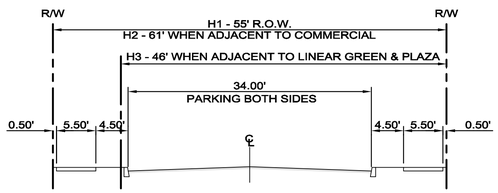
Preliminary
Development Plan

Circulation
Plan

DATE 04/15/2013

7.2

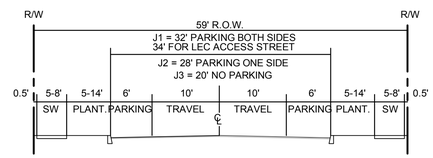
H1 H2 H3



RESIDENTIAL VILLAGE CENTER

SCALE: 1"=10'

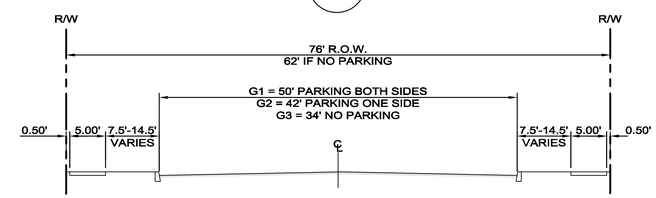
J



RESIDENTIAL - STANDARD - LEC ACCESS

SCALE: 1"=10'

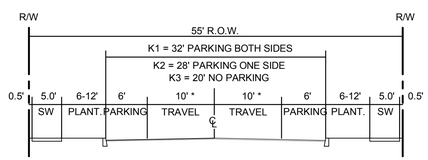
G



RESIDENTIAL - VILLAGE LOOP

SCALE: 1"=10'

K

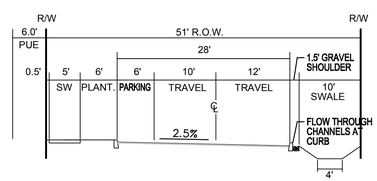


RESIDENTIAL - MINIMUM

SCALE: 1"=10'

* 12' TRAVEL ON OUTSIDE LANE WHEN PARKING ONE SIDE.

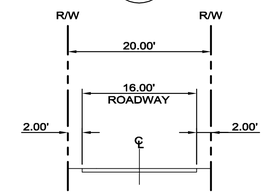
L



RESIDENTIAL - PARKING ONE SIDE

SCALE: 1"=10'

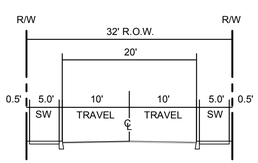
O



PRIVATE LANE

SCALE: 1"=10'

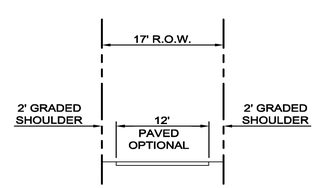
M



RESIDENTIAL - NO PARKING

SCALE: 1"=10'

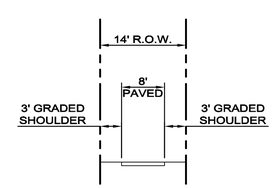
P



MAJOR PATHWAY

SCALE: 1"=10'

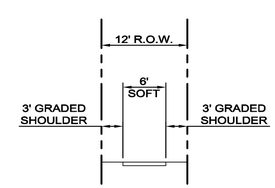
Q



MINOR PATHWAY

SCALE: 1"=10'

R



NATURE TRAIL

SCALE: 1"=10'

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(7)PCirc.dwg - SHEET: SECT May. 3, 13 - 12:38 PM jjk

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

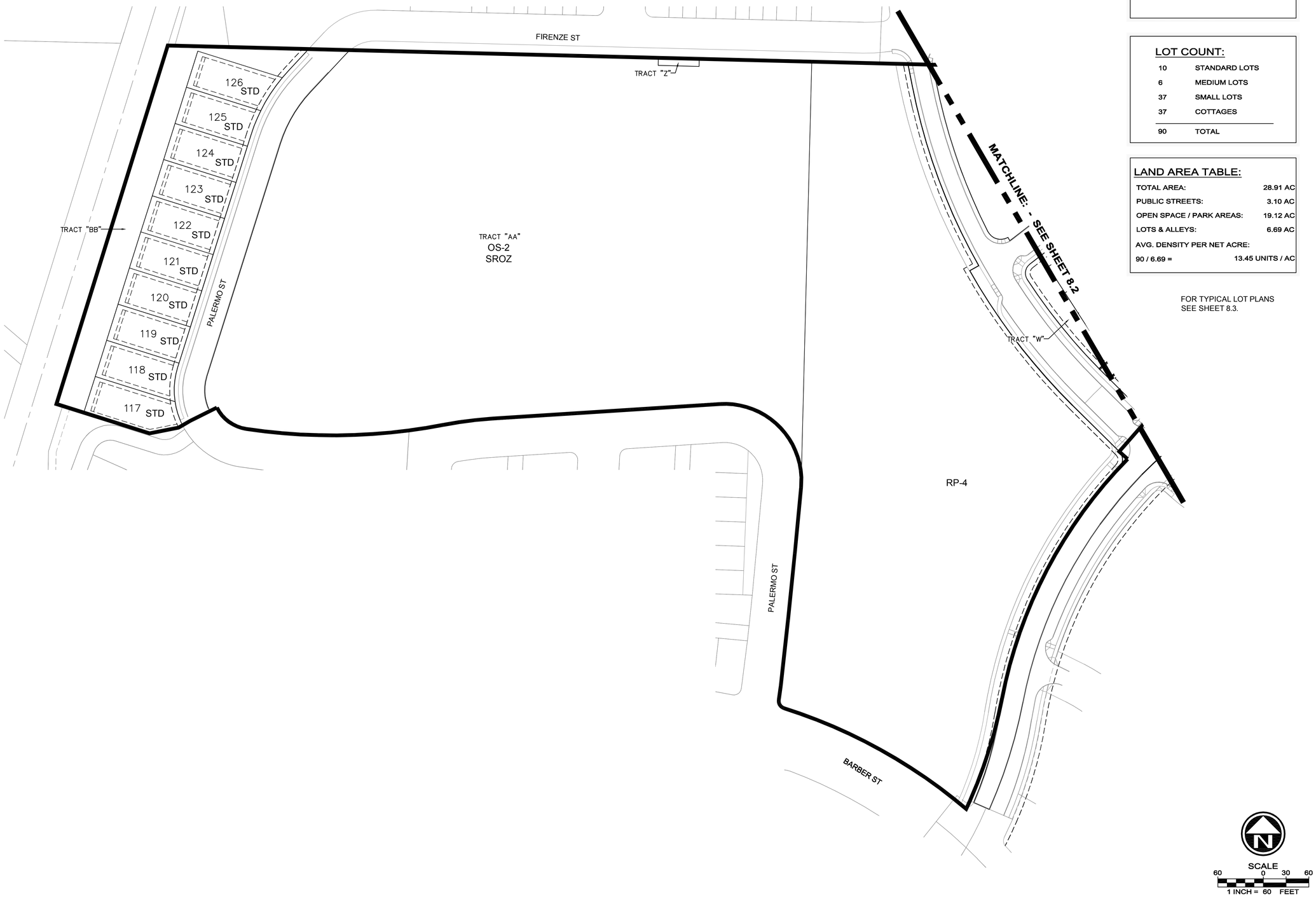
PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Street
Sections

DATE 04/15/2013

7.3



LEGEND:

▬	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

LOT COUNT:

10	STANDARD LOTS
6	MEDIUM LOTS
37	SMALL LOTS
37	COTTAGES
90	TOTAL

LAND AREA TABLE:

TOTAL AREA:	28.91 AC
PUBLIC STREETS:	3.10 AC
OPEN SPACE / PARK AREAS:	19.12 AC
LOTS & ALLEYS:	6.69 AC
AVG. DENSITY PER NET ACRE:	
90 / 6.69 =	13.45 UNITS / AC

FOR TYPICAL LOT PLANS
SEE SHEET 8.3.

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GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Site / Land Use Plan

DATE 04/15/2013

8.1

LAND AREA TABLE:

TOTAL AREA:	28.91 AC
PUBLIC STREETS:	3.10 AC
OPEN SPACE / PARK AREAS:	19.12 AC
LOTS & ALLEYS:	6.69 AC
AVG. DENSITY PER NET ACRE:	
90 / 6.69 =	13.45 UNITS / AC

LEGEND:

▬	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

LOT COUNT:

10	STANDARD LOTS
6	MEDIUM LOTS
37	SMALL LOTS
37	COTTAGES
90	TOTAL

FOR TYPICAL LOT PLANS
SEE SHEET 8.3.

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(8)PSite.dwg - SHEET: SITE (2) May. 3, 13 - 12:38 PM jjk

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

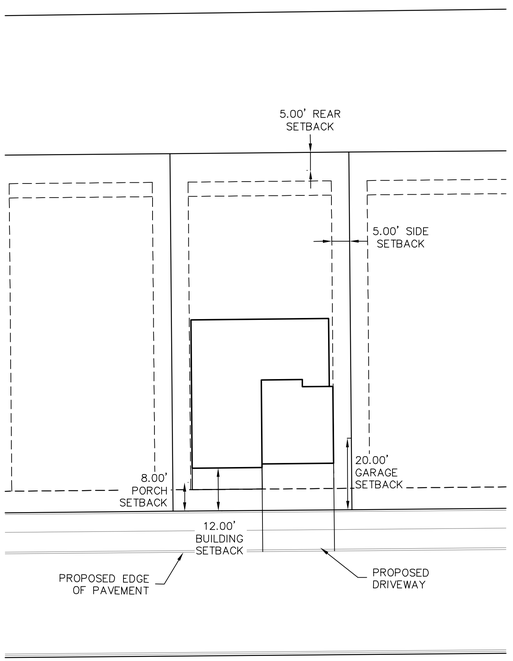
PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Site / Land Use Plan

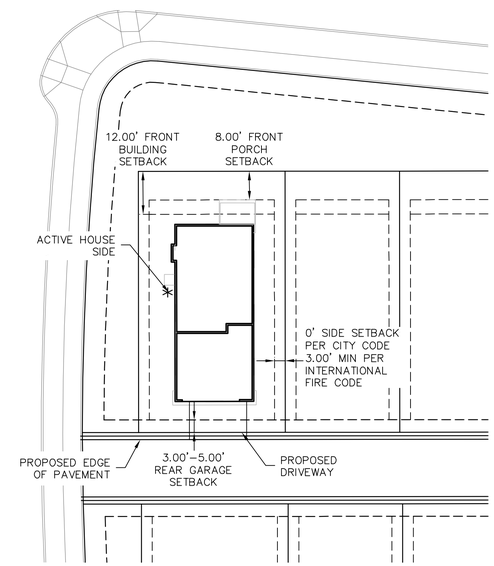
DATE 04/15/2013

8.2



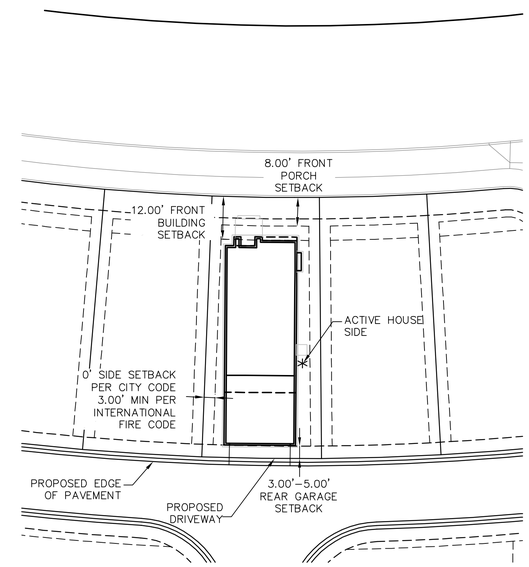
TYPICAL LOT PLAN - FRONT LOADED STANDARD

SCALE: 1" = 20'



TYPICAL LOT PLAN - REAR LOADED SMALL & MEDIUM

SCALE: 1" = 20'



TYPICAL LOT PLAN - REAR LOADED COTTAGE

SCALE: 1" = 20'

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OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Typical Lot
Plan

DATE 04/15/2013

8.3

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(8)PSite.dwg - SHEET: TYPICAL LOT May. 3, 13 - 12:39 PM jjk

NOTES

ALL CONSTRUCTION AND GRADING WITHIN TREE PROTECTION ZONE IS TO BE COMPLETED UNDER DIRECT SUPERVISION OF PROJECT ARBORIST.
CONTACT: MORGAN HOLEN
PHONE: 503-646-4349

THE INTENT OF THE PLAN IS TO RETAIN AND INCORPORATE THE MAXIMUM QUANTITY OF TREES WITH IMPORTANT, GOOD, AND MODERATE CLASSIFICATIONS. THE FOLLOWING CLASSIFICATION SYSTEM WAS USED:

CLASSIFICATION METHOD:
TREES WERE RATED BASED ON THE FOLLOWING CONSIDERATIONS:
1. HEALTH
2. SPECIES (NATIVES WITH HABITAT AND ECOSYSTEM VALUE)
3. COMPATIBILITY WITH DEVELOPMENT
4. FORM / VISUAL INTEREST / MATURE SIZE

TREES RANKED AS IMPORTANT WERE RATED HIGH IN ALL FOUR AREAS.

TREES IN THE GOOD CATEGORY HAD GOOD HEALTH AND WERE A DESIRABLE SPECIES, BUT HAD IRREGULAR FORM OR LESS COMPATIBILITY WITH DEVELOPMENT.

TREES IN THE MODERATE CATEGORY HAD GOOD TO MODERATE HEALTH AND FORM, BUT WERE A LESS DESIRABLE SPECIES OR MAY BE LESS COMPATIBLE WITH DEVELOPMENT.

TREES IN THE POOR CATEGORY HAD POOR HEALTH AND/OR SUBSTANTIAL DAMAGE.

NOTES:
1. THE INFORMATION PROVIDED WITHIN THE PROJECT BOUNDARY IS BASED ON AN ON-SITE EVALUATION OF THE EXISTING TREES BY ARBORIST MORGAN HOLAN AND WAS PROVIDED IN A TREE REPORT DATE 4/10/2013 INCLUDED WITH THE APPLICATION MATERIALS.

LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

SCALE
60 0 30 60
1 INCH = 60 FEET

Ville

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tree Preservation Plan

DATE 04/15/2013

9.1

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(9)PTreeP.dwg - SHEET: PRES May. 15, 13 - 11:44 AM jjk

NOTES

ALL CONSTRUCTION AND GRADING WITHIN TREE PROTECTION ZONE IS TO BE COMPLETED UNDER DIRECT SUPERVISION OF PROJECT ARBORIST.
CONTACT: MORGAN HOLEN
PHONE: 503-646-4349

THE INTENT OF THE PLAN IS TO RETAIN AND INCORPORATE THE MAXIMUM QUANTITY OF TREES WITH IMPORTANT, GOOD, AND MODERATE CLASSIFICATIONS. THE FOLLOWING CLASSIFICATION SYSTEM WAS USED:

CLASSIFICATION METHOD:
TREES WERE RATED BASED ON THE FOLLOWING CONSIDERATIONS:
1. HEALTH
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3. COMPATIBILITY WITH DEVELOPMENT
4. FORM / VISUAL INTEREST / MATURE SIZE

TREES RANKED AS IMPORTANT WERE RATED HIGH IN ALL FOUR AREAS.

TREES IN THE GOOD CATEGORY HAD GOOD HEALTH AND WERE A DESIRABLE SPECIES, BUT HAD IRREGULAR FORM OR LESS COMPATIBILITY WITH DEVELOPMENT.

TREES IN THE MODERATE CATEGORY HAD GOOD TO MODERATE HEALTH AND FORM, BUT WERE A LESS DESIRABLE SPECIES OR MAY BE LESS COMPATIBLE WITH DEVELOPMENT.

TREES IN THE POOR CATEGORY HAD POOR HEALTH AND/OR SUBSTANTIAL DAMAGE.

NOTES:
1. THE INFORMATION PROVIDED WITHIN THE PROJECT BOUNDARY IS BASED ON AN ON-SITE EVALUATION OF THE EXISTING TREES BY ARBORIST MORGAN HOLAN AND WAS PROVIDED IN A TREE REPORT DATE 4/10/2013 INCLUDED WITH THE APPLICATION MATERIALS.

LEGEND:

I	IMPORTANT
G	GOOD
M	MODERATE
P	POOR
NE	NOT EXAMINED
	EXISTING TREES TO REMAIN
	EXISTING TREES LIKELY TO BE REMOVED
	EXISTING TREES TO BE REMOVED

SCALE
60 0 30 60
1 INCH = 60 FEET

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PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Treet Preservation Plan

DATE 04/15/2013

9.2

LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

SROZ MITIGATION			
AREA RATIO	IMPACT AREA	REQUIRED MITIGATION AREA	PROPOSED MITIGATION AREA
2.5:1	16,255 SF	40,638 SF	46,212 SF

SCALE
60 0 30 60
1 INCH = 60 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(9)PTreeP.dwg - SHEET: SROZ May. 3, 13 - 12:40 PM jjk

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POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

SROZ Impacts &
Mitigation Plan

DATE 04/15/2013

9.3

LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

STREET TREE LEGEND: SAP NORTH

QTY.	SYMBOL	BOTANICAL NAME / Common Name	SIZE	SPACING
27		ACER x FREEMANII "AUTUMN BLAZE" / Autumn Blaze Maple	2" cal.	30' o.c.
13		CLADRASTIS KENTUKEA / Yellowwood	2" cal.	30' o.c.
19		FAGUS SYLVATICA / European Beech	2" cal.	30' o.c.
41		LIRIODENDRON TULIPIFERA / Tulip Tree	2 1/2" cal.	25' o.c.
44		QUERCUS ALBA / White Oak	2" cal.	30' o.c.
22		TILIA x EUCHLORA / Crimean Linden	2" cal.	30' o.c.
13		QUERCUS ALBA / White Oak	2" cal.	30' o.c.

N

SCALE
60 0 30 60
1 INCH = 60 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(10)PSTree.dwg - SHEET: TREE May. 3, 13 - 12:41 PM jjk

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

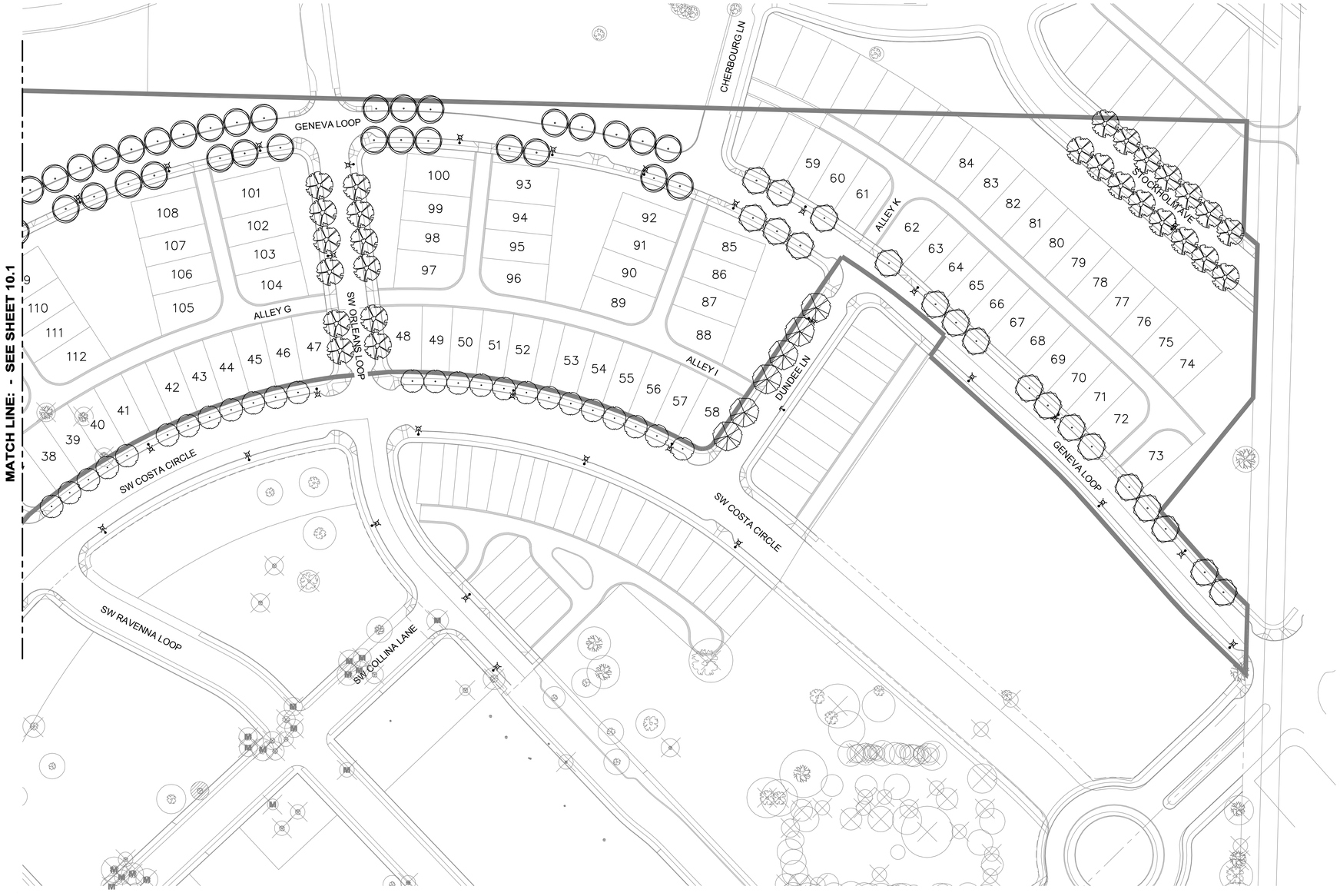
PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Street Tree &
Lighting Plan

DATE 04/15/2013

10.1



LEGEND:

- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- PROPOSED STREET LIGHT LOCATION
- EXISTING STREET LIGHT LOCATION

STREET TREE LEGEND: SAP NORTH

QTY.	SYMBOL	BOTANICAL NAME Common Name	SIZE	SPACING
27		ACER x FREEMANII "AUTUMN BLAZE" Autumn Blaze Maple	2" cal.	30' o.c.
13		CLADRASTIS KENTUKEA Yellowwood	2" cal.	30' o.c.
19		FAGUS SYLVATICA European Beech	2" cal.	30' o.c.
41		LIRIODENDRON TULIPIFERA Tulip Tree	2 1/2" cal.	25' o.c.
44		QUERCUS ALBA White Oak	2" cal.	30' o.c.
22		TILIA x EUCHLORA Crimean Linden	2" cal.	30' o.c.
13		QUERCUS ALBA White Oak	2" cal.	30' o.c.

N

SCALE
60 0 30 60
1 INCH = 60 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(10)PSTree.dwg - SHEET: TREE (2) May. 3, 13 - 12:41 PM jjk

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

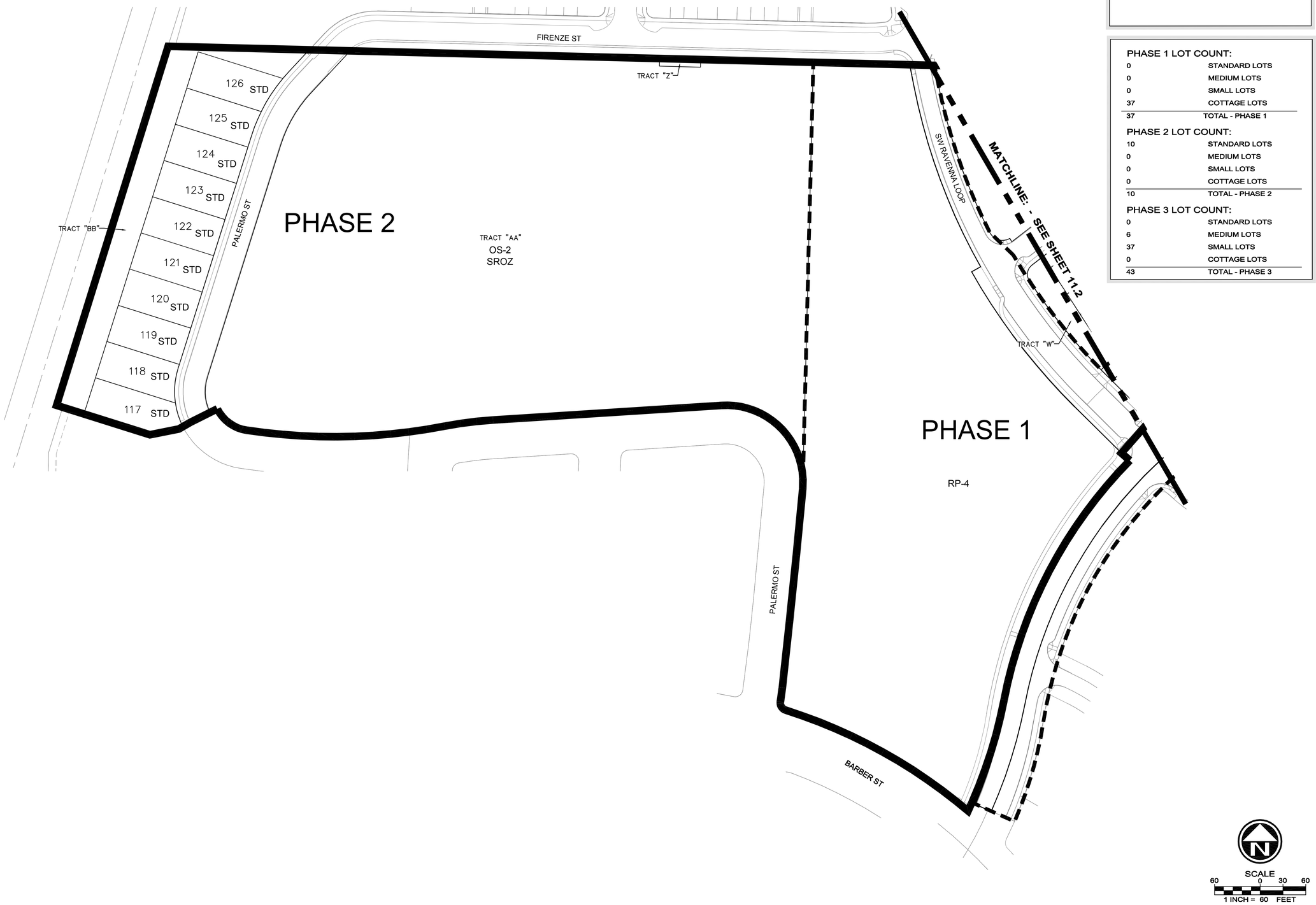
PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Street Tree &
Lighting Plan

DATE 04/15/2013

10.2



LEGEND:

STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGE LOTS

PHASE 1 LOT COUNT:	
0	STANDARD LOTS
0	MEDIUM LOTS
0	SMALL LOTS
37	COTTAGE LOTS
37	TOTAL - PHASE 1

PHASE 2 LOT COUNT:	
10	STANDARD LOTS
0	MEDIUM LOTS
0	SMALL LOTS
0	COTTAGE LOTS
10	TOTAL - PHASE 2

PHASE 3 LOT COUNT:	
0	STANDARD LOTS
6	MEDIUM LOTS
37	SMALL LOTS
0	COTTAGE LOTS
43	TOTAL - PHASE 3

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Phasing Plan

DATE 04/15/2013

11.1

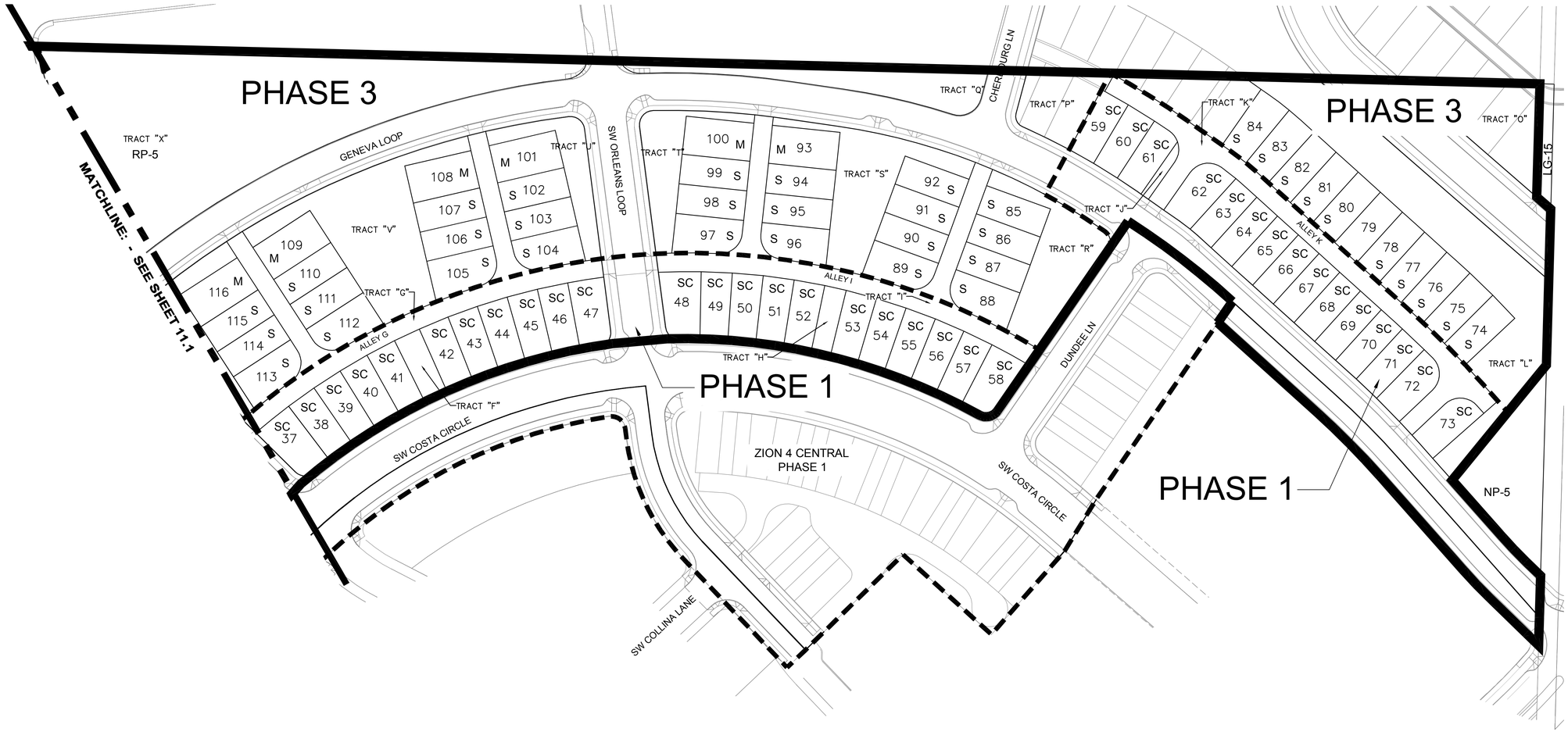
N:\proj\395-008\09 Drawings\03 Planning\Sheets\PDP North\395008.(11)PPhas.dwg - SHEET: PHASE May. 3, 13 - 12:42 PM jjk

PHASE 1 LOT COUNT:	
0	STANDARD LOTS
0	MEDIUM LOTS
0	SMALL LOTS
37	COTTAGE LOTS
37	TOTAL - PHASE 1

PHASE 2 LOT COUNT:	
10	STANDARD LOTS
0	MEDIUM LOTS
0	SMALL LOTS
0	COTTAGE LOTS
10	TOTAL - PHASE 2

PHASE 3 LOT COUNT:	
0	STANDARD LOTS
6	MEDIUM LOTS
37	SMALL LOTS
0	COTTAGE LOTS
43	TOTAL - PHASE 3

LEGEND:	
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGE LOTS



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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Phasing
Plan

DATE 04/15/2013

11.2

PHASE 2 NORTH
VILLEBOIS
FINAL DEVELOPMENT PLAN

TL 2915, PART OF 2916, 2922 & 2995, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

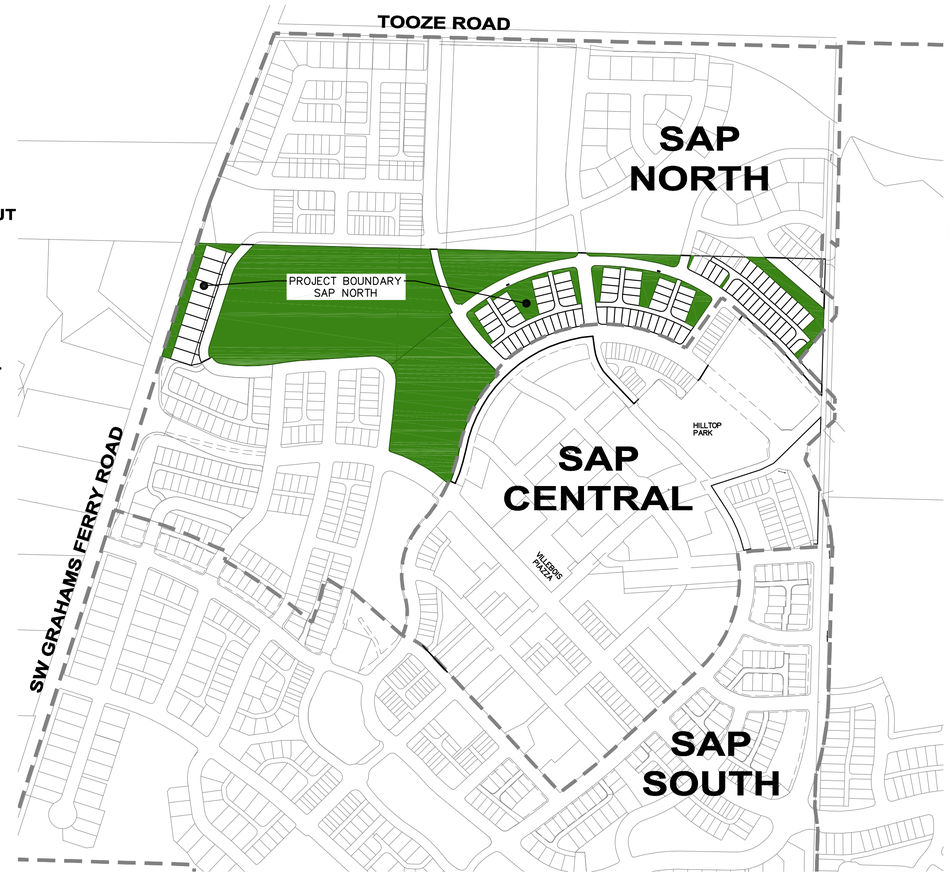
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

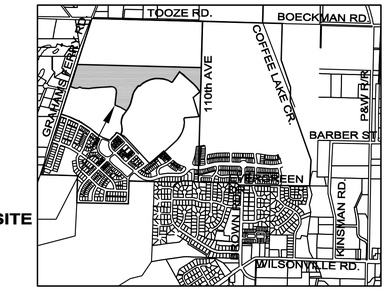
CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE





PROJECT SITE

VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1 COVER SHEET
L1.0 LANDSCAPE PLAN
L2.0 LANDSCAPE PLAN
L3.0 LANDSCAPE PLAN
L4.0 LANDSCAPE PLAN
L5.0 LANDSCAPE PLAN
L6.0 LANDSCAPE DETAILS

SCALE
300 0 150 300
1 INCH = 300 FEET

N:\proj\395-008\09 Drawings\03 Planning\Sheets\FDP North\395008.(1)FTitle.dwg - SHEET: TITLE May. 2, 13 - 11:01 AM jjk

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

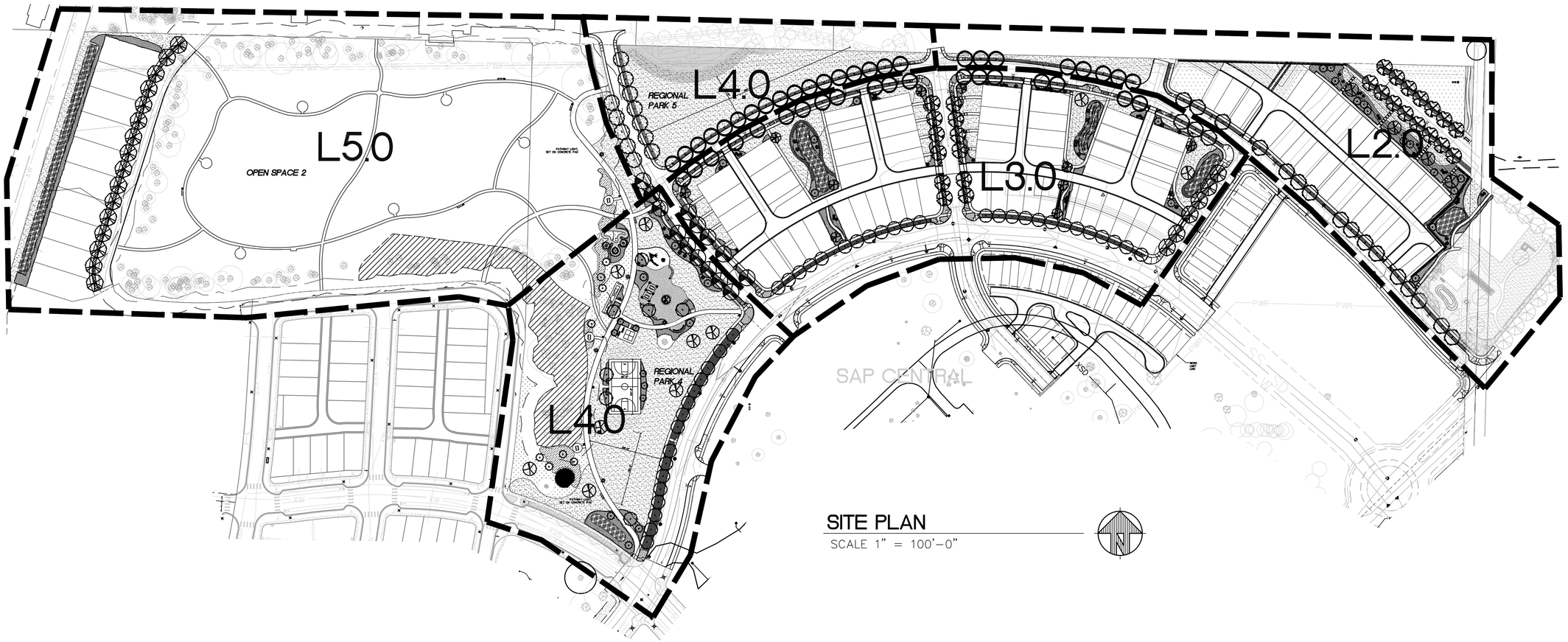
Final Development Plan

City of Wilsonville
EXHIBIT B3 DB13-0020 et al

Cover Sheet

DATE 04/15/2013

1



SITE PLAN

SCALE 1" = 100'-0"

GENERAL NOTES:

1. Contractor is to verify all plant quantities.
2. Adjust plantings in the field as necessary.
3. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. System is to be design/build by Landscape Contractor. Guarantee system for a minimum one year. Show drip systems as alternate bid only.
4. All plants are to be fully foliaged, well branched and true to form.

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PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT
JANET L. OTTEN
OREGON

PHASE 2 NORTH VILLEBOIS

Final Development Plan

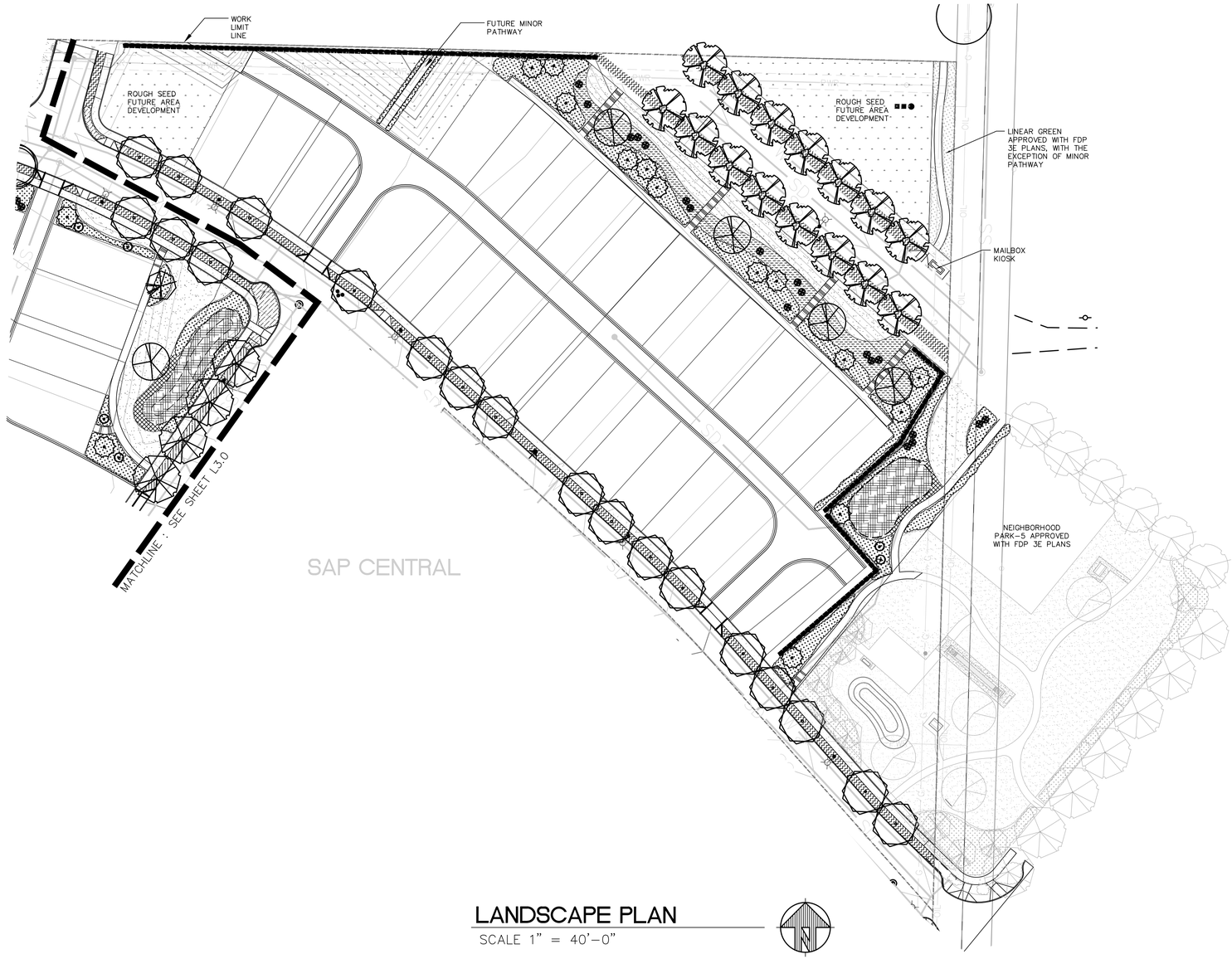
Landscape Plan

DATE 04/15/2013

L1.0

SUGGESTED PLANT LIST: SAP NORTH

SYM.	LATIN NAME/ Common Name		SIZE	SPACING
	STREET TREES			
	ACER X FREMANII 'AUTUMN BLAZE' Autumn Blaze Maple		2" cal.	30' o.c.
	CLADRASTIS KENTUKEA Yellowwood		2" cal.	30' o.c.
	FAGUS SYLVATICA European Beech		2" cal.	30' o.c.
	LIRIODENDRON TULIPIFERA Tulip Tree		2 1/2" cal.	25' o.c.
	QUERCUS ALBA White Oak		2" cal.	30' o.c.
	TILIA X EUCHLORA Crimean Linden		2" cal.	30' o.c.
	ZELKOVA SERRATA 'GREEN VASE' Green Vase Zelkova		2" cal.	30' o.c.
	Shade Tree	Quercus rubra Quercus garryana Fagus sylvatica Acer rubrum	2" cal.	As shown
	Small Columnar or Ornamental Trees	Malus 'Snowdrift' Stewartia pseudocamellia Magnolia stellata 'Royal Star' Acer circinatum	1 3/4" cal.	As shown
	Conifer Tree	Pseudotsuga menziesii Calocedrus decurrens RP-4: Transplant Existing Trees	8' ht. 5-6' ht.	As shown
	Large Flowering Deciduous Shrubs	Hamamelis mollis 'Coombe Wood' Viburnum plic. tom. 'Mariesii' Syringa microphylla 'Superba' Hydrangea macrophylla 'Nikko Blue'	5 gal.	5-6' o.c.
	Medium Ornamental Shrubs	Abelia grandiflora 'Edward Goucher' Berberis thunbergii Ilex crenata Euonymus japonica 'Silver Princess' Lonicera nitida Pieris 'Forest Flame' Rhododendron Spiraea bumalda 'Anthony Waterer' Weigela florida Mahonia aquifolium	2-5 gal.	3-4' o.c.
	Small Ornamental Shrubs	Cornus stolonifera 'Kelseyi'	2 gal.	30" o.c.
	Native Shrubs	Ribes sanguineum Mahonia aquifolium 'Compacta' Symphoricarpus albus Gaultheria shallon Oemlaria cerasiformus	2 gal.	30" o.c.
	Groundcover	Fragaria chiloensis Rubus calycynoides Arctostaphylos uva-ursi Cotoneaster horizontalis	1 gal.	18"-3' o.c.
	Lawn	Fine Seed Lawn	Seed	5 lbs./1,000 sq.ft.
	Rough Seed	Low-Growing Eco-Lawn with Color	Seed	See Specifications
	Water Quality Facilities	To be Planted per City of Wilsonville Standards: 3 Evergreen trees/ 1,000 SF 2 Deciduous trees/ 1,000 SF 30 Shrubs/ 1,000 SF 1 Wetland Plant/ 2 SF Pond Emergent Zone	 Trees - 6' ht./1.5" cal. Shrubs - 1 gal. Aquatic Plants- Plugs	 As shown As shown As shown
		Existing Trees To Remain		



LANDSCAPE PLAN

SCALE 1" = 40'-0"

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POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT OREGON JANET L. OTTEN 212

PHASE 2 NORTH VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L2.0

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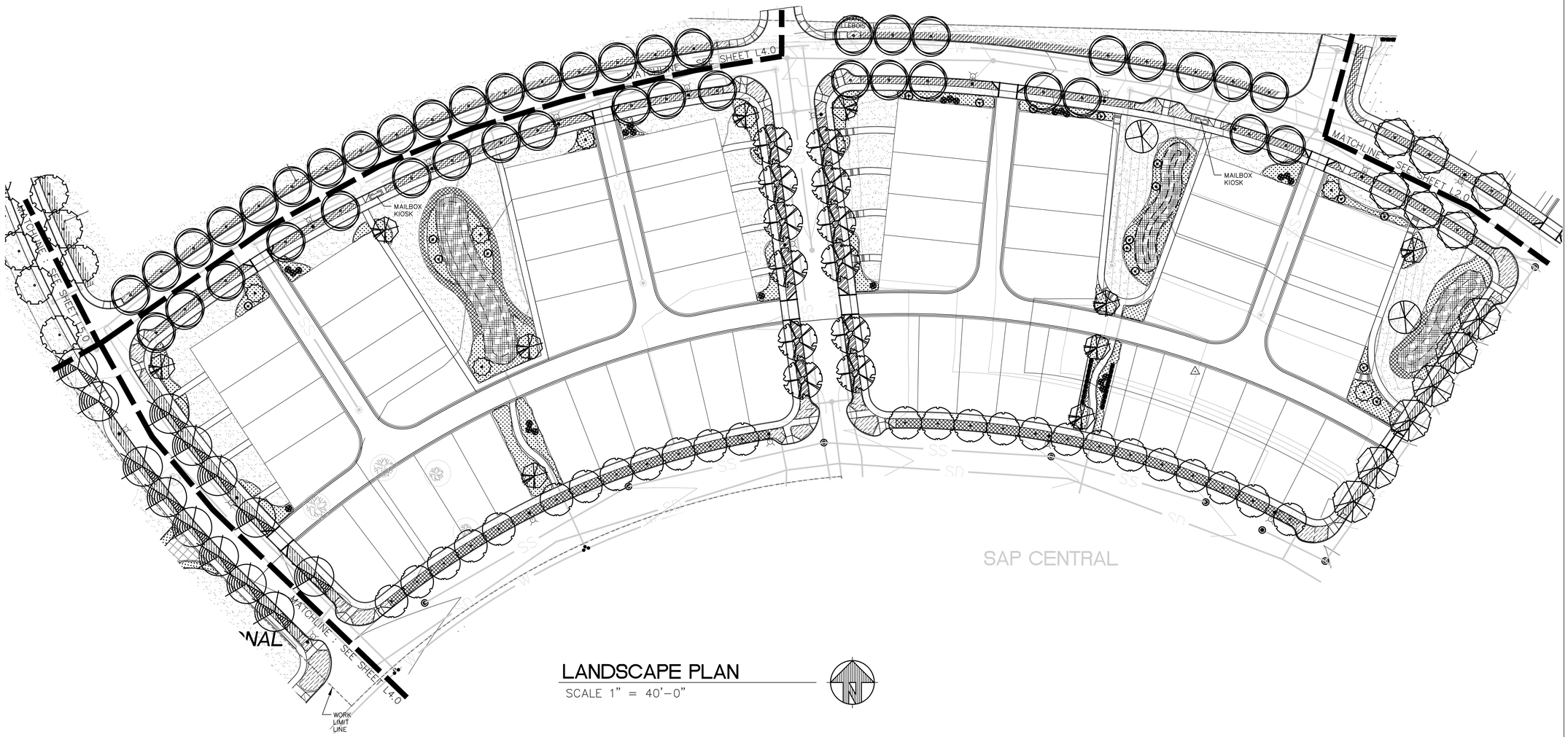


LANDSCAPE PLAN

SCALE 1" = 40'-0"

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT
212
JANET L. OTTEN
OREGON

PHASE 2 NORTH VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L3.0

3 OF 6

PICNIC TABLE

TIMBERFORM / MODEL 2242-8
TIMBERFORM / MODEL 2241-8
(ACCESSIBLE)

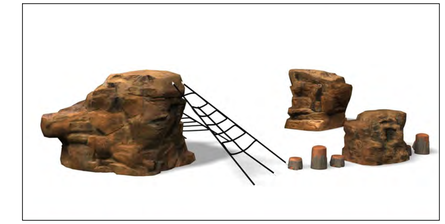
LANDSCAPE PLAN

SCALE 1" = 40'-0"

BIKE RACK

Manufacturer: Function First Bike Security
Model: The Bike Rib
Material: Steel Pipe (Black)

CONCEPTUAL SHELTER



PLAY AREA SCHEMATIC VIEW

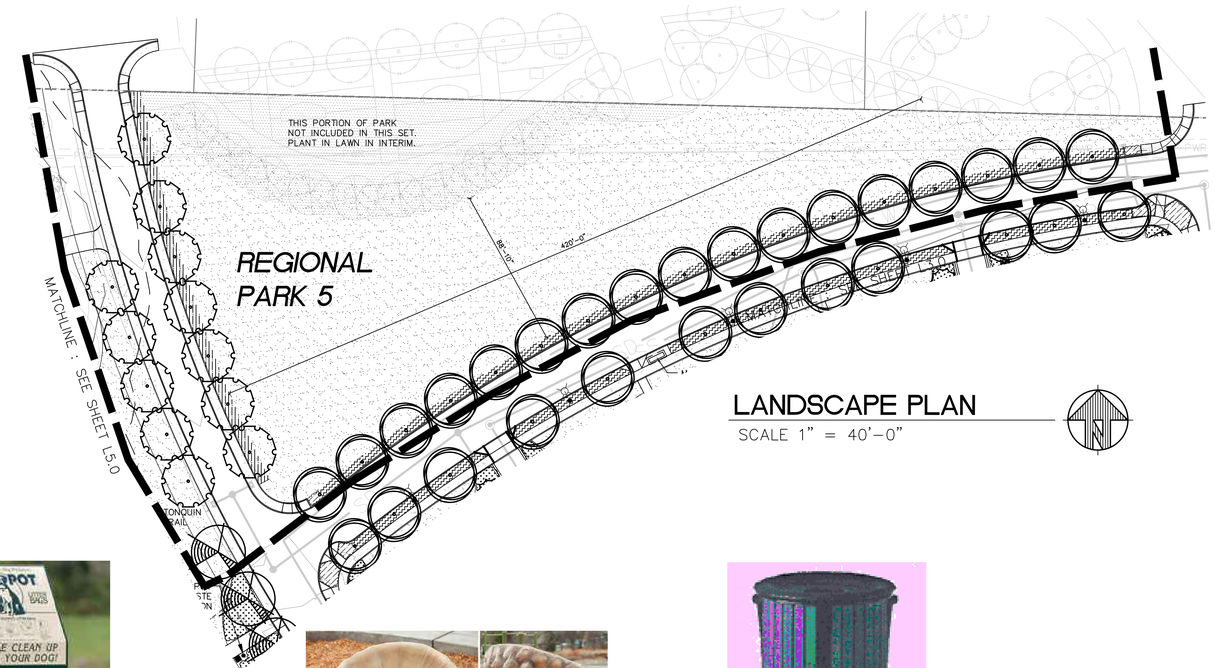
EQUIPMENT TO BE NON-PRIMARY COLORS

DRINKING FOUNTAIN

MURDOCK / MC-76-2 (BLACK)

PARK BENCH

LANDSCAPE FORMS / PLAINWELL SERIES
LENGTH : 7'-10"



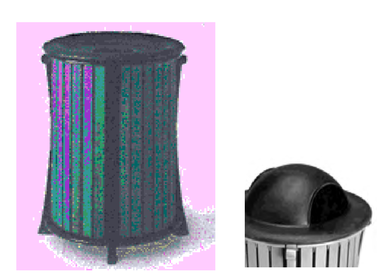
LANDSCAPE PLAN

SCALE 1" = 40'-0"

DOGIPOT PET STATION

MODEL #1002-2
BAG STORAGE COMPONENET TO BE INSTALLED AT 48" MAXIMUM HEIGHT

ACORN SEAT



TRASH RECEPTACLE

LANDSCAPE FORMS / PLAINWELL SERIES WITH DOME LID

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JANET L. OTTEN
OREGON

PHASE 2 NORTH VILLEBOIS

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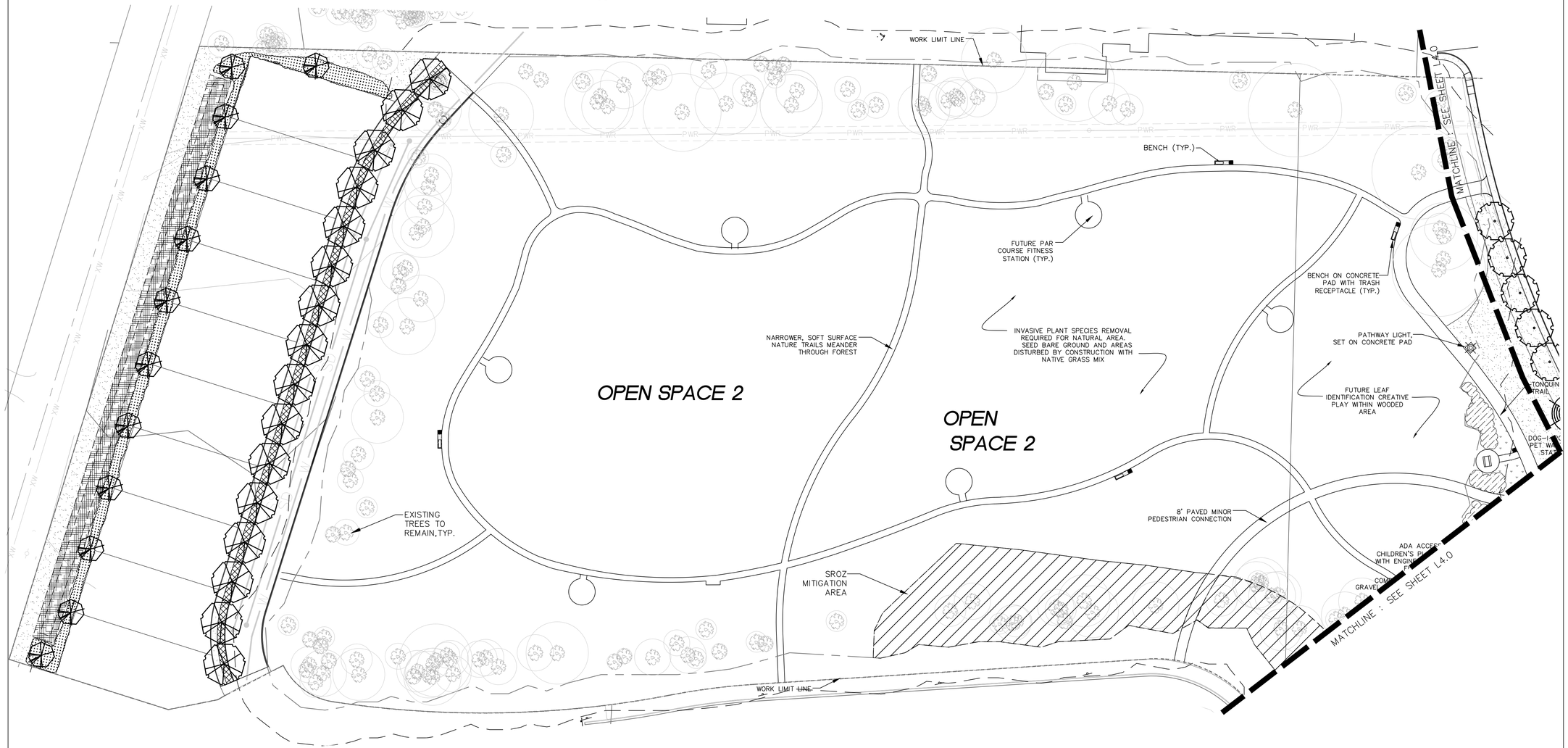
'FUTURE' PAR COURSE EXAMPLES

OUTDOOR FITNESS EQUIPMENT



LANDSCAPE PLAN

SCALE 1" = 40'-0"

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

REGISTERED 212 JANET L. OTTEN OREGON LANDSCAPE ARCHITECT

PHASE 2 NORTH VILLEBOIS

Final Development Plan

Landscape Plan

DATE 04/15/2013

L5.0

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OUTLINE SPECIFICATIONS PLANTING AND SEEDING:

GENERAL: All plants shall conform to all applicable standards of the latest edition of the "American Association of Nurserymen Standards", A.N.S.I. Z60.1 – 1973. Meet or exceed the regulations and laws of Federal, State, and County regulations, regarding the inspection of plant materials, certified as free from hazardous insects, disease, and noxious weeds, and certified fit for sale in Oregon.

The apparent silence of the Specifications and Plans as to any detail, or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of first quality are to be used. All interpretations of these Specifications shall be made upon the basis above stated.

Landscape contractor shall perform a site visit prior to bidding to view existing conditions.

PERFORMANCE QUALITY ASSURANCE: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary horticultural practices and who are completely familiar with the specified requirements and methods needed for the proper performance of the work of this section.

NOTIFICATION: Give Landscape Architect minimum of 2 days advance notice of times for inspections. Inspections at growing site does not preclude Landscape Architect's right of rejection of deficient materials at project site. Each plant failing to meet the above mentioned "Standards" or otherwise failing to meet the specified requirements as set forth shall be rejected and removed immediately from the premises by the Contractor and at his expense, and replaced with satisfactory plants or trees conforming to the specified requirements.

SUBSTITUTIONS: Only as approved by the Landscape Architect or the Owner's Representative.

GUARANTEE AND REPLACEMENT: All plant material shall be guaranteed from final acceptance for one full growing season or one year, whichever is longer. During this period the Contractor shall replace any plant material that is not in good condition and producing new growth (except that material damaged by severe weather conditions, due to Owner's negligence, normally unforeseen peculiarities of the planting site, or lost due to vandalism). Guarantee to replace, at no cost to Owner, unacceptable plant materials with plants of same variety, age, size and quality as plant originally specified. Conditions of guarantee on replacement plant shall be same as for original plant.

Landscape Contractor shall keep on site for Owner's Representative's inspection, all receipts for soil amendment and topsoil deliveries.

PROTECTION: Protect existing roads, sidewalks, and curbs, landscaping, and other features remaining as final work. Verify location of underground utilities prior to doing work. Repair and make good any damage to service lines, existing features, etc. caused by landscaping installation.

PLANT QUALITY ASSURANCE: Deliver direct from nursery. Maintain and protect roots of plant material from drying or other possible injury. Store plants in shade and protect them from weather immediately upon delivery, if not to be planted within four hours.

Nursery stock shall be healthy, well branched and rooted, formed true to variety and species, full foliaged, free of disease, injury, defects, insects, weeds, and weed roots. Trees shall have straight trunks, symmetrical tips, and have an intact single leader. Any trees with double leaders will be rejected upon inspection. All Plants: True to name, with one of each bundle or lot tagged with the common and botanical name and size of the plants in accordance with standards of practice of the American Association of Nurserymen, and shall conform to the Standardized Plant Names, 1942 Edition.

Container grown stock: Small container–grown plants, furnished in removable containers, shall be well rooted to ensure healthy growth. **Grow container plants in containers a minimum of one year** prior to delivery, with roots filling container but not root bound. Bare root stock: Roots well–branched and fibrous. Balled and burlapped (B&B): Ball shall be of natural size to ensure healthy growth. Ball shall be firm and the burlap sound. No loose or made ball will be acceptable.

TOPSOIL AND FINAL GRADES: Landscape Contractor is to verify with the General Contractor if the on site topsoil is or is not conducive to proper plant growth. Supply alternate bid for imported topsoil.

Landscape Contractor is to supply and place 12" of topsoil in planting beds and 6" in lawn areas. If topsoil stockpiled on site is not conducive to proper plant growth, the Landscape Contractor shall import the required amount. Landscape Contractor is to submit samples of the imported soil and/or soil amendments to the Landscape Architect. The topsoil shall be a sandy loam, free of all weeds and debris inimical to lawn or plant growth.

Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated. Planting bed grades shall be approximately 3" below adjacent walks, paving, finished grade lines, etc., to allow for bark application. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

PLANTING SPECIFICATIONS:

HERBICIDES: Prior to soil preparation, all areas showing any undesirable weed or grass growth shall be treated with Round–up in strict accordance with the manufacturer's instructions. Nuisance plant removal in Open Space 2 shall be done by hand, cutting/pulling out at the base. Limited spot application of approved herbicide directly on the cut area of the stem is acceptable.

SOIL PREPARATION: Work all areas by rototilling to a minimum depth of 8". Remove all stones (over 1½" size), sticks, mortar, large clumps of vegetation, roots, debris, or extraneous matter turned up in working. Soil shall be of a homogeneous fine texture. Level, smooth and lightly compact area to plus or minus .10 of required grades.

In groundcover areas add 2" of compost (or as approved) and till in to the top 6" of soil.

PLANTING HOLE: Lay out all plant locations and excavate all soils from planting holes to 2 1/2 times the root ball or root system width. Loosen soil inside bottom of plant hole. Dispose of any "subsoil" or debris from excavation. Check drainage of planting hole with water, and adjust any area showing drainage problems.

SOIL MIX: Prepare soil mix in each planting hole by mixing:
2 part native topsoil (no subsoil)
1 part compost (as approved)

Thoroughly mix in planting hole and add fertilizers at the following rates:
Small shrubs – 1/8 lb./ plant
Shrubs – 1/3 to 1/2 lb./ plant
Trees – 1/3 to 1 lb./ plant

FERTILIZER: For trees and shrubs use Commercial Fertilizer "A" Inorganic (5–4–3) with micro–nutrients and 50% slow releasing nitrogen. For initial application in fine seed lawn areas use Commercial Fertilizer "B" (8–16–8) with micro–nutrients and 50% slow–releasing nitrogen. For lawn maintenance use Commercial Fertilizer "C" (22–16–8) with micro–nutrients and 50% slow–releasing nitrogen. DO NOT apply fertilizer to Water Quality Swale.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Place 6" minimum, lightly compacted layer of prepared planting soil under root system. Loosen and remove twine binding and burlap from top 1/2 of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with soil mix while working each layer to eliminate voids.

When approximately 2/3 full, water thoroughly, then allow water to soak away. Place remaining backfill and dish surface around plant to hold water. Final grade should keep root ball slightly above surrounding grade, not to exceed 1". Water again until no more water is absorbed. Initial watering by irrigation system is not allowed.

STAKING OF TREES: Stake or guy all trees. Stakes shall be 2" X 2" (nom.) quality tree stakes with point. They shall be of Douglas Fir, clear and sturdy. Stake to be minimum 2/3 the height of the tree, not to exceed 8'–0". Drive stake firmly 1'–6" below the planting hole. Tree ties for deciduous trees shall be "Chainlock" (or better). For Evergreen trees use "Gro–Strait" Tree Ties (or a reinforced rubber hose and guy wires) with guy wires of a minimum 2 strand twisted 12 ga. wire. Staking and guying shall be loose enough to allow movement of tree while holding tree upright.

MULCHING OF PLANTINGS: Mulch planting areas with dark, aged, medium grind fir or hemlock bark (aged at least 6 months) to a depth of 2" in ground cover areas and 2½" in shrub beds. Apply evenly, not higher than grade of plant as it came from the nursery, and rake to a smooth finish. Water thoroughly, then hose down planting area with fine spray to wash leaves of plants.

FINE LAWN AREAS: In fine lawn area apply Commercial Fertilizer Mix "B" at 4.5 lbs. Per 1,000 sq.ft. and rake into soil surface. Establish an even, fine textured seedbed meeting grades, surfaces and texture. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

ROUGH SEED AREA: In rough seeded area, establish an evenly graded seedbed. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
Fine Lawn Seed Mix: To contain 50% Top Hat Perennial Ryegrass, 30% Derby Supreme Ryegrass, 20% Longfellow Chewings Fescue (Hobbs and Hopkins Pro–Time 303 Lawn Mix or as approved) Sow Seed at 5 lbs. / 1000 sq. ft.
Rough Seed Mix: To Contain: 60% Perennial Ryegrass, 15% Eureka Hard Fescue, and 20% Herbaceous Plants and Clover (Hobbs and Hopkins Pro–Time 705 PDX, or approved equal). Sow at 2 lbs. Per 1,000 sq.ft.

MAINTENANCE OF SEEDED AREAS:
Fine Lawn Areas: The lawn areas shall be maintained by watering, mowing, reseeding, and weeding for a minimum of 60 days after seeding. After 30 days, or after the second mowing, apply Commercial Fertilizer Mix "C" at 5 lbs. per 1,000 sq. ft. Mow and keep at 1½" to 2" in height. Remove clippings and dispose of off site.

GENERAL MAINTENANCE: Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance. Replace plants not in normal healthy condition at the end of this period. Water, weed, cultivate, mulch, reset plants to proper grade or upright position, remove dead wood and do necessary standard maintenance operations. Irrigate when necessary to avoid drying out of plant materials, and to promote healthy growth.

CLEAN–UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.

CITY OF WILSONVILLE WATER QUALITY FACILITY SPECIFICATIONS:

SOIL PREPARATION: Remove all nonnative plant materials, including plants, roots, and seeds prior to adding topsoils. Till the sub–grade in these areas to a depth of at least four inches. Water Quality Swale area shall be over–excavated and filled to final grade with 4 iches of topsoil in areas where topsoil has been removed or not adequate. Topsoil shall be tested for the following characteristics provide a good growing medium:
A) Texture
B) Fertility
C) Microbial

Incorporate 2" garden compost, free of conventional fertilizer, to a depth of 4" on all areas of the water quality facility. DO NOT apply fertilizer to the Water Quality Facility.

TIMING: Plantings should be installed between February 1 and May 1 or between October 1 and November 15. Bare root stock shall be installed only from December 15 through April 15. When plantings must be installed outside these times, additional measures may be needed to assure survival.

EROSION CONTROL: Grading, soil preparation, and seeding shall be performed during optimal weather conditions and at low flow levels to minimize sediment impacts. Site disturbance shall be minimized and desirable vegetation retained, where possible. Slopes shall be graded to support the establishment of vegetation. Where seeding is used for erosion control, an appropriate native grass, Regreen (or its equivalent), or sterile wheat shall be used to stabilize slopes until permanent vegetation is established. Biodegradable fabrics (coir, coconut or approved jute matting (minimum 1/4" square holes) may be used to stablize slopes and channels. Fabrics such as burlap may be used to secure plant plugs in place and to discourage floating upon inundation.

A biodegradable Erosion Control Matting shall be placed over the topsoil throughout the swale cross section, fabric shall be held in place in accordance with the manufacturer's installation requirements. Use high density jute matting in the treatment area (Geojute Plus or approved equal). In all other areas use low density jute matting (Econojute or approved equal). Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated on civil plans. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

HERBICIDES: Removal of invasive non–native species is required by hand for the entire wetland buffer area. If necessary, excessive weed growth may be treated with Rodeo or Garlon 3–A (or approved equals) in strict accordance with the manufacturer's instructions.

FERTILIZER: Do not apply fertilizer to any plantings within the Wetland Buffer or Water Quality Facilities.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Loosen and remove twine binding and burlap from top one–half of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with native soil mix while working each layer to eliminate voids.

MULCHING: Trees, shrubs, and groundcovers planted in upland areas shall be mulched a minimum of 3" in depth and 18" in diameter, to retain moisture and discourage weed growth around newly installed plant material. Appropriate mulches are made from composted bark or leaves that have not been chemically treated. The use of mulch in frequently inundated areas shall be limited, to avoid any possible water quality impacts including the leaching of tannins and nutrients, and the migration of mulch into waterways.

WILDLIFE PROTECTION: Appropriate measures shall be taken to discourage wildlife browsing. Biodegradable plastic mesh tubing, or other substitute approved by the City, shall be placed around individual trees and shrubs to prevent browsing by wildlife, including beaver, nutria, deer, mice and voles.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
Moist Area Seed Mix: To contain 47% Blue Wildry, 40% Meadow Barley, 10% Tufted Hairgrass, 2% Western Mannagrass and 1% American Sloughgrass (Hobbs & Hopkins Pro–Time 840 Native Wetland Mix) Sow Seed at 20–40 lbs./acre.
Dry Area Seed Mix: To contain 60% Blue Wildry, 30% Meadow Barley and 10% Native California Brome (Hobbs & Hopkins Pro–Time 400 Native Grass Mix) Sow Seed at 15–30 lbs./acre.

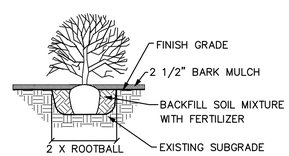
IRRIGATION: Is to be provided as per a separate plan design/build by Landscape Contractor. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. Guarantee system for a minimum one year.

MAINTENANCE: The permitee is responsible for the maintenance of this facility for a minimum of two years following the acceptance of the facility by the City of Wilsonville. The City's authorized representative shall inspect the condition of all landscaping located within the water quality facility, at the end of the of the firest year of the post–construction period. The authorized representative shall provide a report describing any deficiencies to the applicant.

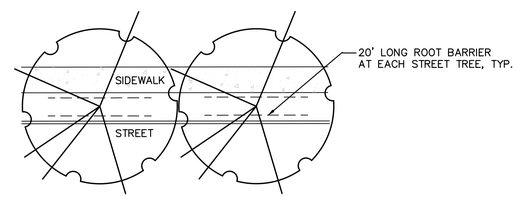
If, at any time during the warranty period, the landscaping falls below 90% survival of trees and shrubs or 90% aerial coverage, the Owner shall remove the undesirable vegetation and reinstall all deficient planting at the next appropriate time. Prior to replanting, the cause of the plant loss shall be determined and corrected. The two–year maintenance period shall begin again from the date of replanting.

Water Quality Facility is to be kept free of debris and maintained to insure water flow and proper functioning. Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance.

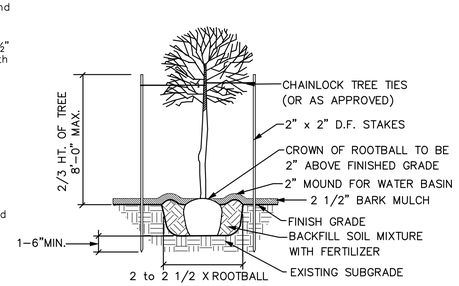
CLEAN–UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.



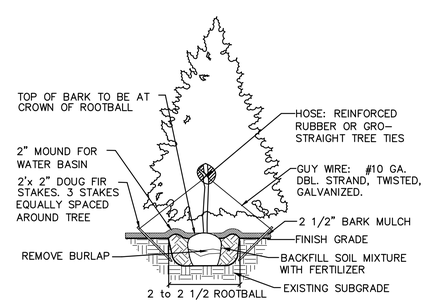
SHRUB PLANTING DETAIL
NOT TO SCALE



ROOT BARRIER DETAIL
NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



EVERGREEN TREE STAKING DETAIL
NOT TO SCALE

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

REGISTERED LANDSCAPE ARCHITECT 212 JANET L OTTEN OREGON

PHASE 2 NORTH VILLEBOIS

Final Development Plan

Landscape Specifications & Details

DATE 04/15/2013

L6.0

6 OF 6

Pacific Community Design

M E M O R A N D U M

City of Wilsonville
EXHIBIT B9 DB13-0020 et al

DATE: May 30, 2013

TO: Dan Pauly, City of Wilsonville

FROM: Stacy Connery

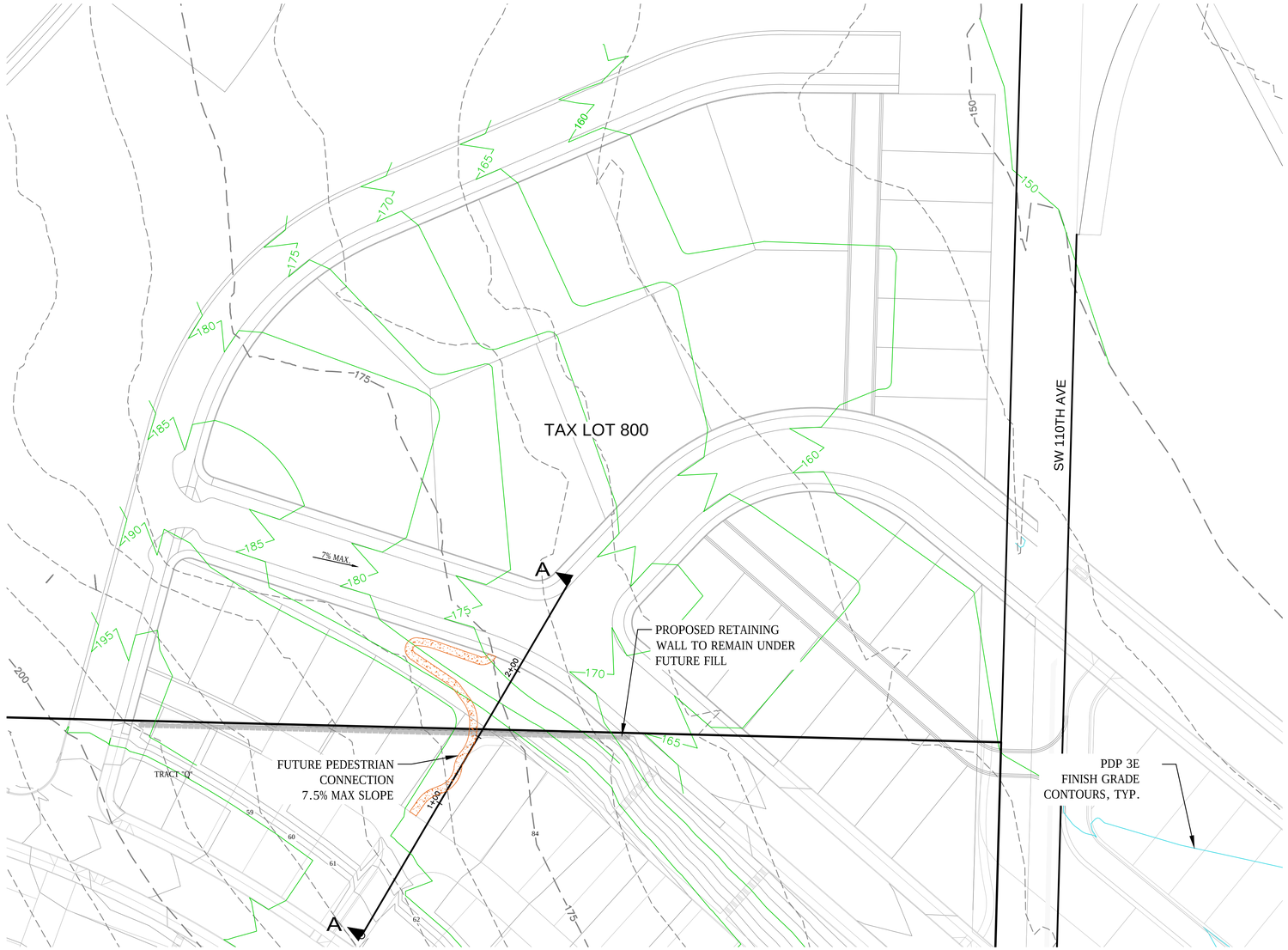
RE: PDP 2N – Revision Relating to Pedestrian-Bike Connection
Dundee Lane - Stockholm Avenue

This Memo provides information relating to the plan revision to align the pedestrian/bicycle connection with Dundee Lane between Geneva Loop and Stockholm Avenue. The revised information includes the following plans:

- Exhibit C – Future Grading Exhibit Change Property
- PDP Plan Sheet 1 – Cover Sheet
- PDP Plan Sheets 4.1 – 4.4 – Tentative Plat

The revision to align the pedestrian/bicycle connection with Dundee Lane between Geneva Loop and Stockholm Avenue has occurred to provide for a line of sight along Dundee Lane and the pedestrian/bicycle tract connection. Additionally, the alignment of Stockholm Avenue on the Chang property is shown on the Cover Sheet to provide for a view corridor westward into the Villebois Greenway. These revisions are provided following conversation with Staff regarding balancing the site's topographic constraints with necessary connections and view corridors.

A new exhibit is also provided, Exhibit E – Tract L Supplemental Grading Plan. This exhibit shows the proposed undulation in the grading for Tract L. Tract L is a Linear Green space between homes located upslope from Stockholm Avenue. The subject homes will have their front doors facing Tract L and Stockholm Avenue, with stairs and walkways connecting front doors with sidewalks along Stockholm Avenue. In order to provide for a more aesthetically pleasing area within Tract L, the slope will be graded to undulate along the street frontage and landscaped with vegetation suitable to the slope. More refined landscaping plans will be provided when construction of the subject phase occurs.

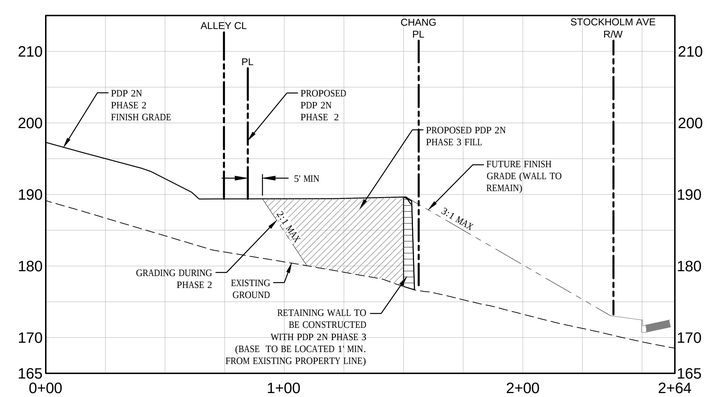


PRELIMINARY GRADING PLAN - FUTURE CHANG PROPERTY GRADING

SCALE: 1" = 40'

LEGEND

- 324 — FUTURE 5-FT CONTOUR
- 324 — FG 2-FT CONTOUR
- 320 — FG 10-FT CONTOUR
- PROPOSED LOCK N' LOAD RETAINING WALL



SECTION A-A

HORIZ SCALE: 1" = 30', VERT SCALE: 1" = 10'

SCALE

40 0 20 40

1 INCH = 40 FEET

N:\proj\395-008\09 Drawings\03 Planning\Exhibits\395008.Future Grading Exhibit.dwg - SHEET: Chang Grading May. 30, 13 - 1:37 PM pre

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC

OTTEN LANDSCAPE ARCHITECTS, INC

GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Future Grading
Exhibit
Chang Property

DATE 5/30/2013

C

LEGEND:

- —SD— PROPOSED STORM DRAIN
- —224— PROPOSED 2-FT CONTOUR
- —230— PROPOSED 10-FT CONTOUR
- TREE PROTECTION FENCE
- —xx— SEDIMENT FENCE
- BIOBAG BARRIER
- GRAVEL CONSTRUCTION ENTRANCE
- RAINWATER SWALE
- RAINWATER BIO-RETENTION CELL
- EXISTING TREES TO REMAIN
- EXISTING TREES LIKELY TO BE REMOVED
- EXISTING TREES TO BE REMOVED
- PROPOSED LOCK N' LOAD RETAINING WALL

N

SCALE
60 0 30 60
1 INCH = 60 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Tract L
Supplemental
Grading Plan

DATE 05/30/2013

E

PHASE 2 NORTH
VILLEBOIS
PRELIMINARY DEVELOPMENT PLAN

TL 2915, PART OF 2916, 2922 & 2995, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SECTION 15 W.M.
CITY OF WILSONVILLE, OREGON

UTILITIES & SERVICES:

WATER:	CITY OF WILSONVILLE
STORM:	CITY OF WILSONVILLE
SEWER:	CITY OF WILSONVILLE
POWER:	PORTLAND GENERAL ELECTRIC
GAS:	NORTHWEST NATURAL
FIRE:	TUALATIN VALLEY FIRE & RESCUE
POLICE:	CLACKAMAS COUNTY SHERIFF
SCHOOL:	WEST LINN / WILSONVILLE SCHOOL DISTRICT 3JT
PARKS:	CITY OF WILSONVILLE
PHONE:	FRONTIER
WASTE DISPOSAL:	UNITED DISPOSAL SERVICE
CABLE:	COMCAST

BENCHMARK:

OREGON STATE PLANE COORDINATE 5818 LOCATED IN MONUMENT BOX IN CENTERLINE OF TOOZE ROAD .2 MILES WEST OF 110TH.

ELEVATION DATUM: NAVD 88, ELEVATION = 202.991

APPLICANT:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

OWNER:

POLYGON NORTHWEST COMPANY
109 E. 13TH ST.
VANCOUVER, WA 98660
[P] 503-221-1920
CONTACT: FRED GAST

PLANNER:

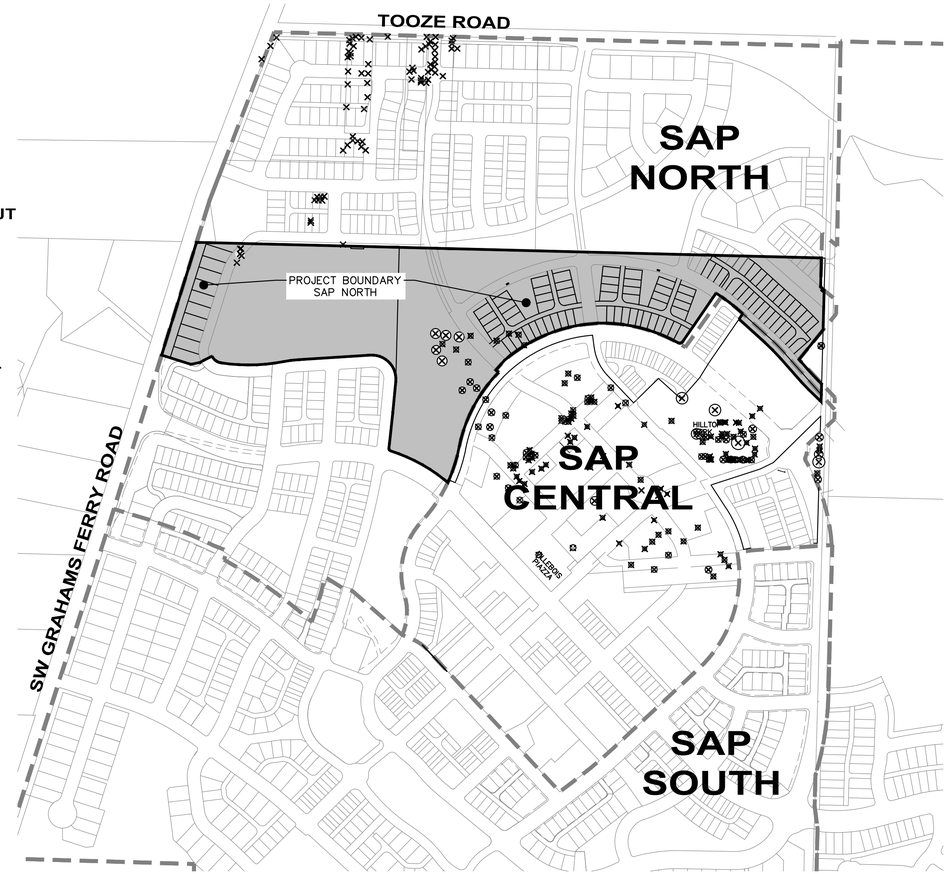
PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: STACY CONNERY, AICP

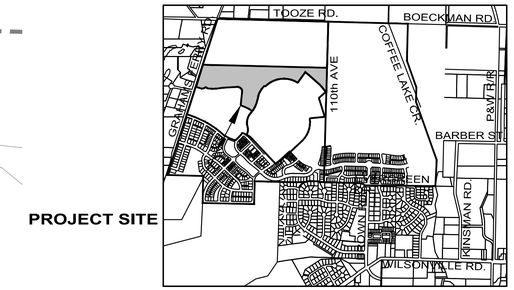
CIVIL ENGINEER:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: PATRICK ESPINOSA, PE

SURVEYOR:

PACIFIC COMMUNITY DESIGN, INC
PMB #519
13500 SW PACIFIC HIGHWAY , STE 58
TIGARD, OR 97223
[P] 503-941-9484
CONTACT: TRAVIS JANSEN, PLS, PE





PROJECT SITE

VICINITY MAP

LANDSCAPE ARCHITECT:

OTTEN LANDSCAPE ARCHITECTS, INC.
3933 SW KELLY AVE, SUITE B
PORTLAND, OR 97239
[P] 503-972-0311
CONTACT: JANET OTTEN, LANDSCAPE ARCHITECT

GEOTECHNICAL ENGINEER:

GEODESIGN, INC.
15575 SW SEQUOIA PARKWAY, SUITE 100
PORTLAND, OR 97224
[P] 503-968-8787
CONTACT: CRAIG WARE, PE

SHEET INDEX:

1	COVER SHEET
2.1	EXISTING CONDITIONS
2.2	EXISTING CONDITIONS
3.1	AERIAL PHOTOGRAPH
3.2	AERIAL PHOTOGRAPH
4.1	TENTATIVE PLAT
4.2	TENTATIVE PLAT
4.3	TENTATIVE PLAT
4.4	TENTATIVE PLAT
4.5	TENTATIVE PLAT
5.1	GRADING / EROSION CONTROL PLAN
5.2	GRADING / EROSION CONTROL PLAN
6.1	COMPOSITE UTILITY PLAN
6.2	COMPOSITE UTILITY PLAN
7.1	CIRCULATION PLAN
7.2	CIRCULATION PLAN
7.3	STREET SECTIONS
8.1	SITE / LAND USE PLAN
8.2	SITE / LAND USE PLAN
8.3	TYPICAL LOT PLAN
9.1	TREE PRESERVATION PLAN
9.2	TREE PRESERVATION PLAN
9.3	SROZ IMPACTS & MITIGATION PLAN
10.1	STREET TREE / LIGHTING PLAN
10.2	STREET TREE / LIGHTING PLAN
11.1	PHASING PLAN
11.2	PHASING PLAN

SCALE
300 0 150 300
1 INCH = 300 FEET

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Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2
NORTH
VILLEBOIS

Preliminary
Development Plan

Cover Sheet

DATE 05/30/2013

1

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.1

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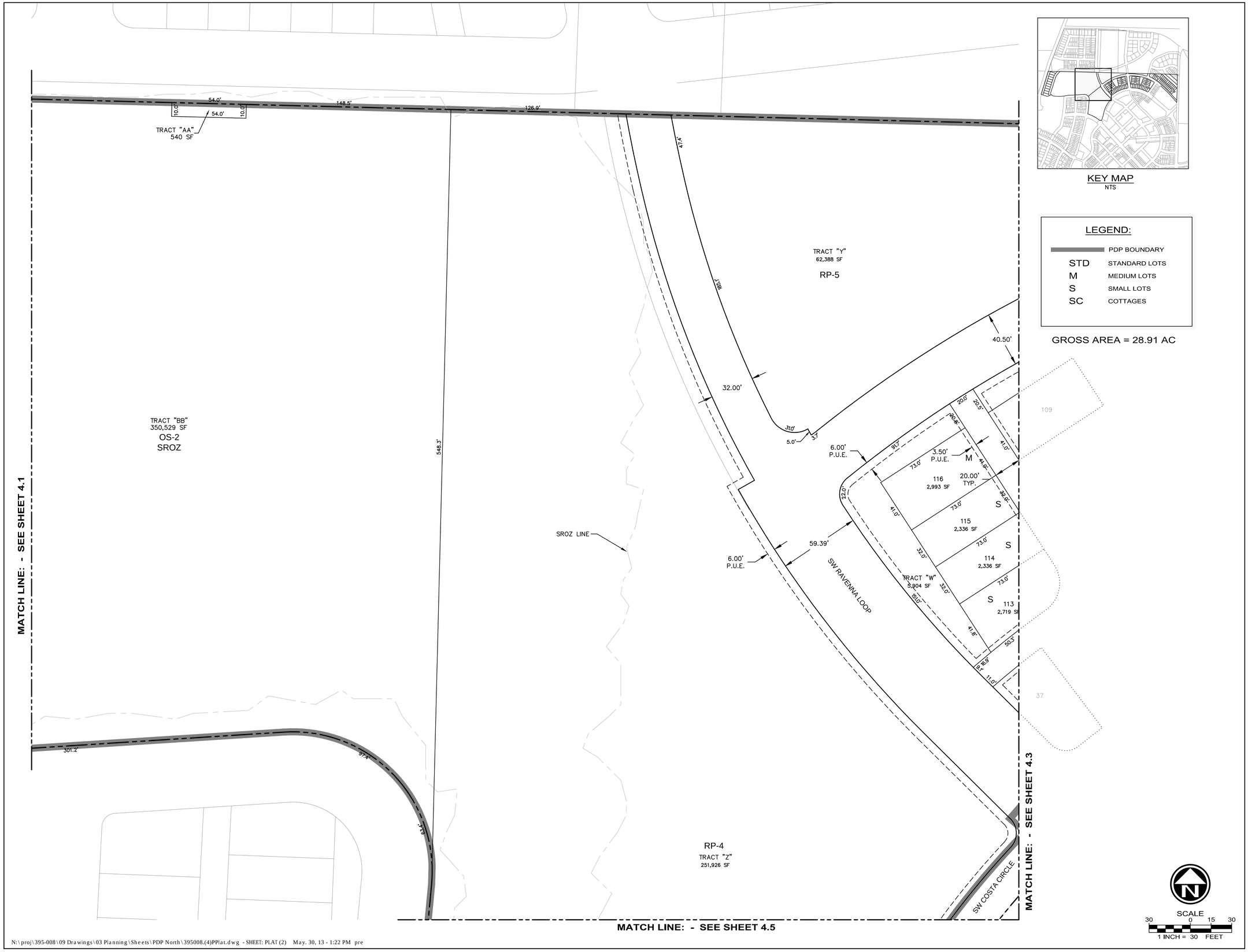

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.2

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Villebois

POLYGON NW COMPANY

PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.3

KEY MAP
NTS

LEGEND:

	PDP BOUNDARY
STD	STANDARD LOTS
M	MEDIUM LOTS
S	SMALL LOTS
SC	COTTAGES

GROSS AREA = 28.91 AC

Villebois

POLYGON NW COMPANY
PACIFIC COMMUNITY DESIGN, INC
OTTEN LANDSCAPE ARCHITECTS, INC
GEODESIGN, INC

PHASE 2 NORTH VILLEBOIS

Preliminary Development Plan

Tentative Plat

DATE 04/15/2013

4.4

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Pacific Community Design

M E M O R A N D U M

DATE: May 20, 2013

TO: Dan Pauly, City of Wilsonville

FROM: Stacy Connery

RE: PDP 2N/ FDP 2N – Regional Park 4 & Open Space 2

Regional Park 4 (RP-4) and Open Space 2 (OS-2) are shown on Feasibility Plan 16 of the *Villebois Village Master Plan* Technical Appendix F with the following elements.

Regional Park 4 (RP-4)

- Stormwater/rainwater feature: swale
- Benches
- Picnic tables
- Drinking fountain: 1
- BBQ: 1
- Shelter: 1
- Child Creative Play: 1
- Sports Courts: ½ court Basketball, Multipurpose Court, Horseshoe Pit
- Lawn Play: 1.10 acres (160' x 300')

The updated FDP plans show the following elements within RP-4:

- A rainwater swale.
- Multiple benches throughout the park
- Multiple picnic tables adjacent to the SROZ and the shelter
- One (1) drinking fountain near the Sports Courts
- One (1) BBQ near the shelter
- A 16' x 32' shelter (Note: This shelter is sized in consideration of the shelter planned for Regional Park 5 which is designated as the Neighborhood Commons and is east of RP-4 across Ravenna Loop, in addition to the number of picnic tables within RP-4)
- Child Creative/Structure Play areas, including a compacted ¼ minus gravel kiddy bike track with acorn seats and precast climbing rocks and ropes on engineered wood fiber
- Sports Courts, including two (2) ½ court basketball areas, four (4) square, hop scotch, and shuffleboard
- Lawn Play: 0.69 acres (150' x 200')

City of Wilsonville
EXHIBIT B10 DB13-0020 et al

Open Space 2 (OS-2)

- Benches
- Picnic Tables
- Child Play Structure: 1

The updated FDP plans show the following elements within OS-2:

- Multiple benches throughout the park adjacent to the nature trails
- Picnic Tables along the east edge of the SROZ adjacent to the Tonquin Trail
- A par course with fitness stations along the nature trails
- A leaf identification creative play course within the forest adjacent to the creative play in RP-4
- (NOTE: A child play structure was planned for the north side of OS-2, which is being deferred until development of the property to the north occurs in order to assure a visible and safe environment for children)

The proposed park designs will implement Villebois Master Plan Parks policies and implementation measures as follows.

Policy 1: *Parks and open space areas shall incorporate existing trees where feasible and large shade trees shall be planted in appropriate locations in parks and open spaces.*

RESPONSE: The FDP plans show the incorporation of existing trees into the park and open space areas. Trees that are in poor condition are proposed for removal with the PDP Tree Preservation Plan. The park planting plans include planting of large shade trees where appropriate.

Policy 2: *An interconnected trail system shall be created linking the park and open spaces and key destination points within Villebois and to the surrounding neighborhoods. The trails system shall also provide loops of varying length to accommodate various activities such as walking, running and rollerblading.*

RESPONSE: The design for RP-4 and OS-2 continues the Tonquin Trail from Regional Park 3 to the south to Regional Park 5 to the northeast. In addition to the Tonquin Trail, an internal system of nature trails is planned within OS-2 with minor pathways in RP-4 and a minor pathway connection from Ravenna Loop to Palermo Street. The proposed trails contribute to the overall trail system in Villebois by adding loops of varying length and accommodating various activities.

Policy 3: *Parks shall encourage the juxtaposition of various age-oriented facilities and activities, while maintaining adequate areas of calm.*

RESPONSE: The proposed design for RP-4 and OS-2 will encourage the juxtaposition of age-oriented facilities and activities while maintaining adequate areas of calm. This is achieved through the location of the shelter in relation to the child play areas and sports courts, as well as the trails that lead into the forested area in OS-2 with picnic

tables and benches along the edges of the forest and benches along the nature trails internal to the forest.

Policy 4: *Park designs shall encourage opportunities for wildlife habitat, such as plantings for wildlife foraging and/or habitat, bird and/or bat boxes and other like elements.*

RESPONSE: The design for OS-2 and RP-4 encourages opportunities for wildlife through the preservation of the forested SROZ and the planned mitigation area extending south along the western edge of RP-4.

Policy 5: *Gathering spaces in parks shall generate social interaction by adding layers of activity (Power of Ten).*

RESPONSE: A plaza area with a shelter is planned within RP-4 which will include many layers of activities. The shelter includes a BBQ and multiple picnic tables near two child play areas for younger children, two ½ court basketball areas, additional sport court areas including 4-square, hopscotch and shuffleboard, trail connections to the forested SROZ, and seating areas slightly removed from the more active areas for viewing wildlife or other park activities from a distance, all with the Tonquin Trail passing through connecting park users to the park system to the north and east and to the south.

Policy 6: *Build-out of the Villebois Village Master Plan shall comply with the City of Wilsonville SROZ regulations. Any encroachment into the SROZ will be reviewed for compliance or exemption as more detailed information is provided that will affect the SROZ areas. Adjustments in plan, street alignments, and intersections as well as rainwater facilities and pathways shall be made to comply with SROZ regulations.*

RESPONSE: The design for OS-2 and RP-4 protects the forested SROZ and provides mitigation in excess of the proposed encroachments. Compliance with SROZ requirements is reviewed in detail in the SRIR prepared by SWCA with the PDP application.

Policy 9: *Parks and recreation spaces shall provide for flexibility over time to allow for adaptation to the future community's park, recreation and open space needs.*

RESPONSE: The proposed parks and open space areas are designed to be flexible overtime allowing for adaptation to future needs for parks, recreation and open space. The proposed designs will not inhibit change or addition of activities to the subject areas over time.

Policy 11: *On-street parking will not be allowed along the frontages of parks and open spaces where views into and out of the park spaces should be protected. Parking will be allowed along parks and open spaces in circumstances where it is necessary for the function of the park and will not obstruct the views into and out of the park area.*

RESPONSE: On-street parking is not allowed on the park street frontages, so views into and out of the park spaces are protected. On-street parking is allowed on the opposite side of streets surrounding the park areas. The proposed parks are designed to be accessible by pedestrians and bicyclists. Proposed park uses do not warrant off-street parking areas.

Implementation Measure 3: *Parks and open spaces shall be designed to incorporate native vegetation, landforms and hydrology to the fullest extent possible.*

RESPONSE: As shown on the attached FDP plans, proposed parks and open spaces are designed to incorporate native vegetation and landforms to the fullest extent possible.

Implementation Measure 7: *The ability to recreate year round shall be preserved through measures such as: the provision of some hard surfaces that function in the wet season; areas shaded from the sun; areas protected from the rain; safely lit areas and indoor recreation opportunities.*

RESPONSE: RP-4 includes provision of hard surfaces within the plaza area and with the sports courts, all of which will function in the wet season. Areas shaded from the sun and protected from the rain are provided with the proposed shelter, as well as seating areas protected within the trees. The attached plans show proposed trail lighting.

Implementation Measure 9: *The design of Villebois shall retain the maximum number of existing trees practicable that are six inches or more DBH in the "Important" and "Good" tree rating categories, which are defined in the Community Elements Books. Trees rated "Moderate" shall be evaluated on an individual basis as regards retention. Native species of trees and trees with historical importance shall be given special consideration for retention.*

RESPONSE: The FDP plans show the incorporation of the maximum number of existing trees practicable that are 6" DBH or greater that are designated as 'Important' or 'Good' into the park and open space areas. Trees that are in poor or moderate condition are proposed for removal with the PDP Tree Preservation Plan.

Implementation Measure 10: *Each Specific Area Plan, Preliminary Development Plan and Final Development Plan shall include tree preservation plans and planting plans to indicate proposed tree planting within parks and along streets and descriptions of the size of trees when planted and upon maturity.*

RESPONSE: The attached FDP plans show tree preservation and planting plans for park and open space areas, as well as along streets, which include descriptions of the size of trees.

Implementation Measure 13: *The Villebois Master Plan shall comply with the Significant Resource Overlay Zone (SROZ) regulations. Proposed encroachments into the SROZ for exempt or non-exempt development shall be reviewed for compliance with the requirements of Section 4.139 of the Wilsonville Code.*

RESPONSE: The design for OS-2 and RP-4 protects the forested SROZ and provides mitigation in excess of the proposed encroachments. Compliance with SROZ requirements is reviewed in detail in the SRIR prepared by SWCA with the PDP application.

Implementation Measure 14: *A conceptual plan for the lighting of park spaces throughout Villebois is provided on the plan included in Appendix H. Future development applications shall comply with the lighting system proposed in Appendix H. Refinements may be approved in accordance with Village Zone Section 4.125(.18)(F).*

RESPONSE: The attached FDP plans include proposed lighting along the Tonquin Trail and at the shelter and sports courts for RP-4 consistent with that shown in Appendix H of the Villebois Village Master Plan Technical Appendix.

Implementation Measure 15: *Each child play area shall include uses suitable for a range of age groups.*

RESPONSE: RP-4 includes child play areas that provide uses suitable for a range of age groups. The child play areas include a compacted ¼ minus gravel kiddy bike track with acorn seats and precast climbing rocks and ropes on engineered wood fiber. Additionally, sports courts are provided, including two (2) ½ court basketball areas, 4-square, hop scotch, and shuffleboard. These uses are located around a plaza area with a shelter. Trails from the plaza lead into the forested area in Open Space 2 and to the lawn play area within RP-4. A wide range of age groups can be served by this concentration of uses surrounding the plaza area.

Implementation Measure 16: *Storage for seasonal activity equipment, as appropriate to the HOA, will be located with the Community Center, Homeowners Association buildings, or with restroom facilities in or near the Neighborhood Commons.*

RESPONSE: The FDP plans for RP-4 identify the potential location for equipment storage, if this should become necessary in the future. However, Regional Park 5 which is situated northeast of RP-4 will include the Neighborhood Commons to be designed and developed at a later date. The future Neighborhood Commons in RP-5 may be the more appropriate location for equipment storage.

Implementation Measure 20: *The adequacy, amount and location of the proposed parking (including ADA parking) necessary to serve the proposed park uses shall be evaluated in detail at the SAP and PDP level. Off-street parking may be required to serve the various park users.*

RESPONSE: Proposed park uses do not warrant off-street parking areas. On-street parking is allowed on the opposite side of streets surrounding the park areas. The proposed parks are designed to be accessible by pedestrians and bicyclists.

VIII. Board Member Communications:

A. Agenda Results from the May 30, 2013 DRB Panel B meeting

City of Wilsonville

Development Review Board Panel B Meeting
Meeting Results

DATE:	**MAY 30, 2013**	
LOCATION:	29799 SW TOWN CENTER LOOP EAST, WILSONVILLE, OR	
TIME START:	**6:30 P.M.**	**TIME END: 9:41 P.M.**

ATTENDANCE LOG

BOARD MEMBERS	STAFF
Andrew Karr, Chair	Blaise Edmonds
Cheryl Dorman	Barbara Jacobson
Dianne Knight	Chris Neamtzu
Aaron Woods	Mike Ward
Jhuma Chaudhuri	

AGENDA RESULTS

AGENDA	ACTIONS
CITIZENS' INPUT	None
CONSENT AGENDA	
A. Approval of April 22 , 2012 Minutes	Approved 4 to 0 to 1 with Jhuma Chaudhuri abstaining.
PUBLIC HEARING	
A. Resolution No. 245. Les Bois Row Homes: Polygon Northwest Company – applicant. The applicant is requesting approval of Final Development Plan (FDP) for PDP - 1 Central (Les Bois Row Homes) for detached row houses and duplexes. The site includes Tax Lots 14300 – 14400 and 14600 – 15200 in Section 15DB, T3S, R1W, Clackamas County, Oregon. Staff: Blaise Edmonds Case File: DB12-0083 – Final Development Plan ***This item was continued to this date and time certain at the April 22, 2013 DRB Panel B meeting.***	A. Resolution No. 245 was unanimously approved with corrections to the Staff report.
B. Resolution 254. Active Adults at the Grove Apartments: Brenchley Estates Partners, LP and CRP & Holland Brenchley Estates II LP – *applicants*/owners. The applicant is requesting approval of a Revised Stage I Preliminary Development Plan for Brenchley Estates, approving a Waiver to the maximum building height, Stage II Final Plan, Site Design Plan, Type 'C' Tree Plan for the Active Adults at the Grove Apartments. The subject property is located on Tax Lots 100, 103, 104, 105 and 200 of Section 14A, T3S, R1W, Clackamas County, Oregon. Staff: Blaise Edmonds Case Files: DB13-0008 – Revised Stage I Preliminary Plan DB13-0009 – Waiver to maximum building height	B. Resolution 254 was unanimously approved with Exhibits B7, B8, D and B9 added to the Staff report. The DRB recommended that City Council modify Ordinance 703 to allow for additional density.

DB13-0010 – Stage II Final Plan, lot 3 DB13-0011 – Site Design Review, lot 3 DB13-0012 – Type 'C' Tree Plan, lot 3	
BOARD MEMBER COMUNICATIONS	
A. Results of the May 13, 2013 DRB Panel A meeting	None
STAFF COMMUNICATIONS	None