



**WILSONVILLE CITY HALL
DEVELOPMENT REVIEW BOARD PANEL A**

MONDAY, NOVEMBER 14, 2016 - 6:30 P.M.

I. **Call To Order:**

II. **Chairman's Remarks:**

III. **Roll Call:**

Mary Fierros Bower Kristin Akervall
James Frinell Fred Ruby
Ronald Heberlein Council Liaison Julie Fitzgerald

IV. **Introduction Of New Associate Planners Jennifer Scola And Kim Rybold**

V. **Citizen's Input:**

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

VII. **Consent Agenda:**

A. Approval of minutes of September 12, 2016 DRB Panel A meeting

Documents:

[Sept 12 2016 Minutes.pdf](#)

VIII. **Public Hearing:**

A. Resolution No. 334.

Charbonneau Range Subdivision: Pahlisch Homes Inc. – Applicant:

Charbonneau Golf Club – Owner. The applicant is requesting approval of Stage I Master Plan Revisions, Stage II Final Plan, Site Design Review and Tentative Subdivision Plat for a 40-lot single family subdivision on the property historically used as the Charbonneau driving range. The subject property is located on Tax Lot 325 of Section 25, T3S, R1W, Clackamas County, Oregon. Staff: Daniel Pauly

Case Files: DB16-0039 Stage I Master Plan Revisions
DB16-0040 Stage II Final Plan
DB16-0041 Site Design Review
DB16-0042 Tentative Subdivision Plat

Documents:

[Charbonneau Range StaffReport.Exhibits.pdf](#)
[Exhibit B1 Applicant Notebook part 1.pdf](#)
[Exhibit B1 Applicant Notebook part 2.pdf](#)
[Exhibit B2 Applicant Plans.pdf](#)

IX. Board Member Communications:

A. Results of the September 26, 2016 DRB Panel B meeting

Documents:

[DRB-B Sept 26 2016 Results.pdf](#)

X. Staff Communications

XI. 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

DEVELOPMENT REVIEW BOARD MEETING

MONDAY, NOVEMBER 14, 2016

6:30 PM

VII. Consent Agenda:

- A.** Approval of minutes from September 12, 2016 DRB
Panel A meeting

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

**Development Review Board – Panel A
Minutes–September 12, 2016 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, James Frinell, Ronald Heberlein, Kristin Akervall, and City Council Liaison Julie Fitzgerald. Fred Ruby was absent.

Staff present: Barbara Jacobson, Daniel Pauly, and Shelley White.

IV. 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

Councilor Fitzgerald reported on the September 8, 2016 City Council meeting, noting Council:

- Reviewed an in-depth study that evaluated different approaches to managing the budget and cash flow related to Community Development fees and other items to ensure the City was doing the best job possible of capturing the Staff time required for different development activities in the city. It was a complex issue and Staff had reviewed many different options and cities’ practices. The issue would continue to be considered for some time to ensure there was enough in reserve and so the City could get as close as possible to predicting it.
- One big variable was the changes in the economy that created up and down activity levels regarding building projects, so what exactly the City would face from year to year was uncertain, making it hard to budget; however, the process would provide good guidance moving forward.
- Discussed an in-depth Staff report about the potential results of the ballot measure regarding the sale of marijuana within the City of Wilsonville, which was driven in by State legislation. No creativity was involved; the City would just follow the State’s instructions. If the measure passed, the City Council wanted to be able to have plans in place as to where and when marijuana could and could not be sold. Work continued on that issue.
- Was presented an extensive report considering the options for managing traffic, truck traffic, speeding, and other issues of concern on Wilsonville Rd. The City had received a lot of feedback from the County, State, ODOT, and different elements that drove what could and could not be done on Wilsonville Rd. It was a complex issue, and Council would spend more time discussing it at the next meeting.
- She noted that the *Boones Ferry Messenger* had some important items to read about, and she encouraged the Board members to look at the descriptions regarding the ballot measures concerning the community recreation center and the marijuana initiative. She also encouraged the Board to take, and encourage others to take, the survey related to the Transit Master Plan (TMP) Update. The survey

was intended to provide feedback about any changes that should be made to the planning of SMART routes, frequency, etc.

VI. Consent Agenda:

A. Approval of minutes of July 11, 2016 DRB Panel A meeting.

James Frinell moved to approve the July 11, 2016 DRB Panel A meeting minutes as presented.

Kristin Akervall seconded the motion, which passed 3-0-1 with Ron Heberlein abstaining.

VII. Public Hearing:

A. **Resolution No. 332. Villebois Phase 2 Central Modifications - Berkshire: Stacy Connery, AICP, Pacific Community Design, Inc. – Representative for RCS–Villebois Development, LLC – Applicant/Owner.** The applicant is requesting approval of a SAP Central Refinement, Preliminary Development Plan modification, Final Development Plan modification and Tentative Subdivision Plat for development of ten detached row houses and associated improvements at the southeast corner of Costa Circle West and Barber Street. The subject property is located on Tax Lots 1900 and 2500 of Section 15AC, T3S, R1W, Clackamas County, Oregon. Staff: Daniel Pauly

Case Files:	DB16-0027	SAP Central Refinement
	DB16-0028	Preliminary Development Plan modification
	DB16-0029	Final Development Plan modification
	DB16-0030	Tentative Subdivision Plat

Chair Fierros Bower called the public hearing to order at 6:40 pm 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.

Daniel Pauly, Senior Planner 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. Pauly presented the Staff report via PowerPoint, briefly noting the project's location and surrounding features, and reviewing the Applicant's requests with these key comments:

- A couple of projects had been approved for the subject site, but none had been built, so those previous approvals would need to be modified to enable construction of the proposed 10 detached row houses in the Village Center. The row houses would be similar to the cottage homes, the smallest of the detached unit types, elsewhere in the Villebois development.
 - He reminded that Villebois had aggregate land use categories: medium-sized, single-family homes and larger and small single-family and smaller, including all attached units. In Specific Area Plan (SAP) Center, including the Village Center, all of the land uses were within the smaller category of small single-family and attached units.
- Specific Area Plan and Preliminary Development Plan Modification
 - The prior approval for a majority of the site was for a 49-unit, three- and four-story, apartment complex with tuck-under parking and a pocket park in the southeast corner to preserve three trees. Those trees were actually permitted for removal based on an arborist's recommendation, and due to the number and the trees' poor health, Staff approved a Type A permit. With the removal of the trees, there was no purpose for the park, which was not in any of the master plans. The park did not have good visibility from the street, so it was not a good location for a park outside of preserving the trees, which were now being removed.

- The Applicant now proposed 10 row houses, which was quite a change from the 49-unit apartment. To approve a refinement, Staff reviewed both quantitative and qualitative criteria.
 - Regarding the quantitative criteria, the overall density of the Village Center was allowed to change up to 10 percent. With the current proposed reduction, the cumulative change in density would only be down to 4.36 percent fewer units than the original approval, resulting in 966 units versus the original SAP Central approval for 1010 units, which easily met the test. The new unit count would also still be well above the minimum unit count for Villebois required in the Master Plan and by the State statute that allowed the Villebois project to go forward.
 - The qualitative component was more about urban design and feel and housing diversity. In Villebois, the densest development was in the Village Center, particularly at the core, with less density, the larger lots and single-family homes, along the edges of the development.
 - The subject site was in the transect, an interesting location at the edge of the Village Center where the smaller lot, single-family homes transition into the denser, multi-story, multi-family product. Looking at the Piazza as the core of the Village Center, the Barber St frontage was the shortest transition period, as there were only a couple of lots from Piccadilly Park and Edelweiss Park to the Piazza. South, north, or east of the Piazza, there was much more room to make that transition.
 - The current proposal sought to change the previously approved height and density to essentially, a two-story, single-family product. Looking at what had been done elsewhere and the overall concept in terms of urban design, both worked, because they were both adjacent to and made sense in a transect. Somewhere along Barber St, there would be an abrupt change, and the current proposal would push that change a little farther east.
 - A similar product was also proposed on the north side of Barber St. That application was scheduled for Panel B later this month. The projects had been split because the current proposal did not require approval of a zone change, so the developer could move forward quite a bit sooner than the 16 lots to the north that required the zone change.
 - In terms of housing diversity, there was limited guidance in the Code regarding flexibility to change product type within a single aggregate land use category. However, it was clear that the intent of grouping the land uses was to not allow single-family homes throughout the Village Center. Historically, it always came back to the idea of the transect, where at the edge of the Village Center, it was more open to having detached units; whereas in the core, especially along Barber St, Villebois Dr, and other areas with addresses for urban design to create specific urban rooms, Staff had been a lot more particular about making sure those urban forms were met. At the edge, no criteria stated the Applicant could not go to the lower height as they were still able to meet all of the architectural standards and fell within the established criteria. In Staff's view, this was the type of flexibility that was intended, so the project was approvable and made sense in terms of the transect, which was an important consideration.
 - With regard to circulation, the proposed alley was typical and not too long, and neither the fire district nor Republic Services had any concerns about access issues. The area was serviceable as proposed.
 - Parking. For row houses, the requirement was one space per unit and the proposed garages met that requirement. In addition, there would be onstreet parking; however, no offstreet parking proposed outside of the garages, which did meet Code.
 - Traffic. With the reduction from 49 to 10 units, there would be fewer trips generated than originally proposed, so creating less congestion easily passed the traffic criteria.
- The Final Development Plan Modification included addressing architecture, and looking at the Village Center Architectural Standards (VCAS). Key items to note were that all of the windows were appropriately shaped, long-lasting materials were proposed, and the architectural styles were

consistent with the VCAS. All the proposed plans had been reviewed by the City's contractor architect, who had reviewed all of the homes in Villebois, and were found to be satisfactory. Efforts were made to ensure the enhanced elevations, where sides were exposed to the public view shed, were addressed.

- Courtyard fencing was proposed, which was consistent with other courtyard fencing as described in various pattern books throughout the Villebois development.
- Landscaping. The street trees and onsite landscaping all fell within the material recommendations and requirements established in the Villebois documents.
- The Tentative Subdivision Plat established the lot sizes allowed in the Village Center and created the easements and tracts, including the revision of the tract to allow the midblock pedestrian crossing to the east.
- He noted that this evening, he had received updated renderings of what the streetscape would look like with the trees, fencing, and how the different homes would go together.

Chair Fierros Bower confirmed two parking spaces were proposed per unit and asked if street parking would be available for visitors, since no additional parking was being provided; only those provided in the units.

Mr. Pauly clarified that street parking was not differentiated between visitors, residents. Being a public street, it would be treated as any other street in Villebois. Staff hoped, and a lot of HOAs encouraged, residents parking in the garage to keep street spaces free for aesthetic reasons, as well as visitors.

James Frinell asked if Staff would approve the same kind of idea for vacant areas closer to Villebois Dr that transition from the central, commercial area.

Mr. Pauly responded the area immediately east the subject site was planned to be mixed-use condos and at this point, Staff would not support having this sort of product in that area.

Kristin Akervall asked how tall the mixed-use condo building was expected to be.

Mr. Pauly replied the VCAS stated up to 60 ft, with an average of 45 ft, adding the Applicant had been encouraged to maximize the height to create that urban feel. Typically, that would be ground level parking and/or commercial with three to four stories of residential above. He confirmed three-to-four-story condos would transition to two-story, single-family homes on the same block.

- He displayed a map (Slide 8) and indicated the subject property and the size of the projects approved for the surrounding areas. Along Costa Circle facing Piccadilly Park were similar two-story, cottage-type units that transitioned down to some of the older, two-story Arbor attached row houses. The area directly south on Barber St, north of Villebois Dr, was planned for a mixed-use condo type product, but no land use approvals had been received yet. It was expected to be one of the taller type buildings.

Ron Heberlein asked if there was any conversation about the subject property transitioning from three stories on the first couple of lots down to two to provide more of a transition, because it did seem abrupt to go from four down to two stories.

Mr. Pauly replied no, that had not been discussed, but it was a thought the architect could entertain.

Ms. Akervall asked if he Mr. Pauly had any images of other buildings completed on Barber St leading up to the block to show as an example.

Mr. Pauly explained that Polygon had built a number of duplexes and some three-story single-family homes east of Villebois Dr. Higher building had been encouraged, particularly in the address overlay on

Barber St that ended at Villebois Dr and there was a lot of concern that the Polygon product match the existing homes built by a previous developer. There was also the more urban form of the three-story front façades that blended more with the mixed-use buildings that had a more modern look. Although detached, the buildings along Barber St east of Villebois Drive were designed to look like a single unit, whereas the ten new proposed homes were meant to reflect more of the diversity currently seen among the existing cottages outside the Village Center, such as along Costa Circle or across the park.

Chair Fierros Bower noted the 6:12 roof pitch of the proposed buildings and asked what the overall height was of the proposed units.

Mr. Pauly responded the Compliance Report noted they were less than 35 ft high. (Section IV of the Notebook)

Chair Fierros Bower asked what the height difference was between the 45 ft or so height of the mixed-use building and the ten proposed homes.

Mr. Pauly stated, as an example, the apartment building previously approved on the subject site was 3½ stories on the western portion, but four stories elsewhere. He displayed a photo showing a visual example of how the proposed ten units might look alongside the existing homes, which would be a similar transition. A lot of consideration would be needed for the design of the western façade of the next building. He cited a similar transition between the four-story Charleston Apartments and the existing homes built by Polygon along Costa Circle that were a similar height. He confirmed the Charleston Apartments were directly behind and across the alleyway from the proposed project.

Chair Fierros Bower invited the Applicant to present testimony to the Board.

Rudy Kadlub, Villebois Master Planner, Costa Pacific Communities, 11422 SW Barber St, Wilsonville, noted 15 years ago no one knew what transect meant, and he was proud that Staff now used the word so well and understood it. He reminded the three development tenets used for planning Villebois included diversity, in the broadest sense of the term, diverse product types, diverse land uses, diversity in home style and architecture, and diversity in price points. He believed the proposed project helped meet the diversity tenet. The homebuilder was new to Villebois and Oregon, and he was excited to have more choices available.

- He was pleased with the Staff report and the Applicant had no issues in terms of the recommendations.
- He noted Costa Pacific had studied and continued to work on the mixed-use portion of the community. They had gone through a number of design studies, and it was unlikely that a four-over-one, four stories of residential over one story of retail, would be done as all the studies had indicated there would not be enough room for the parking required for that kind of density without building subterranean parking. After all these years, they still had not figured out a way to do structured parking in the suburbs and make pricing or rents work to support structured parking.
 - When developing the Master Plan in 2002-2004, the vision was to have a parking structure, parking garage, or mixed-use buildings with tuck-under or structured parking. Even though the pricing had come up, the relative costs had also continued to rise, and it did not seem that the two would ever mix in the suburbs.
- He also had concerns about the adjacency and height, adding it would be wrong to have anything shorter than what existed. He noted that the pitch of the roof and gables of the proposed ten units were 12:12, and the rest were 6:12, so fairly steep roofs. The plate height on the ground floor was 10 ft on the ground floor, 9 ft on the second floor, for a height of 19 ft at the eaves on the second floor, and then the roof went up another 8 ft to 9 ft for a total height of 28 ft or so. The three-over-one, which was more likely than the four-over-one, would be closer to 45 ft with a commercial look, so the

roof would be flat. The two-story unit roofs would scale up to approach more of a three-story massing, whereas the adjacent buildings would be four-stories and have a flat roof, so the height difference was not that significant.

- In addition, there was a bit of a buffer there due to the wide pedestrian path that extended between this particular application and the future building to the east, called the Campanile Building.
 - He introduced Steve Puls, local representative from David Weekley Homes, the largest private home builder in the country. The company had been on Costa Pacific's radar for a number of years. He admired their attention to detail and design. He had looked at many of David Weekley's other communities and home designs and was convinced they could meet the architectural standards.

Steve Puls, Division President, David Weekley Homes, 19968 NW Cornwall Lane, Hillsboro, Oregon, 97124, stated that although new to the area, David Weekley Homes had been building homes for 40 years across the nation. They were the largest privately-held builders, still with the original owner, David Weekley, who showed up for work every day and was very involved in design. He had spoken that morning with the owner about the proposed project.

- David Weekley Homes operated in 23 markets with Oregon being the 23rd and farthest west; previously Salt Lake and Denver were the farthest west. Although a national company, they operated locally. He noted he had been a Portland resident and in the local home-building industry for 24 years; however, he represented David Weekley Homes and he was proud to say this would be their first project in Oregon.
- As a private builder, David Weekley was focused around design, customer service, and satisfaction. The company had won more than 655 awards for new home design and 93 percent of its customers were definitely likely to recommend the company to a friend or family member when their home was completed. David Weekley Homes had been ranked on *Fortune 100's* Best Place to Work for ten years in a row and did a lot of charitable giving. The David Weekley Foundation had given over \$100 million to a variety of foundations across the US and abroad.
- He had known Mr. Kadlub for a long time and respected him very much. They were both excited about the community and David Weekley looked forward to being a part of it.
- He noted some brochures were available to the Board that briefly described David Weekley Homes and he thanked the Board for the opportunity.

Mr. Frinell noted that in the packet, the facades looked variable and eclectic, but in the latest view, they looked very homogenous in style. He asked why there had been a change.

Mr. Puls explained although there would be some repeat floor plans due to the limited number of lots, they understood the adjacency rules and had not completed the designs, so the Applicant was open to considering more variety among the streetscape and elevations if needed.

Mr. Frinell responded that new one seemed more consistent with other projects that had been approved throughout Villebois and looked quite different and exciting.

Stacey Connery, Costa Pacific, believed the difference might be due to the difference in vibrancy of color between hand-coloring and computer-coloring.

Mr. Kadlub stated three different elevations were shown, whereas the other one only showed two that were repeated, so it was probably not the best choice. He believed it was important to have at least three elevations to avoid feeling that the elevation was repeated every other house. He believed the colors also looked a bit mousey and wanted to see more variation and vibrancy in both the body and trim colors.

Mr. Puls agreed, adding David Weekley worked with a professional design color consultant and there were a variety of professionally selected palettes that would provide a lot more diversity than was currently displayed.

Mr. Heberlein asked if there would be any hesitation to looking into a more gradual transition from the larger adjacent elevations, such as a third level.

Mr. Puls responded the Applicant had looked at an optional third level, but was concerned about the square footages getting too large for such a small house, putting them in the 2,400 to 2,500 sq ft range which would result in a higher price point. The Applicant wanted to stay at a more affordable price point; however, if there was demand, they would consider it as an option on that portion, but that would not guarantee a staggered progression.

Ms. Akervall asked how wide the walkway would be between the mixed-use building and the subject property.

Ms. Connery believed the tract was 15 ft with a 10-ft wide pathway.

Mr. Pauly clarified it would be 15-ft from the corner of the side yard of the first two-story lot.

Mr. Heberlein understood it would be approximately 21 ft to 22 ft.

Ms. Connery noted that was just the pedestrian pathway, adding there was a setback on the west side to the house and then there was the mixed-use lot on the east side.

Ms. Akervall confirmed the setback for the mixed-use portion would be at least 5 ft.

Mr. Kadlub added there was about 30 ft to 35 ft between buildings.

Mr. Heberlein stated almost the width of the current lot sizes for this development.

Mr. Pauly added that as the trees matured, it would also similar in height to the mixed use building adding the existing trees that would be retained offer height.

Mr. Heberlein asked where trash and recycling bins would be located.

Ms. Connery replied they would be stored in the garages and placed behind the garages on pickup day.

Mr. Heberlein confirmed there would be enough space in the garage to store trash bins and parked cars simultaneously. He asked if the line on the floor plans of the garage layout helped indicate where the trash bins would be located.

Mr. Pauly replied if the board is concerned about garage parking we had a template for a Condition of Approval to require garages be kept available for parking. On this project, garage spaces had to meet a standard parking spot dimensional requirements.

Mr. Heberlein understood the proposal exceeded the parking space calculations, but he was leery of that because in a garage this size, it was rare for two people to actually park their cars inside, which meant they actually used street parking, and waste bins in the garage would further reduce available space. He noted standard garages were 19-ft, 10-in wide by 24-in deep.

Ms. Connery clarified there was a 16-ft garage door.

Mr. Kadlub added that the buildings were 20-ft, 10-in, –21 ft wide.

Mr. Pauly confirmed 9 ft by 18 ft was a standard parking spot.

Ms. Connery noted the parking requirement for the proposed homes was one per unit, and the Applicant was providing two garage spaces.

Mr. Pauly replied that even if you only had one car in each garage they would still meet the minimum parking requirements.

Mr. Heberlein responded the calculations would need to be updated to specify there was only one parking space in the garage, and the rest was extra space, if everything could not actually be fit inside.

Ms. Connery reiterated only one parking space was required.

Mr. Heberlein understood, but added it was misleading to say there were two spaces in the garage if six other items were also required to go in the garage that would effectively eliminate one of the parking spaces.

Ms. Connery stated the only required items were trash bins and vehicles. There was space for the bins either on the side or towards the back of the garage.

Mr. Heberlein asked if air conditioning would be an option and if so, where they would be located.

Mr. Puls replied he had not thought about the air conditioning, adding sometimes there were restrictions on the side yard, and he was unsure of the Code regarding that.

Mr. Heberlein noted previously, the Board had sometimes seen them depicted in the landscape plans to see where everything would be located. One thing he noticed on the current planting plan was it did not have any definition between the homes as to what was going to be installed as part of the build-out, which followed all the same kinds of questions related to what would be going on between the two houses.

Ms. Connery stated in other homes similar in size and with similar setbacks, the air conditioning units tended to be in the active side yard. The homes were usually staggered a bit to provide a wider active side yard, which the homeowner could access.

Ms. Akervall confirmed that was how other Polygon homes of a similar size were designed.

Mr. Pauly stated having active versus passive side yards was common throughout Villebois homes to.

Ms. Akervall confirmed the existing homes had air conditioning units and there had been no noise complaints.

Mr. Pauly noted the newer units were pretty quiet, as well as being highly efficient.

Chair Fierros Bower asked if the trash bins could be stored in the active side yard or did they have to be stored in the garage.

Mr. Pauly responded that would be up to the homeowners association (HOA).

Mr. Heberlein understood that screening of trash receptacles was required, but he did not know if that applied to single-family homes.

Mr. Pauly said that's more for multi-family

Ms. Akervall understood it would depend on how the fences were. Many homes in Villebois had side yards where it was difficult to get the trash bins through the side yards and out to the street. She believed people were more likely store the trash bins in the garage.

Mr. Heberlein asked if the Landscape Plan was part of the subject approval or would a separate Landscape Plan approval occur later.

Mr. Pauly responded the Applicant provided the typical internal landscaping between houses that had been done in the Village Center. Staff had pushed them to provide the details for the front landscaping. The Board could condition the Applicant to provide a Master Landscaping Plan for the entire project prior to granting permits; however, at this time, the exact placement of some of the buildings was still being determined. At this point, two approaches could be taken with the transect: either the buildings could all be the same height to work together as unit, or an 'outside-the-Village-Center style' could be applied that addressed the rules of adjacency and diversity of product, which was where the Applicant was leaning. Therefore, it was not as important to make sure a particular unit was at a specific location at this stage of the process. He recommended the Applicant have an overall Landscape Plan that met Code standards in place after they finalized where the units would be and before they pulled permits. He confirmed that such a condition of approval could be added.

Mr. Heberlein noted one issue he saw was that Detail 1 of the Master Fencing Plan showed a 6 ft by 12-ft patio at the front of some of the home plans, but the Landscape Plan did not show what the landscaping would like for those homes with that patio. It showed the area entirely planted and no path was shown from the door to the street.

Mr. Pauly agreed there needed to be more landscape detail once the final site plan for the homes was established. Oftentimes, if there was a front gate on the small lots, no path would be provided to access the actual side yard.

Mr. Heberlein clarified there was no path shown to the front door.

Mr. Pauly agreed a path to the front door was a reasonable condition for all 10 lots at once.

Chair Fierros Bower called for public testimony in favor of, opposed and neutral to the application. Seeing none, she asked if there was any further discussion.

Mr. Heberlein asked how tall the trees were in front of the first three lots. If the trees were taller than the homes, it would provide some natural transition from the adjacent four-story development.

Mr. Pauly displayed a Google street view along Barber St to show the street trees' heights in relation to taller buildings, showing the view across and down the street. He confirmed where the subject site and Piazza were located, and that similar units were proposed directly across the street, so caution would be needed with regard to the rules of adjacency. Referencing the aerial photograph in his presentation (Slide 8), he indicated the locations of the projects proposed along Barber St near the subject site, including a taller mixed-use building, the similar units across the street, and a potential parking area.

Mr. Heberlein asked about the wording for the new condition.

Mr. Pauly read the proposed language for new Condition PDC-6 as follows, “Prior to issuing building permits, the Applicant shall submit and get approval through the Class I administrative process a Landscaping Plan for all ten lots.” He confirmed the Applicant had no comments regarding the proposed language.

Chair Fierros Bower closed the public hearing at 7:40 pm.

Ron Heberlein moved to approve Resolution No. 332 with the addition of new Condition PDC-6 as read into the record by Daniel Pauly. The motion was seconded by James Frinell.

Ms. Akervall believed the homes looked nice and the proposal had its benefits compared to the previously approved larger multi-unit building, especially given the traffic study. However, she had concerns about how the transition would work with the Charleston Apartments located right behind the site. It felt a bit odd. Having the strip of park as the division line between the smaller single-family homes and buildings with a larger presence made sense and felt more natural than extending around the corner and suddenly going into something else. While the proposal appeared to meet all of the requirements, she was still a bit apprehensive about how the transition would feel walking down Barber St, which was a main street in the community and should showcase the thoughtful collection of places that make up the community. However, she could not suggest a solution at this time.

Mr. Heberlein said he agreed with the concern, especially with the large multi-family development proposed right across Barber St from the first four homes. Although it met all of the requirements, it could be a situation where, after it was built, it did not feel right going down the street.

Mr. Frinell stated the proposal met all the criteria and would be consistent with what would be across the street. He believed it would be a fine transition.

Chair Fierros Bower stated she was leaning towards that thought as well. The proposal met the requirements and standards and the trees would provide somewhat of a buffer. The designers were sensitive and would be thoughtful in how to make it all come together.

Ms. Akervall understood the homeowners could elect to have a three-story option if they wanted, which could be worse from an aesthetic standpoint depending upon how many homeowners chose that option. The heights of the homes should be intentional all the way through, so she did not believe that was a solution.

Mr. Heberlein agreed, adding if only the first lot was a three-story home and the remaining were two-stories, he did not believe it would not work to have one of that style, then go to nothing.

Ms. Akervall agreed consistency would be good in that sense. She reiterated that the proposal met all of the requirements, but she did not feel good about it at a gut level. She was just not sure how it would read going down the street.

Mr. Heberlein stated he was not inclined to vote against it necessarily, but he did have concerns.

The motion passed unanimously.

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

VIII. Board Member Communications

- A. Results of the July 25, 2016 DRB Panel B.
- B. Meeting and results of the August 22, 2016 DRB Panel B Meeting.

There were no comments.

IX. Staff Communications

Dan Pauly, Senior Planner, provided an update on the status of several projects recently approved by the Board and projects anticipated to come before the Board for review with these key comments:

- Construction for the Ash Park Subdivision would begin soon. Both grading and tree removal permits had been received, so he anticipated that construction permits would be issued shortly.
- Republic Services was still working through Metro's permitting, which was expected to take some time.
- Wilsonville Greens was done and he had toured the facility.
- Montague Park turned out really nice, and no noise complaints had been received yet about the pickle ball court.
- Grading was being done for Brookeside Terrace. The plat had been submitted last week, so the building permits would follow shortly and construction should begin soon. He did not know when the pool across the street would be completed.
- He expected the next biggest project likely to come before this Board in November was the 40-lot subdivision on the driving range in Charbonneau.

Ron Heberlein asked why DRB Panel A would not review the development proposed on the other side of Barber St. From a continuity standpoint, he believed Panel A should review it because the Board now knew what was being done on the other side, having reviewed this development, and could ensure the two sides meshed together.

Mr. Pauly responded Staff had gone back and forth on that because it was a unique situation. The project just approved by Panel A had a quicker process because it was previously approved and zoned, which put it on a different track; otherwise the applications would have been reviewed at the same time. The application was also assigned to Panel B to even the workload. Generally, he agreed the same Board should review similar or adjacent projects. He assured that adjacency and the relationship with the development just approved by Panel A would be discussed in the Staff report. He noted Panel B had worked on a number of projects in this section of Villebois and was up to speed.

Chair Fierros Bower believed that since Mr. Pauly was the planner on the project, he had heard the comments and concerns of DRB Panel A and could pass those along to Panel B.

The Board congratulated Mr. Pauly on his promotion to Senior Planner.

X. Adjournment

The meeting adjourned at 7:53 pm.

Respectfully submitted,

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

DEVELOPMENT REVIEW BOARD MEETING

MONDAY, NOVEMBER 14, 2016

6:30 PM

VIII. Public Hearing:

A. Resolution No. 334. Charbonneau Range Subdivision: Pahlisch Homes Inc. – Applicant: Charbonneau Golf Club – Owner. The applicant is requesting approval of Stage I Master Plan Revisions, Stage II Final Plan, Site Design Review and Tentative Subdivision Plat for a 40-lot single family subdivision on the property historically used as the Charbonneau driving range. The subject property is located on Tax Lot 325 of Section 25, T3S, R1W, Clackamas County, Oregon. Staff: Daniel Pauly

Case Files:	DB16-0039	Stage I Master Plan Revisions
	DB16-0040	Stage II Final Plan
	DB16-0041	Site Design Review
	DB16-0042	Tentative Subdivision Plat

**DEVELOPMENT REVIEW BOARD
RESOLUTION NO. 334**

A RESOLUTION ADOPTING FINDINGS AND CONDITIONS APPROVING STAGE I MASTER PLAN REVISIONS, STAGE II FINAL PLAN, SITE DESIGN REVIEW AND TENTATIVE SUBDIVISION PLAT FOR A 40-LOT SINGLE FAMILY SUBDIVISION. THE SUBJECT PROPERTY IS LOCATED ON TAX LOT 325 OF SECTION 25, T3S, R1W, CLACKAMAS COUNTY, OREGON. PAHLISCH HOMES INC. – APPLICANT: CHARBONNEAU GOLF CLUB – 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 November 7, 2016, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel A at a scheduled meeting conducted on November 14, 2016, 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 November 7, 2016, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations for:

DB16-0039 through DB16-0042, Stage I Master Plan Revision, Stage II Final Plan, Site Design Review, and Tentative Subdivision Plat for the development of a 40-lot single-family subdivision.

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 14th day of November, 2016 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 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
Charbonneau Range 40-Lot Single-Family Subdivision

Development Review Board Panel 'A'
Quasi-Judicial Public Hearing

Hearing Date: November 14, 2016

Date of Report: November 7, 2016

Application Nos.: DB16-0039 Stage I Preliminary Plan Revision
DB16-0040 Stage II Final Plan
DB16-0041 Site Design Review of Landscaping
DB16-0042 Tentative Subdivision Plat

Request/Summary: The Development Review Board is being asked to review a Class 3 Stage I Master Plan Revision, Stage II Final Plan, Site Design Review, and Tentative Subdivision Plat for the development of a 40-lot single-family subdivision.

Location: Former driving range, central Charbonneau, west side of SW Arbor Lake Drive approximately 1600 feet west of French Prairie Drive. The property is specifically known as Tax Lot 325, Section 25, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon

Owner: Charbonneau Golf Club

Applicant: Dennis Pahlisch, Pahlisch Homes Inc.

Applicant's Representative: Chris Goodell AICP, AKS Engineering and Forestry

Comprehensive Plan Designation: Residential 4-5 dwelling units per acre

Zone Map Classification: PDR-3 (Planned Development Residential-3)

Staff Reviewers: Daniel Pauly AICP, Senior Planner
Steve Adams PE, Development Engineering Manager
Kerry Rappold, Natural Resources Program Manager

Staff Recommendation: Approve with conditions the requested Stage I Master Plan Revision, Stage II Final Plan, Site Design Review request, and Tentative Subdivision Plat.

Applicable Review Criteria:

<u>Development Code:</u>	
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 4.110	Zones
Section 4.113	Standards Applying to Residential Development in Any Zone
Section 4.118	Standards Applying to Planned Development Zones
Section 4.124	Standards Applying to All Planned Development Residential Zones
Section 4.124.3	PDR-3 Zone
Section 4.140	Planned Development Regulations
Section 4.154	On-site Pedestrian Access and Circulation
Section 4.155	Parking, Loading, and Bicycle Parking
Sections 4.156.01 through 4.156.11	Signs
Section 4.167	Access, Ingress, and Egress
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
Sections 4.200 through 4.220 Sections 4.236 through 4.270	Land Divisions
Sections 4.300 through 4.320	Underground Utilities
Sections 4.400 through 4.440 as applicable	Site Design Review
<u>Other Documents:</u>	
Comprehensive Plan Oregon Statewide Planning Goals Charbonneau Master Plan "Village at Wilsonville"	

Vicinity Map



Background/Summary:

Stage I Master Plan Revision (DB16-0039)

Density/Number of Proposed Lots

The approved Charbonneau Master Plan provides for a maximum density of 2,018 total dwelling units spread across 421.4 net acres. Therefore, the density approved in the Charbonneau Master Plan is 4.8 units/acre. This aligns with the Comprehensive Plan density range of 4-5 units/acre that applies to PDR-3 zoned property.

Data provided by Charbonneau Country Club, Charbonneau Together, and Fidelity National Title present the following unit counts by housing type for current development in Charbonneau:

534	Townhomes
236	Condominiums
510	Single-family homes
126	Haven Apartments
178	SpringRidge Retirement Community units
+84	SpringRidge Court assisted living units
1,668	Total Units

Based on a count of 1,668 existing units and the approval of the 2,018-unit Charbonneau Master Plan, there is enough excess capacity in the approved Master Plan to accommodate the planned 40-lot subdivision.

Put another way, the current density in Charbonneau is:

1,668 units / 421.4 acres available for housing = 3.96 units/acre

Adding 40 additional lots would increase the density in Charbonneau as follows:

1,708 units / 421.4 acres available for housing = 4.05 units/acre

Consequently, the creation of 40 additional lots complies with the Charbonneau Master Plan and falls within the acceptable Comprehensive Plan density range for the PDR-3 Zoning District.

Use of Land/Compliance with Wilsonville Comprehensive Plan

The subject property, though historically used as recreational open space, has never been designated open space in an adopted City of Wilsonville Plan or Master Plan. The land use designation in the comprehensive plan and in the plans for The Village at Wilsonville (Charbonneau) indicated residential development. Supporting development of the subject property within the Urban Growth Boundary supports the City's obligation to do its fair share to increase development capacity within the UGB.

Stage II Final Plan (DB16-0040)

Traffic

While residents often understandably desire a minimum amount of traffic on streets adjacent to and near their homes, minimizing traffic on every residential street is not a sustainable standard. Rather, streets are designed for a certain traffic volume and the City has a Level of Service capacity standard to ensure traffic volumes from development do not exceed street and intersection capacity. The DKS Transportation Impact Analysis (see the applicant's Exhibit I in their notebook, Exhibit B1) confirms the majority of nearby streets and intersections continue to exceed the City's capacity standards with the proposed development.

Of the intersections studied in the Transportation Impact Analysis one intersection, under the jurisdiction of Clackamas County, is failing during the a.m. peak. The particular issue is traffic stacking on Airport Road NE to turn left onto Miley Road towards I-5. Adding any additional cross traffic on Miley Road will further exacerbate the problem. Clackamas County has identified a project in their Transportation System Plan to add a traffic signal at Miley Road and Airport Road. The timeframe for construction is uncertain. However, Clackamas County has requested Condition of Approval PFB 6 for the applicant to pay \$18,000 as their pro rata share of the cost to create a signalized intersection.

Utilities and Services

All utilities and services are available to support development at this location. Beyond connecting to existing utilities in Arbor Lake Drive, the applicant is required to loop the water line to the north across the golf course to Arbor Glen Court.

Parks and Open Space

No additional open space or recreational area is required for the proposed project as the requirement is met in the Charbonneau Master Plan, including by the golf course. Some open space is provided as a stormwater facility behind Lots 32 to 40 as well as an approximately 1,400 square foot landscaped open space tract between Lots 1 and 2.

Setbacks and Lot Coverage

Charbonneau is unique in that many typical setbacks and lot coverage requirements were waived as part of the planned development process in the 1970s. Per a 1980 clarifying memo the required setback for detached dwellings is 3 feet. No lot coverage maximums were established.

Pedestrian Access and Circulation

The applicant's plan set, Exhibit B2, shows sidewalks extending along the new public street to its connection with SW Arbor Lake Drive. A Design Exception was approved by the City Engineer from the Residential Street Cross-Section (Drawing Number: RD-1015). The planned cross-section features a 6-foot-wide sidewalk located on the outside of the looped street and no sidewalk on the inside of the looped street.

Parking

Each dwelling unit requires 1 parking space. The applicant states each lot will accommodate at least 1 exterior parking space meeting the dimensions of 20 feet long and 12 feet wide. In addition, all homes will have at least a 1 car garage and on-street parking is provided on the proposed street. Condition of Approval PDB 3 further ensures a minimum amount of parking designed for individual lots meets the dimensions for parking spaces defined in Wilsonville's Development Code.

Street and Access Improvements

The applicant proposes one street access from Arbor Lake Drive. The new street, Honor Loop, will loop through the subdivision to provide access to individual lots. To increase safety on Honor Loop near its intersection with Arbor Lake Drive, the City Engineer is requiring lots with frontage on Arbor Lake Drive, Lots 1 and 29, to take access from Arbor Lake Drive.

Site Design Review (DB16-0041)

The scope of Site Design Review is the public landscaped areas, including the landscaping in the planter strips between the sidewalk and street as well as the open space tracts. All landscaping and fixtures are appropriate for the site, are of an acceptable quality, and are professionally designed enhancing the appeal of the subdivision.

Tentative Subdivision Plat (DB16-0042)

The tentative subdivision plat shows all the necessary information consistent with the Stage II Final Plan for dividing the properties in a manner to allow the proposed development.

Discussion Points:

Status of Charbonneau Master Plan and Implementation

No records show that the Village at Wilsonville Master Plan, governing the development of Charbonneau, was adopted by ordinance or adopted as a subcomponent of the Comprehensive Plan. As such, the master plan can be amended by the Development Review Board through a quasi-judicial process concurrent with a request to develop within the master plan area.

Street Tree Species

Due to the potential future infestation of Emerald Ash Borer staff has suggested and the applicant agreed to change the street tree species from the Marshall's Seedless Green Ash shown in the proposed landscape plan. Email correspondence in Exhibit B3 discusses this change. Condition of Approval PDC 7 requires a different street tree than shown in the landscape plans.

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 except as noted in staff's findings. Based on the findings 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 (DB16-0039 through DB16-0042) with the following conditions:

Planning Division Conditions:

Request A: DB16-0039 Stage I Preliminary Plan Revision

No conditions for this request.

Request B: DB16-0040 Stage II Final Plan

PDB 1. The approved final plan shall control the issuance of all building permits and shall restrict the nature, location and design of the subdivision. Minor changes in an approved plan may be approved by the Planning Director through the Class I Administrative Review Process if such changes are consistent with the purposes

	and general character of the development plan. All other modifications shall be processed in the same manner as the original application and shall be subject to the same procedural requirements. See Finding B7.
PDB 2.	The applicant shall provide a crosswalk across SW Honor Loop at SW Arbor Lake Drive clearly marked with contrasting paint or paving materials. See Finding B27.
PDB 3.	All parking spaces in driveways and garages shall be no less than 9 feet wide by 18 feet long. Areas not meeting these dimensions shall not be considered a parking space for purposes of providing the required parking. At least one parking space meeting these required dimensions shall be provided on each lot. See Finding B30.
PDB 4.	A waiver of remonstrance against formation of a local improvement district shall be recorded in the County Recorder's Office as well as on the City's Lien Docket as part of the recordation of the final plat. See Finding B43.
PDB 5.	Prior to the recording of the final plat of the subdivision the applicant shall submit for review and approval by the City Attorney CC&R's, bylaws, etc. related to the maintenance of the open space areas. Such documents shall assure the long-term protection and maintenance of the open space areas.

Request C: DB16-0041 Site Design Review

PDC 1.	Landscaping 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 Finding C3.
PDC 2.	All landscaping required and approved by the Board shall be installed prior to the issuance of the 20 th building permit for the subdivision. Street trees and planter strip landscaping on or adjoining a lot shall be completed prior to occupancy of each home, 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 will be returned to the applicant. See Finding C12.
PDC 3.	The approved landscape plan is 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, pursuant to the applicable sections of Wilsonville's Development Code. See Finding C13.
PDC 4.	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 as allowed by Wilsonville's Development Code. See Findings C14 and C15.
PDC 5.	The following requirements for planting of shrubs and ground cover shall be met: <ul style="list-style-type: none"> • Non-horticultural plastic sheeting or other impermeable surface shall not be placed under landscaping mulch. • Native topsoil shall be preserved and reused to the extent feasible. • Surface mulch or bark dust shall be fully raked into soil of appropriate depth, sufficient to control erosion, and shall be confined to areas around plantings. • 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. • Shrubs shall reach their designed size for screening within three (3) years of planting. • 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. • Appropriate plant materials shall be installed beneath the canopies of trees and large shrubs to avoid the appearance of bare ground in those locations. • Compost-amended topsoil shall be integrated in all areas to be landscaped, including lawns. See Finding C19.
PDC 6.	Plant materials shall be installed to current industry standards and be properly staked to ensure survival. Plants that die shall be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City. See Finding C20.
PDC 7.	Street trees shall not be the ash shown in the landscape plan, sheet P1-08 of Exhibit B2, but rather Queen Elizabeth Hedge Maple or another tree variety approved in writing by the Planning Division, as discussed in Exhibit B3.

Request D: DB16-0042 Tentative Subdivision Plat

PDD 1.	A reserve strip shall be placed along the rear yards of Lots 30 and 31 to prevent access to the adjoining street. Reserve strips shall be placed along the Honor Loop frontages of Lots 1 and 29 to prevent access from Honor Loop. See Finding D13.
PDD 2.	Any necessary easements or dedications shall be identified on the Final Subdivision Plat.
PDD 3.	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 the Stage II Final Plan or the Tentative Plat.

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.

Engineering Division Conditions:

Request B: DB16-0040 Stage II Final Plan

PFB 1.	Public Works Plans and Public Improvements shall conform to the "Public Works Plan Submittal Requirements and Other Engineering Requirements" in Exhibit C1.
PFB 2.	City Engineering has granted the Applicant a waiver allowing the development to not have a sidewalk along the inside of the Honor Loop roadway. At the entrance to the planned development sidewalks on both sides of Honor Loop will extend and connect to Arbor Lake Drive.
PFB 3.	With the proposed project Applicant shall obtain access to public right-of-way via a planned intersection with Arbor Lake Drive. All lots shall take access from Honor Loop, except as noted in Condition of Approval PFB 4.
PFB 4.	Proposed Lots 1 and 29 with frontage on Arbor Lake Drive shall take driveway access onto Arbor Lake Drive and shall not be allowed driveway access onto Honor Loop.
PFB 5.	From its intersection with Arbor Lake Drive, Honor Loop shall be posted as No Parking to 100 feet west of Arbor Lake Drive.
PFB 6.	As a requirement of Clackamas County, who owns and maintains Miley Road, the applicant shall be required to provide payment in the amount of \$18,000 to Clackamas County Transportation Engineering for their estimated pro-rata impact on the Miley at Airport Road intersection, where the County has planned a signalized intersection. The contribution amount is based on the project's anticipated peak hour trips on this intersection (3.6% of total) and the County's estimated costs of \$500,000 to signalize this intersection.
PFB 7.	For the stormwater facilities on Tract "B" at a minimum access to the inlet and outlet structures shall be provided per the Public Works Standards (per Sec. 301.4.10 of the Public Works Standards).
PFB 8.	Rainwater management components will be allowed to be located in the public right-of-way, however such components shall be maintained by the Applicant, or

	subsequent HOA, and this shall be included in the Stormwater Maintenance and Access Easement per Exhibit C1, Item 27.
PFB 9.	Applicant shall obtain sanitary sewer service from the existing system in Arbor Lake Drive.
PFB 10.	Applicant shall provide a looped water system by tying the proposed water system into the existing public water mains located in Arbor Lake Drive and Arbor Glen Court (per Sec. 501.2.04.a of the Public Works Standards).
PFB 11.	Applicant shall provide a 15 foot wide public water easement for that portion of the public water line not located within a public right-of-way (per Sec. 101.8.14.b of the Public Works Standards). Note that for the section on private homeowner property adjacent to Arbor Glen Court the City will accept a 10 foot wide easement. Applicant shall be required to provide the City with the recorded easement document(s) prior to the City issuing a Public Works Permit for site development.
PFB 12.	Applicant shall provide sufficient mail box units for this proposed development; applicant shall construct mail kiosk at a location coordinated with City staff and the Wilsonville U.S. Postmaster.
PFB 13.	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.
PFB 14.	The proposed Charbonneau Range subdivision consists of 40 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 (21st lot).

Natural Resources Division Conditions:

All Requests

NR 1.	Natural Resource Division Requirements and Advisories listed in Exhibit C3 apply to the proposed development.
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Tualatin Valley Fire & Rescue:

All Requests

TVFR 1.	<u>Additional Access Roads-One- or Two-Family Residential Development:</u> Developments of one- or two-family dwellings, where the number of dwelling units exceeds 30, shall be provided with separate and approved fire apparatus access
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roads and shall meet the requirements of Section D104.3. Exception: Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the International Fire Code, access from two directions shall not be required. (OFC D107)
TVFR 2. <u>Single Family Dwellings- Required Fire Flow:</u> The minimum available fire flow for one and two-family dwellings served by a municipal water supply shall be 1,000 gallons per minute. If the structure(s) is (are) 3,600 square feet or larger, the required fire flow shall be determined according to OFC Appendix B. (OFC B105.2)

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 DB16-00039 through DB16-0042.

Planning Staff Materials

- A1. Staff report and findings (this document)
- A2. Staff’s presentation slides for Public Hearing (to be presented at Public Hearing)

Materials from Applicant

- B1. Applicant’s Notebook: Narrative and Submitted Materials (under separate cover)
 - I. Executive Summary
 - II. Site Description/Setting
 - III. Applicable Review Criteria and Responses
 - IV. Conclusion
 - Exhibit A Development Permit Application
 - Exhibit B Approved Design Exception to the Residential Street Cross-Section (Drawing Number RD-1015)
 - Exhibit C Preliminary Subdivision Plans
 - Exhibit D Subdivision and Street Name Approval
 - Exhibit E Draft HOA By-laws
 - Exhibit F Surrounding Property Owners (250 feet)
 - Exhibit G Certification of Assessment and Liens
 - Exhibit H Geotechnical Engineering Report
 - Exhibit I Traffic Study
 - Exhibit J Ben Altman Setbacks Memo (1980)
 - Exhibit K Preliminary Stormwater Report
 - Exhibit L 30-Foot-Wide Driveway Approval
 - Exhibit M Preliminary Title Report

- B2.** Drawings and Plans (under separate cover)
 - Sheet P1-00 Cover Sheet with Site and Vicinity Maps
 - Sheet P1-01 Preliminary Existing Conditions Plan
 - Sheet P1-02 Preliminary Subdivision Plat
 - Sheet P1-03 Preliminary Demolition, Grading, Tree Preservation & Removal, & Erosion & Sediment Control Plan
 - Sheet P1-04 Preliminary Street Improvement Plan
 - Sheet P1-05 Preliminary Street Profiles
 - Sheet P1-06 Preliminary Composite Utility Plan
 - Sheet P1-07 Preliminary Subdivision Plan with Aerial Photograph
 - Sheet P1-08 Preliminary Landscape Plan
- B3.** Email Correspondence Regarding Street Trees

Development Review Team Correspondence

- C1.** Public Works Plan Submittal Requirements and Other Engineering Requirements
- C2.** Natural Resources Findings & Requirements
- C3.** Email from Clackamas County Transportation Engineering Regarding Condition of Approval for Miley Road/Airport Road intersection.

Other Correspondence/Public Comments

- D1.** Email Correspondence with Mike Walsh

Procedural Statements and Background Information:

1. The statutory 120-day time limit applies to this application. The application was received on September 2, 2016. Staff conducted a completeness review within the statutorily allowed 30-day review period and found, on September 23, 2016, the application to be incomplete. On September 27, 2016, the Applicant submitted new materials. On September 30, 2016 the application was deemed complete. The City must render a final decision for the request, including any appeals, by January 28, 2017.
2. Surrounding land uses are as follows:

Compass Direction	Zone:	Existing Use:
North:	PDR-3	Golf Course and Single-family Residential
East:	PDR-3/PDC	Golf Course and Charbonneau Village Center
South:	PDR-3	Golf Course and Single-family Residential
West:	PDR-3	Golf Course and Single-family Residential

3. Previous Planning Approvals:
None specific to this property
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.

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

Application Procedures-In General Section 4.008

The application is being processed in accordance with the applicable general procedures of this Section.

Applications Must be Filed by Owner Section 4.009

The application has been submitted on behalf of the property owner, Charbonneau Golf Club, and is signed by an authorized representative, Dale Owen.

Pre-Application Conference Required Subsection 4.010 (.02)

A Pre-application conferences was held accordance with this subsection (see case file PA16-0008).

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

No applicable liens exist for the subject property. The application can thus move forward.

General Submission Requirements Subsection 4.035 (.04) A.

The applicant has provided all of the applicable general submission requirements contained in this Subsection.

Zoning-Generally Section 4.110

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: DB16-0039 Stage I Preliminary Plan Revision

As described in the Findings below, the applicable criteria for this request are met.

Planned Development Regulations

Planned Development Lot Qualifications

Subsection 4.140 (.02)

A1. The planned 40-lot subdivision will accommodate attached and detached single-family homes, provide a functional public street, and be surrounded by open space and several existing recreational opportunities consistent with the purpose of Section 4.140. The subject property is ± 7.5 acres and is suitable to be planned and developed.

Ownership Requirements

Subsection 4.140 (.03)

A2. A joint application has been made and signed by owner of the property involved, Charbonneau Golf Club, as well as the contract purchaser, Pahlisch Homes Inc.

Professional Design Team

Subsection 4.140 (.04)

A3. Appropriate professionals are being used with Monty Hurley as the project manager.

Application Requirements

Subsection 4.140 (.07)

A4. Review of the proposed revised Stage I Master Plan has been scheduled for a public hearing before the Development Review Board in accordance with this subsection and the applicant has met all the applicable submission requirements as follows:

- The property affected by the revised Stage I Master Plan is all under the control of the property owner, Charbonneau Golf Club.
- The application for a Stage I Master Plan has been submitted on a form prescribed by the City.
- The professional design team and coordinator has been identified. See Finding A3.
- The applicant has stated the uses involved in the Master Plan and their locations.
- The boundary information is provided with the concurrent tentative subdivision plat request.
- Sufficient topographic information has been submitted.
- A tabulation of the land area to be devoted to various uses has been provided.
- The proposed development will be built in a single phase.
- Any necessary performance bonds will be required.

Standards for Residential Development in Any Zone

Outdoor Recreational Area and Open Space Land Area Requirements
Subsections 4.113 (.01) and (.02)

- A5. Open space requirements continue to be met by land elsewhere in the Charbonneau, including the golf course.

Standards for All Planned Development Residential Zones

Typically Permitted Uses
Subsection 4.124 (.01)

- A6. The applicant proposes attached and detached single-family homes, an allowed use in the PDR zones.

Appropriate PDR Zone
Subsection 4.124 (.05)/ The Village at Wilsonville May 27, 1971

- A7. PDR-3 is the appropriate PDR designation based on the Comprehensive Plan density designation of 4-5 dwelling units per acre. The “Zoning Calculations” in the approved Charbonneau Master Plan provide for a maximum density of 2,018 total dwelling units spread across 421.4 net acres available for housing. Therefore, the density approved in the Charbonneau Master Plan is 4.8 units/acre. This aligns with the Comprehensive Plan density range of 4-5 units/acre that applies to PDR-3 zoned property.

Data provided by Charbonneau Country Club, Charbonneau Together, and Fidelity National Title present the following unit counts by housing type for current development in Charbonneau:

534	Townhomes
236	Condominiums
510	Single-family homes
126	Haven Apartments
178	SpringRidge Retirement Community units
+84	SpringRidge Court assisted living units
1,668	Total Units

Based on a count of 1,668 existing units and the approval of the 2,018-unit Charbonneau Master Plan, there is enough excess capacity in the approved Master Plan to accommodate the planned 40-lot subdivision.

Put another way, the current density in Charbonneau is:
 $1,668 \text{ units} / 421.4 \text{ acres available for housing} = 3.96 \text{ units/acre}$

Adding 40 additional lots would increase the density in Charbonneau as follows:
 $1,708 \text{ units} / 421.4 \text{ acres available for housing} = 4.05 \text{ units/acre}$

Consequently, the creation of 40 additional lots complies with the Charbonneau Master Plan and falls within the acceptable Comprehensive Plan density range for the PDR-3 Zoning District.

Comprehensive Plan

City Support Development of Land Within City Consistent with Land Use Designation

Goal 2.1, Policy 2.1.1., Implementation Measure 2.1.1.a., Policy 2.2.1

A8. The subject property, though historically used as recreational open space, has never been designated open space in an adopted City of Wilsonville Plan. The land use designation in the Comprehensive Plan and in the plans for The Village at Wilsonville (Charbonneau) indicated residential development. The City is thus supportive of the development of the subject land for residential dwelling as long as other applicable policies and standards are met.

Urbanization for Adequate Housing for Workers Employed in Wilsonville, Jobs and Housing Balance

Implementation Measures 2.1.1.b., 4.1.4.l., 4.1.4.p.

A9. The proposal provides for urbanization of an area planned for residential use to provide additional housing within the City which could be occupied by workers employed within the City. However, no special provisions or programs are being implemented to target the units to workers employed within the City.

Encouraging Master Planning of Large Areas

Implementation Measure 2.1.1.b.2.

A10. The proposal further implements the master plan for the Charbonneau District by developing compatible housing on land planned for residential development. Being part of Charbonneau the homes are required to complement the existing development increasing design quality and conformity with the master planned area.

City Obligated to do its Fair Share to Increase Development Capacity within UGB

Implementation Measure 2.2.1.b.

A11. Though the subject property is not listed as available for development in the most recent Residential Lands Inventory, the property is within the urban growth boundary and, due to the property owners' plans and desire to discontinue the prior use, the land is now available for use consistent with its residential designation. Allowing development of the property for additional residential units supports the further urbanization and increased capacity of residential land within the Urban Growth Boundary.

Urban Development Only Where Necessary Facilities can be Provided
Implementation Measure 3.1.2.a.

A12. As can be found in the findings for the Stage II Final plan, all necessary facilities and services can be provided for the proposed development.

Creation and Preservation of Open Space
Policy 3.1.11.

A13. The open space requirement for the entirety of the Charbonneau district, as reflected in The Village at Wilsonville master plan documents, is met by the golf course not including the driving range. The development of residential units on the subject property is consistent with The Village at Wilsonville plans and does not require additional open space beyond what has previously been planned and built in Charbonneau.

Area South of Willamette River for Residential Needs, Maintaining Residential Character in Charbonneau
Implementation Measure 4.1.2.e.

A14. The conversion of a former recreational commercial use to a residential use consistent with Comprehensive Plan Designation and Charbonneau Master Plan furthers the effort to maintain the area south of the Willamette River for residential needs and a residential character.

Wide Range of Housing Choices, Planning for a Variety of Housing
Policy 4.1.4., Implementation Measures 4.1.4.b., 4.1.4.c., 4.1.4.d., 4.1.4.j., 4.1.4.o.

A15. The implementation of the Charbonneau Master Plan over the years has provided for a diversity of housing types. Charbonneau Master Plan drawings indicate primarily attached housing on the subject property. However, the applicant requests a revision to the Master Plan through the Stage I Master Plan revision to allow for single-family homes, both attached and detached, that fit into the context of the area and match the type of product they would like to bring to the current market. Wilsonville's Planned Development regulations allow for flexibility, and the proposed type of housing product would not significantly alter the diversity of housing in Charbonneau and the City as a whole. The applicant will design their housing product to fit into the neighborhood and the specific context in which the subject property sits especially in terms of the relationship with existing nearby homes and the golf course.

Accommodating Housing Needs of Existing Residents
Implementation Measure 4.1.4.f.

A16. The applicant intends on providing a housing product attractive to existing residents of Charbonneau and the City as a whole including current home owners and current renters looking to purchase in a medium to medium high price range, similar to other nearby homes. The number of units and location context do not lend themselves to creation of

housing units at a lower price point to accommodate existing residents looking at the low to medium low price range.

Request B: DB16-0040 Stage II Final Plan

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

Planned Development Regulations

Planned Development Lot Qualifications Subsection 4.140 (.02)

- B1.** The planned 40-lot subdivision will accommodate future attached and detached single-family homes, provide a functional public street, and be surrounded by open space and several existing recreational opportunities consistent with the purpose of Section 4.140. The subject property is ± 7.5 acres and is suitable to be planned and developed.

Ownership Requirements Subsection 4.140 (.03)

- B2.** A joint application has been made and signed by owner of the property involved, Charbonneau Golf Club, as well as the contract purchaser Pahlisch Homes Inc.

Professional Design Team Subsection 4.140 (.04)

- B3.** Appropriate professionals are being used to design the subdivision with Monty Hurley as the project manager.

Stage II Final Plan Submission Requirements and Process

Consistency with Comprehensive Plan and Other Plans Subsection 4.140 (.09) J. 1.

- B4.** The project is consistent with the Comprehensive Plan and other applicable plans of which staff is aware. See also Findings A8 through A16 in Request A.

Traffic Concurrency Subsection 4.140 (.09) J. 2.

- B5.** A traffic impact analysis (TIA) has been completed (Applicant's Exhibit I in their notebook, Exhibit B1, demonstrating the proposed development will not result in congestion in excess of Level of Service D at the study intersections of the east and west intersections of French Prairie Drive and Miley Road. While not within the City's jurisdiction, the intersection of Miley Road and Airport Road operate at a Level of Service F during the a.m. peak. The addition of trips through this intersection would further add to the congestion. Clackamas County has identified a project in their Transportation

Systems Plan to signalize the intersection. Condition of Approval PFB 6 requires the applicant to pay \$18,000 to Clackamas County for their estimated pro-rata impact on the Miley Road-Airport Road intersection.

Facilities and Services Concurrency
Subsection 4.140 (.09) J. 3.

- B6.** Sufficient facilities and services, including utilities, are proposed to be development concurrently with the subdivision and needed utility lines are available.

Adherence to Approved Plans
Subsection 4.140 (.09) L.

- B7.** Condition of Approval PDB 1 ensures adherence to approved plans except for minor revisions by the Planning Director.

General Residential Development Standards

Purpose of Outdoor Recreational Area
Subsection 4.113 (.01) A.

- B8.** No additional open space or recreational area is required for the proposed project as the requirement is met in the Charbonneau, including by the golf course.

Setbacks for Lots Less than 10,000 Square Feet
Subsection 4.113 (.03)

- B9.** As documented in Exhibit J of the applicant's notebook, Exhibit B1, setbacks were established during the Charbonneau Master Planning process. Per a 1980 memo by Ben Altman the setback for residential dwellings is 3 feet if detached.

Effects of Compliance Requirements and Conditions on Cost of Needed Housing
Subsection 4.113 (.14) and 4.124 (.04)

- B10.** No parties have presented evidence nor has staff discovered evidence that provisions of this section are in such a manner that additional conditions, either singularly or cumulatively, have the effect of unnecessarily increasing the cost of housing or effectively excluding a needed housing type.

Underground Utilities Required
Subsection 4.118 (.02) and Sections 4.300 to 4.320

- B11.** All utilities are required to be installed underground.

Habitat Friendly Development Practices to be Used to the Extent Practicable
Subsection 4.118 (.09)

- B12.** The subject property does not contain any water resources, wildlife corridors, fish passages, or Significant Resource Overlay Zone (SROZ) designations. Grading will be

minimized to only what is required to install site improvements and build homes. Water, sewer, and storm water are designed, and will be constructed, in accordance with the applicable City requirements in order to minimize adverse impacts on the site, adjacent properties, and surrounding resources.

Permitted Uses

Subsections 4.124 (.01) and (.02)

B13. The applicant proposes open space and attached and detached single-family homes, allowed uses in the PDR zones. While no allowed accessory uses are specifically mentioned in the applicant's materials, they will continue to be allowed.

Block and Access Standards in PDR Zones

Maximum Block Perimeter: 1800 Feet

Subsection 4.124 (.06) 1.

B14. Only one new block will be created by the subdivision. The perimeter of the block containing Lots 30-40 will measure $\pm 1,180$ feet.

Maximum Spacing Between Streets for Local Access: 530 Feet

Subsection 4.124 (.06) 2.

B15. In conformance with surrounding development and the Charbonneau Master Plan, no street extensions are planned. A new Local Street will access SW Arbor Lake Drive between SW East Lake Court to the south and SW Old Farm Road to the north. The existing spacing between these two streets is ± 880 feet. The planned access to SW Arbor Lake Drive is ± 630 feet from SW Old Farm Road and ± 250 feet from SW East Lake Court. The existing street network and surrounding development do not allow for spacing less than 530 feet in both directions in this part of Charbonneau. Therefore, the planned access spacing complies with the criteria as much as practicable while also complying with the Charbonneau Master Plan.

Maximum Block Length Without Bicycle or Pedestrian Crossing: 330 Feet

Subsection 4.124 (.06) 3.

B16. Only one new block will be created by the subdivision. The length of this block will be ± 490 feet. The Charbonneau Master Plan provides for a specific system of pedestrian and bicycle facilities which does not include through-block connectivity. Because this site is located within the Charbonneau Master Plan area and a through-block pedestrian crossing would not connect with additional pedestrian facilities, no pedestrian crossing is required. Therefore, this criterion does not apply.

PDR-3 Zone Standards

Average (7,000 sf) and Minimum (5,000 sf) Lot Size
Subsections 4.124.3 (.01) and (.02)

B17. The Preliminary Subdivision Plans show lots ranging in size from $\pm 3,977$ square feet to $\pm 11,015$ square feet, with an average lot size of $\pm 5,928$ square feet. In order to comply with the Charbonneau Master Plan, meet the density range of the PDR-3 zone, and include “typically permitted” development for single-family homes described below in (.05), it is not practicable to meet the average and minimum lot sizes described above. In this case, the Charbonneau Master Plan supersedes, though the planned 40-lot subdivision meets the PDR-3 density range and aligns with housing that is typically permitted in the PDR-3 zone.

Minimum Density: One Unit per 8,000 sf
Subsection 4.124.3 (.03)

B18. The Preliminary Subdivision Plans show 40 lots (40 units) on a ± 7.5 -acre site, which equals a gross density of ± 5.3 units per acre, or one unit per $\pm 8,219$ square feet. Subtracting out rights-of-way and Tracts A, B, and C results in a net developable area of ± 5.4 acres and a net density of ± 7.4 units per acre, or one unit per $\pm 5,928$ square feet.

Minimum Lot Width: 40 Feet
Subsection 4.124.3 (.04) A.

B19. The Preliminary Subdivision Plans show all lots with more than a 40 foot width.

Minimum Street Frontage: 40 Feet, 24 Feet on Cul-de-sac
Subsection 4.124.3 (.04) B.

B20. The Preliminary Subdivision Plans show 38 of the planned 40 lots with at least 40 feet of street frontage. Lot 12 and Lot 17 have less than 40 feet of street frontage on the bulb of an eyebrow street corner, and both meet the exception listed in Section 4.237(.06)A.

Minimum Lot Depth: 60 Feet
Subsection 4.124.3 (.04) C.

B21. The Preliminary Subdivision Plans show the minimum lot depth for all lots exceeds 60 feet.

Maximum Height: 35 Feet
Subsection 4.124.3 (.04) E.

B22. No homes will be approved for construction in this subdivision with a height greater than 35 feet.

Maximum Lot Coverage
Subsection 4.124.3 (.04) F.

B23. Lot coverage requirements waived as part of Charbonneau Master Plan

On-site Pedestrian Access and Circulation

Continuous Pathway System
Section 4.154 (.01) B. 1.

B24. The Preliminary Subdivision Plans show sidewalks extending along the new public street to its connection with SW Arbor Lake Drive. A Design Exception was approved by the City Engineer from the Residential Street Cross-Section (Drawing Number: RD-1015). The planned cross-section features a 6-foot-wide sidewalk located on the outside of the looped street and no sidewalk on the inside of the looped street. This design will integrate more seamlessly with surrounding housing areas and the larger Charbonneau community than a design without the Design Exception. Future phases of the project are not planned.

Safe, Direct, and Convenient
Section 4.154 (.01) B. 2.

B25. The Preliminary Subdivision Plans show sidewalks extending along the new public street to its connection with SW Arbor Lake Drive. A Design Exception was approved by the City Engineer from the Residential Street Cross-Section (Drawing Number: RD-1015). The sidewalk will connect to Tract A and is planned to be 0.5 feet wider than the standard width and free from hazards with a smooth, hard surface, as required by Public Works Standards. The sidewalk will be located on the outside of the looped street and provide direct access to all abutting lots. Tract C contains a 7-foot wide paved golf cart/pedestrian path connecting the subdivision to the golf course.

Vehicle/Pathway Separation
Section 4.154 (.01) B. 3.

B26. All pathways are vertically separated except for driveways and crosswalks.

Crosswalks
Section 4.154 (.01) B. 4.

B27. Condition of Approval PDB 2 requires a crosswalk clearly marked with contrasting paint or paving materials on Honor Loop at Arbor Lake Drive.

Pathway Width and Surface
Section 4.154 (.01) B. 5.

B28. The applicant proposes all pathways to be concrete or asphalt, meeting or exceeding the 5 foot required width.

Parking Area Design Standards

Minimum and Maximum Parking Subsection 4.155 (.03) G.

B29. Each dwelling unit requires 1 parking space. The applicant states each lot will accommodate at least 1 exterior parking space meeting the dimensions of 20 feet lot and 12 feet wide. In addition, all homes will have at least a 1 car garage and on-street parking is provided on the proposed street. The minimum parking requirement will thus be exceeded.

Other Parking Area Design Standards Subsections 4.155 (.02) and (.03)

B30. The applicable standards are met as follows:

Standard	Met	Explanation
Subsection 4.155 (.02) General Standards		
B. All spaces accessible and usable for Parking	<input checked="" type="checkbox"/>	Though final design of garages and driveways is not part of the current review they are anticipated to meet the minimum dimensional standards to be considered a parking space as well as fully accessible. Condition of Approval PDB 3 requires the dimensional standards to be met.
I. Surfaced with asphalt, concrete or other approved material.	<input checked="" type="checkbox"/>	Garages and driveways will be surfaced with concrete.
Drainage meeting City standards	<input checked="" type="checkbox"/>	Drainage is professionally designed and being reviewed to meet City standards
Subsection 4.155 (.03) General Standards		
A. Access and maneuvering areas adequate.	<input checked="" type="checkbox"/>	The parking areas will be typical single-family design adequate to maneuver vehicles and serve the needs of the homes.
A.2. To the greatest extent possible, vehicle and pedestrian traffic separated.	<input checked="" type="checkbox"/>	Pursuant to Section 4.154 pedestrian circulation is separate from vehicle circulation by vertical separation except at driveways and crosswalks.

Other General Regulations

Access, Ingress and Egress Subsection 4.167 (.01)

B31. Planned access points are typical of local residential streets. Final access points for individual driveways will be approved by the City at the time of issuance of building permits.

Double Frontage Lots
Subsection 4.169 (.01)

B32. Lots 1, 30 and 31 are double frontage lots. At time of building permit issuance Lots 30 and 31 as well as corner lots will be reviewed to ensure setbacks are met.

Special Maintenance Conditions for Rear Yards of Double Frontage Lots
Subsection 4.167 (.01)

B33. No specific maintenance conditions are recommended for maintenance of the rear yards of Lots 1, 30 and 31 as no maintenance issues are anticipated.

Protection of Natural Features and Other Resources

General Terrain Preparation
Section 4.171 (.02)

B34. The development area is a previously graded golf course driving range. No natural terrain features or topography are present in need of consideration for protection.

Trees and Wooded Areas
Section 4.171 (.04)

B35. The development area is a previously graded golf course driving range. No significant individual trees or wooded areas are present in need of consideration for protection.

Public Safety and Crime Prevention

Design for Public Safety, Addressing, Lighting to Discourage Crime
Section 4.175

B36. In regards to public safety and crime prevention, the subdivision design is fairly typical single-family development with eyes on the street to deter crime and access to ensure public safety. Lighting will be typical of other subdivisions in Wilsonville. The Building Permit process will ensure appropriate addresses are affixed to the homes for emergency responders.

Landscaping Standards

Intent and Required Materials
Subsections 4.176 (.02) C. through I.

B37. The planting areas along the street and the open spaces within the subdivision are generally open and are not required to provide any specific screening, thus the design of the landscaping follows the general landscaping standards. The plantings include a mixture of ground cover, shrubs, and trees. Except where driveways and utility conflicts prevent, street trees are placed 30 foot on center. Ground cover and shrubs are planted in the non-tree landscape area.

Types of Plant Material, Variety and Balance, Use of Natives When Practicable
Subsection 4.176 (.03)

B38. The applicant proposes a professionally designed landscape using a variety of plant material. A number of native plants are proposed including Oregon grape and Kelsey dogwood.

Street Improvement Standards-Generally

Conformance with Standards and Plan
Subsection 4.177 (.01)

B39. The proposed streets appear to meet the City's public works standards and transportation systems plan. Further review of compliance with public works standards and transportation plan will occur with review and issuance of the Public Works construction permit. The required street improvements are a standard local residential street proportional to and typical of the single-family development proposed.

Street Design Standards-Future Connections and Adjoining Properties
Subsection 4.177 (.02) A.

B40. The Preliminary Subdivision Plans show the new looped street connecting to SW Arbor Lake Drive. Because Charbonneau is fully developed, streets and adjoining development have already been built. No future street connections are planned from the subject site to adjacent sites.

City Engineer Determination of Street Design and Width
Subsection 4.177 (.02) B.

B41. The City Engineer approved a Design Exception to the Residential Street Cross-Section (Drawing Number: RD-1015). The planned cross-section features a wider than standard sidewalk located on the outside of the looped street and no sidewalk on the inside of the looped street. This design will integrate more seamlessly with surrounding housing areas and the larger Charbonneau community than a design without the exception. The planned street cross-section generally consists of a 51-foot right-of-way with a 6-foot sidewalk on one side (outside/perimeter), two 8.0-foot stormwater swales, and a 28-foot paved surface wide enough for two travel lanes and parking on one side. The short north/south street segment at the east end of the site consists of a 47-foot right-of-way reflecting two 6.0-foot landscape strips instead of 8.0-foot swales.

Right-of-Way Dedication
Subsection 4.177 (.02) C. 1.

B42. Right-of-way dedication is proposed as part of the Tentative Subdivision Plat. See Request D.

Waiver of Remonstrance Required
Subsection 4.177 (.02) C. 2.

B43. Condition of Approval PDB 4 requires a waiver of remonstrance against formation of a local improvement district be recorded in the County Recorder's Office as well as the City's Lien Docket as a part of the recordation of a final plat.

Dead-end Streets Limitations
Subsection 4.177 (.02) D.

B44. The proposed looping street prevents any dead end streets prohibited by this subsection.

Street Improvement Standards-Clearance

Corner Vision Clearance
Subsection 4.177 (.02) E.

B45. Street locations and subdivision design allow vision clearance standards to be met.

Vertical Clearance
Subsection 4.177 (.02) F.

B46. Nothing in the proposed subdivision design would prevent vertical clearance from being met.

Street Improvement Standards- Interim Improvements

Interim Improvement Standards
Subsection 4.177 (.02) G.

B47. No interim improvements are proposed.

Street Improvement Standards-Sidewalks

Sidewalks Requirements
Subsection 4.177 (.03)

B48. The City Engineer approved a Design Exception to the Residential Street Cross-Section (Drawing Number: RD-1015) to allow sidewalks on only one side and staff recommends DRB approve the exception pursuant to Subsection B. The planned cross-section features a 6-foot-wide sidewalk, with a 5 foot or greater through zone, located on the outside of the looped street and no sidewalk on the inside of the looped street. This design will integrate more seamlessly with surrounding housing areas and the larger Charbonneau community than a design without the exception.

Street Improvement Standards- Intersection Spacing

Offset Intersections Not Allowed
Subsection 4.177 (.09) A.

B49. No offset intersections are proposed.

Transportation System Plan Table 3-2
Subsection 4.177 (.09) B.

B50. All involved streets are local streets with no spacing standard.

Request C: DB16-0041 Site Design Review

Objectives of Site Design Review

Proper Functioning of the Site, High Quality Visual Environment Meets Objectives
Subsections 4.400 (.02) A., 4.400 (.02) C.-J., and Subsection 4.421 (.03)

C1. The proposed professionally designed landscaping provides stormwater, air quality, and other site functions while not interfering with utilities, sidewalks, or other site features. The landscaping also adds to the high quality visual environment. By functioning properly and contributing to a high quality visual environment the proposed design fulfills the objectives of site design review.

Encourage Originality, Flexibility, and Innovation
Subsection 4.400 (.02) B. and Subsection 4.421 (.03)

C2. The applicant has been provided flexibility to create an original design appropriate for the site.

Jurisdiction and Power of the DRB for Site Design Review

Development Review Board Jurisdiction
Section 4.420

C3. Condition of Approval PDC 1 ensures landscaping is carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. No building permits will be granted prior to development review board approval. No variances are requested from site development requirements.

Design Standards

Preservation of Landscaping
Subsection 4.421 (.01) A.

C4. The development area is a previously graded golf course driving range. No significant landscaping is present in need of consideration for protection.

Surface Water Drainage
Subsection 4.421 (.01) D.

- C5. Surface water drainage has been professionally designed showing the proper attention has been paid as shown on sheet P1-03 of Exhibit B2.

Above Ground Utility Installations
Subsection 4.421 (.01) E.

- C6. No above ground utility installations are proposed.

Screening and Buffering of Special Features
Subsection 4.421 (.01) G.

- C7. No exposed storage areas, exposed machinery installations, surface areas, truck loading areas, utility buildings and structures, and similar accessory areas and structures exist requiring screening.

Applicability of Design Standards
Subsection 4.421 (.02)

- C8. Design standards have been applied to the proposed streetscape and park area, which are the portions of the proposed development subject to site design review.

Conditions of Approval Ensuring Proper and Efficient Functioning of Development
Subsection 4.421 (.05)

- C9. No additional conditions of approval are recommended to ensure the proper and efficient functioning of the development.

Site Design Review Submission Requirements

Submission Requirements
Section 4.440

- C10. The applicant has provided a sufficiently detailed landscape plan and street tree plan to review the streetscape and open space areas subject to site design review.

Time Limit on Site Design Review Approvals

Void after 2 Years
Section 4.442

- C11. The applicant has indicated that they will pursue development within 2 years and 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.

Installation of Landscaping

Landscape Installation or Bonding

Subsection 4.450 (.01)

- C12.** Condition of Approval PDC 2 ensures all landscaping 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.

Approved Landscape Plan

Subsection 4.450 (.02)

- C13.** Condition of Approval PDC 3 ensures the approved landscape plan is binding upon the applicant. It prevents substitution of plant materials, irrigation systems, or other aspects of an approved landscape without official action of the Planning Director or Development Review Board, as specified in this Code.

Landscape Maintenance and Watering

Subsection 4.450 (.03)

- C14.** Condition of Approval PDC 4 ensures the landscape is continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered with appropriate City approval.

Modifications of Landscaping

Subsection 4.450 (.04)

- C15.** Condition of Approval PDC 4 provides ongoing assurance that this criterion is met by preventing modification or removal without the appropriate City review.

Natural Features and Other Resources

Protection

Section 4.171

- C16.** The proposed design of the site provides for protection of natural features and other resources consistent with the proposed Stage II Final Plan for the site as well as the purpose and objectives of site design review. See Findings B34 and B35 under Request B.

Landscaping

Landscape Standards Code Compliance

Subsection 4.176 (.02) B.

C17. No waivers or variances to landscape standards have been requested. Thus all landscaping and screening must comply with standards of this section.

Intent and Required Materials

Subsections 4.176 (.02) C. through I.

C18. The general landscape standard has been applied throughout different landscape areas of the site and landscape materials are proposed to meet each standard in the different areas. Site Design Review is being reviewed concurrently with the Stage II Final Plan which includes an analysis of the functional application of the landscaping standards. See Finding B37 under Request B.

Quality and Size of Plant Material

Subsection 4.176 (.06)

C19. A note on the landscape plans ensures the quality of the plant materials will meet American Association of Nurserymen (AAN) standards for top grade. Trees are specified at 2" caliper or greater than 6 foot for evergreen trees. Shrubs are all specified 2 gallon or greater in size. Ground cover is all specified as greater than 4". Turf or lawn is used for minimal amount of the proposed public landscape area. Condition of Approval PDC 5 ensures other requirements of this subsection are met including use of native topsoil, mulch, and non-use of plastic sheeting,

Landscape Installation and Maintenance

Subsection 4.176 (.07)

C20. The installation and maintenance standards are or will be met by Condition of Approval PDC 6 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.
- Irrigation Notes on the applicant's sheet L2 provides for irrigation during the establishment period.

Landscape Plans

Subsection 4.176 (.09)

C21. Applicant's sheets P1-08 in Exhibit B2 provides the required information.

Completion of Landscaping
Subsection 4.176 (.10)

C22. The applicant has not requested to defer installation of plant materials.

Request D: DB16-0042 Tentative Subdivision Plat

Land Division Authorization

Plat Review Authority
Subsection 4.202 (.01) through (.03)

D1. 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.

Undersized Lots Prohibited
Subsection 4.202 (.04) B.

D2. No lots will be divided into a size smaller than allowed by the PDR-3 zone and the Charbonneau Master Plan.

Plat Application Procedure

Pre-Application Conference
Subsection 4.210 (.01)

D3. A pre-application conference was held in accordance with this subsection.

Tentative Plat Preparation
Subsection 4.210 (.01) A.

D4. Following gathering information from Planning Staff, Monty Hurley, a registered professional engineer in the State of Oregon, prepared the tentative plat. See sheet P1-02 of Exhibit B2.

Tentative Plat Submission
Subsection 4.210 (.01) B.

D5. The applicant has submitted a tentative plat with all the required information.

Phases to Be Shown
Subsection 4.210 (.01) D.

D6. The land will be developed in a single phase with subsequent home development pursuant to the market and other factors.

Remainder Tracts
Subsection 4.210 (.01) E.

D7. The tentative plat accounts for all land within the plat area as lots, tracts, or right-of-way.

Street Requirements for Land Divisions

Master Plan or Map Conformance
Subsection 4.236 (.01)

D8. As found in other findings in this report, the land division is in harmony with the Transportation Systems Plan and other applicable plans.

Adjoining Streets Relationship
Subsection 4.236 (.02) A.

D9. The Preliminary Subdivision Plans show the new looped street connecting to SW Arbor Lake Drive. Because Charbonneau is fully developed, streets and adjoining development have already been built. No future street connections are planned from the subject site to adjacent sites.

Planning for Further Land Divisions
Subsection 4.236 (.02) C.

D10. No further land divisions are planned or anticipated requiring consideration in arrangement of lots and streets.

Streets Standards Conformance
Subsection 4.236 (.03)

D11. As part of the Stage II Final Plan approval, see Request B, the streets conform with Section 4.177 and block size requirements.

Topography
Subsection 4.236 (.05)

D12. The surrounding area is relatively flat not requiring any special consideration to topographical conditions.

Reserve Strips
Subsection 4.236 (.06)

D13. Condition of Approval PDD 1 prevents access from the street to the rear yard of Lots 30 and 31 as well as the Honor Loop frontages of Lots 1 and 29 by use of a reserve strip.

Future Street Expansion
Subsection 4.236 (.07)

D14. No future street expansion is planned or possible. All surrounding land is fully developed.

Additional Right-of-Way
Subsection 4.236 (.08)

D15. SW Arbor Lake Drive is adjacent to the subject site and will connect with the new looped street. Southwest Arbor Lake Drive is fully improved and contains adequate right-of-way to conform to the Charbonneau Master Plan and all applicable standards.

Street Names
Subsection 4.236 (.09)

D16. A street name conforming to the City system and approved by the City Engineer will be provided on the final subdivision plat. The City Engineer has approved the name SW Honor Loop.

General Land Division Requirements-Blocks

Blocks for Adequate Building Sites in Conformance with Zoning
Subsection 4.237 (.01)

D17. Streets are addressed above in the responses to Section 4.177. Block size for Planned Development Residential zones is addressed above in the responses to Section 4.124(.06). The Preliminary Subdivision Plans provide adequate building sites for attached and detached single-family homes, and safe and convenient access and circulation will be provided by the project for vehicles, pedestrians, and bicycles in compliance with applicable requirements in the Wilsonville Development Code and Transportation System Plan.

General Land Division Requirements- Easements

Utility Line Easements
Subsection 4.237 (.02) A.

D18. Generally, public utility lines will be installed in the public rights-of-way, except for the following exceptions shown on the Preliminary Subdivision Plans: a 15-foot waterline easement extending from the northwest corner of the subject site to the residential development to the north, a 15-foot stormwater easement extending from the northwest corner of the subject site to the northwest, and a 10-foot private water easement running between Lots 17 and 18.

General Land Division Requirements- Pedestrian and Bicycle Pathways

Mid-block Pathways Requirement
Subsection 4.237 (.03)

D19. Only one new block will be created by the subdivision. The length of this block will be \pm 490 feet. The Charbonneau Master Plan provides for a specific system of pedestrian and bicycle facilities which does not include through-block connectivity. This site is located

within the Charbonneau Master Plan area and a through-block pedestrian crossing would not connect with existing pedestrian facilities.

General Land Division Requirements- Lot Size and Shape

Lot Size and Shape Appropriate

Subsection 4.237 (.05)

D20. The size, width, shape, and orientation of lots comply with the Charbonneau Master Plan. The applicable criteria for the PDR-3 Zoning District are addressed in the findings for Section 4.124.3 in Request B.

General Land Division Requirements- Access

Minimum Street Frontage

Subsection 4.237 (.06)

D21. Section 4.124.3(04)(B) sets a minimum street frontage requirement of 40 feet, except for lots fronting a cul-de-sac. The Preliminary Subdivision Plans show 38 of the planned 40 lots with at least 40 feet of street frontage. Lot 12 and Lot 17 have less than 40 feet of street frontage on the bulb of an eyebrow street corner. Both of these lots are located on the outer radius of a curved street and have more than 25 feet of frontage.

General Land Division Requirements- Other

Through Lots

Subsection 4.237 (.07)

D22. Lots 30-40 will front SW Honor Loop to the south. Due to the size and configuration of the subject property in relation to existing development, the block containing Lots 30-40 cannot be designed with a depth to accommodate two rows of lots. Emergency services require a looped street for safe and efficient emergency access within the subdivision, which effectively limits the depth of the block. A stormwater facility separates the northern portion of Lots 33-40 from SW Honor Loop. Applicant plans to include a plat note for a non-access reservation along the north side of Lots 30-32 to ensure access only from the south side of the block.

Lot Side Lines

Subsection 4.237 (.08)

D23. The side lines of all lots fronting straight streets run at right angles to the street. Lots 2-3, Lots 12-13, and Lots 16-18 are located on the curve of the street, and their side lines run at right angles to the subject curve as far as practicable.

Corner Lots
Subsection 4.237 (.13)

D24. Lots 1, 29, and 30 are located on the corners of street intersections. All three lots have a corner radius of at least 10 feet.

Lots of Record

Lots of Record
Section 4.250

D25. The subject property is a remnant portion of the George L. Curry Donation Land Claim No. 43 and has not been included in any plats or partitions, and thus is legally divisible.



From: Chris Goodell <chrisg@aks-eng.com>
Sent: Tuesday, October 25, 2016 1:43 PM
To: Pauly, Daniel
Cc: Joey Shearer
Subject: RE: Charbonneau Range Street Trees

Great. Thanks Dan.

Chris Goodell, AICP, LEED^{AP} - Associate
AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | chrisg@aks-eng.com

From: Pauly, Daniel [<mailto:pauly@ci.wilsonville.or.us>]
Sent: Tuesday, October 25, 2016 1:22 PM
To: Chris Goodell <chrisg@aks-eng.com>
Cc: Joey Shearer <shearerj@aks-eng.com>
Subject: RE: Charbonneau Range Street Trees

Those selections sound fine. I agree flexibility should be built into the condition due to tree availability. It is something we routinely do.

Daniel Pauly, AICP | Senior Planner | City of Wilsonville | Planning Division
29799 SW Town Center Loop East | Wilsonville OR 97070 | ☎: 503.682.4960 | ✉: pauly@ci.wilsonville.or.us

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

From: Chris Goodell [<mailto:chrisg@aks-eng.com>]
Sent: Monday, October 24, 2016 12:39 PM
To: Pauly, Daniel
Cc: Joey Shearer
Subject: RE: Charbonneau Range Street Trees

Dan:

We are recommending the Queen Elizabeth Hedge Maple (*Acer campestre* 'Evelyn') as the street tree. It is included in the City of Portland's Storm Water Management Manual for Green Streets – Street Tree Detail for Swales. It would be nice if the ultimate condition of approval had some flexibility built in – in case it is difficult to find. (It should be available, but just in case.)

Thanks for asking. If you need anything else, please let me know.

Chris Goodell, AICP, LEED^{AP} - Associate
AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | chrisg@aks-eng.com

From: Pauly, Daniel [<mailto:pauly@ci.wilsonville.or.us>]
Sent: Monday, October 24, 2016 8:58 AM
To: Chris Goodell <chrisg@aks-eng.com>
Subject: RE: Charbonneau Range Street Trees

Yes. We are happy to support any quality street tree off another City's list.

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

From: Chris Goodell [<mailto:chrisg@aks-eng.com>]
Sent: Friday, October 21, 2016 4:07 PM
To: Pauly, Daniel
Subject: FW: Charbonneau Range Street Trees

Dan:

Can we go off the street tree list?

The reason I'm asking is that Kirsti specified that tree because of its tolerance for wet roots and the width of the swales. She did not find another one on the list that worked given the situation. We could provide you with some species (maybe from the City of Portland's tree list for swales) to pick one if this is at all a possibility.

When you have minute, please let me know.

Thanks,

Chris Goodell, AICP, LEED^{AP} - Associate
AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | chrisg@aks-eng.com

From: Chris Goodell
Sent: Friday, October 21, 2016 3:54 PM
To: 'Pauly, Daniel' <pauly@ci.wilsonville.or.us>
Subject: RE: Charbonneau Range Street Trees

Thanks Dan. I will ask our Landscape Architect and Pahlisch and get back to you on this.

Have a great weekend.

Chris Goodell, AICP, LEED^{AP} - Associate
AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | chrisg@aks-eng.com

From: Pauly, Daniel [<mailto:pauly@ci.wilsonville.or.us>]
Sent: Friday, October 21, 2016 2:16 PM
To: Chris Goodell <chrisg@aks-eng.com>
Subject: Charbonneau Range Street Trees

Hi Chris

I wanted to give you a heads up I am recommending a street tree different than shown for Charbonneau Range. We are discouraging planting Ash as it is likely the Emerald Ash Borer will eventually make it to Oregon destroying many of the Ash. Please work with the landscaper and client to come up with a different street tree we can present to the board. No need to change the landscape plans, it would just be nice to know the choice by the time of the hearing.

Thanks

Daniel Pauly, AICP | Senior Planner | City of Wilsonville | Planning Division
29799 SW Town Center Loop East | Wilsonville OR 97070 | 📞: 503.682.4960 | ✉: pauly@ci.wilsonville.or.us

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

Exhibit C1
Public Works Plan Submittal Requirements
and Other Engineering Requirements

1. All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards - 2015.
2. Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:

Coverage (<i>Aggregate, accept where noted</i>)	Limit
Commercial General Liability:	
▪ General Aggregate (per project)	\$3,000,000
▪ General Aggregate (per occurrence)	\$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

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.
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.
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 printed to PDF, combined to a single file, stamped and digitally signed by a Professional Engineer registered in the State of Oregon.
 - l. All plans submitted for review shall be in sets of a digitally signed PDF and three printed sets.
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.
7. Design engineer shall coordinate with the City in numbering the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to City's numbering system.
 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.
 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.
 10. The applicant shall be in conformance with all stormwater and flow control requirements for the proposed development per the Public Works Standards.
 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.
 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.
 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.
 14. 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.

15. 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.
16. Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
17. No surcharging of sanitary or storm water manholes is allowed.
18. 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.
19. 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.
20. 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.
21. 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.
22. Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
23. 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.
24. The applicant shall provide adequate sight distance at all project street intersections, alley intersections and commercial driveways by properly designing intersection alignments, establishing set-backs, driveway placement and/or vegetation control. Coordinate and align proposed streets, alleys and commercial driveways with existing streets, alleys and

commercial driveways located on the opposite side of the proposed project site existing roadways. Specific designs shall be approved by a Professional Engineer registered in the State of Oregon. As part of project acceptance by the City the Applicant shall have the sight distance at all project intersections, alley intersections and commercial driveways verified and approved by a Professional Engineer registered in the State of Oregon, with the approval(s) submitted to the City (on City approved forms).

25. 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.
26. 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.
27. 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. Stormwater or rainwater LID facilities may be located within the public right-of-way upon approval of the City Engineer. Applicant shall maintain all LID storm water components and private conventional storm water facilities; maintenance shall transfer to the respective homeowners association when it is formed.
28. The applicant shall "loop" proposed waterlines by connecting to the existing City waterlines where applicable.
29. 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 Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
30. 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).
31. 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.

Exhibit C2
Natural Resources Findings & Requirements

Stormwater Management Requirements

1. Provide profiles, plan views, landscape information, and specifications for the proposed stormwater facilities consistent with the requirements of the 2015 Public Works Standards.
2. Pursuant to the 2015 Public Works Standards, the applicant shall submit a maintenance plan (including the City's stormwater maintenance and access easement) for the proposed stormwater facilities prior to approval for occupancy of the associated development.
3. Pursuant to the 2015 Public Works Standards, access shall be provided to all areas of the proposed stormwater facilities. At a minimum, at least one access shall be provided for maintenance and inspection.

Other Requirements

4. The applicant shall comply with all applicable state and federal requirements for the proposed construction activities (e.g., DEQ NPDES #1200–CN permit).
5. Pursuant to the City of Wilsonville's Ordinance No. 482, the applicant shall submit an erosion and sedimentation control plan. The following techniques and methods shall be incorporated, where necessary:
 - a. Gravel construction entrance;
 - b. Stockpiles and plastic sheeting;
 - c. Sediment fence;
 - d. Inlet protection (Silt sacks are recommended);
 - e. Dust control;
 - f. Temporary/permanent seeding or wet weather measures (e.g., mulch);
 - g. Limits of construction; and
 - h. Other appropriate erosion and sedimentation control methods.



From: Adams, Steve
Sent: Friday, November 04, 2016 1:08 PM
To: Kraushaar, Nancy; Pauly, Daniel
Subject: RE: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Dan,

Can we modify the condition to read:

As a requirement of Clackamas County, who owns and maintain Miley Road, the applicant shall be required to provide payment in the amount of \$18,000 to Clackamas County Transportation Engineering for their estimated pro-rata impact on the Miley at Airport Road intersection, where the County has planned a signalized intersection. The contribution amount is based on the project's anticipated peak hour trips on this intersection (3.6% of total) and the County's estimated costs of \$500,000 to signalize this intersection.

Steve R. Adams, P.E.

Development Engineering Manager
City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, OR 97070

ph: 503-682-4960
email: adams@ci.wilsonville.or.us

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From: Kraushaar, Nancy
Sent: Friday, November 04, 2016 11:59 AM
To: Adams, Steve; Pauly, Daniel
Subject: RE: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Would it be appropriate to note that Clackamas County is requiring the payment? -Nancy

From: Adams, Steve
Sent: Thursday, November 03, 2016 4:20 PM
To: Pauly, Daniel; Kraushaar, Nancy
Subject: FW: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Following is the response from Clackamas County approving the language in PF 6. Dan had a question of why are we requiring it here and not for other projects when they impact County intersections? My response is that Clackamas County is the Road Authority on Miley, took part in the traffic study (both scope and approval) and could have included their own conditions. In working with Christian Snuffin he agreed that the City would include this one County condition. With all other County intersections none of them are adjacent to City development nor are the only access to that part of the City being developed, hence the County is not included in the development application or traffic study.

Do I have this correct or is there better or different language that you would like? I can see this being a talking point at DRB.

Thanks, Steve

Steve R. Adams, P.E.

Development Engineering Manager
City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, OR 97070

ph: 503-682-4960

email: adams@ci.wilsonville.or.us

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From: Snuffin, Christian [<mailto:CSnuffin@co.clackamas.or.us>]
Sent: Wednesday, November 02, 2016 6:08 PM
To: Adams, Steve
Subject: RE: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Steve,

Thank you, looks good.

Christian Snuffin, PE, PTOE
503.742.4716

From: Adams, Steve [<mailto:adams@ci.wilsonville.or.us>]
Sent: Wednesday, November 02, 2016 6:07 PM
To: Snuffin, Christian <CSnuffin@co.clackamas.or.us>
Subject: RE: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Christian,

This is the condition I included with this project:

"Applicant shall be required to provide payment in the amount of \$18,000 to Clackamas County Transportation Engineering for their estimated pro-rata impact on the Miley at Airport Road intersection, where the County has planned a signalized intersection. The contribution amount is based on the project's anticipated peak hour trips on this intersection (3.6% of total) and the County's estimated costs of \$500,000 to signalize this intersection."

Let me know by end of week if this acceptable to you.

Thanks, Steve

Steve R. Adams, P.E.

Development Engineering Manager
City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, OR 97070

ph: 503-682-4960

email: adams@ci.wilsonville.or.us

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From: Snuffin, Christian [<mailto:CSnuffin@co.clackamas.or.us>]
Sent: Monday, September 12, 2016 12:35 PM
To: Joey Shearer; Adams, Steve; Scott Mansur
Cc: Nys, Richard; Chris Goodell; Nathan McCarty
Subject: RE: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

We do not have reliable information (projected traffic volumes, cost estimates) on the signalization project at Miley & Airport from the TSP. We are asking the applicant to propose a proportionate share dollar amount based on a planning-level cost estimate that they prepare for the future signal.

For estimating purposes, it may be assumed that the east and west legs would not need to be widened, but that separate lanes be provided on the northbound Airport Rd approach for left and right turning traffic. The lanes should have a minimum length of 100 feet, plus tapers and deceleration lengths. Airport Rd has 40-feet of right of way. Our typical rural arterial cross section requires a minimum of 60 feet, so some ROW acquisition would likely be required. Again, I would direct you to the City's traffic engineer, who may have already developed an estimate.

Christian Snuffin, PE, PTOE
503.742.4716

From: Joey Shearer [<mailto:shearerj@aks-eng.com>]
Sent: Thursday, September 08, 2016 4:18 PM
To: Snuffin, Christian <CSnuffin@co.clackamas.or.us>; Adams, Steve <adams@ci.wilsonville.or.us>; Scott Mansur <SMM@dksassociates.com>
Cc: Nys, Richard <RichardNys@co.clackamas.or.us>; Chris Goodell <chrisg@aks-eng.com>; Nathan McCarty <McCartyN@aks-eng.com>
Subject: RE: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Can you please send me whatever TSP docs provide any details regarding cost and specific improvements related to the Airport Rd/Miley Rd signalization? The information I found online was a line item for the project, but did not provide cost or other details. The City of Wilsonville referenced an estimate of \$500,000.

Thanks,

Joey Shearer

AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | shearerj@aks-eng.com

From: Snuffin, Christian [<mailto:CSnuffin@co.clackamas.or.us>]
Sent: Thursday, September 08, 2016 4:10 PM
To: Joey Shearer <shearerj@aks-eng.com>
Cc: Nys, Richard <RichardNys@co.clackamas.or.us>
Subject: RE: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Hi Joey,

I'm not sure if you are still waiting on us for information about this intersection, but I was unable to find any detailed information in the TSP analysis documentation about needed upgrades beyond signalization. However, it should be assumed that signalization would require separate left and right turn lanes on the northbound approach. I believe DKS

has a preliminary cost estimate for signalization so you may want to contact Scott Mansur. Please let me know if there are any questions.

Christian Snuffin, PE, PTOE
Clackamas County Transportation Engineering
150 Beaver Creek Road
Oregon City, OR 97045
503.742.4716
www.clackamas.us/engineering/

From: Nys, Richard
Sent: Friday, September 02, 2016 8:30 AM
To: shearerj@aks-eng.com
Cc: Buehrig, Karen <KarenB@co.clackamas.or.us>; Snuffin, Christian <CSnuffin@co.clackamas.or.us>; smm@dksassociates.com
Subject: RE: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Hi Joey,

We'll dig into the Transportation System Plan modeling numbers and determine if the existing lane configuration is adequate or if modifications are required. I could see the need for separated northbound travel lanes. We don't have a reliable cost estimate for this project, so we'd normally rely on the applicant to develop a planning level cost estimate based on the scope of the project. We should be able to figure this out by next week.

Thanks,

Rick Nys, P.E.
Development Engineering Supervisor
Clackamas County Engineering
richardnys@clackamas.us
Phone: 503-742-4702
Cell: 971-325-4155
Office Hours: 7:30 AM – 4:00 PM Monday to Friday

From: Joey Shearer [<mailto:shearerj@aks-eng.com>]
Sent: Thursday, September 01, 2016 2:56 PM
To: Buehrig, Karen <KarenB@co.clackamas.or.us>
Subject: TSP Project ID 1093 - Signal at Airport Rd/Miley Rd Intersection

Karen,

Can you please share whatever cost estimates you have for this project? If, as you said, the estimates are very general, how would we go about calculating and paying a small proportionate share related to a subdivision in Wilsonville?

Let me know if I can provide any additional info.

Thanks in advance for your time,

Joey Shearer



AKS ENGINEERING & FORESTRY, LLC

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From: Adams, Steve
Sent: Wednesday, November 02, 2016 2:29 PM
To: Pauly, Daniel
Subject: RE: Charbonneau Range 40-lot subdivision- concern about traffic loads
Attachments: 1979 05 001 Charbonneau Q Neighborhood as-builts.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dan, for Mr. Walsh (the green space question and density formula I leave to you):

You are correct in the traffic study only reporting on impacts to main City streets; this is per development requirements found in the City code.

The original Charbonneau development showed the project area as “N Neighborhood” with 36 lots anticipated (see attachment); I do not know the history as to why this neighborhood was not built and the land developed as a driving range. The change from 36 lots to 40 lots is considered negligible. The City’s comprehensive plan shows this land as still planned as residential development at 4-5 units per acre so there is no change in use with this development application. The general rule of thumb is that local streets can comfortably accommodate some 1,500 vehicles per day. A single family home is typically considered to generate around 9-10 trips per day, on average (Institute of Transportation Engineers Trip Generation Manual), so a residential street will accommodate some 150 to 167 single family homes.

While the 40 news homes will generate additional traffic, it is not viewed as excessive.

The traffic study did indicate a need today for a signalized intersection at Miley and Airport Road, specifically for the morning commute as you have pointed out. However Miley Road is owned and operated by Clackamas County and the City has no jurisdiction or control in adding a signal light here. I have been in contact with Clackamas County (Christian Snuffin, Transportation Engineering) , and he has confirmed that the traffic signal is on the County Master Plan list for needed improvements, however he also informed me they do not have the improvements currently budgeted. The developer will be conditioned to pay some \$18,000 towards the needed signal improvements.

-Steve

Steve R. Adams, P.E.

Development Engineering Manager
City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, OR 97070

ph: 503-682-4960
email: adams@ci.wilsonville.or.us

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From: Pauly, Daniel
Sent: Thursday, October 27, 2016 4:51 PM
To: Adams, Steve
Subject: FW: Charbonneau Range 40-lot subdivision- concern about traffic loads

Can you provide some responses? Thanks

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

From: Walsh, Mike [<mailto:Mike.Walsh@nike.com>]
Sent: Wednesday, October 26, 2016 9:21 AM
To: Pauly, Daniel
Subject: RE: Charbonneau Range 40-lot subdivision- concern about traffic loads

Thanks Daniel. The report doesn't mention the amount of increase traffic on the Arbor Lake and Lake streets except for the following:

The site plan provided by the project sponsor shows the proposed 40 single family homes with access along the new proposed road to SW Arbor Lake Drive.

Two lots are within 50 feet of the proposed intersection of the new road and SW Arbor Lake Drive. Vehicles entering and exiting a potential driveway of the lots may conflict with vehicles using the intersection.

It is recommended that parking be restricted from Arbor Lake Drive to approximately 100 feet.

That's the only comment in the report I could see addressing car traffic in the Arbor Lake street....

The report's focus is on the main streets going into and out of Charbonneau not on the smaller side streets trying to get access to French Prairie and Miley and only during peak times. Can they do a study on the impact for the side streets?

Is the report saying that the future plan is to have a traffic light at Miley and Airport Rd? It certainly needs it during the morning for people trying to gain access to Miley and I-5. What's the timeline for that?

On the density point there is limited "green space" –except for the golf course fairway- that I can tell from the map . It looks like there is some sort of circular grass/tree areas along the road. But the area is nothing like the open areas in the existing neighborhoods with pools and open lawns.

Has there been a change in the density formula from the original development to now? What is the density standard – a %? maybe- of open space to houses. What I don't want to see here is what Villebois has done with cramming houses/condos so close to each other.

Thanks .

MIKE WALSH // Construction & Project Manager, Emerging Markets, Workplace Design + Connectivity
o: 503 532 1625
m: 503 807 8105



From: Pauly, Daniel [<mailto:pauly@ci.wilsonville.or.us>]
Sent: Wednesday, October 26, 2016 8:53 AM
To: Walsh, Mike
Subject: RE: Charbonneau Range 40-lot subdivision- concern about traffic loads

See attached.

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

From: Pauly, Daniel
Sent: Wednesday, October 26, 2016 8:34 AM
To: 'Walsh, Mike'
Subject: RE: Charbonneau Range 40-lot subdivision- concern about traffic loads

Good Morning

A full traffic analysis has been done for the impacted intersections. Please see attached and let me know if you have further questions. The requirement is the intersections continue to operate at a certain level, called Level of Service D, as determined by traffic engineers. The traffic engineers have not raised any concerns about local intersections.

Regarding density, the proposed density is well within the allowance of the Charbonneau Master Plan and City Code.

Daniel Pauly, AICP | Senior Planner | City of Wilsonville | Planning Division
29799 SW Town Center Loop East | Wilsonville OR 97070 | 📞: 503.682.4960 | ✉: pauly@ci.wilsonville.or.us

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

From: Walsh, Mike [<mailto:Mike.Walsh@nike.com>]
Sent: Wednesday, October 26, 2016 8:27 AM
To: Pauly, Daniel
Cc: Walsh, Mike
Subject: Charbonneau Range 40-lot subdivision- concern about traffic loads

Daniel- I would like you to address whether there may be an issue with traffic based on the increase car load coming in and out of Arbor Lake Drive to gain access to the subdivision. In addition there is only one way in and out of the subdivision that has 40 houses.

Assuming 1.5 cars for each home lot that is 60 more cars coming in and out trying to get to French Prairie Drive. The density of this subdivision is much higher than most of the other areas in Charbonneau. I understand the developer wants to maximize his land costs with building as many houses as possible.

I am concerned there are too many new houses which will create an overload in the streets in the immediate area.

Is there a code or standard for the amount of cars acceptable on neighborhood streets?

MIKE WALSH //
m: 503 807 8105

Land Use Application for Charbonneau Range Subdivision

Date: September 2, 2016

Submitted to: City of Wilsonville
29799 SW Town Center Loop East
Wilsonville, OR 97070

Applicant: Pahlisch Homes, Inc.
210 SW Wilson Avenue, Suite 100
Bend, OR 97702

Owner: Charbonneau Golf Club
32020 SW Charbonneau Drive
Wilsonville, OR 97070



12965 SW Herman Road, Suite 100
Tualatin, OR 97062
(503) 563-6151

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Exhibits

- Exhibit A:** Development Permit Application
 - Exhibit B:** Approved Design Exception to the Residential Street Cross-Section
(Drawing Number: RD-1015)
 - Exhibit C:** Preliminary Subdivision Plans
 - Exhibit D:** Subdivision and Street Name Approval
 - Exhibit E:** Draft HOA By-Laws
 - Exhibit F:** Surrounding Property Owners (250 Feet)
 - Exhibit G:** Certification of Assessment and Liens
 - Exhibit H:** Geotechnical Engineering Report
 - Exhibit I:** Traffic Study
 - Exhibit J:** Ben Altman Setbacks Memo (1980)
 - Exhibit K:** Preliminary Stormwater Report
 - Exhibit L:** 30-Foot-Wide Driveway Approval
 - Exhibit M:** Preliminary Title Report
-

Land Use Application for Charbonneau Range Subdivision

Submitted to:	City of Wilsonville Planning Division 29799 SW Town Center Loop East Wilsonville, OR 97070
Applicant:	Pahlisch Homes, Inc. 210 SW Wilson Avenue, Suite 100 Bend, OR 97702
Property Owners:	Charbonneau Golf Club 32020 SW Charbonneau Drive Wilsonville, OR 97070
Applicant's Consultant:	AKS Engineering & Forestry, LLC 12965 SW Herman Road, Suite 100 Tualatin, OR 97062 Contact: Monty Hurley (monty@aks-eng.com) Contact: Chris Goodell (chrisg@aks-eng.com) Phone: (503) 563-6151 Fax: (503) 563-6152
Site Location:	West side of SW Arbor Lake Drive in Charbonneau
Assessor's Map:	Clackamas County Assessor's Map 3S1W25 Tax Lot 325
Site Size:	± 7.5 Acres
Land Use District:	Planned Development Residential (PDR-3)
Plan Area:	Charbonneau Master Plan (The Village at Wilsonville)



I. Executive Summary

Pahlisch Homes (Applicant) is submitting this application to subdivide a ± 7.5-acre (326,518-square foot) site into 40 lots for the future construction of attached and detached single-family homes. The subject property is within the approved 1971 Charbonneau Master Plan (“The Village at Wilsonville”) area and zoned Planned Development Residential (PDR-3).

The intent of the project is to provide quality homes that integrate as seamlessly as possible into the existing Charbonneau community. The essential components of the subdivision application include:

- 40 lots that meet Charbonneau Master Plan and PDR-3 Zoning District density standards
- Looped public street connecting to SW Arbor Lake Drive
- Pedestrian connectivity within the subdivision
- Integrated on-site stormwater management

This written narrative, together with preliminary plans and other documentation included in the application materials, establishes that the application is in compliance with all applicable approval criteria. As detailed throughout, this documentation represents substantial evidence and provides the basis for approval of the application by the City of Wilsonville.

II. Site Description/Setting

The subject property is located on the west side of SW Arbor Lake Drive within the community of Charbonneau in the City of Wilsonville. The property consists of a single tax lot totaling ± 7.5 acres and is zoned PDR-3. The property is currently utilized as the Charbonneau Golf Course driving range. The elevation at the southwest corner of the site is 146 feet in elevation, and the site gently slopes down to 139 feet in elevation at the northwest corner.

The majority of Charbonneau is zoned Planned Development Residential (PDR-3), with two pockets of Planned Development Commercial (PDC). From a neighborhood perspective, Charbonneau comprises 12 homeowner associations and includes apartments, condominiums, townhomes, and detached single-family homes.

The recreational centerpiece of Charbonneau is a 27-hole golf course. Charbonneau also maintains several parks in the community for the enjoyment of homeowners and their guests, including Edith Green Memorial Park on SW Country View Lane, a tot lot with swings and a play structure on the corner of SW Molalla Bend and SW Armitage Roads, Riverwalk Park along the Willamette River, and Native Island Park between the divided lanes of SW French Prairie Road. A walking path also extends along part of SW French Prairie Road and continues through the Country Club Estates area and beyond.

III. Applicable Review Criteria

WILSONVILLE PLANNING AND LAND DEVELOPMENT ORDINANCE

CHAPTER 4 SECTIONS 4.100 – 4.141 ZONING

Section 4.113. Standards Applying To Residential Developments In Any Zone.

(.02) Open Space Area shall be provided in the following manner:

- A. In all residential subdivisions including subdivision portions of mixed use developments where (1) the majority of the developed square footage is to be in residential use or (2) the density of residential units is equal or greater than 3 units per acre, at least twenty-five percent (25%) of the area shall be in open space excluding streets and private drives. Open space must include, as a minimum, natural areas that are preserved under the City's SROZ regulations and usable open space such as public park area, tot lots, swimming and wading pools, grass area for picnics and recreational play, walking paths, and other like space. For subdivisions with less than 25% SROZ lands and those with no SROZ lands, the minimum requirement shall be ¼ acre of usable park area for 50 or less lots, ½ acre of usable park area for 51 to 100 lots, and pro rata amounts based on this formula for subdivisions exceeding 100 lots. Front, side and rear yards of individual residential lots shall not be counted towards the 25% open space.

Provided, however, where SROZ is greater than 25% of the developable area for any development, the development must also provide ¼ acre of usable park area for a development of less than 100 lots, and ½ acre of usable park area for a development of 100 lots, and pro rata amounts based on this formula for subdivisions exceeding 100 lots. The Development Review Board may waive the usable open space requirement if there is substantial evidence in the record to support a finding that the intent and purpose of the requirement will be met in alternative ways. Irrespective of the amount of SROZ, a development may not use phasing to avoid the minimum usable space requirement.

Multi-family developments shall provide a minimum of 25% open space excluding streets and private drives. Open space must include, as a minimum natural areas that are preserved under the City's SROZ regulations, and outdoor recreational area as provided in 4.113(.01)(A)(1) through (5).

Response: The purpose of the open space standards is to provide adequate light, air, and usable recreational facilities to occupants of each residential development. The Charbonneau Master Plan was designed to maximize the amount and availability of open space throughout the community:

The total concept of golf and recreation has been carried throughout the entire project as the theme of the landscape design. The shaping and contouring of the common areas will be similar to that of the golf course, thus extending the impact and importance of the golf open space to all portions of the site.

In addition to the 27-hole golf course, of which three fairways wrap the subject site on three sides, Charbonneau maintains several parks in the community for the enjoyment of

homeowners and their guests, including Edith Green Memorial Park on SW Country View Lane, a tot lot with swings and a play structure on the corner of SW Molalla Bend and SW Armitage Roads, Riverwalk Park along the Willamette River, and Native Island Park between the divided lanes of SW French Prairie Road. A walking path also extends along part of SW French Prairie Road and continues through the Country Club Estates area and beyond.

Additional recreational facilities are provided by the Charbonneau Clubhouse and Fitness Center, which is available for use by Charbonneau residents. A 35-slip marina and a tennis club with two indoor courts and two lighted outdoor courts are also available at an additional annual cost.

The existing open space and recreational facilities throughout Charbonneau conform with the Charbonneau Master Plan and allow the planned subdivision to meet the applicable open space standards. Additionally, the Preliminary Site Plan shows three tracts totaling ± 10,363 square feet (0.24 acres) within the subdivision. Tract A is unprogrammed open space, Tract B serves as a stormwater facility, and Tract C contains a 7-foot wide paved golf cart/pedestrian path that connects to the golf course abutting the site to the north. Consequently, the criteria are met.

(.03) Building Setbacks (for Fence Setbacks, see subsection .08)

B. For lots not exceeding 10,000 square feet:

1. **Minimum front yard setback: Fifteen (15) feet, with open porches allowed to extend to within ten (10) feet of the property line.**
2. **Minimum side yard setback: One story: five (5) feet; Two or more stories: seven (7) feet. In the case of a corner lot, abutting more than one street or tract with a private drive, the side yard on the street side of such lot shall be not less than ten (10) feet.**
3. **In the case of a key lot, the front setback shall equal one-half (1/2) the sum of depth of the required yard on the adjacent corner lot along the street or tract with a private drive upon which the key lot faces and the setback required on the adjacent interior lot.**
4. **No structure shall be erected within the required setback for any future street shown within the City's adopted Transportation Master Plan or Transportation Systems Plan.**
5. **Minimum setback to garage door or carport entry: Twenty (20) feet. Wall above the garage door may project to within fifteen (15) feet of property line, provided that clearance to garage door is maintained. Where access is taken from an alley, garages or carports may be located no less than four (4) feet from the property line adjoining the alley.**
6. **Minimum rear yard setback: One story: fifteen (15) feet. Two or more stories: Twenty (20) feet. Accessory buildings on corner lots must observe the same rear setbacks as the required side yard of the abutting lot.**

Response: The City specifically waived all setbacks within Charbonneau as part of the original Master Plan under Ordinance No. 23 (Sections 12.07 and 12.08) for the Master Plan, as well as Ordinance No. 11 (Section 16.13) for Charbonneau Phase I and all succeeding phases. Setbacks will be shown for individual homes at such time that building permit applications are submitted. The project and future housing can meet all applicable setback standards. Therefore, the criteria are met.

(***)

(.06) **Off Street Parking:** Off-street parking shall be provided as specified in Section 4.155.

Response: Off-street parking is addressed in the response to Section 4.155, below.

(***)

(.09) **Corner Vision:** Vision clearance shall be provided as specified in Section 4.177, or such additional requirements as specified by the City Engineer.

Response: Corner vision clearance is addressed in the responses to Section 4.177, below.

Section 4.118. **Standards applying to all Planned Development Zones:**

(***)

(.02) **Underground Utilities** shall be governed by Sections 4.300 to 4.320. All utilities above ground shall be located so as to minimize adverse impacts on the site and neighboring properties.

Response: Underground utilities are shown on the preliminary plans and are located to minimize adverse impacts to the site and neighboring properties. Underground utilities are also addressed below in the response to Section 4.320.

(***)

(.09) **Habitat-Friendly Development Practices.** To the extent practicable, development and construction activities of any lot shall consider the use of habitat-friendly development practices, which include:

- A. **Minimizing grading, removal of native vegetation, disturbance and removal of native soils, and impervious area;**
- B. **Minimizing adverse hydrological impacts on water resources, such as using the practices described in Part (a) of Table NR-2 in Section 4.139.03, unless their use is prohibited by an applicable and required state or federal permit, such as a permit required under the federal Clean Water Act, 33 U.S.C. §§1251 et seq., or the federal Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit;**
- C. **Minimizing impacts on wildlife corridors and fish passage, such as by using the practices described in Part (b) of Table NR-2 in Section 4.139.03; and**
- D. **Using the practices described in Part (c) of Table NR-2 in Section 4.139.03.**

Response: The subject property does not contain any water resources, wildlife corridors, fish passage, or Significant Resource Overlay Zone (SROZ) designations. Grading will be

minimized to only what is required to install site improvements and build homes. Water, sewer, and storm water are designed, and will be constructed, in accordance with the applicable City requirements in order to minimize adverse impacts on the site, adjacent properties, and surrounding resources.

Section 4.124. Standards Applying To All Planned Development Residential Zones.

(.01) Examples of principal uses that are typically permitted:

- A. Open Space.
- B. Single-Family Dwelling Units.
- C. Multiple-Family Dwelling Units, subject to the density standards of the zone.
- D. Public parks, playgrounds, recreational and community buildings and grounds, tennis courts, and similar recreational uses, all of a non-commercial nature, provided that any principal building or public swimming pool shall be located not less than forty-five (45) feet from any other lot.
- E. Manufactured homes, subject to the standards of Section 4.115 (Manufactured Housing).

Response: The subdivision is planned to allow future construction of attached and detached single-family homes. Single-family dwelling units are a principal use that is typically permitted in all Planned Development Residential zones. This criterion is met.

(***)

(.05) Appropriate PDR zone based on Comprehensive Plan Density:

Table 1: PDR Zone based on Comprehensive Plan Density	
Comprehensive Plan Density	Zoning District
4-5 u/acre	PDR-3

Response: The “Zoning Calculations” in the approved Charbonneau Master Plan provide for a maximum density of 2,018 total dwelling units spread across 421.4 net acres available for housing. Therefore, the density approved in the Charbonneau Master Plan is 4.8 units/acre. This aligns with the Comprehensive Plan density range of 4-5 units/acre that applies to PDR-3 zoned property.

Data provided by Charbonneau Country Club, Charbonneau Together, and Fidelity National Title present the following unit counts by housing type for current development in Charbonneau:

- 534 Townhomes
- 236 Condominiums
- 510 Single-family homes
- 126 Haven Apartments
- 178 SpringRidge Retirement Community units
- + 84 SpringRidge Court assisted living units
- 1,668 Total Units

Based on a count of 1,668 existing units and the approval of the 2,018-unit Charbonneau Master Plan, there is enough excess capacity in the approved Master Plan to accommodate the planned 40-lot subdivision.

Put another way, the current density in Charbonneau is:
1,668 units / 421.4 acres available for housing = 3.96 units/acre

Adding 40 additional lots would increase the density in Charbonneau as follows:
1,708 units / 421.4 acres available for housing = 4.05 units/acre

Consequently, the creation of 40 additional lots complies with the Charbonneau Master Plan and falls within the acceptable Comprehensive Plan density range for the PDR-3 Zoning District.

(.06) Block and access standards:

1. Maximum block perimeter in new land divisions: 1,800 feet.

Response: Only one new block will be created by the subdivision. The perimeter of the block containing Lots 30-40 will measure \pm 1,180 feet. Therefore, the criterion is met.

2. Maximum spacing between streets or private drives for local access: 530 feet, unless waived by the Development Review Board upon finding that barriers such as railroads, freeways, existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent street extensions meeting this standard.

Response: In conformance with surrounding development and the Charbonneau Master Plan, no street extensions are planned. A new Local Street will access SW Arbor Lake Drive between SW East Lake Court to the south and SW Old Farm Road to the north. The existing spacing between these two streets is \pm 880 feet. The planned access to SW Arbor Lake Drive is \pm 630 feet from SW Old Farm Road and \pm 250 feet from SW East Lake Court. The existing street network and surrounding development do not allow for spacing less than 530 feet in both directions in this part of Charbonneau. Therefore, the planned access spacing complies with the criteria as much as practicable while also complying with the Charbonneau Master Plan.

3. Maximum block length without pedestrian and bicycle crossing: 330 feet, unless waived by the Development Review Board upon finding that barriers such as railroads, freeways, existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions meeting this standard.

Response: Only one new block will be created by the subdivision. The length of this block will be \pm 490 feet. The Charbonneau Master Plan provides for a specific system of pedestrian and bicycle facilities which does not include through-block connectivity. Because this site is located within the Charbonneau Master Plan area and a through-block pedestrian crossing would not connect with additional pedestrian facilities, no pedestrian crossing is required. Therefore, this criterion does not apply.

(.07) Signs. Per the requirements of Sections 4.156.01 through 4.156.11.

Response: No signs are planned at this time. Therefore, this criterion does not apply.

(.08) **Parking.** Per the requirements of Section 4.155.

Response: Off-street parking is addressed in the response to Section 4.155, below.

(.09) **Corner Vision Clearance.** Per the requirements of Section 4.177.

Response: Corner vision clearance is addressed in the responses to Section 4.177, below.

Section 4.124.3. **PDR-3:**

The following standards shall apply in PDR-3 zones. It should be noted that lot size requirements do not specify the number of units that may be constructed per lot:

(.01) **Average lot size:** 7,000 square feet.

(.02) **Minimum lot size:** 5,000 square feet.

Response: The Preliminary Subdivision Plans show lots ranging in size from $\pm 3,977$ square feet to $\pm 11,015$ square feet, with an average lot size of $\pm 5,928$ square feet. In order to comply with the Charbonneau Master Plan, meet the density range of the PDR-3 zone, and include “typically permitted” development for single-family homes described below in (.05), it is not practicable to meet the average and minimum lot sizes described above. In this case, the Charbonneau Master Plan supersedes, though the planned 40-lot subdivision meets the PDR-3 density range and aligns with housing that is typically permitted in the PDR-3 zone. Therefore, the applicable lot standards are met.

(.03) **Minimum density at build out:** One unit per 8,000 square feet.

Response: The Preliminary Subdivision Plans show 40 lots (40 units) on a ± 7.5 -acre site, which equals a gross density of ± 5.3 units per acre, or one unit per $\pm 8,219$ square feet. Subtracting out rights-of-way and Tracts A, B, and C results in a net developable area of ± 5.4 acres and a net density of ± 7.4 units per acre, or one unit per $\pm 5,928$ square feet. Therefore, the criterion is met.

(.04) **Other standards:**

A. **Minimum lot width at building line:** Forty (40) feet.

Response: The Preliminary Subdivision Plans show 38 of the planned 40 lots with at least 40 feet of street frontage. Lot 12 and Lot 17 have less than 40 feet of street frontage on the bulb of an eyebrow street corner, but 40 feet are available outside the setback at the building line. Therefore, the criterion is met.

B. **Minimum street frontage of lot:** Forty (40) feet; however, street frontage may be reduced to twenty-four (24) feet when the lot fronts a cul-de-sac. No street frontage is required when the lot fronts on an approved, platted private drive.

Response: The Preliminary Subdivision Plans show 38 of the planned 40 lots with at least 40 feet of street frontage. Lot 12 and Lot 17 have less than 40 feet of street frontage on the bulb of an eyebrow street corner, and both meet the exception listed in Section 4.237(.06)(A), below. Therefore, the criteria are met.

C. Minimum lot depth: Sixty (60) feet.

Response: The Preliminary Subdivision Plans show the minimum lot depth for all lots exceeds 60 feet. Therefore, the criterion is met.

D. Setbacks: per Section 4.113(.03).

Response: Setbacks are addressed in Section 4.113(.03), above. Essentially, the City specifically waived all setbacks within Charbonneau as part of the original Master Plan under Ordinance No. 23 (Sections 12.07 and 12.08) for the Master Plan, as well as Ordinance No. 11 (Section 16.13) for Charbonneau Phase I and all succeeding phases. Setbacks will be shown for individual homes at such time that building permit applications are submitted. All applicable setback standards are met.

(.05) Examples of development that is typically permitted (hypothetical 10-acre site):

- A. Fifty-four single-family dwellings (with or without accessory dwelling units) on individual lots, or
- B. Sixty-two dwelling units (any combination of multiple-family or single-family units with or without accessory dwelling units).

Response: Example A presents 54 single-family dwellings on a 10-acre site, which equates to a gross density of 5.4 units per acre. If 25% of the gross area is assumed to be dedicated to open space, rights-of-way, and other undevelopable obligations, the net density would be ± 7.2 units per acre, and the average lot size would be $\pm 6,050$ square feet.

Example B presents 62 dwelling units (a combination of single-family and multi-family) on a 10-acre site, which equates to a gross density of ± 6.2 units per acre. Assuming, once again, that 25% of the gross area is subtracted for various dedications and obligations, the net density would be ± 8.3 units per acre.

The Preliminary Subdivision Plans show 40 lots (40 units) on a ± 7.5 -acre site, which equals a gross density of ± 5.3 units per acre, or one unit per $\pm 8,219$ square feet. Subtracting out rights-of-way and Tracts A, B, and C results in a net developable area of ± 5.4 acres and a net density of ± 7.4 units per acre, or one unit per $\pm 5,928$ square feet. The planned subdivision presents nearly identical densities and average lot sizes to Example A of “development that is typically permitted.”

Section 4.140. Planned Development Regulations.

(.01) Purpose.

- A. The provisions of Section 4.140 shall be known as the Planned Development Regulations. The purposes of these regulations are to encourage the development of tracts of land sufficiently large to allow for comprehensive master planning, and to provide flexibility in the application of certain regulations in a manner consistent with the intent of the Comprehensive Plan and general provisions of the zoning regulations and to encourage a harmonious variety of uses through mixed use design within specific developments thereby promoting the economy of shared public services and facilities and a variety of complimentary activities consistent with the land use designation on the Comprehensive Plan and the creation of an

attractive, healthful, efficient and stable environment for living, shopping or working.

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(.02) Lot Qualification.

- A. Planned Development may be established on lots which are suitable for and of a size to be planned and developed in a manner consistent with the purposes and objectives of Section 4.140.

Response: The planned 40-lot subdivision will accommodate future attached and detached single-family homes, provide a functional public street, and be surrounded by open space and several existing recreational opportunities consistent with the purpose of Section 4.140 listed above. The subject property is ± 7.5 acres and its suitability to be planned and developed is further discussed throughout this narrative.

- B. Any site designated for development in the Comprehensive Plan may be developed as a Planned Development, provided that it is zoned "PD." All sites which are greater than two (2) acres in size, and designated in the Comprehensive Plan for commercial, residential, or industrial use shall be developed as Planned Developments, unless approved for other uses permitted by the Development Code. Smaller sites may also be developed through the City's PD procedures, provided that the location, size, lot configuration, topography, open space and natural vegetation of the site warrant such development.

Response: The subject property is designated for residential development in the Comprehensive Plan, as evidenced by its PDR-3 zoning, and is ± 7.5 acres in size. It is also within the Charbonneau Master Plan area. Therefore, the subject property meets the criteria and is eligible for development through the City's PD procedures.

(.03) Ownership.

- A. 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. The holder of a written option to purchase, with written authorization by the owner to make applications, shall be deemed the owner of such land for the purposes of Section 4.140.

Response: The subject tract of land is a single lot of record under one ownership. A joint application has been made and signed by the owner and contract purchaser. Therefore, the criteria have been met.

(.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;

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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.

Response: As listed on the cover page of this narrative and indicated throughout the submitted materials, professional engineers, designers, surveyors, and planners have been involved in the planning of this subdivision. AKS Engineering & Forestry is the Applicant's consultant on this project.

CHAPTER 4 SECTIONS 4.154 – 4.199 GENERAL DEVELOPMENT REGULATIONS

Section 4.154. On-site Pedestrian Access and Circulation.

(.01) On-site Pedestrian Access and Circulation

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B. Standards. Development shall conform to all of the following standards:

1. Continuous Pathway System. A pedestrian pathway system shall extend throughout the development site and connect to adjacent sidewalks, and to all future phases of the development, as applicable.

Response: The Preliminary Subdivision Plans show sidewalks extending along the new public street to its connection with SW Arbor Lake Drive. A Design Exception was approved by the City Engineer for the Residential Street Cross-Section (Drawing Number: RD-1015). The planned cross-section features a 6-foot-wide sidewalk located on the outside of the looped street and no sidewalk on the inside of the looped street. This design will integrate more seamlessly with surrounding housing areas and the larger Charbonneau community than a design without the Design Exception. Future phases of the project are not planned. The criteria are met.

2. Safe, Direct, and Convenient. Pathways within developments shall provide safe, reasonably direct, and convenient connections between primary building entrances and all adjacent parking areas, recreational areas/playgrounds, and public rights-of-way and crosswalks based on all of the following criteria:
 - a. Pedestrian pathways are designed primarily for pedestrian safety and convenience, meaning they are free from hazards and provide a reasonably smooth and consistent surface.
 - b. The pathway is reasonably direct. A pathway is reasonably direct when it follows a route between destinations that does not involve a significant amount of unnecessary out-of-direction travel.
 - c. The pathway connects to all primary building entrances and is consistent with the Americans with Disabilities Act (ADA) requirements.

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- d. All parking lots larger than three acres in size shall provide an internal bicycle and pedestrian pathway pursuant to Section 4.155(.03)(B.) (3.)(d.).

Response: The Preliminary Subdivision Plans show sidewalks extending along the new public street to its connection with SW Arbor Lake Drive. A Design Exception was approved by the City Engineer for the Residential Street Cross-Section (Drawing Number: RD-1015). The sidewalk will connect to Tract A and is planned to be 0.5 feet wider than the standard width and free from hazards with a smooth, hard surface, as required by Public Works Standards. The sidewalk will be located on the outside of the looped street and provide direct access to all abutting lots. Tract C contains a 7-foot wide paved golf cart/pedestrian path connecting the subdivision to the golf course. Therefore, all applicable criteria are met.

- 3. **Vehicle/Pathway Separation.** Except as required for crosswalks, per subsection 4, below, where a pathway abuts a driveway or street it shall be vertically or horizontally separated from the vehicular lane. For example, a pathway may be vertically raised six inches above the abutting travel lane, or horizontally separated by a row of bollards.

Response: The Preliminary Subdivision Plans show all sidewalks and pedestrian pathways vertically and/or horizontally separated from travel lanes, except as necessitated by driveway cuts. Therefore, the criteria are met.

- 4. **Crosswalks.** Where a pathway crosses a parking area or driveway, it shall be clearly marked with contrasting paint or paving materials (e.g., pavers, lightcolor concrete inlay between asphalt, or similar contrast).

Response: No crosswalks are planned. Therefore, the criteria do not apply.

- 5. **Pathway Width and Surface.** Primary pathways shall be constructed of concrete, asphalt, brick/masonry pavers, or other durable surface, and not less than five (5) feet wide. Secondary pathways and pedestrian trails may have an alternative surface except as otherwise required by the ADA.

Response: A Design Exception was approved by the City Engineer to the Residential Street Cross-Section (Drawing Number: RD-1015). The planned cross-section features a 6-foot-wide sidewalk located on the outside of the looped street. The planned golf cart/pedestrian path in Tract C will be paved and 7-feet wide. Therefore, the criteria are met.

Section 4.155. General Regulations - Parking, Loading and Bicycle Parking.

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(.02) **General Provisions:**

- A. 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.

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1. The Board shall have the authority to grant variances or planned development waivers to these standards in keeping with the purposes and objectives set forth in the Comprehensive Plan and this Code.
 2. Waivers to the parking, loading, or bicycle parking standards shall only be issued upon a findings that the resulting development will have no significant adverse impact on the surrounding neighborhood, and the community, and that the development considered as a whole meets the purposes of this section.
- B. No area shall be considered a parking space unless it can be shown that the area is accessible and usable for that purpose, and has maneuvering area for the vehicles, as determined by the Planning Director.

Response: Table 5 establishes a minimum requirement of one parking space per dwelling unit for detached and attached single-family units. There is no maximum parking limit and no applicable requirement for bicycle parking. It is anticipated that driveways and garages of sufficient size on each lot will satisfy the minimum parking requirement, which will be evaluated with future building permit applications. Thirty-foot-wide driveways have been approved for a portion of the lots, as described in Exhibit L. Therefore, the criteria are met.

Section 4.177. Street Improvement Standards.

(.02) Street Design Standards.

- A. All street improvements and intersections shall provide for the continuation of streets through specific developments to adjoining properties or subdivisions.
1. Development shall be required to provide existing or future connections to adjacent sites through the use of access easements where applicable. Such easements shall be required in addition to required public street dedications as required in Section 4.236(.04).

Response: The Preliminary Subdivision Plans show the new looped street connecting to SW Arbor Lake Drive. Because Charbonneau is fully developed, streets and adjoining development have already been built. No future street connections are planned from the subject site to adjacent sites. Therefore, the criteria are met.

- B. The City Engineer shall make the final determination regarding right-of-way and street element widths using the ranges provided in Chapter 3 of the Transportation System Plan and the additional street design standards in the Public Works Standards.

Response: The City Engineer approved a Design Exception to the Residential Street Cross-Section (Drawing Number: RD-1015). The planned cross-section features a wider than standard sidewalk located on the outside of the looped street and no sidewalk on the inside of the looped street. This design will integrate more seamlessly with surrounding housing areas and the larger Charbonneau community than a design without the exception. The planned street cross-section generally consists of a 51-foot right-of-way with a 6-foot sidewalk on one side (outside/perimeter), two 8.0-foot stormwater swales, and a 28-foot

paved surface wide enough for two travel lanes and parking on one side. The short north/south street segment at the east end of the site consists of a 47-foot right-of-way reflecting two 6.0-foot landscape strips instead of 8.0-foot swales. The short east/west street segment that intersects with SW Arbor Lake Drive consists of a 57-foot right-of-way, including two 8.0-foot swales and two 6.0-foot sidewalks. Therefore, the criteria are met.

C. Rights-of-way.

1. 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 Transportation System Plan. All dedications shall be recorded with the County Assessor's Office.

Response: As required, rights-of-way will be dedicated by the final subdivision plat and recorded with Clackamas County. The criteria are met.

- D. Dead-end Streets. New dead-end streets or cul-de-sacs shall not exceed 200 feet in length, unless the adjoining land contains barriers such as existing buildings, railroads or freeways, or environmental constraints such as steep slopes, or major streams or rivers, that prevent future street extension and connection. A central landscaped island with rainwater management and infiltration are encouraged in cul-de-sac design. No more than 25 dwelling units shall take access to a new dead-end or cul-de-sac street unless it is determined that the traffic impacts on adjacent streets will not exceed those from a development of 25 or fewer units. All other dimensional standards of dead-end streets shall be governed by the Public Works Standards. Notification that the street is planned for future extension shall be posted on the dead-end street.

Response: No dead-end streets or cul-de-sacs are planned. Therefore, these criteria do not apply.

E. Corner or clear vision area.

1. 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:
 - a. Light and utility poles with a diameter less than 12 inches.
 - b. Trees less than 6" d.b.h., approved as a part of the Stage II Site Design, or administrative review.
 - c. Except as allowed by b., above, an existing tree, trimmed to the trunk, 10 feet above the curb.
 - d. Official warning or street sign.
 - e. 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: As shown on the Preliminary Subdivision Plans, the design of the project allows for clear vision meeting the Public Works Standards at driveway intersections and the intersection of the internal street with SW Arbor Lake Drive. Therefore, the criteria are met.

- F. Vertical clearance - a minimum clearance of 12 feet above the pavement surface shall be maintained over all streets and access drives.

Response: As shown on the Preliminary Subdivision Plans, the design of the project allows for vertical clearance of 12 feet above pavement surface. No obstruction to vertical clearance is planned. Therefore, the criterion is met.

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(.03) Sidewalks. Sidewalks shall be provided on the public street frontage of all development. Sidewalks shall generally be constructed within the dedicated public right-of-way, but may be located outside of the right-of-way within a public easement with the approval of the City Engineer.

- A. Sidewalk widths shall include a minimum through zone of at least five feet. The through zone may be reduced pursuant to variance procedures in Section 4.196, a waiver pursuant to Section 4.118, or by authority of the City Engineer for reasons of traffic operations, efficiency, or safety.
- B. Within a Planned Development, the Development Review Board may approve a sidewalk on only one side. If the sidewalk is permitted on just one side of the street, the owners will be required to sign an agreement to an assessment in the future to construct the other sidewalk if the City Council decides it is necessary.

Response: The City Engineer approved a Design Exception to the Residential Street Cross-Section (Drawing Number: RD-1015). The planned cross-section features a 6-foot-wide sidewalk located on the outside of the looped street and no sidewalk on the inside of the looped street. This design will integrate more seamlessly with surrounding housing areas and the larger Charbonneau community than a design without the exception. Therefore, the criteria are met.

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(.09) Minimum street intersection spacing standards.

- A. New streets shall intersect at existing street intersections so that centerlines are not offset. Where existing streets adjacent to a proposed development do not align properly, conditions shall be imposed on the development to provide for proper alignment.
- B. Minimum intersection spacing standards are provided in Transportation System Plan Table 3-2.

Response: The new Local Street will access SW Arbor Lake Drive between SW East Lake Court to the south and SW Old Farm Road to the north. The existing spacing between these two streets is ± 880 feet. The planned access to SW Arbor Lake Drive is ± 630 feet from SW Old Farm Road and ± 250 feet from SW East Lake Court. New intersections with offset centerlines are not planned for the project.

All of the above-referenced streets are classified as Local Streets in the Wilsonville Transportation System Plan. The minimum intersection/access spacing standard for Local Streets provided in Table 3-2 is "Access Permitted to Each Lot." The Preliminary Subdivision Plans show that access is permitted to each lot. Therefore, the criteria are met.

- (.10) Exceptions and Adjustments. The City may approve adjustments to the spacing standards of subsections (.08) and (.09) above through a Class II process, or as a waiver per Section 4.118(.03)(A.), where an existing connection to a City street does not meet the standards of the roadway authority, the proposed development moves in the direction of code compliance, and mitigation measures alleviate all traffic operations and safety concerns. Mitigation measures may include consolidated access (removal of one access), joint use driveways (more than one property uses same access), directional limitations (e.g., one-way), turning restrictions (e.g., right in/out only), or other mitigation.

Response: No exceptions or adjustments to the spacing standards are planned. Therefore, the criteria do not apply.

CHAPTER 4 - SECTIONS 4.200 – 4.290 LAND DIVISIONS

Section 4.236. General Requirements - Streets.

- (.01) Conformity to the Transportation System Plan. Land divisions shall conform to and be in harmony with the Transportation Systems Plan, the Bicycle and Pedestrian Master Plan, and the Parks and Recreation Master Plan.

Response: Conformance with applicable provisions of the Transportation System Plan, Bicycle and Pedestrian Master Plan, and Parks and Recreation Master Plan is addressed throughout this narrative. This criterion is met.

(.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.

Response: The Preliminary Subdivision Plans show the new looped street connecting to SW Arbor Lake Drive. Because Charbonneau is fully developed, streets and adjoining development have already been built. No future street connections are planned from the subject site to adjacent sites. With the approved Design Exception, streets will meet minimum width requirements. Therefore, the criteria are met.

- 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.

Response: The submitted Preliminary Subdivision Plans cover the entirety of the subject tract. Therefore, this criterion does not apply.

- 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 Preliminary Subdivision Plans have not been designed to allow future division of any lots. Therefore, this criterion does not apply.

- (.03) All streets shall conform to the standards set forth in Section 4.177 and the block size requirements of the zone.

Response: Section 4.177 is addressed above. Block size for Planned Development Residential zones is addressed above in the responses to Section 4.124(.06). All applicable street and block size requirements are met.

- (.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.

Response: No such access easements are planned. Therefore, the criteria do not apply.

- (.05) Topography: The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of these regulations.

Response: The subject site is relatively flat. No significant topography exists that would impact the layout of streets. Therefore, this criterion is met.

- (.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: The planned subdivision does not include any elements meeting A-D, above. Therefore these criteria do not apply.

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- (.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. Notification that the street is planned for future extension shall be posted on the stub street.

Response: The new looped street will fully connect with SW Arbor Lake Drive. No future expansion is planned or possible. Therefore, the criteria do not apply.

- (.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: Southwest Arbor Lake Drive is adjacent to the subject site and will connect with the new looped street. Southwest Arbor Lake Drive is fully improved and contains adequate right-of-way to conform to the Charbonneau Master Plan and all applicable standards. Therefore, the criterion is met.

- (.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: A street name conforming to the City system and approved by the City Engineer will be provided on the final subdivision plat. The City Engineer has approved the name SW Honor Loop. Therefore, the criteria are met.

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 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.

Response: Streets are addressed above in the responses to Section 4.177. Block size for Planned Development Residential zones is addressed above in the responses to Section 4.124(.06). The Preliminary Subdivision Plans provide adequate building sites for attached and detached single-family homes, and safe and convenient access and circulation will be provided by the project for vehicles, pedestrians, and bicycles in compliance with applicable requirements in the Wilsonville Development Code and Transportation System Plan. All applicable street and block size requirements are met.

(.02) Easements:

- A. 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.

- 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: Generally, public utility lines will be installed in the public rights-of-way, but for the following exceptions shown on the Preliminary Subdivision Plans: a 15-foot waterline easement extending from the northwest corner of the subject site to the residential development to the north, a 15-foot stormwater easement extending from the northwest corner of the subject site to the northwest, and a 10-foot private water easement running between Lots 17 and 18. A public utility easement will be provided along the front of all lots for franchise utilities. The subject site is not traversed by any water courses. Therefore, the criteria are met.

- (.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 or 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: Only one new block will be created by the subdivision. The length of this block will be ± 490 feet. The Charbonneau Master Plan provides for a specific system of pedestrian and bicycle facilities which does not include through-block connectivity. This site is located within the Charbonneau Master Plan area and a through-block pedestrian crossing would not connect with existing pedestrian facilities. Therefore, this criterion does not apply and no pedestrian pathway is required.

- (.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 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.

Response: The Preliminary Landscaping Plan shows the planned locations of tree plantings. Therefore, the criteria are met.

- (.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.

Response: As discussed above, the size, width, shape, and orientation of lots comply with the Charbonneau Master Plan. The applicable criteria for the PDR-3 Zoning District are addressed in the responses to Section 4.124.3. The applicable criteria are met.

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.

Response: The project will be served by public sewer lines. Therefore, this criterion does not apply.

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.

Response: The subject property is zoned for residential development, and no business or industrial uses are planned. Therefore, this criterion does not apply.

(.06) **Access.** 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:

A. A lot on the outer radius of a curved street or tract with a private drive, or facing the circular end of a cul-de-sac shall have frontage of not less than twenty-five (25) feet upon a street or tract with a private drive, 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: Section 4.124.3(.04)(B) sets a minimum street frontage requirement of 40 feet, except for lots fronting a cul-de-sac. The Preliminary Subdivision Plans show 38 of the planned 40 lots with at least 40 feet of street frontage. Lot 12 and Lot 17 have less than 40 feet of street frontage on the bulb of an eyebrow street corner. Both of these lots are located on the outer radius of a curved street and have more than 25 feet of frontage, which meets exception A, above. Therefore, the criteria are met.

(.07) **Through lots.** Through lots shall be avoided except where essential to provide separation of residential development from major traffic arteries or adjacent nonresidential 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: Lots 30-40 will front SW Honor Loop to the south. Due to the size and configuration of the subject property in relation to existing development, the block containing Lots 30-40 cannot be designed with a depth to accommodate two rows of lots. Emergency services require a looped street for safe and efficient emergency access within the subdivision, which effectively limits the depth of the block. These constraints qualify as specific disadvantages related to the orientation of the site.

While there are several examples of through lots within Charbonneau – specifically, the homes along SW Lakeside Drive, SW Edgewater E, and SW Riviera Lane – a stormwater facility separates the northern portion of Lots 33-40 from SW Honor Loop. Applicant plans to include a plat note for a non-access reservation along the north side of Lots 30-32 to ensure access only from the south side of the block.

(.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 or tract with a private drive upon which the lots face.

Response: The side lines of all lots fronting straight streets run at right angles to the street. Lots 2-3, Lots 12-13, and Lots 16-18 are located on the curve of the street, and their side lines run at right angles to the subject curve as far as practicable. Therefore, this criterion is met.

(.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: Based on the layout of the planned subdivision, including lot sizes and street locations, re-division of the planned lots is impracticable. Therefore, this criterion does not apply.

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(.13) Corner lots. Lots on street intersections shall have a corner radius of not less than ten (10) feet.

Response: Lots 1, 29, and 30 are located on the corners of street intersections. All three lots have a corner radius of at least 10 feet. Therefore, this criterion is met.

CHAPTER 4 - SECTION 4.300 – 4.320 UNDERGROUND UTILITIES

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.

(.02) The location of the buried facilities shall conform to standards supplied to the subdivider by the City. The City also reserves the right to approve location of all surface-mounted transformers.

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- (.03) Interior easements (back lot lines) will only be used for storm or sanitary sewers, and front easements will be used for other utilities unless different locations are approved by the City Engineer. Easements satisfactory to the serving utilities shall be provided by the developer and shall be set forth on the plat.

Response: The Preliminary Subdivision Plans include underground utilities located per standards provided by the City and constructed in compliance with all applicable regulations. Easements will be used as approved by the City Engineer and set forth on the final plat. Therefore, all criteria are met.

CHAPTER 4 – SECTION 4.600 – 4.640.20 TREE PRESERVATION AND PROTECTION

Section 4.600.40. Exceptions

- (.01) Exception from requirement. Notwithstanding the requirement of WC 4.600.30(1), the following activities are allowed without a Tree Removal Permit, unless otherwise prohibited:

- F. The Charbonneau District, including its golf course, is exempt from the requirements of WC 4.600.30(1) on the basis that by and through the current CC&R's of the Charbonneau Country Club, the homeowners' association complies with all requirements of WC 4.610.30(1)(C)(1). This exception has been based upon the Tree Maintenance and Protection Plan that has been submitted by the Charbonneau Country Club and approved by the Planning Director. Tree removal activities remain subject to all applicable standards of this subchapter. Unless authorized by the City, this exception does not include tree removal upon any public easements or public property within the district. In the event that the CC&R's are changed relative to the effect of the Tree Maintenance and Protection Plan, then the Planning Director shall review whether such effect is material, whether it can be mitigated, and if not, may disallow the exemption.

Response: The approved Tree Maintenance and Protection Plan in effect in Charbonneau exempts this project from the specific standards of Section 4.600.30(1) and therefore a City of Wilsonville Tree Removal Permit (TRP) is not required.

IV. Conclusion

The required findings have been made and this written narrative and accompanying documentation demonstrate that the application is consistent with the applicable provisions of the City of Wilsonville Planning and Land Development Ordinance. The evidence in the record is substantial and supports approval of the application. Therefore, the Applicant respectfully requests that the City approve this application.



Exhibit A: Development Permit Application



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

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

Pre-Application Meeting Date: June 23, 2016

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

Applicant:

Name: Dennis Pahlisch
Company: Pahlisch Homes, Inc
Mailing Address: 210 Wilson Ave, Suite 100
City, State, Zip: Bend, OR 97702
Phone: contact consultant Fax: _____
E-mail: contact applicant's consultant

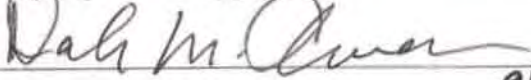
Authorized Representative: / Applicant's Consultant

Name: Monty Hurley
Company: AKS Engineering & Forestry, LLC
Mailing Address: 12965 SW Herman Rd, Suite 100
City, State, Zip: Tualatin, OR 97062
Phone: 503-563-6151 Fax: 503-563-6152
E-mail: monty@aks-eng.com

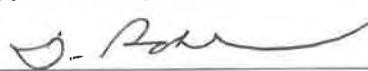
Property Owner:

Name: Charbonneau Golf Club
Company: _____
Mailing Address: 32020 SW Charbonneau Dr
City, State, Zip: Wilsonville, OR 97070
Phone: contact consultant Fax: _____
E-mail: contact applicant's consultant

Property Owner's Signature:


Printed Name: DALE M. OWEN Date: 9/1/2016

Applicant's Signature: (if different from Property Owner)


Printed Name: DENNIS PAHLISCH Date: 9-2-16

Site Location and Description:

Project Address if Available: NA Suite/Unit _____
Project Location: West side of SW Arbor Lake Drive in Charbonneau
Tax Map #(s): 3 1W 25 Tax Lot #(s): 325 County: Washington Clackamas

Request:

40-lot subdivision for construction of single-family homes

Project Type: Class I Class II Class III

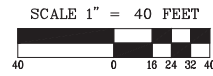
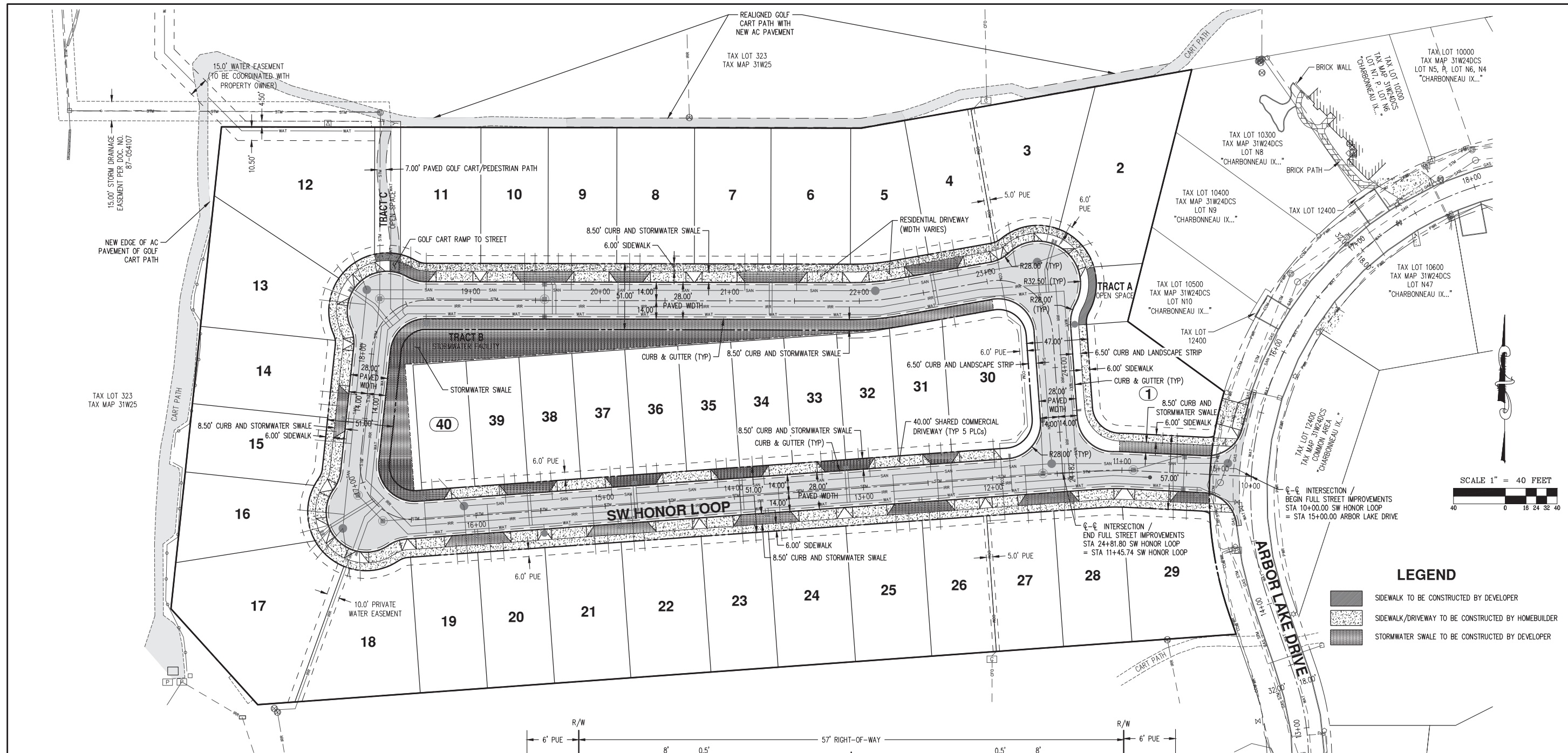
Residential Commercial Industrial Other: _____

Application Type(s):

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Annexation | <input type="checkbox"/> Appeal | <input type="checkbox"/> Comp Plan Map Amend | <input type="checkbox"/> Parks Plan Review |
| <input type="checkbox"/> Final Plat | <input type="checkbox"/> Major Partition | <input type="checkbox"/> Minor Partition | <input type="checkbox"/> Request to Modify Conditions |
| <input type="checkbox"/> Plan Amendment | <input checked="" type="checkbox"/> Planned Development | <input checked="" type="checkbox"/> Preliminary Plat | <input checked="" type="checkbox"/> Site Design Review |
| <input type="checkbox"/> Request for Special Meeting | <input type="checkbox"/> Request for Time Extension | <input type="checkbox"/> Signs | <input checked="" type="checkbox"/> Stage II Final Plan |
| <input type="checkbox"/> SROZ/SRIR Review | <input type="checkbox"/> Staff Interpretation | <input checked="" type="checkbox"/> Stage I Master Plan | <input type="checkbox"/> Variance |
| <input type="checkbox"/> Type C Tree Removal Plan | <input type="checkbox"/> Tree Permit (B or C) | <input type="checkbox"/> Temporary Use | <input type="checkbox"/> Other (describe) |
| <input type="checkbox"/> Villebois SAP | <input type="checkbox"/> Villebois PDP | <input type="checkbox"/> Villebois FDP | |
| <input type="checkbox"/> Zone Map Amendment | <input type="checkbox"/> Waiver(s) | <input type="checkbox"/> Conditional Use | |

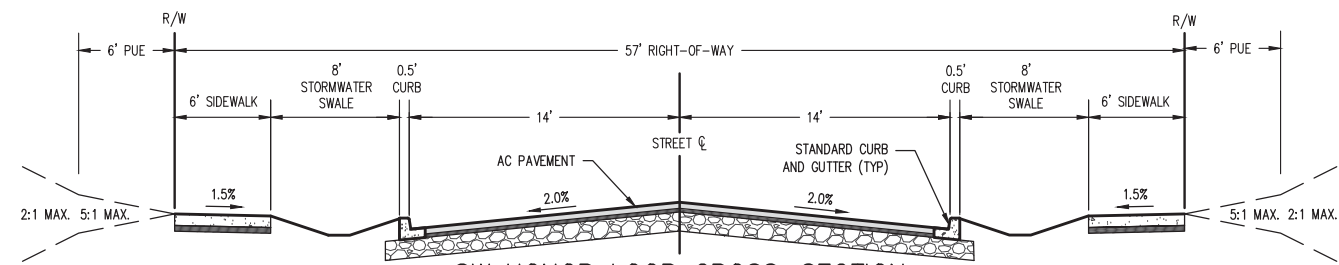


**Exhibit B: Approved Design Exception to the
Residential Street Cross-Section
(Drawing Number: RD-1015)**

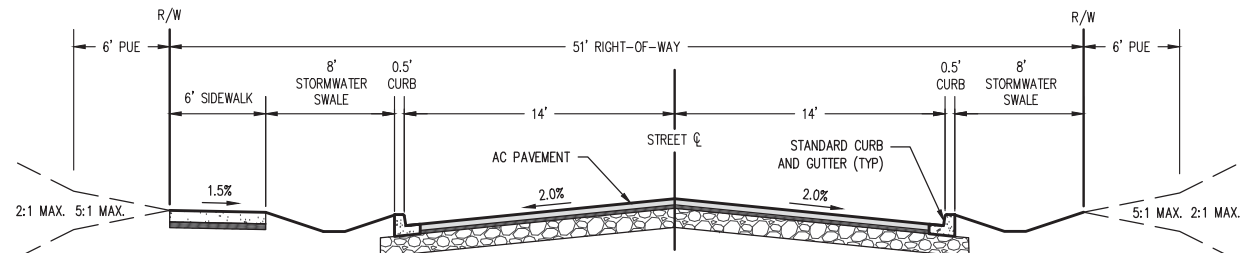


LEGEND

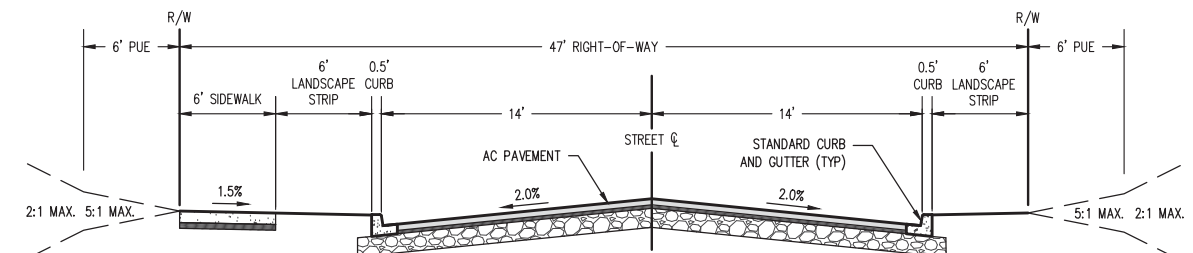
- SIDEWALK TO BE CONSTRUCTED BY DEVELOPER
- SIDEWALK/DRIVEWAY TO BE CONSTRUCTED BY HOMEOWNER
- STORMWATER SWALE TO BE CONSTRUCTED BY DEVELOPER



SW HONOR LOOP CROSS-SECTION
 STA: 10+00.00 - 11+45.74
 NOT TO SCALE



SW HONOR LOOP CROSS-SECTION
 STA: 11+45.74 - 23+01.25
 NOT TO SCALE



SW HONOR LOOP CROSS-SECTION
 STA: 23+01.25 - 24+81.80
 NOT TO SCALE

AKS DRAWING FILE: 4898 PROFILE.DWG | LAYOUT: P1-04

July 11, 2016

City of Wilsonville
Planning Department
Wilsonville, OR 97070

Dear City Planners:


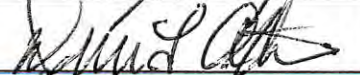
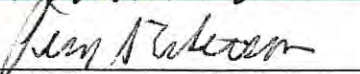


We wish to express a "look and feel" opinion about the new neighborhood in Charbonneau being planned by Pahlisch Homes.




Although we recognize that many new subdivisions being built in Wilsonville require sidewalks, and in some cases sidewalks on both sides of the street, we believe one of the best ways to ensure a consistent look and feel in Charbonneau is to allow the new subdivision to be built with either no sidewalks or sidewalks on only one side of the street.

No other area in the core of Charbonneau has been built with sidewalks on both sides of the street. And no Charbonneau area with a line of sight to the new neighborhood has any sidewalks at all. Those with sidewalks inside the French Prairie loop are on short stretches of Fairway Drive and Lake Drive. Outside the French Prairie loop sidewalks are found only in Country View Estates.

Those few areas with sidewalks are generally one of two styles. One has high curbs street side, like on Country View Drive, with dips in the sidewalk with each separate driveway. The other, like those on Fairway Drive, has low curbs that are on the same plane as the driveways, without dips. The first style is very difficult for walkers the age of most Charbonneau residents because the frequent elevation change requires one to focus on the sidewalk rather than on the scenery of the area. The jolt one gets to knees, hips and one's lower back is significant in the age group of Charbonneau residents. The second sidewalk style has a large enough drainage slope, like on Fairway Drive, that the hip on one side of a walker's body is below the hip on the other side, thus creating wear and tear and likelihood of injury. As a result, residents walk on the flattest area around, i.e., the edge of the street.

The following residents living near the new development are requesting that the City of Wilsonville allow the development to be planned with either no sidewalks or sidewalks on only one side of the street.

Name	Signature	Address
Larry Baugh		32075 SW Arbor Lake
DENNIS ATKIN		32065 SW ARBOR LAKE DR
Rory Esterson		32055 SW ARBOR LAKE DR
Larry Esterson		32055 SW Arbor Lake Dr.
KATHIE BARTON		32570 SW Arbor Lake Dr.

Name	Signature	Address
Sherry L. Myers	SHERRY L. MYERS	7750 SW Arbor Glen Ct.
Claudia Ostrem	C Ostrem	31443 SW Old Farm Rd
PAUL NEWMAN		31476 SW OLD FARM RD
LESLIE KEEPER		31555 SW Arbor Glen Ln
James A. Sanford		8336 SW Mariners Dr

Thank you for your consideration.

SW Arbor Lake Drive (Abutting the site, looking north)



Charbonneau Subdivision
Design Exception Request
Imagery from Surrounding Streets

SW East Lake Court (neighborhood east of the site, looking east)



**Charbonneau Subdivision
Design Exception Request
Imagery from Surrounding Streets**

SW Arbor Glen Loop (neighborhood north of the site, looking east)



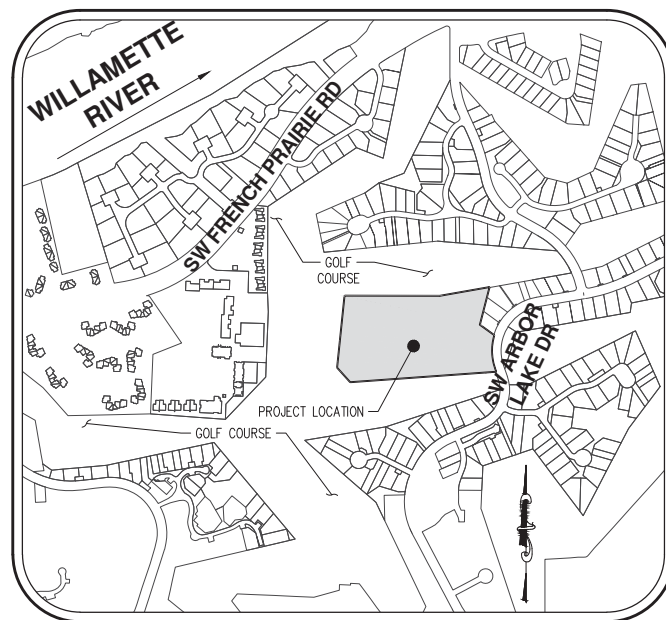
**Charbonneau Subdivision
Design Exception Request
Imagery from Surrounding Streets**



Exhibit C: Preliminary Subdivision Plans

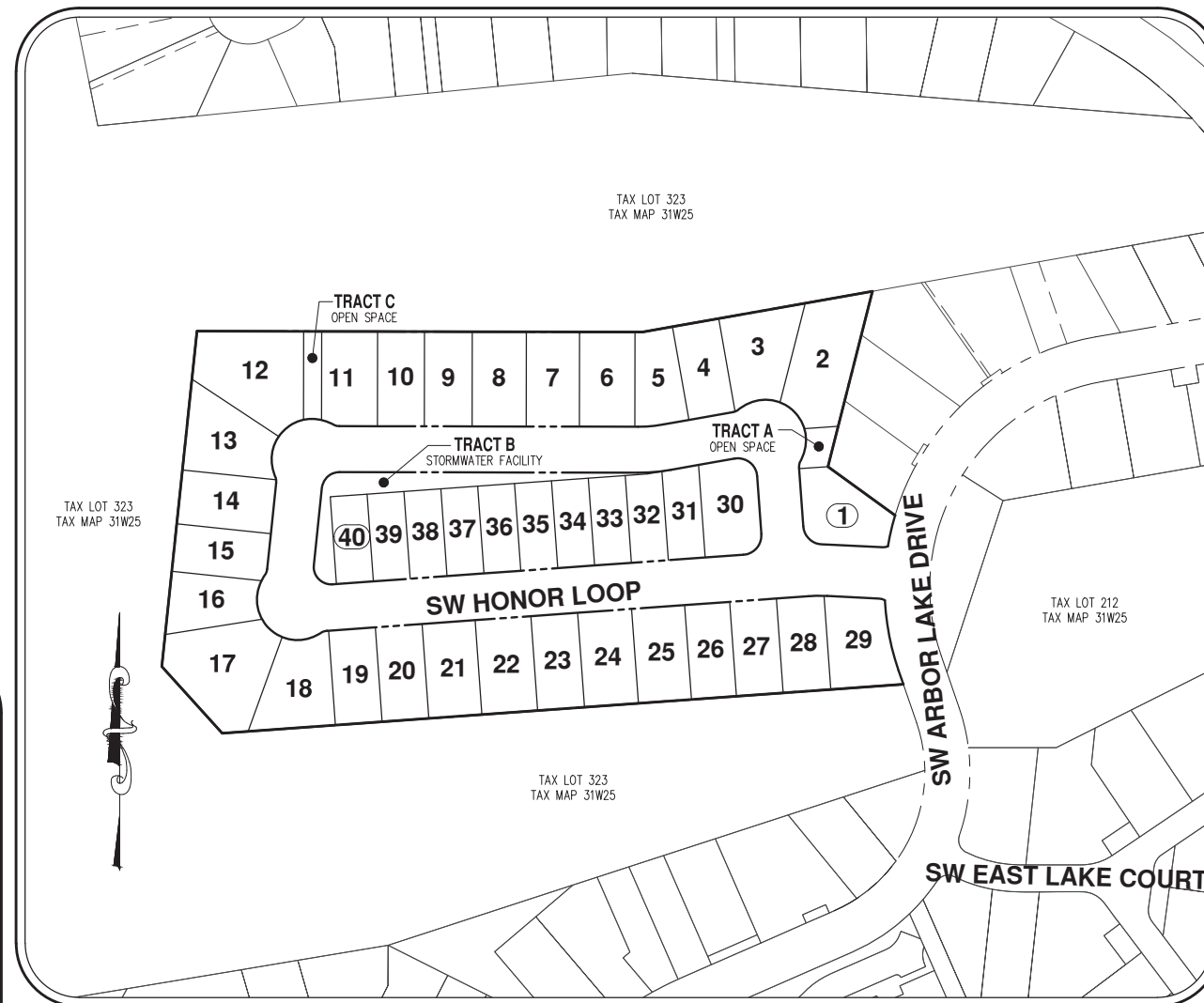
CHARBONNEAU RANGE

PRELIMINARY SUBDIVISION PLANS



VICINITY MAP

1"=500'



SITE MAP

1"=100'

APPLICANT:

PAHLISCH HOMES, INC
210 SW WILSON AVENUE, SUITE 100
BEND, OR 97702

**CONSULTING
PLANNING/
ENGINEERING/
SURVEYING FIRM:**

AKS ENGINEERING & FORESTRY, LLC
CONTACT: MONTY HURLEY
12965 SW HERMAN ROAD, SUITE 100
TUALATIN, OR 97062
PH: 503-563-6151
FAX: 503-563-6152

**PROPERTY
LOCATION:**

SW ARBOR LAKE DRIVE
WILSONVILLE, OR 97070

**PROPERTY
DESCRIPTION:**

TAX LOT 325 CLACKAMAS COUNTY
ASSESSOR'S MAP 3-1W-25 LOCATED IN
SECTION 25, TOWNSHIP 3 SOUTH, RANGE 1
WEST, WILLAMETTE MERIDIAN, CLACKAMAS
COUNTY, OREGON.

EXISTING LAND USE:

EXISTING GOLF COURSE DRIVING RANGE
WITH ASPHALT PAVEMENT CART PATHS,
LAWN, TEE BOXES, AND RAISED GREENS.

PROJECT PURPOSE:

RESIDENTIAL SUBDIVISION

ZONING:

PDR-3

VERTICAL DATUM:

VERTICAL DATUM: ELEVATIONS ARE BASED
ON NGS BENCHMARK DESIGNATION QUEV
(PID: RD1511), LOCATED AT THE NW
CORNER OF AIRPORT ROAD NE AND KEIL
ROAD NE NEAR THE AURORA AIRPORT.
ELEVATION = 190.25 FEET (NAVD 88).

**WATER, SANITARY
SEWER & STORM
DRAINAGE:**

CITY OF WILSONVILLE

IRRIGATION WATER:

CHARBONNEAU WATER COMPANY, LLC

LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
DECIDUOUS TREE			STORM SEWER CLEAN OUT		
CONIFEROUS TREE			STORM SEWER CATCH BASIN		
FIRE HYDRANT			STORM SEWER AREA DRAIN		
WATER BLOWOFF			STORM SEWER MANHOLE		
WATER METER			GAS METER		
WATER VALVE			GAS VALVE		
DOUBLE CHECK VALVE			GUY WIRE ANCHOR		
AIR RELEASE VALVE			POWER POLE		
SANITARY SEWER CLEAN OUT			POWER VAULT		
SANITARY SEWER MANHOLE			POWER JUNCTION BOX		
SIGN			POWER PEDESTAL		
STREET LIGHT			COMMUNICATIONS VAULT		
MAILBOX			COMMUNICATIONS JUNCTION BOX		
			COMMUNICATIONS RISER		

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		
BOUNDARY LINE		
PROPERTY LINE		
CENTERLINE		
DITCH		
CURB		
EDGE OF PAVEMENT		
EASEMENT		
FENCE LINE		
GRAVEL EDGE		
POWER LINE		
OVERHEAD WIRE		
COMMUNICATIONS LINE		
FIBER OPTIC LINE		
GAS LINE		
STORM SEWER LINE		
SANITARY SEWER LINE		
WATER LINE		

SHEET INDEX

- P1-00 COVER SHEET WITH SITE AND VICINITY MAPS
- P1-01 PRELIMINARY EXISTING CONDITIONS PLAN
- P1-02 PRELIMINARY SUBDIVISION PLAT
- P1-03 PRELIMINARY DEMOLITION, GRADING, TREE PRESERVATION & REMOVAL, & EROSION & SEDIMENT CONTROL PLAN
- P1-04 PRELIMINARY STREET IMPROVEMENTS PLAN
- P1-05 PRELIMINARY STREET PROFILES
- P1-06 PRELIMINARY COMPOSITE UTILITY PLAN
- P1-07 PRELIMINARY SUBDIVISION PLAN WITH AERIAL PHOTOGRAPH
- P1-08 PRELIMINARY LANDSCAPING PLAN

AKS
AKS ENGINEERING & FORESTRY, LLC
12965 SW HERMAN RD. STE 100
TUALATIN, OR 97062
P: 503.563.6151
F: 503.563.6152
aks-eng.com

CHARBONNEAU RANGE
WILSONVILLE
OREGON
CLACKAMAS COUNTY ASSESSOR'S MAP 3 1W 25
TAX LOT 325

**COVER SHEET WITH SITE
AND VICINITY MAPS**

DESIGNED BY: RSW
DRAWN BY: JDR/JRN
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 09/02/2016
REGISTERED PROFESSIONAL
LAND SURVEYOR
MONTY HURLEY
RENEWAL DATE: 6/30/17

REVISIONS
JOB NUMBER
4898
SHEET
P1-00

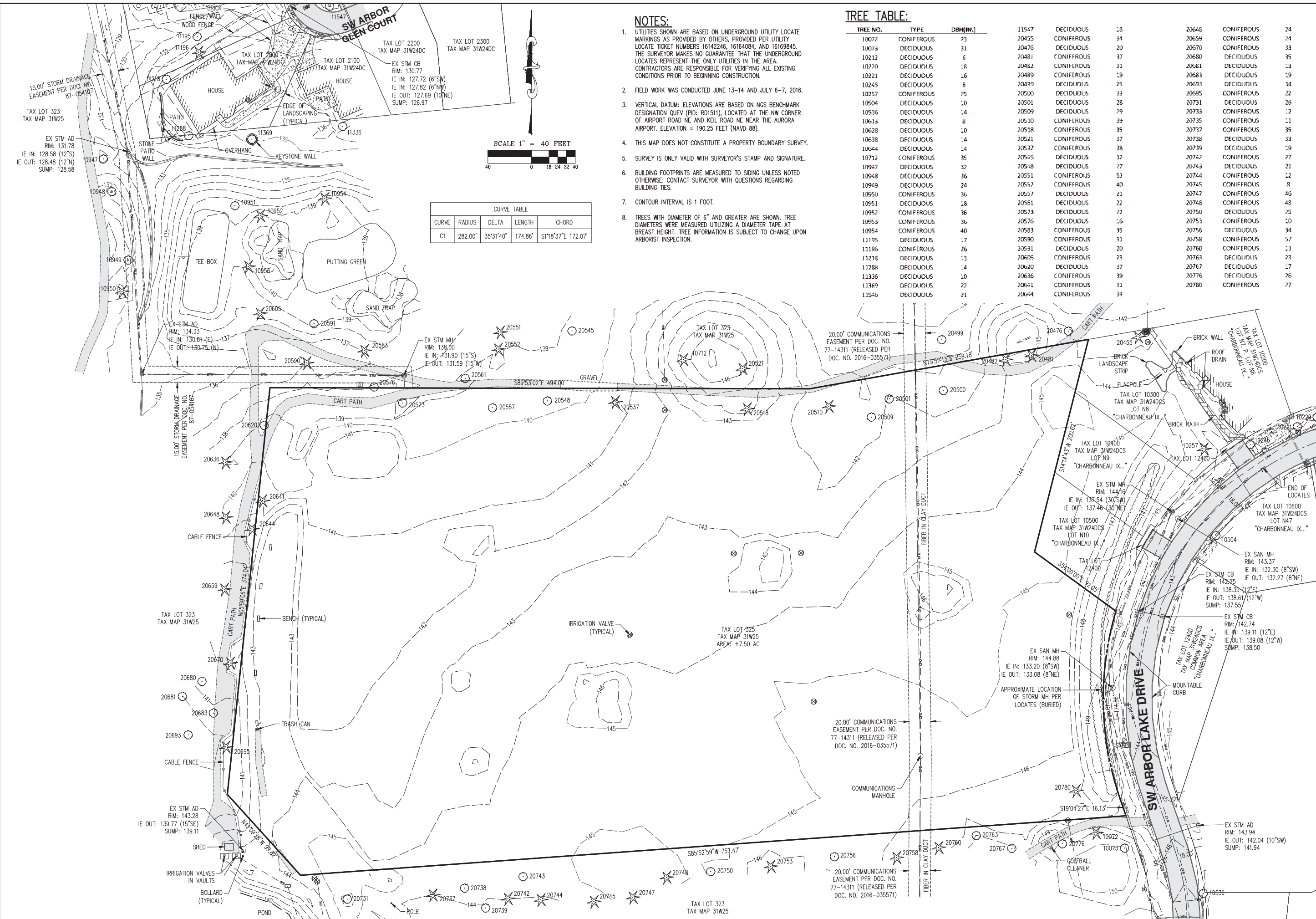
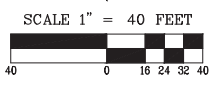
- NOTES:**
- UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBERS 16142246, 16164084, AND 16169845. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
 - FIELD WORK WAS CONDUCTED JUNE 13-14 AND JULY 6-7, 2016.
 - VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS BENCHMARK DESIGNATION QUEV (PID: RD1511), LOCATED AT THE NW CORNER OF AIRPORT ROAD NE AND KEIL ROAD NE NEAR THE AURORA AIRPORT. ELEVATION = 190.25 FEET (NAVD 88).
 - THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
 - SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE.
 - BUILDING FOOTPRINTS ARE MEASURED TO SIDING UNLESS NOTED OTHERWISE. CONTACT SURVEYOR WITH QUESTIONS REGARDING BUILDING TIES.
 - CONTOUR INTERVAL IS 1 FOOT.
 - TREES WITH DIAMETER OF 6" AND GREATER ARE SHOWN. TREE DIAMETERS WERE MEASURED UTILIZING A DIAMETER TAPE AT BREAST HEIGHT. TREE INFORMATION IS SUBJECT TO CHANGE UPON ARBORIST INSPECTION.

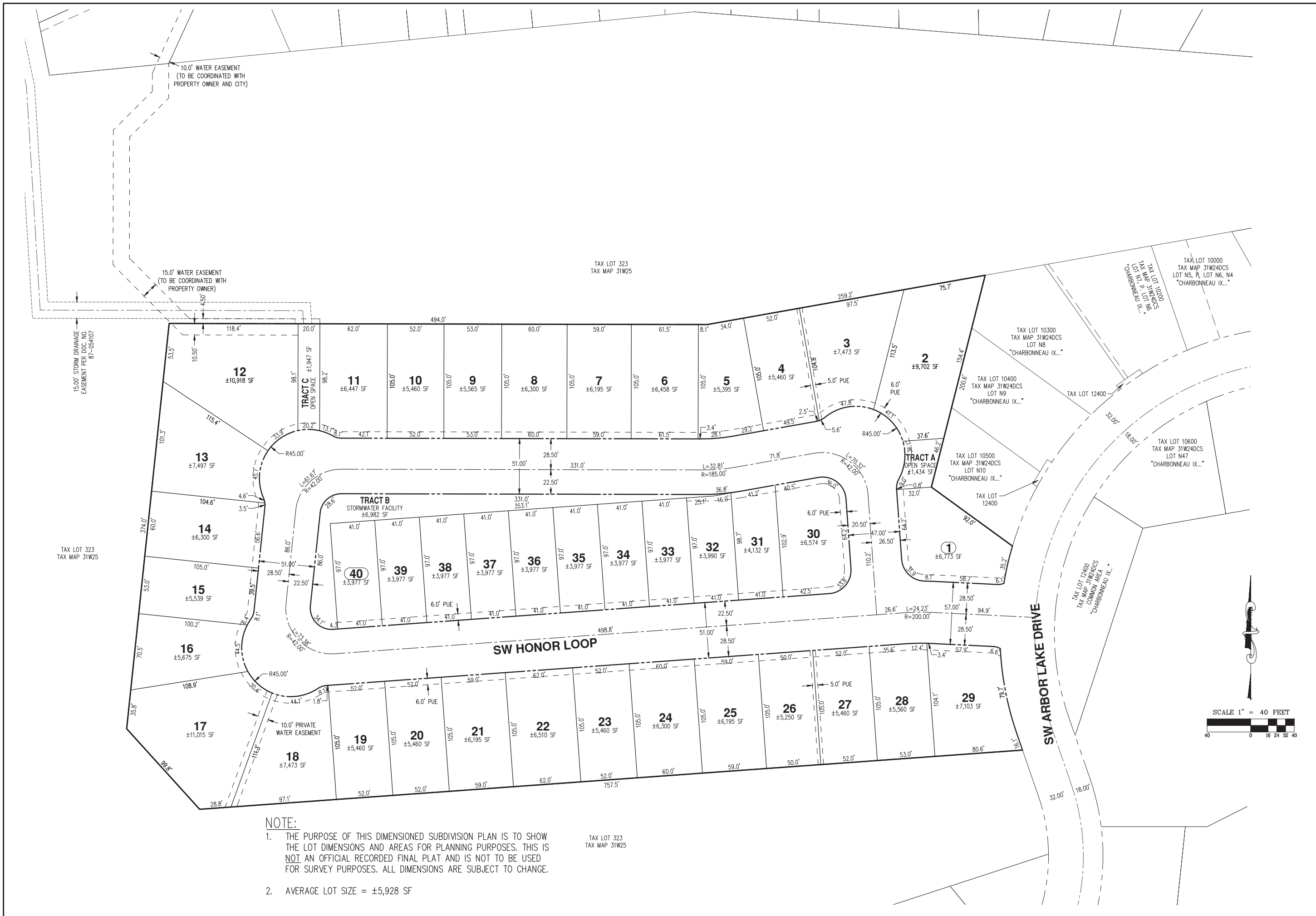
TREE TABLE:

TREE NO.	TYPE	DBH(IN.)			
10072	CONIFEROUS	73	11547	DECIDUOUS	18
10073	CONIFEROUS	31	20455	CONIFEROUS	34
10212	CONIFEROUS	6	20476	CONIFEROUS	20
10270	CONIFEROUS	18	20481	CONIFEROUS	37
10221	CONIFEROUS	6	20482	CONIFEROUS	31
10245	CONIFEROUS	16	20489	CONIFEROUS	19
10257	CONIFEROUS	25	20499	CONIFEROUS	25
10504	CONIFEROUS	10	20500	CONIFEROUS	33
10536	CONIFEROUS	14	20501	CONIFEROUS	28
10614	CONIFEROUS	8	20509	CONIFEROUS	29
10628	CONIFEROUS	10	20510	CONIFEROUS	39
10638	CONIFEROUS	14	20518	CONIFEROUS	35
10644	CONIFEROUS	14	20521	CONIFEROUS	37
10712	CONIFEROUS	35	20537	CONIFEROUS	38
10947	CONIFEROUS	37	20545	CONIFEROUS	32
10948	CONIFEROUS	36	20548	CONIFEROUS	27
10949	CONIFEROUS	24	20551	CONIFEROUS	53
10950	CONIFEROUS	36	20552	CONIFEROUS	40
10951	CONIFEROUS	18	20557	CONIFEROUS	21
10952	CONIFEROUS	36	20561	CONIFEROUS	22
10953	CONIFEROUS	36	20573	CONIFEROUS	22
10954	CONIFEROUS	16	20576	CONIFEROUS	25
11195	CONIFEROUS	17	20583	CONIFEROUS	35
11196	CONIFEROUS	26	20590	CONIFEROUS	31
11218	CONIFEROUS	13	20591	CONIFEROUS	20
11288	CONIFEROUS	4	20605	CONIFEROUS	23
11336	CONIFEROUS	10	20620	CONIFEROUS	37
11369	CONIFEROUS	27	20636	CONIFEROUS	39
11546	CONIFEROUS	21	20641	CONIFEROUS	31
			20644	CONIFEROUS	34
			20648	CONIFEROUS	24
			20659	CONIFEROUS	24
			20670	CONIFEROUS	33
			20680	CONIFEROUS	35
			20681	CONIFEROUS	13
			20683	CONIFEROUS	19
			20693	CONIFEROUS	26
			20731	CONIFEROUS	22
			20733	CONIFEROUS	12
			20735	CONIFEROUS	11
			20737	CONIFEROUS	35
			20738	CONIFEROUS	19
			20739	CONIFEROUS	33
			20742	CONIFEROUS	27
			20743	CONIFEROUS	21
			20744	CONIFEROUS	12
			20745	CONIFEROUS	8
			20746	CONIFEROUS	46
			20748	CONIFEROUS	48
			20750	CONIFEROUS	25
			20753	CONIFEROUS	10
			20756	CONIFEROUS	34
			20758	CONIFEROUS	57
			20760	CONIFEROUS	13
			20763	CONIFEROUS	23
			20767	CONIFEROUS	17
			20776	CONIFEROUS	26
			20780	CONIFEROUS	27

CURVE TABLE

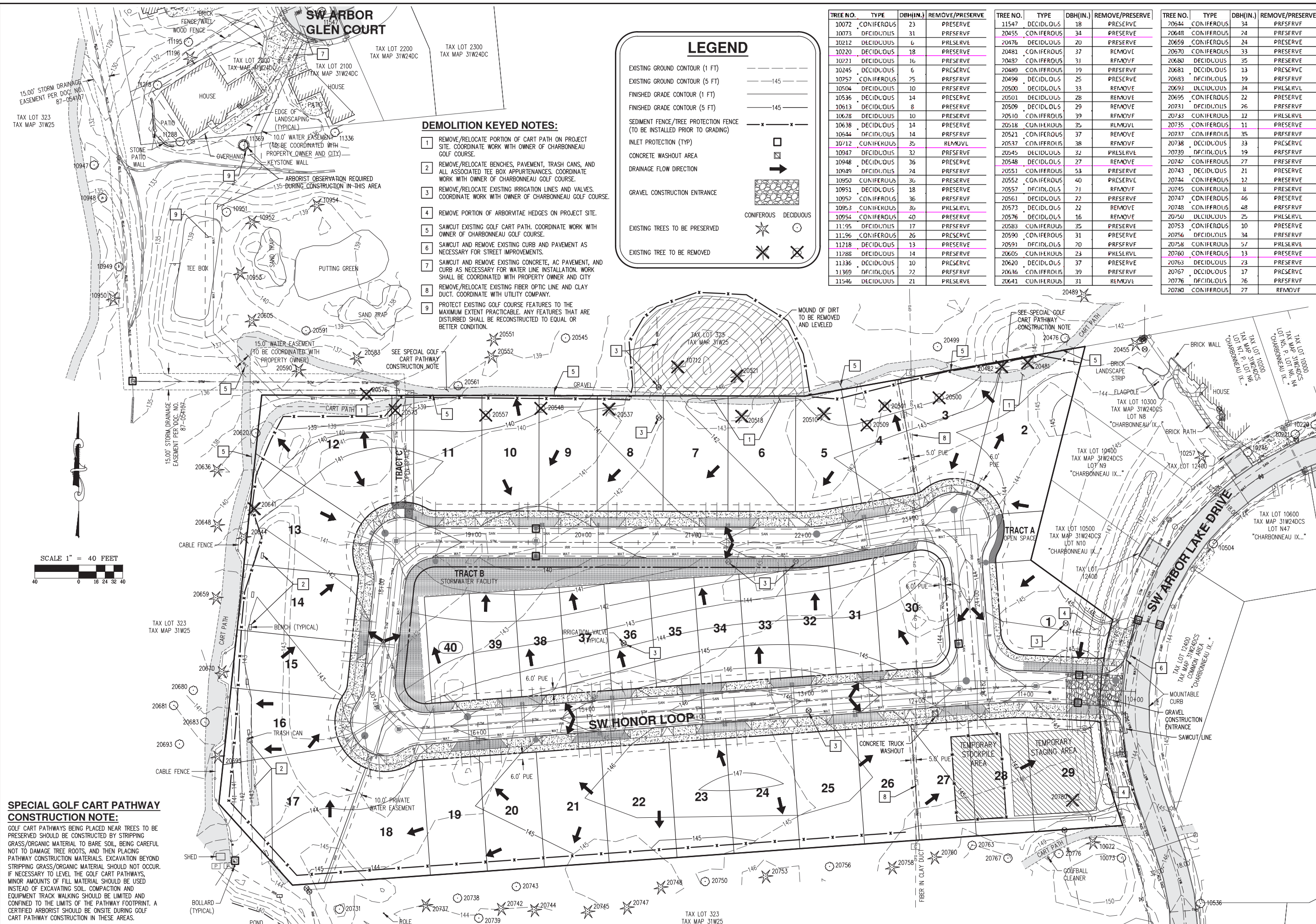
CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	282.00'	35°31'40"	174.86'	S118°37'E 172.07'





NOTE:
 1. THE PURPOSE OF THIS DIMENSIONED SUBDIVISION PLAN IS TO SHOW THE LOT DIMENSIONS AND AREAS FOR PLANNING PURPOSES. THIS IS NOT AN OFFICIAL RECORDED FINAL PLAT AND IS NOT TO BE USED FOR SURVEY PURPOSES. ALL DIMENSIONS ARE SUBJECT TO CHANGE.
 2. AVERAGE LOT SIZE = ±5,928 SF

TAX LOT 323
 TAX MAP 31W25



SPECIAL GOLF CART PATHWAY CONSTRUCTION NOTE:
 GOLF CART PATHWAYS BEING PLACED NEAR TREES TO BE PRESERVED SHOULD BE CONSTRUCTED BY STRIPPING GRASS/ORGANIC MATERIAL TO BARE SOIL, BEING CAREFUL NOT TO DAMAGE TREE ROOTS, AND THEN PLACING PATHWAY CONSTRUCTION MATERIALS. EXCAVATION BEYOND STRIPPING GRASS/ORGANIC MATERIAL SHOULD NOT OCCUR. IF NECESSARY TO LEVEL THE GOLF CART PATHWAYS, MINOR AMOUNTS OF FILL MATERIAL SHOULD BE USED INSTEAD OF EXCAVATING SOIL. COMPACTION AND EQUIPMENT TRACK WALKING SHOULD BE LIMITED AND CONFINED TO THE LIMITS OF THE PATHWAY FOOTPRINT. A CERTIFIED ARBORIST SHOULD BE ONSITE DURING GOLF CART PATHWAY CONSTRUCTION IN THESE AREAS.

- DEMOLITION KEYED NOTES:**
- REMOVE/RELOCATE PORTION OF CART PATH ON PROJECT SITE. COORDINATE WORK WITH OWNER OF CHARBONNEAU GOLF COURSE.
 - REMOVE/RELOCATE BENCHES, PAVEMENT, TRASH CANS, AND ALL ASSOCIATED TEE BOX APPURTENANCES. COORDINATE WORK WITH OWNER OF CHARBONNEAU GOLF COURSE.
 - REMOVE/RELOCATE EXISTING IRRIGATION LINES AND VALVES. COORDINATE WORK WITH OWNER OF CHARBONNEAU GOLF COURSE.
 - REMOVE PORTION OF ARBORVITAE HEDGES ON PROJECT SITE.
 - SAWCUT EXISTING GOLF CART PATH. COORDINATE WORK WITH OWNER OF CHARBONNEAU GOLF COURSE.
 - SAWCUT AND REMOVE EXISTING CURB AND PAVEMENT AS NECESSARY FOR STREET IMPROVEMENTS.
 - SAWCUT AND REMOVE EXISTING CONCRETE, AC PAVEMENT, AND CURB AS NECESSARY FOR WATER LINE INSTALLATION. WORK SHALL BE COORDINATED WITH PROPERTY OWNER AND CITY.
 - REMOVE/RELOCATE EXISTING FIBER OPTIC LINE AND CLAY DUCT. COORDINATE WITH UTILITY COMPANY.
 - PROTECT EXISTING GOLF COURSE FEATURES TO THE MAXIMUM EXTENT PRACTICABLE. ANY FEATURES THAT ARE DISTURBED SHALL BE RECONSTRUCTED TO EQUAL OR BETTER CONDITION.

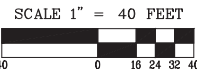
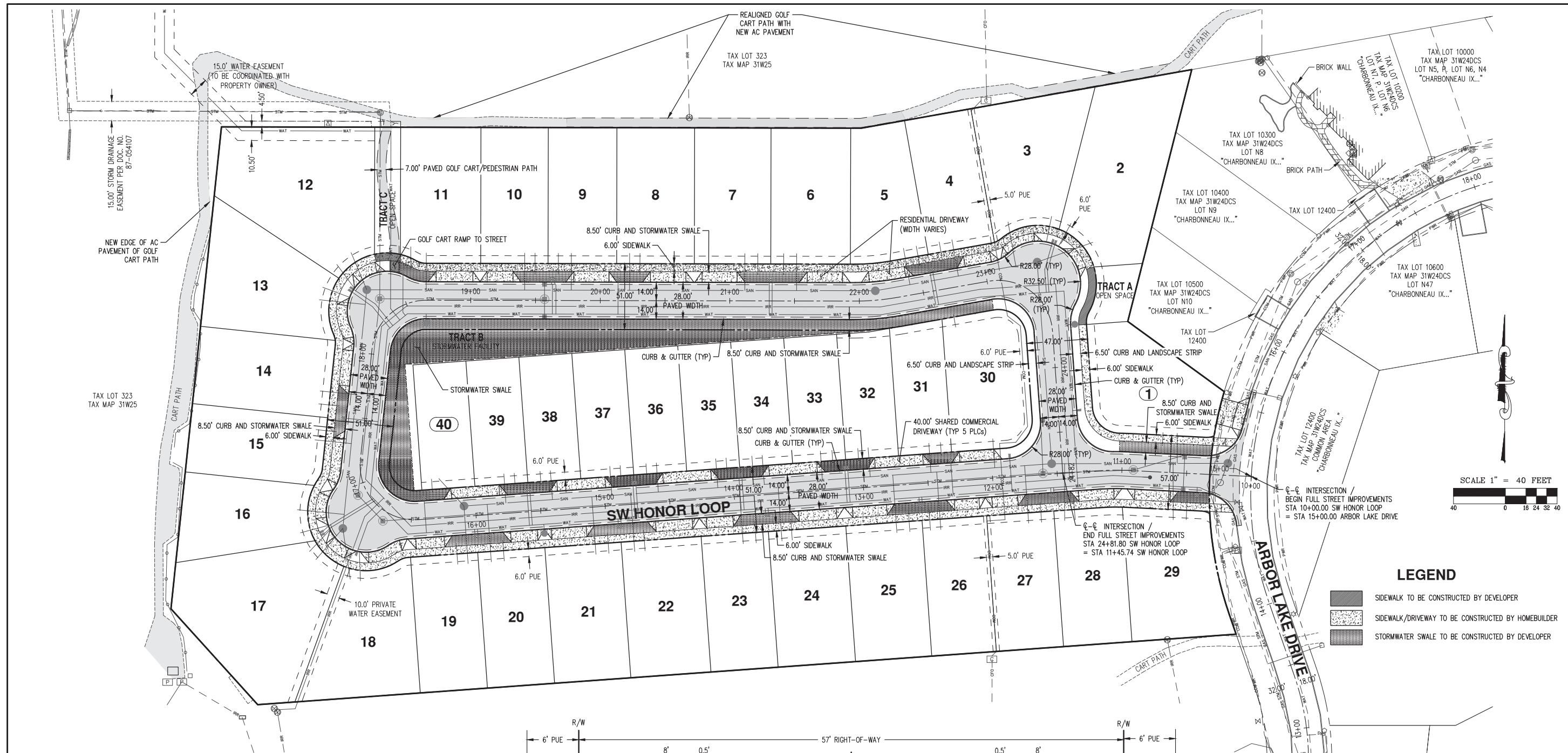
LEGEND

- EXISTING GROUND CONTOUR (1 FT) ————
- EXISTING GROUND CONTOUR (5 FT) ————
- FINISHED GRADE CONTOUR (1 FT) ————
- FINISHED GRADE CONTOUR (5 FT) ————
- SEDIMENT FENCE/TREE PROTECTION FENCE (TO BE INSTALLED PRIOR TO GRADING) — x — x —
- INLET PROTECTION (TYP) □
- CONCRETE WASHOUT AREA □
- DRAINAGE FLOW DIRECTION →
- GRAVEL CONSTRUCTION ENTRANCE [Pattern]
- EXISTING TREES TO BE PRESERVED * (CONIFEROUS) ○ (DECIDUOUS)
- EXISTING TREE TO BE REMOVED ✕ (CONIFEROUS) ✕ (DECIDUOUS)

TREE NO.	TYPE	DBH(IN.)	REMOVE/PRESERVE
10072	CONIFEROUS	23	PRESERVE
10073	DECIDUOUS	31	PRESERVE
10212	DECIDUOUS	6	PRESERVE
10220	DECIDUOUS	18	PRESERVE
10221	DECIDUOUS	16	PRESERVE
10245	DECIDUOUS	6	PRESERVE
10257	CONIFEROUS	25	PRESERVE
10504	DECIDUOUS	10	PRESERVE
10536	DECIDUOUS	14	PRESERVE
10513	DECIDUOUS	8	PRESERVE
10628	DECIDUOUS	10	PRESERVE
10638	DECIDUOUS	14	PRESERVE
10644	DECIDUOUS	14	PRESERVE
10712	CONIFEROUS	35	REMOVE
10947	DECIDUOUS	32	PRESERVE
10948	DECIDUOUS	36	PRESERVE
10949	DECIDUOUS	24	PRESERVE
10950	CONIFEROUS	36	PRESERVE
10951	DECIDUOUS	18	PRESERVE
10952	CONIFEROUS	36	PRESERVE
10953	CONIFEROUS	36	PRESERVE
10954	CONIFEROUS	40	PRESERVE
11195	DECIDUOUS	17	PRESERVE
11196	CONIFEROUS	26	PRESERVE
11218	DECIDUOUS	13	PRESERVE
11288	DECIDUOUS	14	PRESERVE
11336	DECIDUOUS	10	PRESERVE
11369	DECIDUOUS	22	PRESERVE
11546	DECIDUOUS	21	PRESERVE

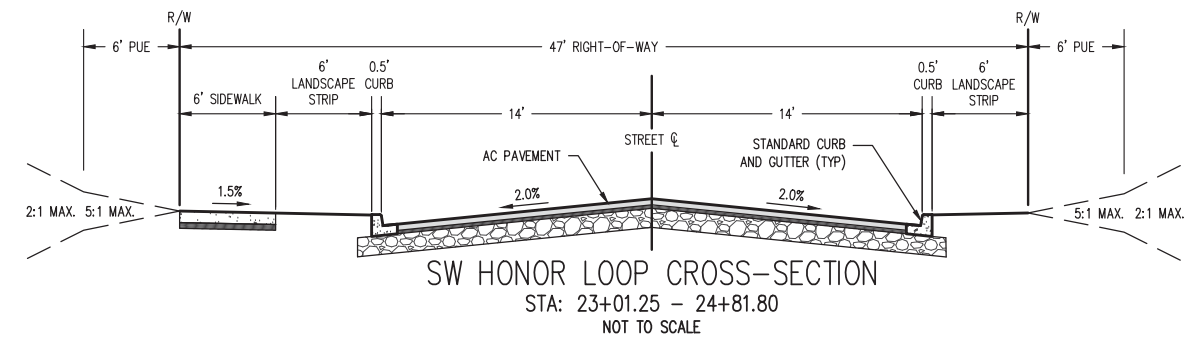
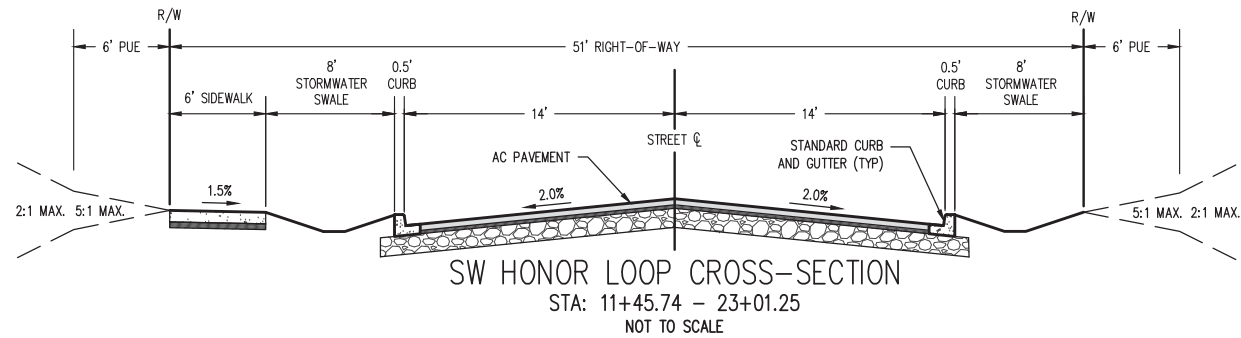
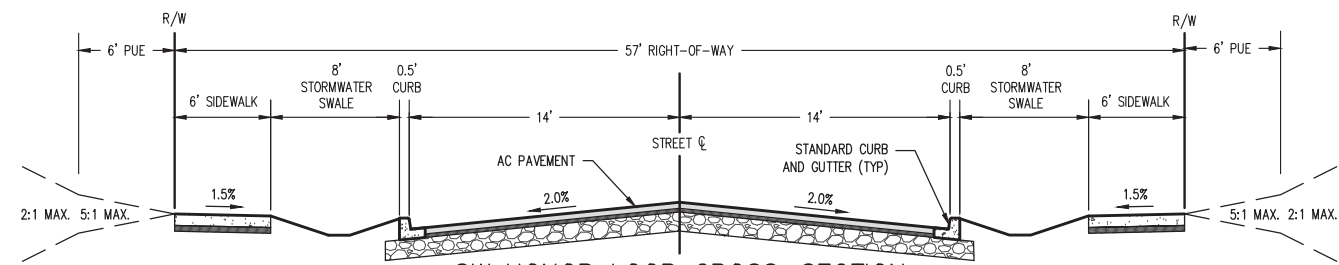
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11547	DECIDUOUS	18	PRESERVE
20455	CONIFEROUS	34	PRESERVE
20476	DECIDUOUS	20	PRESERVE
20481	CONIFEROUS	37	REMOVE
20487	CONIFEROUS	31	REMOVE
20489	CONIFEROUS	19	PRESERVE
20499	DECIDUOUS	25	PRESERVE
20500	DECIDUOUS	33	REMOVE
20501	DECIDUOUS	28	REMOVE
20509	DECIDUOUS	29	REMOVE
20510	CONIFEROUS	39	REMOVE
20518	CONIFEROUS	35	REMOVE
20521	CONIFEROUS	37	REMOVE
20537	CONIFEROUS	38	REMOVE
20545	DECIDUOUS	32	PRESERVE
20548	DECIDUOUS	27	REMOVE
20551	CONIFEROUS	53	PRESERVE
20552	CONIFEROUS	40	PRESERVE
20557	DECIDUOUS	21	REMOVE
20561	DECIDUOUS	22	PRESERVE
20573	DECIDUOUS	22	REMOVE
20576	DECIDUOUS	16	REMOVE
20583	CONIFEROUS	35	PRESERVE
20590	CONIFEROUS	31	PRESERVE
20591	DECIDUOUS	20	PRESERVE
20605	CONIFEROUS	23	PRESERVE
20620	DECIDUOUS	37	PRESERVE
20636	CONIFEROUS	39	PRESERVE
20641	CONIFEROUS	31	REMOVE

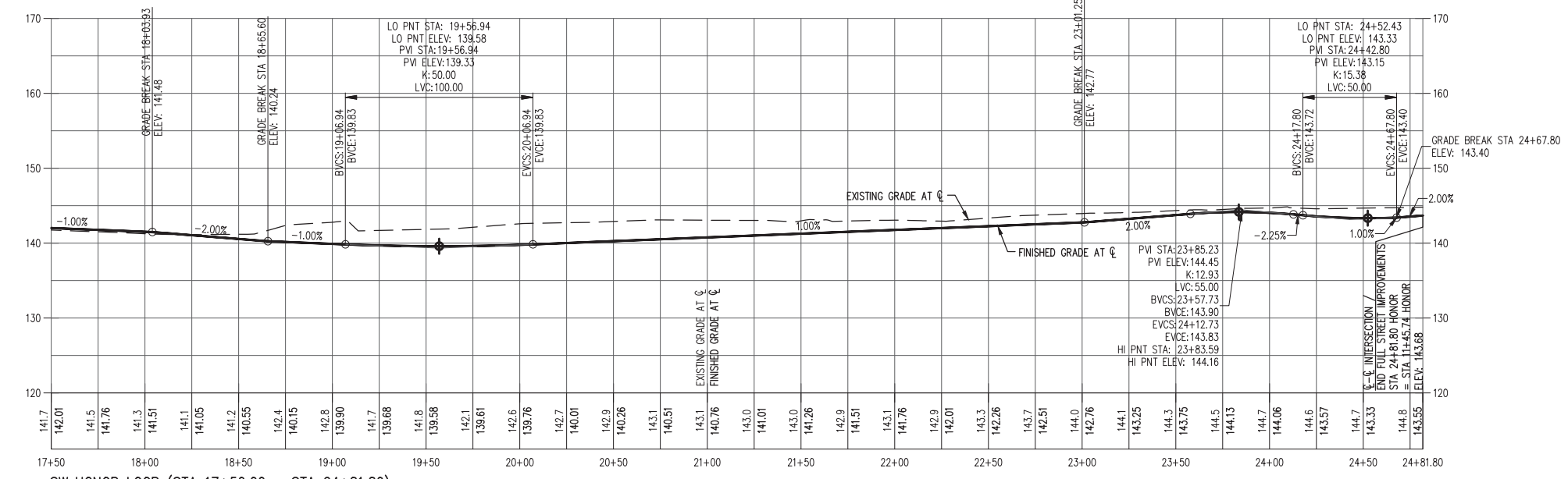
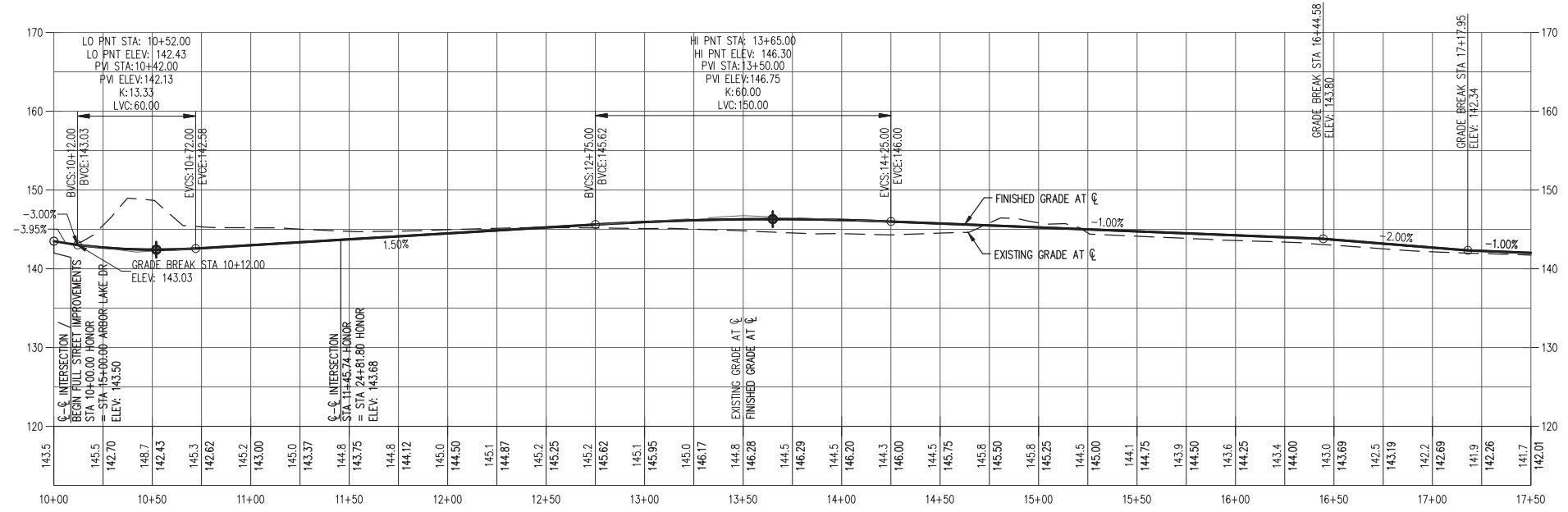
TREE NO.	TYPE	DBH(IN.)	REMOVE/PRESERVE
20644	CONIFEROUS	34	PRESERVE
20648	CONIFEROUS	24	PRESERVE
20659	CONIFEROUS	24	PRESERVE
20670	CONIFEROUS	33	PRESERVE
20680	DECIDUOUS	35	PRESERVE
20681	DECIDUOUS	13	PRESERVE
20683	DECIDUOUS	19	PRESERVE
20693	DECIDUOUS	34	PRESERVE
20695	CONIFEROUS	22	PRESERVE
20731	DECIDUOUS	26	PRESERVE
20733	CONIFEROUS	12	PRESERVE
20735	CONIFEROUS	11	PRESERVE
20737	CONIFEROUS	35	PRESERVE
20738	DECIDUOUS	33	PRESERVE
20739	DECIDUOUS	19	PRESERVE
20742	CONIFEROUS	77	PRESERVE
20743	DECIDUOUS	21	PRESERVE
20744	CONIFEROUS	12	PRESERVE
20745	CONIFEROUS	8	PRESERVE
20747	CONIFEROUS	46	PRESERVE
20748	CONIFEROUS	48	PRESERVE
20750	DECIDUOUS	25	PRESERVE
20753	CONIFEROUS	10	PRESERVE
20756	DECIDUOUS	34	PRESERVE
20758	CONIFEROUS	57	PRESERVE
20760	CONIFEROUS	13	PRESERVE
20763	DECIDUOUS	23	PRESERVE
20767	DECIDUOUS	17	PRESERVE
20776	DECIDUOUS	26	PRESERVE
20780	CONIFEROUS	77	REMOVE

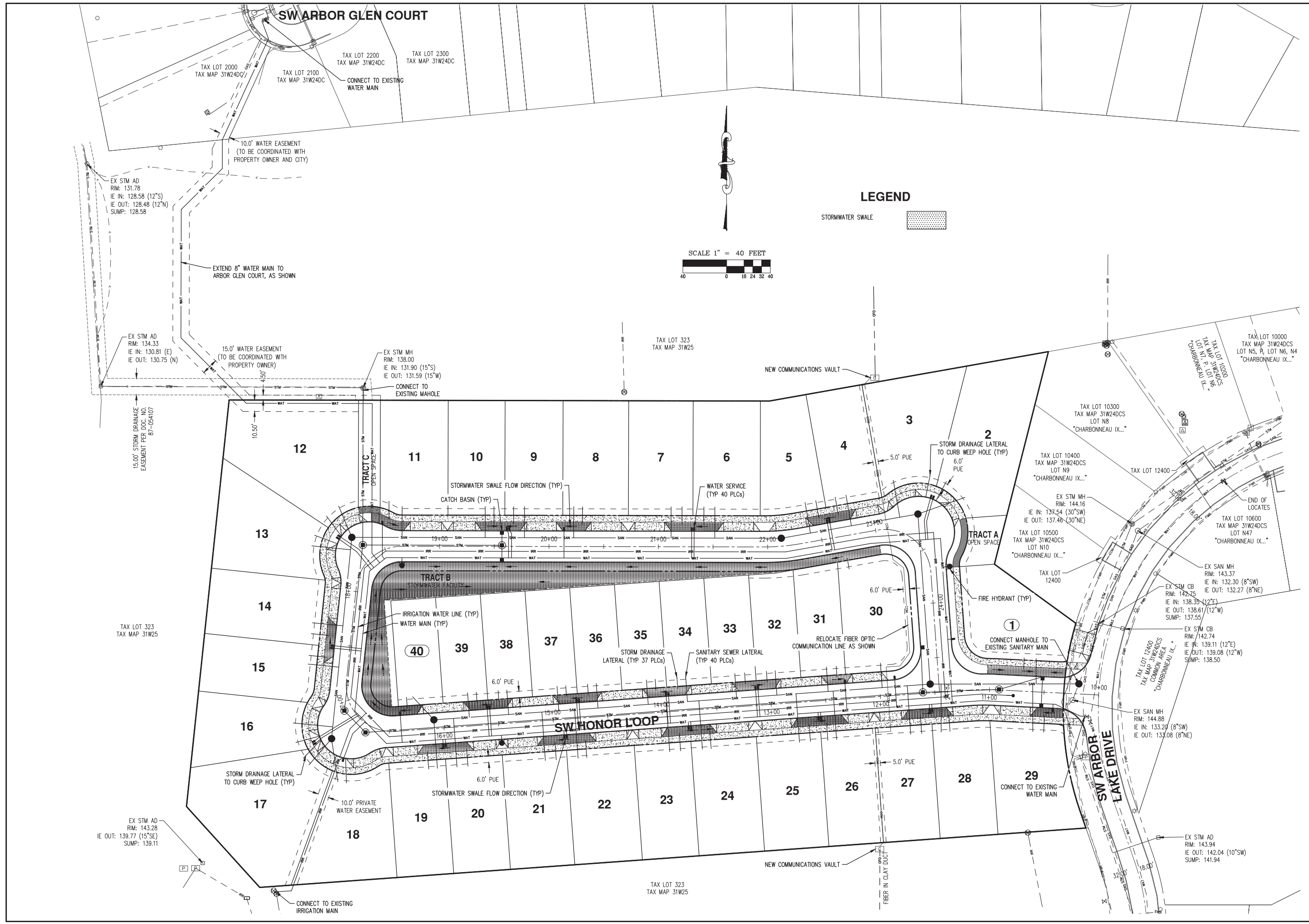


LEGEND

- SIDEWALK TO BE CONSTRUCTED BY DEVELOPER
- SIDEWALK/DRIVEWAY TO BE CONSTRUCTED BY HOMEBUILDER
- STORMWATER SWALE TO BE CONSTRUCTED BY DEVELOPER







AKS DRAWING FILE: 4898 UTILITY.DWG | LAYOUT: P1-06



AKS ENGINEERING & FORESTRY, LLC
 12965 SW HERMAN RD. STE 100
 TUALATIN, OR 97062
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 F: 503.563.6152
 aks-eng.com

ENGINEERING • SURVEYING • NATURAL RESOURCES
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CHARBONNEAU RANGE

WILSONVILLE OREGON
 CLACKAMAS COUNTY ASSESSOR'S MAP 3 1W 25
 TAX LOT 325

**PRELIMINARY
 SUBDIVISION PLAN WITH
 AERIAL PHOTOGRAPH**

DESIGNED BY: RSW
 DRAWN BY: JDR/JRN
 CHECKED BY: MBH
 SCALE: AS NOTED
 DATE: 09/02/2016

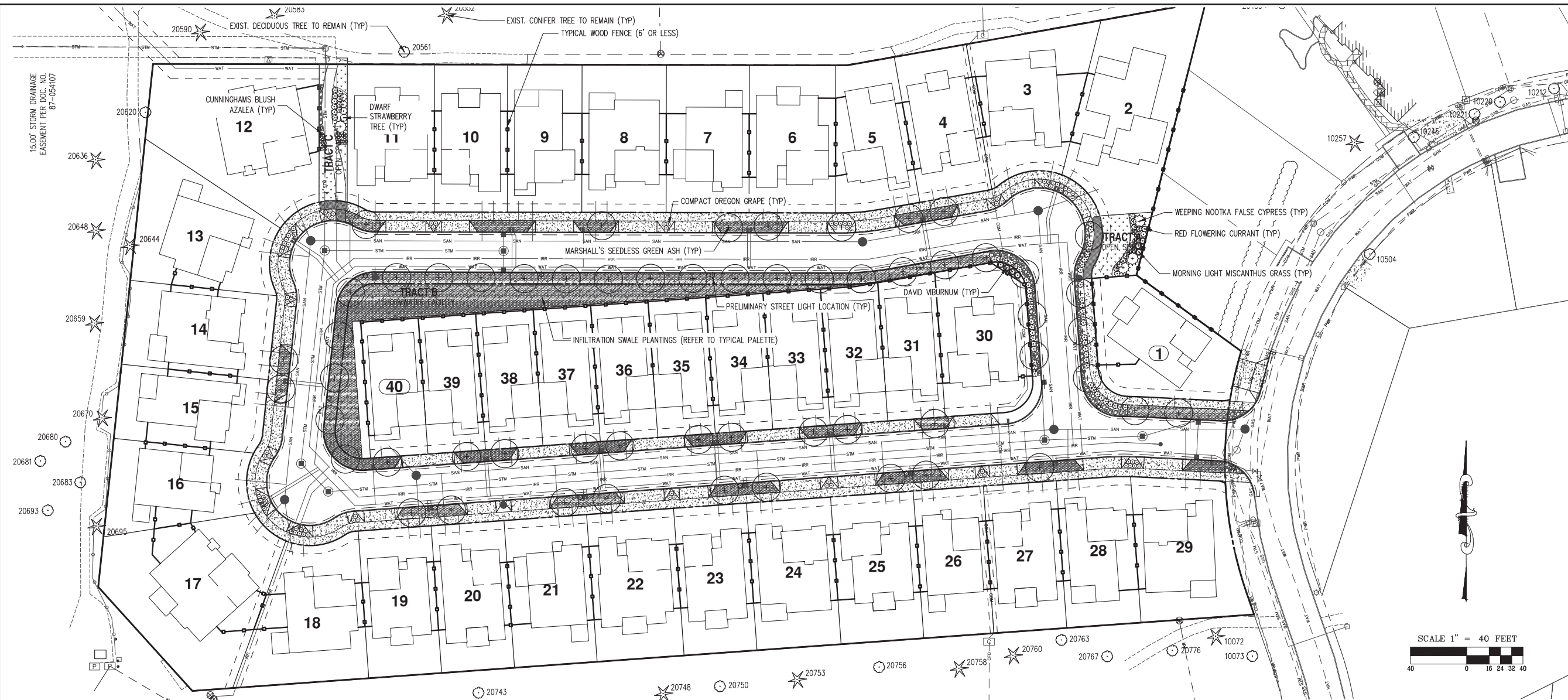


REVISIONS

JOB NUMBER
4898

SHEET
P1-07

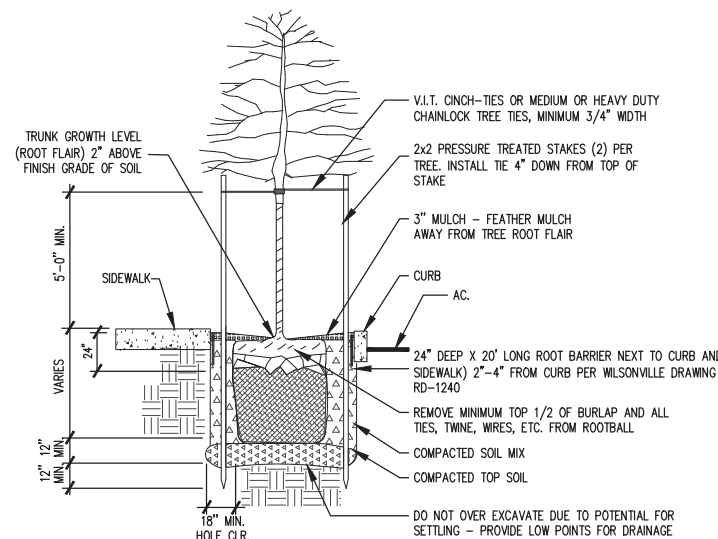




PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONTAINER	SPACING
	4	CHAMAECYPARIS NOOTKATENSIS 'PENDULA'	WEeping NOOTKA FALSE CYPRESS	7'-8" HT. B&B	AS SHOWN
STREET TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONTAINER	SPACING
	57	FRAXINUS PENNSYLVANICA 'MARSHALL'S SEEDLESS'	MARSHALL'S SEEDLESS GREEN ASH	2" CAL. B&B	AS SHOWN
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONTAINER	SPACING
	4	ARBUTUS UNEDO 'COMPACTA'	DWARF STRAWBERRY TREE	5 GAL. CONT.	60" o.c.
	13	AZALEA 'CUNNINGHAM'S BLUSH'	CUNNINGHAM'S BLUSH AZALEA	3 GAL. CONT./18" HT. MIN.	48" o.c.
	85	MAHONIA AQUIFOLIUM 'COMPACTA'	COMPACT OREGON GRAPE	3 GAL. CONT.	36" o.c.
	3	RIBES SANGUINEUM	RED FLOWERING CURRANT	5 GAL. CONT.	48" o.c.
	69	VBURNUM DAVIDII	DAVID VIBURNUM	3 GAL. CONT./18" HT. MIN.	48" o.c.
ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONTAINER	SPACING
	7	MISCANTHUS SINENSIS 'MORNING LIGHT'	MORNING LIGHT MISCANTHUS GRASS	2 GAL. CONT.	60" o.c.
GROUND COVERS	DESCRIPTION				
	LAWN (SEED OR SOD)				
	RIVER COBBLE: 3"-6" DIA., NATURAL GRAYS AND TANS, ROUNDED RIVER ROCK				

- STORMWATER AREA**
- DESCRIPTION**
- INFILTRATION SWALE PLANTINGS
- TYPICAL INFILTRATION SWALE PLANTING PALETTE:
- MOISTURE ZONE 'A' (BOTTOM OF SWALE)
 JUNCUS PATENS 'ELK BLUE'/'ELK' BLUE SPREADING RUSH, 6" PLUGS, 12" O.C.
 SCIRPUS MICROCARPUS/SMALL-FRUITED BULRUSH, 6" PLUGS, 12" O.C.
 JUNCUS ENSIFOLIUS/DAGGER-LEAF RUSH, 6" PLUGS, 12" O.C.
- MOISTURE ZONE 'B' (DRIER TRANSITIONAL AREA)
 CORNUS SERICEA 'KELSEY'/'KELSEY DOGWOOD, 2-GAL. CONTAINERS, 30" O.C.
 FRAGARIA CHILOENSIS/COASTAL STRAWBERRY, 6" SP CONTAINERS, 18" O.C.
 MAHONIA AQUIFOLIUM 'COMPACTA'/'COMPACT OREGON GRAPE, 2-GAL. CONTAINERS 36" O.C.
- GENERAL NOTES:**
- LANDSCAPE PLAN, PLANTINGS, DETAILS, AND FEATURES ARE CONCEPTUAL AND SUBJECT TO CHANGE. BUILDING FOOTPRINTS AND LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE.
 - ALL PLANT MATERIAL AND INSTALLATION SHALL CONFORM TO APPLICABLE CITY OF WILSONVILLE STANDARDS AND TO AMERICAN NURSERY STANDARDS ASN 1260.1.
 - STREET TREES SHALL BE FIELD ADJUSTED AS REQUIRED TO AVOID CONFLICTS WITH UTILITIES, LIGHT POLES, WATER METERS, ETC. THE FOLLOWING DISTANCES SHALL BE MAINTAINED PER SECTION 4.176, FIGURE 29: 10' FROM FIRE HYDRANTS, 15' FROM STORM SEWER INLETS, 10' FROM DRIVEWAYS, STREET LIGHTS, AND SIGNS, 5' FROM UNDERGROUND UTILITY BRANCHES, AND 30' FROM INTERSECTIONS. FINAL QUANTITY AND LOCATION OF STREET TREES MAY VARY, DEPENDING ON FINAL SITE LAYOUT.
 - RIGID STYLE ROOT BARRIERS, SUCH AS DEEP ROOT UB 24-2 OR SIMILAR, A MINIMUM OF 24" DEEP X 20" LONG, SHALL BE USED ON ALL STREET TREES CLOSER THAN 4' O.C. TO ANY HARD PAVING (SIDEWALKS, CURBS, ETC.). CENTER ROOT BARRIER ON TREE TRUNKS. ROOT BARRIER SHALL RUN IMMEDIATELY ADJACENT TO PAVING.
 - CONTRACTOR SHALL INSTALL ALL PLANT MATERIAL IN A SOUND-WORKMAN LIKE MANNER PER CURRENT INDUSTRY STANDARDS SUCH AS THOSE ADOPTED BY THE OREGON LANDSCAPE CONTRACTORS BOARD (OLCB). DOUBLE STAKE ALL NEW TREES FOR ROOT ESTABLISHMENT.
 - ALL PLANTING BED AREAS OUTSIDE OF THE INFILTRATION SWALES SHALL HAVE A 3" DEEP LAYER OF DARK HEMLOCK OR FIR BARK MULCH, MEDIUM GRIND OR SHREDED.
 - IRRIGATION: A PERMANENT, IN-GROUND IRRIGATION SYSTEM IS INTENDED TO BE USED FOR ALL NEW PLANTING AREAS. IRRIGATION SYSTEM SHALL BE ZONED BY WATER USAGE (LAWN AREAS SHALL BE ZONED SEPARATELY FROM PLANTING BEDS) TO INCREASE SYSTEM EFFICIENCY, AND SHALL BE 'DESIGN-BUILD' BY A QUALIFIED LANDSCAPE CONTRACTOR LICENSED TO PROVIDE IRRIGATION PLANS. CONTRACTOR SHALL PROVIDE IRRIGATION PLANS TO THE CITY AND LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
 - NATIVE TOPSOIL ON SITE SHALL BE STOCKPILED AND REUSED TO THE GREATEST EXTENT PRACTICABLE. MINIMUM TOPSOIL DEPTH OF NEW PLANTING AREAS SHALL BE 12" DEEP UNLESS OTHERWISE SPECIFIED. IF STOCKPILED SOIL IS USED, CONTRACTOR SHALL INTEGRATE (TILL) 2" OF CLEAN 100% VEGETATIVE DERIVED COMPOST INTO NEW PLANTING AREAS IN COMPLIANCE WITH SECTION 4.176.06(A)(5). SOIL SHALL BE SMOOTHED AND FREE OF DEBRIS, WOODY MATERIAL, ROCK, CLAY LUMPS, SOD, AND HIGH-LOW SPOTS PRIOR TO INSTALLATION OF PLANT MATERIAL.
 - MAINTENANCE OF ALL NEW LANDSCAPE AREAS SHALL BE THE ON-GOING RESPONSIBILITY OF THE PROPERTY OWNER, INCLUDING WEEDING, WATERING, PRUNING, AND DEAD PLANT REPLACEMENT IN KIND.



- 1 TYPICAL STREET TREE PLANTING DETAIL**
- NOTES:**
- DRIVE STAKES OUTSIDE OF ROOTBALL PARALLEL TO STREET AND SIDEWALK SO THEY DO NOT IMPEDE THE FLOW OF VEHICULAR OR PEDESTRIAN TRAFFIC.
 - SET TREE 2" ABOVE FINISH GRADE TO ALLOW FOR SETTLING OF SOIL.
 - PROVIDE A 20' LONG ROOT BARRIER NEXT TO SIDEWALK AND CURB. CENTER BARRIER ON TREE TRUNK
 - SOIL MIX FOR TREE PLANTING TO BE 1/3 ORGANIC MATERIALS, 1/3 TOPSOIL, AND 1/3 SANDY LOAM.
 - STREET TREES SHALL BE LIMBED UP A MINIMUM OF 15' (OR PER AASHTO STANDARDS, WHICHEVER IS GREATER) FROM THE STREET AND 8" MINIMUM FROM THE SIDEWALK. REFER TO CITY OF WILSONVILLE PUBLIC WORKS STANDARD DRAWING RD-1240 STREET TREE LOCATION AND CLEARANCES DETAIL.



Exhibit D: Subdivision and Street Name Approval

Joey Shearer

From: Fuller, Debbie <DebbieFul@co.clackamas.or.us>
Sent: Tuesday, August 02, 2016 8:14 AM
To: Joey Shearer
Subject: RE: Request to Reserve Subdivision Name - "Charbonneau Range"

Good morning,

Your request to reserve the plat name of "Charbonneau Range" is approved.

Thank you.

[Debbie Fuller](#) | Office Manager
County Surveyor's Office | Department of Transportation & Development
Ph: 503.742.4492 | Fax: 503.742.4481 | E: debbieful@clackamas.us

Office Hours: Monday – Thurs. 7:30 - 4:30 ~ Friday 7:30 - 3:00
Lobby Hours: Monday – Thurs. 8:00 - 4:30 ~ Friday 8:00 - 3:00

From: Joey Shearer [mailto:shearerj@aks-eng.com]
Sent: Monday, August 01, 2016 4:29 PM
To: Surveyor <Surveyor@co.clackamas.or.us>
Subject: Request to Reserve Subdivision Name - "Charbonneau Range"

Please see the attached request to reserve the subdivision name.

Thank you,

Joey Shearer



AKS ENGINEERING & FORESTRY, LLC

12965 SW Herman Road, Suite 100 | Tualatin, OR 97062

P: 503.563.6151 Ext. 273 | F: 503.563.6152 | www.aks-eng.com | shearerj@aks-eng.com

Offices in: Tualatin, OR | Salem-Keizer, OR | Vancouver, WA

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NOTE: This message was trained as non-spam. If this is wrong, please correct the training as soon as possible.

REQUEST TO RESERVE SUBDIVISION / CONDOMINIUM NAME

Clackamas County Surveyor's Office
150 Beaver Creek Road #325
Oregon City, OR 97045
(503) 742-4475 / FAX (503) 742-4481
E-mail address: surveyor@clackamas.us

PLAT NAME REQUESTED:

Charbonneau Range

	TWP/RANGE:	SECTION#:	TAX LOT#(s):
<i>Location of Plat:</i>	3S 1W	25	325

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: **Joey Shearer, AKS Engineering & Forestry**

DATE:	TELEPHONE:	FAX:
8/1/2016	(503) 563 - 6151	(503) 563 - 6152

EMAIL ADDRESS: **shearerj@aks-eng.com**

PLAT SURVEYOR: #

NAME OF DEVELOPER: **Pahlisch Homes, Inc**

ADDRESS: **210 SW Wilson Avenue, Suite 100, Bend, OR 97702**

DATE:	TELEPHONE:	FAX:
8/1/2016	(541) 385 - 6762	(541) 385 - 6742

EMAIL ADDRESS: **jasonm@pahlischhomes.com**

APPROVED BY:

APPROVAL DATE:

Joey Shearer

From: Rothenberger, Susan <rothenberger@ci.wilsonville.or.us>
Sent: Tuesday, August 02, 2016 3:48 PM
To: Joey Shearer
Cc: Adams, Steve
Subject: Honor Loop

Categories: Filed by Newforma

Honor Loop is acceptable.

Susan Rothenberger | Engineering Technical Support | City of Wilsonville

29799 SW Town Center Loop East | Wilsonville OR 97070 | 📞: 503.570.1569 | ✉: rothenberger@ci.wilsonville.or.us



Exhibit E: Draft HOA By-Laws

AFTER RECORDING, RETURN TO:

[Project Name] Owners Association
C/o Crystal Lake Property Management LLC
7128 SW Gonzaga Street, Suite 100
Tigard, OR 97223

**DECLARATION OF PROTECTIVE COVENANTS,
CONDITIONS, RESTRICTIONS AND EASEMENTS FOR
FOR [PROJECT NAME]**

[City], Oregon

[Declarant Name]

Declarant

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**DECLARATION OF PROTECTIVE COVENANTS,
CONDITIONS, RESTRICTIONS AND EASEMENTS
FOR [PROJECT NAME]**

THIS DECLARATION is made this _____ day of _____, 20_____ by [DECLARANT NAME], an Oregon limited liability company (“**Declarant**”).

RECITALS

A. Declarant owns or controls certain real property within the City of [City], [County Name] County, Oregon. Declarant proposes to develop this property as a planned development to be known as “[**Project Name**]”.

B. Declarant hopes to create in [Project Name] a carefully planned community, which will provide an attractive place to live. Declarant will provide leadership in organizing and administering [Project Name] to accept the responsibility for community administration by the time the development is complete.

C. The purpose of this Declaration is to provide for the ownership, maintenance and use of certain Common Areas, which will be owned and operated by an owners association for the benefit of all properties now or later made subject to this Declaration, and ASI’s, which will be owned by the [City] Parks and Recreation District. In addition, areas made subject to this Declaration may be subject to Project Declarations, which impose additional or different restrictions on the use of property within such projects and may establish Project Common Areas for the benefit of the owners within such projects. The initial phase of [Project Name] will include, as common area, a community amenity.

D. Funds for the maintenance and operation of Common Areas generally will be provided through assessments against those who purchase property within [Project Name], although to assist with the development of [Project Name], Declarant may from time to time itself provide some improvements. For the protection of all Owners of property in [Project Name] there will be a system designed to assure that each person who purchased property in [Project Name] will pay an equitable share of the moneys necessary for the maintenance and development of Common Areas.

E. Purchasers of property within [Project Name] hereby consent to the master Plan for [Project Name] approved by the City of [City], as the same may subsequently be amended. By adoption of such Master Plan and this Declaration, Declarant is not committing itself to take any action for which definite provision is not made below. One who acquires property in [Project Name] will have the advantage of any further development of [Project Name], but shall not have any legal right to insist that there be development except as provided in this instrument or in the instruments which hereafter may be recorded annexing areas to [Project Name] and subjecting areas to this Declaration.

F. Declarant has recorded the plat of [Project Name] in the plat records of [County Name] County, Oregon. Declarant desires to subject the property described in such plat to the conditions, restrictions and charges set forth in this instrument for the benefit of such property and its present and subsequent owners, and to establish such property as the first phase of a Class I planned community under the Oregon Planned Community Act, ORS 94.550 to 94.783.

NOW, THEREFORE, Declarant hereby declares that the property described in Section 2.1 below shall be held, sold and conveyed subject to the following easements,

covenants, restrictions and charges, which shall run with such property and shall be binding upon all parties having or acquiring any right, title or interest in such property or any part thereof and shall inure to the benefit of each owner thereof.

Article 1 **Definitions**

As used in this Declaration, the terms set forth below shall have the following meanings:

1.1 **“Accessory Dwelling Unit”** means a portion of a Living Unit capable of being occupied as a separate residence and which includes its own kitchen and bath facilities.

1.2 **“Additional Property”** means any land, whether or not owned by Declarant, which is made subject to this Declaration as provided in Section 2.2 below.

1.3 **“Architectural Review Committee” or “The Committee”** means the committee appointed pursuant to Article 7 below.

1.4 **“ASI – Areas of Special Interest”** means open space pockets, trails, and important upland natural features consisting of scattered rock outcrops, stands of trees, and dominant ridges, as identified in the Areas of Special Interest Ordinance and graphically represented on the City of [City] Urban Area General Plan.

1.5 **“Assessments”** means all assessments and other charges, fines and fees imposed by the Association on an Owner in accordance with this Declaration or the Bylaws of the Association or provisions of the Oregon Planned Community Act, including, without limitation, Annual Assessments, Special Assessments, Emergency Assessments, Limited Common Area Assessments and Individual Assessments as described in Article 10 below.

1.6 **“Association”** means the nonprofit corporation to be formed to serve as the owners association as provided in Article 8 below, and its successors and assigns.

1.7 **“Board of Directors” or “the Board”** means the duly appointed or elected board of directors of the Association, which is invested with the authority to operate the Association and to appoint the officers of the Association. Prior to the Turnover Meeting, Declarant will appoint the Board of Directors. After the Turnover Meeting, the Owners will elect the Board of Directors.

1.8 **“Bylaws”** means the duly adopted bylaws of the Association set forth in the attached Exhibit A as the same may hereafter be amended or replaced.

1.9 **“Common Areas”** means those lots or tracts designated as such on any plat of the Property, or in this Declaration or any declaration annexing Additional Property to [Project Name], including any Improvements thereon, and shall also include Common Easement Areas, Limited common Areas and any Lots converted to Common Areas as provided in Section 3.2 below. Common Areas do not include Project Common Areas.

1.10 **“Common Easement Areas”** means those easements established for the benefit of all property within [Project Name] pursuant to this Declaration or any plat or declaration annexing Additional property to [Project Name].

1.11 **“Declarant”** means [Declarant Name], an Oregon limited liability company, and its successors and assigns if such successor or assignee should acquire Declarant’s interest in the remainder of the proposed project site, or less than all of such property if a recorded instrument executed by Declarant assigns to the transferee all of Declarant’s rights under this Declaration.

1.12 **“Front Yard”** means the area between the predominant wall plane of the Living Unit toward any street and including any side yard adjoining the street and includes any portion of the street right of way between the curb and the Lot line.

1.13 **“Improvement”** means every structure or improvement of any kind, including but not limited to a fence, wall, driveway, swimming pool, storage shelter, landscaping or other product of construction efforts on or in respect to the Property.

1.14 **“[Project Name]”** means the Initial Development and any Additional property annexed to this Declaration.

1.15 **“Initial Development”** means the real property referred to in Section 2.1 below.

1.16 **“Limited Common Areas”** means those Common Areas established for the exclusive use or enjoyment of certain Lots as designated in this Declaration or any declaration annexing property to [Project Name], including Limited Common Easement Areas.

1.17 **“Limited Common Easement Areas”** means those easements established for the exclusive use or enjoyment of Certain Lots as designated in this Declaration or any declaration annexing property to [Project Name].

1.18 **“Living Unit”** means a building or a portion of a building located upon a Lot within the Property and designated for separate residential occupancy, together with any permitted Accessory Dwelling Unit.

1.19 **“Lot”** means a platted lot within the Property.

1.20 **“Master Plan”** means the Development Plan of [Project Name] approved by the City of [City], Oregon, as the same may hereafter be amended.

1.21 **“Mortgage”** means a mortgage or a trust deed; **“mortgagee”** means a mortgagee or a beneficiary of a trust deed; and **“mortgagor”** means a mortgagor or a grantor of a trust deed.

1.22 **“Owner”** means the person or persons, including Declarant, owning any Lot in the Property, but does not include a tenant or holder of a leasehold interest or a person holding only a security interest in a Lot. The rights, obligations and other status of being an Owner commence upon acquisition of the ownership of a Lot and terminate upon disposition of such ownership, but termination of ownership shall not discharge an Owner from obligations incurred prior to termination.

1.23 **“Project”** means any separately designated and developed portion of the Property and comprised of discrete type of development or use, including, without limitation, Townhomes or other attached dwellings. Any such Project shall be designated as a Project in the Project Declaration, this Declaration or the declaration annexing such portion of the Property to [Project Name].

1.24 **“Project Assessments”** means assessments levied pursuant to a specific Project Declaration.

1.25 **“Project Association”** means any association established for a specific Project pursuant to a Project Declaration.

1.26 **“Project Common Area”** means the area within a Project restricted in whole or in part to common use primarily by or for the benefit of the owners within the Project and their families, tenants employees, guests and invitees.

1.27 **“Project Declaration”** means a declaration of easements, covenants, conditions and restrictions imposing a unified development scheme on a particular Project, which declaration shall have been executed by or bear the written approval of Declarant.

1.28 **“Project Parcel”** means the portion of the Property upon which a Project is located, as indicated, if appropriate, on the plat relating to the Project and as designated in the Project Declaration.

1.29 **“Public Areas”** means areas dedicated to the public or established for public use in any plat of the Property, or so designated in this Declaration or the declaration annexing such property to [Project Name].

1.30 **“Sold”** means that legal title has been conveyed or that a contract of sale has been executed and recorded under which the purchaser has obtained the right to possession.

1.31 **“The Property”** means [Project Name].

1.32 **“This Declaration”** means all of the easements, covenants, restrictions and charges set forth in this instrument, together with any rules or regulations promulgated hereunder, as the same may be amended or supplemented from time to time in accordance with the provisions hereof.

1.33 **“Turnover Meeting”** means the meeting called by Declarant pursuant to Section 8.7 below, at which Declarant will turnover administrative responsibility for the Property to the Association.

Article 2 **Property Subject To This Declaration**

2.1 **Initial Development.** Declarant hereby declares that all of the real property described below is owned and shall be owned, conveyed, hypothecated, encumbered, used, occupied and improved subject to this Declaration:

All real property within that certain plat entitled “[Project Name],” filed in the plat records of [County Name] County, Oregon, in Book ___ at Page ___ of Plat Records.

2.2 **Annexation of Additional Property**. Declarant may from time to time and in its sole discretion annex to [Project Name] as Additional Property any real property now or hereafter acquired by it, and may also from time to time and in its sole discretion permit other holders of real property to annex the real property owned by them to [Project Name]. The annexation of such Additional Property shall be accomplished as follows:

(a) The owner or owners of such real property shall record a declaration which shall be executed by or bear the approval of Declarant and shall, among other things, describe the real property to be annexed, designate the Project of which such property is a part, establish land classifications for the Additional Property, establish any additional limitations, uses, restrictions, covenants and conditions which are intended to be applicable to such Additional Property, and declare that such property is held and shall be held, conveyed, hypothecated, encumbered, used, occupied and improved subject to this Declaration.

(b) The Additional property included in any such annexation shall thereby become a part of [Project Name] and this Declaration, and the Declarant and the Association shall have and shall accept and exercise administration of this Declaration with respect to such property.

(c) Notwithstanding any provision apparently to the contrary, a declaration with respect to any Additional Property may:

(i) Establish such new land classifications and such limitations, uses, restrictions, covenants and conditions with respect to such Additional Property as Declarant may deem to be appropriate for the development of the Additional Property.

(ii) With respect to existing land classifications, establish additional or different limitations, uses, restrictions, covenants and conditions with respect to such property as Declarant may deem to be appropriate for the development of such Additional Property.

(d) There is no limitation on the number of Lots or Living Units, which Declarant may create or annex to [Project Name], except as may be established by applicable ordinances of the City of [City]. Similarly, there is no limitation on the right of Declarant to annex common property, except as may be established by the City of [City].

(e) Declarant does not agree to build any specific future Improvement, but does not choose to limit Declarant’s right to add additional Improvements.

(f) Upon annexation to [Project Name], additional Lots so annexed shall be entitled to voting rights as set forth in Section 8.3 below.

(g) The formula to be used for reallocating the common expenses if additional Lots are annexed and the manner of reapportioning the common expenses if additional Lots are annexed during a fiscal year are set forth in Section 10.9 below.

2.3 **Improvements.** Phase One of [Project Name] will include, as Common Areas, a community feature as yet undetermined. Declarant does not agree to build any other Improvements on the Property other than as required by the City of [City], but may elect, at Declarant's option, to build additional Improvements.

2.4 **Withdrawal of Property.** Declarant may withdraw property from [Project Name] only by duly adopted amendment to this Declaration, except that Declarant may withdraw all or a portion of the Initial Development or any Additional Property annexed pursuant to a declaration described in Section 2.2 above at any time prior to the sale of the first Lot in the respective plat of the Initial Development, or in the case of Additional property, prior to the sale of the first Lot in the property annexed by the supplemental declaration, subject to the prior approval of the City of [City]. Such withdrawal shall be by a declaration executed by Declarant and recorded in the deed records of [County Name] County, Oregon. If a portion of the Property is so withdrawn, all voting rights otherwise allocated to Lots being withdrawn shall be eliminated, and the common expenses shall be reallocated as provided in Section 10.9 below. Such right of withdrawal shall not expire except upon sale of the first Lot within the applicable phase of the Property as described above.

Article 3 **Land Classifications**

3.1 **Land Classifications within Initial Development.** All land within the Initial Development is included in one or another of the following classifications:

(a) Lots, which shall consist of Lots ___ through ___ of the plat of the Initial Development.

(b) Common Areas, which shall be the areas marked as Tract A and Tract B on the plat of the Initial Development.

(c) ASI – Areas of Special Interest, which shall be the areas so marked on the plat of the Initial Development as such.

(d) Public Areas, which shall be the dedicated streets shown on the plat of the Initial Development.

(e) There are no Limited Common Areas or Common Easement Areas within the Initial Development.

3.2 **Conversion of Lots to Common Areas.** Declarant may elect to build common facilities on one or more Lots and designate such Lots as Common Areas by a declaration recorded in the deed records of [County Name] County, Oregon. Declarant, as owner of the Lots, shall execute such declaration.

Article 4
Property Rights In Common Areas

4.1 **Owners Easements of Enjoyment.** Subject to provisions of this Section, every Owner and his 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. The use of any Limited Common Areas, however, shall be limited to the Owners and invitees of the Lots designated in the declaration establishing the Limited Common Area.

4.2 **Common Easement Areas.** Common Easement Areas, if any, shall be reserved for signage and visual landscape features. Such areas are to be maintained by the Association and no changes in landscaping will be permitted within such areas without written authorization by the Board of Directors of the Association. No building, wall, fence, paving, landscaping or construction of any type shall be erected or maintained by any Owner so as to trespass or encroach upon the Common Easement Areas, nor may any such areas be used by the Owner for storm water treatment purposes.

4.3 **Title to Common Areas.** Title to the Common Areas, except Common Easement Areas, shall be conveyed to the Association by Declarant, free and clear of monetary liens, prior to the Turnover Meeting. Title to Common Easement Areas, subject to the easements set forth in this Declaration, shall rest in the Owners of the respective Lots within which such areas are located, or to the public if part of dedicated street right of ways.

4.4 **Extent of Owners' Rights.** The rights and easements of enjoyment in the Common Areas created hereby shall be subject to the following and all other provisions of this Declaration:

(a) **Association Easements.** Declarant grants to the Association for the benefit of the Association and all Owners of Lots within the Property the following easements over, under and upon the Common Areas, including the Common Easement Areas:

(i) An easement on all Common Areas for underground installation and maintenance of power, gas, electric, water and other utility and communication lines and services installed by Declarant or with the approval of the Board of Directors of the Association and any such easement shown on any plat of the Property.

(ii) An easement for construction, maintenance, repair and use of Common Areas, including common facilities thereon.

(iii) An easement for the purpose of making repairs to any existing structures on Common Areas.

(b) **Public and Utility Easements.** The public is hereby granted access easements over all alley areas, pedestrian accesses, trails and common area tracts within the Property. In addition, Declarant or the Association may (and, to the extent required by law, shall) grant or assign such easements to municipalities or other utilities performing utility services and to communication 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.

(c) **Use of the Common Areas.** The Common Areas shall not be partitioned or otherwise divided into parcels for residential use, and no private structure of any type shall be constructed on the Common Areas. Except as otherwise provided in this Declaration, the Common Areas shall be reserved for the use and enjoyment of all Owners and no private use may be made of the Common Areas, including Common Easement Areas. Nothing herein shall prevent the placing of a sign or signs upon the Common Areas identifying the Property or any Project or identifying pathways or items of interest, signs restricting certain uses or warning signs, provided such signs are approved by the Architectural Review Committee, are consistent with the City of [City] Sign Code and meet vision clearance standards contained in the City of [City] Land Development code. Lighting for the Property shall be shielded such that it does not shine on adjacent properties, including the ASI Areas, and shall be consistent with the City of [City] Land Development Code and the lighting plan approved by the City of [City]. The Board of Directors of the Association shall have authority to abate any trespass or encroachment upon the Common Area at any time, by any unreasonable means and with or without having to bring legal proceedings. A declaration annexing Additional property may provide that the Owners of such Additional Property do not have the right to use a particular Common Area or facility located on such Common Area. In such case, those Owners will not be required to share in the costs of maintaining the facility, as is more particularly described in Section 10.9.

(d) **ASI – Areas of Special Interest.** ASI-Areas of Special Interest shall be subject to the following restrictions on use:

(i) Disposal of grass clippings/yard waste and any garbage into the open space area is prohibited.

(ii) Fireworks, use of flammable materials, or the building of fires in the open space areas is prohibited.

(iii) Construction or placement of any structures in the open space areas, other than those items previously approved by the Parks and Recreation District and the City of [City] Community Development Department is prohibited.

(iv) Overnight use or any habitation, including tents and tree houses, of the open space area is prohibited.

(v) Motor vehicle use (cars, motorbikes, etc) in the open space area is prohibited.

(vi) Grading or any other site disturbance, other than that approved by the Park and Recreation District for purposes of vegetation removal or fire suppression purposes is prohibited.

(e) **Alienation of the Common Areas.** The Association may not by act or omission seek to abandon, partition, subdivide, encumber, sell or transfer the Common Areas

owned directly or indirectly by the Association for the benefit of the Lots unless the holders of at least 80 percent of the Class A Association voting rights and the Class B member (as defined in Section 8.3 below), if any, have given their prior written approval and unless approved by the City of [City]. This provision shall not apply to the easements described in Section 4.4(a) above. The Association, upon approval in writing of at least 50 percent of the Class A Association voting rights and the Class B member, if any, and if approved by order or resolution of the City of [City], may dedicate or convey any portion of the Common Areas to a park district or other public body.

(f) **Limitations on Use.** Use of the Common Areas by the Owners shall be subject to the provisions of this Declaration and to the following:

(i) The right of the Association to suspend such use rights of an Owner to the extent provided in Article 11 below.

(ii) The right of the Association to adopt, amend and repeal rules and regulations in accordance with this Declaration.

4.5 **Delegation of Use.** Any Owner may delegate, in accordance with the Bylaws of the Association, his right of enjoyment of the Common Areas to the family members, tenants, invitees and guests, whose use shall be subject to this Declaration and rules and regulations adopted under this Declaration.

4.6 **Easements Reserved by Declarant.** So long as Declarant owns any Lot, Declarant reserves an easement over, under and across the Common Areas in order to carry out sales and rental activities necessary or convenient for the sale or rental of Lots. In addition, Declarant hereby reserves to itself and for the owners of Lots in all future phases of [Project Name] a perpetual easement and right-of-way for access over, upon and across the common Areas for construction, utilities, communication lines, drainage, and ingress and egress over, in, upon, under and across the Common Areas and the right to store materials thereon and to make such other use thereof as may be reasonably necessary or incident to the construction of the Improvements on the Property or other real property owned by Declarant; provided, however, that no such rights shall be exercised by Declarant in such a way as to unreasonably interfere with the occupancy, use, enjoyment or access to an Owner's Lot by that Owner or his family, tenants, employees, guests or invitees.

4.7 **Limited Common Areas.** The respective Limited Common Areas shall be subject to a reciprocal access easement for the exclusive use by the Owners of the benefited Lots for vehicular access. Such areas shall be operated, maintained, replaced and improved by the Association, but the entire cost thereof shall be assessed to the owners of Lots to which such Limited Common Areas pertain.

Article 5 **Property Rights In Lots**

5.1 **Use and Occupancy.** The Owner of a Lot in the Property shall be entitled to the exclusive use and benefit of such Lot, except as otherwise expressly provided in this Declaration,

contained in Article 6 below, and all other provisions of this Declaration and the Provisions of any supplement or amendment to this Declaration and any applicable Project Declaration.

5.2 **Easements Reserved.** In addition to any utility and drainage easements shown on any recorded plat, Declarant hereby reserves the following easement for the benefit of Declarant and the Association.

(a) **Adjacent Common Area.** The Owner of any Lot which blends together visually with any Common Area shall, if the Association elects from time to time to so require, permit the Association to enter upon the Lot to perform the maintenance of such Common Area.

(b) **Right of Entry.** Declarant, the Architectural Review Committee and any representative of the Association authorized by it may at any reasonable time, and from time to time at reasonable intervals, enter upon any Lot for the purpose of performing the Front Yard maintenance and determining whether or not the use and/or improvements of such Lot are then in compliance with this Declaration. No such entry shall be deemed to constitute a trespass or otherwise create any right of action in the Owner of such Lot.

(c) **Utility Easements.** Easement for installation and maintenance of utilities and drainage facilities may be reserved over portions of certain Lots, as shown on any recorded plat. Within the easements, the Architectural Review Committee will not permit any structure, planting or other material to be placed or permitted to remain on the easement area which may damage or interfere with the installation or maintenance of utilities, or which may change the direction or flow of drainage channels in the easements. The easement area of each Lot and all improvements in it shall be maintained continuously by the Owner of the Lot, except for those improvements for which a public authority or utility company is responsible, and Common Easement areas, which will be maintained by the Association.

(d) **Irrigation Systems.** In some cases irrigation systems for the Front Yards may have a controller for the timing system attached to the exterior walls of the Living Unit and use the water and power supply of that Living Unit. In each case the Association shall have an easement for such system, including access to the controller and the ability to use the Living Unit's water and power system for such purpose. The Owner of the Living Unit shall not disturb this system. Any additional irrigation the Owner wishes to supply for the Owner's side and rear yards must be independent of the Association's system.

5.3 **Side Yard Easements.** Adjoining side yards between two Living Units where there is no fence along the boundary line shall be subject to a cross easement for maintenance of the Living Units and to allow the occupant of each of such Living Units access to the rear yard of their Lot. The cross easement shall be over the first 48 inches from the common property line, thereby creating an eight foot wide pathway centered between the Living Units. Each Owner shall be responsible for maintaining such Owner's portion of the easement area surface and to keep the easement area clear of obstruction which in any manner might hinder access to their rear yards. The Association shall settle any disputes between Owners relating to such easement area.

Article 6
General Use Restrictions

6.1 **Structures Permitted.** No structures shall be erected or permitted to remain on any Lot except structures containing Living Units, including an Accessory Dwelling Unit, if permitted by applicable governmental regulations, and structures normally accessory thereto. Such provision shall not exclude construction of a private greenhouse, storage unit, private swimming pool or structure for the storage of a boat and/or camping trailer for personal use, provided the location of such structure is in conformity with the applicable governmental regulations, is compatible in design and decoration with the dwelling structure constructed on such Lot, and has been approved by the Architectural Review Committee.

6.2 **Residential Use.** Lots shall only be used for residential purposes. Except with the consent of the Board of Directors of the Association, no trade, craft, business, profession, commercial or similar activity of any kind shall be conducted on any Lot, nor shall any goods, equipment, vehicles, materials or supplies used in connection with any trade, service or business be kept or stored on any such Lot. The mere parking on a Lot of a vehicle bearing the name of a business shall not, in itself, constitute a violation of this provision. Nothing in this paragraph shall be deemed to prohibit (a) activities relating to the rental or sale of Living Units, (b) the right of Declarant or any contractor or homebuilder to construct Living Units on any Lot, to store construction materials and equipment on such Lots in the normal course of construction, and to use any Living Unit as a sales or rental office or model home for purposes of sales or rental in [Project Name], and (c) the right of the Owner of a Lot to maintain his professional personal library, keep his personal business or professional records or accounts, handle his personal business or professional telephone calls or confer with business or professional associates, clients or customers, in his Living Unit. The Board of Directors shall not approve commercial activities otherwise prohibited by this paragraph unless the Board of Directors determines that only normal residential activities would be observable outside of the Living Unit and that the activities would not be in violation of applicable governmental ordinances.

6.3 **Leasing and Rental of Living Units .** No Owner may lease or rent his Living Unit for a period of less than thirty (30) days. All leases or rentals shall be by written lease agreement, which shall provide that the terms of the lease shall be subject in all respects to the provisions of this Declaration and the Articles of Incorporation and Bylaws of the Association, and that any failure by the lessee or tenant to comply with the terms of such documents shall be a default under the lease. If the Board of Directors finds that a lessee or tenant has violated any provision of such documents or rules and regulations, the Board may require the Owner to terminate such lease or rental agreement. Other than the foregoing, there is no restriction on the right of any Owner to lease or rent his living unit.

6.4 **Offensive or Unlawful Activities.** No noxious or offensive activities shall be carried out upon the Property, nor shall anything be done or placed on the Property which interferes with or jeopardizes the enjoyment of the Property, or which is a source of annoyance to Owners or occupants. No unlawful use shall be made of the Property nor any part thereof, and all valid laws, zoning ordinances and regulations of all governmental bodies having jurisdiction over the Property shall be observed.

6.5 **Animals.** No animals, livestock or poultry of any kind shall be raised, bred or kept or permitted within any Lot other than a reasonable number of household pets which are not kept, bred or raised for commercial purposes and which are reasonably controlled so as not to be a nuisance. Any inconvenience, damage or unpleasantness caused by such pets shall be the responsibility of their respective owners. No animal shall be permitted to roam the Property unattended, and all dogs shall be kept on a leash while outside a Lot. An Owner or occupant may be required to remove a pet upon receipt of the third written notice from the Association Board of Directors of violations of any rule, regulation or restriction governing pets within the Property.

6.6 **Maintenance of Structures and Grounds.** Each Owner shall maintain the Owner's Lot and Improvements thereon in a clean and attractive condition, in good repair and in such fashion as not to create a fire or other hazard. Such maintenance shall include, without limitation, exterior painting, repair, replacement and care for roofs, gutters, downspouts, exterior building surfaces, walks, lights and fences on alleys and other exterior improvements and glass surfaces. All repainting or restaining and exterior remodeling shall be subject to prior review and approval by the Architectural Review Committee. In addition, each Owner shall keep all sidewalks, shrubs, trees, grass and plantings of every kind on the Owner's Lot (other than Front Yards) neatly trimmed, properly cultivated and free of trash, weeds and other unsightly material. Damage caused by fire, flood, storm, earthquake, riot, vandalism, or other causes shall likewise be the responsibility of each Owner and shall be restored within a reasonable period of time.

6.7 **Recreational and Commercial Vehicles.** Except as may otherwise be provided in the rules and regulations of the Association, parking of boats, trailers, motorcycles, trucks, campers or other recreational or commercial vehicles or equipment, regardless of weight, and parking of any other vehicles with a gross vehicle weight in excess of 9,000 pounds shall not be allowed to remain overnight on any part of the Property or on public streets within the Property, excepting only within areas designated for such purposes by the Board of Directors of the Association or within the confines of an enclosed garage or screened area, the plans of which shall have been reviewed and approved by the Architectural Review Committee prior to construction, and no portion of the same may project beyond the screened area. If there is no rear fencing and the vehicle could be seen from outside the Lot other than from the Front Yard, the vehicle must also be screened from view from that direction as well. Vehicles may not be used for storage of materials for more than forty-eight (48) hours without approval from the Architectural Review Committee. Any vehicle in violation of this Section can be towed or impounded as provided in Section 11.1(c) below.

6.8 **Vehicles in Disrepair.** No Owner shall permit any vehicle, which is in an extreme state of disrepair to be abandoned or to remain parked on the Owner's Lot unless screened from view, on the Common Area or on any street for a period in excess of forty-eight (48) hours. A vehicle shall be deemed in an "extreme state of disrepair" when the Board of Directors reasonably determines that its presence offends the occupants of the area due to its appearance or continued inoperability. Should any Owner fail to remove such vehicle within five (5) days following the date on which the Association mails notice to him, the Association may have the vehicle removed from the property and charge the expense of such removal to the Owner. Any vehicle parked in violation of this Section can be towed or impounded as provided in Section 11.1(c) below.

6.9 **Noisy and Hazardous Vehicles.** The Board of Directors may restrict access to the Property of any vehicle, which, in the reasonable determination of the Board of Directors, is too noisy or constitutes a safety hazard.

6.10 **Parking.** Parking of vehicles by Owner shall be restricted to the Owner's garage or driveway. Parking in the street by Owner is prohibited, except for any parking areas so designated by the Board of Directors.

6.11 **Signs.** No signs shall be erected or maintained on any Lot except that not more than one "For Sale" or "For Rent" sign placed by the Owner, Declarant or by a licensed real estate agent, not exceeding twenty-four (24) inches high and thirty-six (36) inches long, may be temporarily displayed on any Lot, except that two such signs may be placed on a Lot during the course of initial construction of a dwelling on such Lot. The restrictions contained in this paragraph shall not prohibit the temporary placement of "political" signs on any Lot by the Owner, subject to reasonable regulations adopted by the Architectural Review Committee relating to size and length of display.

6.12 **Rubbish and Trash.** Trash, garbage and other waste shall be kept in sanitary containers, screened from public view. No part of the Property shall be used as a dumping ground for trash, garbage, waste, debris or rubbish of any kind. Yard rakings, dirt and other material resulting from landscaping work shall not be dumped onto Lots or streets, Common Areas or ASI areas. Should any Owner or occupant responsible for its generation fail to remove any trash, rubbish, garbage, yard rakings or any such materials from any streets or the Property where deposited by such person within ten (10) days following the date on which notice is mailed to the Owner or occupant by the Board of Directors of the Association, the Association may have such materials removed and charge the expense of such removal to the Owner.

6.13 **Landscape.** Unless the Board of Directors adopts a resolution to the contrary, the Association will perform all exterior landscape maintenance of Front yards. Each Owner shall be responsible for installing and maintaining the landscaping on any portion of the Lot not maintained by the Association in a neat and well-kept condition. An Owner may not remove street trees, change the Front Yard landscaping or install additional Front Yard landscaping without the prior written approval of the Board of Directors of the Association. Vegetation around structures shall be maintained or modified for a minimum distance of thirty (30) feet around structures to prevent the rapid spread of fire to or from the building site. Such clearance shall be established prior to framing and maintained upon completion consistent with the Uniform Building Code, Appendix A, Article 16. This provision shall not preclude the establishment of typical residential landscaping such as trees, shrubs, bulbs, perennials and other groundcover generally associated with residential development, but is intended to prevent the overgrowth of grasses and shrubs which exist unmaintained on a site and which could contribute to the rapid spread of fire. All landscaping (including front and side yards) shall be completed within six (6) months from the date of occupancy of the Living Unit constructed thereon. Landscaping must include at least grass and bark dust unless the Board adopts a formal Xeriscape plan, and shall be maintained in harmony with surrounding landscaping. In the event of undue hardship due to weather conditions, this provision may be extended for a reasonable length of time upon written approval of the Architectural Review Committee. No weeds, noxious plants, or unmaintained vegetation shall be planted or allowed to grow. No tree over six

inches (6") in diameter measured four feet (4') above adjacent grade may be removed without the prior approval of the Architectural Review Committee.

6.14 **Temporary Structures.** No structure of a temporary character, trailer, basement, tent, shack, garage, barn or other outbuildings shall be used on any Lot at any time as a residence either temporarily or permanently, except during the period of initial construction of a dwelling on the Lot. No structure may be occupied prior to connection to power, water and sewer and approval by the City of [City].

6.15 **Fences and Hedges.** No fences or boundary hedges shall be installed without prior approval of the Architectural Review Committee consistent with Design Guidelines adopted by the Architectural Review Committee and the City of [City] Conditions of Approval for [Project Name]. Fences may not exceed six (6) feet in height. Fences must be well constructed of suitable materials and may not detract from the appearance of the adjacent structures and buildings.

6.16 **Service Facilities.** Service facilities (garbage cans, fuel tanks, clotheslines, clothesline poles and other outside drying of clothes, linens and such, firewood, gardening tools, and equipment, etc.) shall be screened such that the elements screened are not visible at any time from the street or a neighboring property. Appliances may not be stored outside. All heat pumps and condenser units (or other utilities and devices commonly placed out of doors) shall receive special consideration to provide visual screening and noise reduction.

6.17 **Outside Furniture and Hot Tubs.** Furniture left outside a Living Unit shall be limited to items commonly accepted as outdoor or patio furniture. Hot tubs are allowed with the prior written permission of the Board of Directors. The hot tub must be installed out of sight of the main traffic patterns. Locking covers are required and shall remain locked when not in use.

6.18 **Window Coverings.** Window coverings visible from the outside of the Living Unit must be: (a) in good working order; (b) a neutral color compatible with the home/trim color; and (c) of a design and materials standard in the window dressing industry such as drapes, mini-blinds, etc. Sheets, blankets, plastic paper, foil, etc. are not allowed.

6.19 **Air Conditioning Units.** Window or portable air conditioning units are prohibited.

6.20 **Firearms and Fireworks.** Firearms shall not be discharged within [Project Name] at any time. Firearms are to be unloaded at all times while in [Project Name]. Weapons including "BB" guns, pellet guns, dart guns, paint-ball guns and any other weapon capable of firing a projectile are considered firearms. Oregon statutory law prohibits the use of certain types of fireworks. Only fireworks considered legal and are both silent and hand held will be allowed. Discharge of firearms or fireworks of any type toward the ASI area is prohibited. Owners and their guests must clean up any fireworks discharged in [Project Name].

6.21 **Nonbiodegradable Substances.** No motor oil, paint or other caustic or nonbiodegradable substance may be deposited in any street drain, sewer system or on the grounds within [Project Name]. Any fine and/or costs associated with the cleanup of any

nonbiodegradable substance that is caused by any Owner or their guests shall be responsibility of the offending Owner.

6.22 **Antennas and Satellite Dishes.** Exterior antennas, satellite receiver and transmission dishes and other communication devices shall not be permitted to be placed upon any Lot except in accordance with rules established by the Architectural Review Committee in accordance with Section 7.3.

6.23 **Exterior Lighting or Noisemaking Devices.** Except with the consent of the Architectural Review Committee, no exterior lighting or noise making devices may be installed or maintained on any Lot, other than as originally installed by the builder of the home and security and fire alarms. Outside lighting shall be designed to prevent unnecessary light spillage onto adjoining Lots or public streets, and no high output exterior lighting, including, but not limited to mercury vapor and halide lights, may be installed without the specific approval of the Architectural Review Committee. The size and design of light standards and fixtures shall be considered by the Architectural Review Committee in its review of plans. Seasonal holiday lighting and decorations are permissible if consistent with any applicable rules and regulations and if removed within thirty (30) days after the celebrated holiday.

6.24 **Pest Control.** No Owner shall permit any thing or condition to exist upon any portion of the Property, which shall induce, breed or harbor infectious plant or animal diseases or noxious insects or vermin.

6.25 **Grades, Slopes and Drainage.** Each Owner of a Lot shall accept the burden of, and shall not in any manner alter, modify or interfere with, the established drainage pattern and grades, slopes and courses related thereto over any Lot or Common Area without the express written permission of the Architectural Review Committee, and then only to the extent and in the manner specifically approved. No structure, plantings or other materials shall be placed or permitted to remain on or within any grades, slopes, or courses, nor shall any other activities be undertaken which may damage or interfere with established slope ratios, create erosion or sliding problems, or which may change the direction of flow, or obstruct or retard the flow of water through drainage channels.

6.26 **Additional Restrictions.** Each Owner of a Lot, and such Owner's family, tenants, employees, guests and invitees, shall also comply with any additional use restrictions contained in any supplemental declaration annexing such Lot to [Project Name] and in any Project Declaration applicable to such Lot.

6.27 **Minimum Floor Area.** Any Living Unit with a design other than one furnished by Declarant or the Architectural Review Committee shall have a minimum of 1100 square feet of floor area, plus a one-car garage. If the Living Unit is two stories, 500 square feet of the floor area must be on the main floor.

6.28 **Building Materials.** All building materials to be incorporated into and visible as a part of the external structure of any building or other structure may be regulated by the Architectural Review Committee as provided in Article 7.

6.29 **Completion of Improvements.** All structures (including flat work and landscaping) constructed within the Property shall be erected and completed within one year after the commencement of construction. All remodeling, reconstruction or enhancement of structures shall be completed within one year of the commencement of construction. Commencement of construction shall be deemed to be the date upon which a building permit was first issued for the construction, or, if no building permit was obtained, the date on which lot clearing, demolition or remodeling commenced.

6.30 **Association Rules and Regulations.** In addition, the Association from time to time may adopt, modify or revoke such nondiscriminatory rules and regulations governing the conduct of persons and the operation and use of the Property (including, without limitation, use of playground and parking areas) as it may deem necessary or appropriate in order to assure the peaceful and orderly use and enjoyment of the Property. The Association Board of Directors thereof, shall deliver a copy of the Rules and Regulations, upon adoption, and a copy of each amendment, modification or revocation promptly to each Owner. The Board of Directors of the Association may adopt the rules and regulations, except as may be otherwise provided in the Bylaws of the Association.

Article 7 **Architectural Committee**

7.1 **Architectural Review.** No Improvement shall be commenced, erected, placed or altered on any Lot until the construction plans and specifications showing the nature, shape, heights, materials, colors and proposed location of the Improvement have been submitted to and approved in writing by the Architectural Review Committee. It is the intent and purpose of this Declaration to assure quality of workmanship and materials and to assure harmony of external design with the existing Improvements and as to location with respect to topography and finished grade elevations and compliance with the setback requirements contained in applicable governmental development code standards. The building plans to be submitted shall consist of one complete set of plans and specifications in the usual form showing insofar as appropriate, (i) the size and dimensions of the Improvements, (ii) the exterior design, (iii) approximate exterior color scheme, (iv) location of Improvements on the Lot, including setbacks, driveway and parking areas, and (v) location of existing trees to be removed. These plans and specifications shall be left with the Committee until sixty (60) days after the Committee has received notice of completion. This is for the purpose of determining whether, after inspection by the Committee, the Improvement complies substantially with the plans and specifications submitted and approved. The Architectural Review Committee is not responsible for determining compliance with structural and building codes, solar ordinances, zoning codes or any other governmental regulations, all of which are the responsibility of the applicant. The procedure and specific requirements for review and approval of construction may be set forth in Design Guidelines adopted from time to time by the Architectural Review Committee. The Committee may charge a reasonable fee to cover the cost of processing the application. In all cases in which the Architectural Review Committee consent is required by this Declaration, or any Project Declaration, the provisions of this Section shall apply, except that this Section shall not apply to construction by Declarant.

7.2 **Committee Decision.** The Architectural Review Committee shall render its decision with respect to the construction proposal within thirty (30) working days after it has received all material required by it with respect to the application. In the event the Committee fails to render its approval or disapproval within forty-five (45) working days after the Committee has received all material required by it with respect to the proposal, or if no suit to enforce this Declaration has been commenced within one year after completion thereof, approval will not be required and the related provisions of this Declaration shall be deemed to have been fully complied with.

7.3 **Committee Discretion.** The Architectural Review Committee may, at its sole discretion, withhold consent to any proposed work if the Committee finds the proposed work would be inappropriate for the particular Lot or incompatible with the design standards that the Committee intends for [Project Name]. Considerations such as siting, shape, size, color, design, materials, height, solar access, screening, impairment of the view from other Lots, or other effect on the enjoyment of other Lots, disturbance of existing terrain and vegetation and any other factors which the Committee reasonably believes to be relevant, may be taken into account by the Committee in determining whether or not to consent to any proposed work. Regulations on siting of television antennas and satellite receiving dishes shall be in conformance with any applicable Federal Communications Commission rules.

7.4 **Membership: Appointment and Removal** The Architectural Review Committee shall consist of as many persons, but not less than two, as the Declarant may from time to time appoint. The Declarant may remove any member of the Committee from office at its discretion at any time and may appoint new or additional members at any time. The Association shall keep on file at its principal office a list of the names and addresses of the members of the Committee. Declarant may at any time delegate to the Board of Directors of the Association the right to appoint or remove members of the Architectural Review Committee. In such event, or in the event Declarant fails to appoint an Architectural Review Committee, the Board of Directors shall assume responsibility for appointment and removal of members of the Architectural Review Committee, or if it fails to do so, the Board of Directors shall serve as the Architectural Review Committee.

7.5 **Majority Action.** Except as otherwise provided in this Declaration, a majority of the members of the Architectural Review Committee shall have the power to act on behalf of the Committee, without the necessity of a meeting and without the necessity of consulting the remaining members of the Committee. The Committee may render its decision only by written instrument setting forth the action taken by the consenting members.

7.6 **Liability.** Neither the Architectural Review Committee nor any member thereof shall be liable to any Owner, occupant, builder or developer for any damage, loss or prejudice suffered or claimed on account of any action or failure to act of the Committee or a member of the Committee, and the Association shall indemnify the Committee and its members therefrom, provided only that the member has, in accordance with the actual knowledge possessed by him, acted in good faith.

7.7 **Nonwaiver.** Consent by the Architectural Review Committee to any matter proposed to it or within its jurisdiction shall not be deemed to constitute a precedent or waiver

impairing its right to withhold approval as to any similar matter thereafter proposed or submitted to it for consent.

7.8 **Appeal.** At any time after Declarant has delegated appointment of the members of the Architectural Review Committee to the Board of Directors of the Association pursuant to Section 7.4, any Owner adversely affected by action of the Architectural Review Committee may appeal such action to the Board of Directors of the Association. Appeals shall be made in writing within ten (10) days of the Committee's action and shall contain specific objections or mitigating circumstances justifying the appeal. A final, conclusive decision shall be made by the Board of Directors of the Association within fifteen (15) working days after receipt of such notification.

7.9 **Effective Period of Consent.** The Architectural Review Committee's consent to any proposed work shall automatically be revoked one year after issuance unless construction of the work has been substantially commenced in the judgment of the Architectural Review Committee and thereafter diligently pursued, unless the Owner has applied for and received an extension of time from the Committee.

7.10 **Estoppel Certificate.** Within fifteen (15) working days after written request is delivered to the Architectural Review Committee by any Owner, and upon payment to the Committee of a reasonable fee fixed by the Committee to cover costs, the Committee shall provide such Owner with an estoppel certificate executed by a member of the Committee and acknowledged, certifying with respect to any Lot owned by the Owner, that as of the date thereof, either: (a) all Improvements made or done upon or within such Lot by the Owner comply with this Declaration, or (b) such Improvements do not so comply, in which event the certificate shall also identify the noncomplying Improvements and set forth with particularity the nature of such noncompliance. Any purchaser from the Owner, and any mortgagee or other encumbrancer, shall be entitled to rely on such certificate with respect to the matters set forth therein, such matters being conclusive as between Declarant, the Architectural Review Committee, the Association and all Owners, and such purchaser or mortgagee.

7.11 **Enforcement.** If during or after the construction, the Architectural Review Committee finds that construction does not comply with the approved plans, the Committee may require conforming changes to be made or that construction be stopped. The cost of any required changes shall be borne by the Owner. The Committee shall have the power and authority to order any manner of changes or complete removal of any Improvement, alteration or other activity for which prior written approval from the Committee is required and has not been obtained or waived in writing. If an Owner fails to comply with an order of the Committee, then, subject to the Owner's right of appeal under Section 7.8, either the Architectural Review Committee or the Association may enforce compliance in accordance with the procedures set forth in Section 11.1 below.

Article 8 **Association**

Declarant shall organize an association of all of the Owners within [Project Name]. Such Association, its successors and assigns, shall be organized as an Oregon nonprofit corporation

under the name “[Project Name] Owners Association” or such similar name as Declarant shall designate, and shall have such property, powers and obligations as are set forth in this Declaration for the benefit of the Property and all Owners of Lots located therein.

8.1 **Organization**. Declarant shall, before the first Lot is conveyed to an Owner, organize the Association as a nonprofit corporation under the general nonprofit corporation laws of the State of Oregon. The Articles of Incorporation of the Association shall provide for its perpetual existence, but in the event the Association is at any time dissolved, whether inadvertently or deliberately, an unincorporated association of the same name shall automatically succeed it. In that event the assets of the Association shall be dedicated to a public body, or all of the property, powers and obligations of the incorporated association existing immediately prior to its dissolution shall thereupon automatically vest in the successor unincorporated association, and such vesting shall thereafter be confirmed as evidenced by appropriate conveyances and assignments by the incorporated association. To the greatest extent possible, the Articles of Incorporation and Bylaws of the Association shall govern any successor-unincorporated association as if they had been made to constitute the governing documents of the unincorporated association.

8.2 **Membership**. Every Owner of one or more Lots within the Property shall, immediately upon creation of the Association and thereafter during the entire period of such Owner’s ownership of one or more Lots within the Property, 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.

8.3 **Voting Rights**. The Association shall have two classes of voting membership:

Class A. Class A members shall be all Owners with the exception of the Class B member and shall be entitled to one vote for each Lot owned. When more than one person holds an interest in any Lot, all such persons shall be members. The vote for such Lot shall be exercised as they among themselves determine, but in no event shall more than one vote be cast with respect to any Lot.

Class B. The Class B member shall be the Declarant and shall be entitled to three votes for each Lot owned by Declarant. The Class B membership shall cease and be converted to Class A membership on the happening of either of the following events, whichever occurs earlier:

- (i) When ninety percent (90%) of the Lots of the last phase of [Project Name] have been sold and conveyed to Owners other than a successor Declarant; or
- (ii) At such earlier time as Declarant may elect in writing to terminate Class B membership.

8.4 **General Powers and Obligations**. The Association shall have, exercise and perform all of the following powers, duties and obligations:

(a) The powers, duties and obligations granted to the Association by this Declaration.

(b) The powers and obligations of a nonprofit corporation pursuant to the general nonprofit corporation laws of the State of Oregon.

(c) The powers, duties and obligations of a homeowners association pursuant to the Oregon Planned Community Act.

(d) 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 or otherwise promoting the general benefit of the Owners within the Property.

The powers and obligations of the Association may from time to time be amended, repealed, enlarged or restricted by changes in this Declaration made in accordance with its provisions, accompanied by changes in the Articles of Incorporation or Bylaws of the Association made in accordance with such instruments and with the nonprofit corporation laws of the State of Oregon.

8.5 **Specific Powers and Duties.** The powers and duties of the Association shall include, without limitation, the following:

(a) **Maintenance and Services.** The Association shall provide maintenance and services for the Property as provided in Article 9 and other provisions of this Declaration.

(b) **Insurance.** The Association shall obtain and maintain in force policies of insurance as provided in this Declaration or the Bylaws of the Association.

(c) **Rulemaking.** The Association shall make, establish, promulgate, amend and repeal rules and regulations as provided in Section 6.29 of this Declaration.

(d) **Assessments.** The Association shall adopt budgets and impose and collect Assessments as provided in Article 10 of this Declaration.

(e) **Enforcement.** The Association shall perform such acts, whether or not expressly authorized by this Declaration, as may be reasonably necessary to enforce the provisions of this Declaration and the rules and regulations adopted by the Association, including without limitation, enforcement of the decisions of the Architectural Review Committee.

(f) **Employment of Agents, Advisors and Contractors.** The Association through its Board of Directors, may employ the services of any person or corporation as managers, hire employees to manage, conduct and perform the business, obligations and duties of the Association, employ professional counsel and obtain advice from such person or firms or corporations such as, but not limited to, landscape architects, architects, planners, lawyers and accountants, and contract for or otherwise provide for all services necessary or convenient for the managements, maintenance and operation of the Property; provided, however, the Association may not incur or commit to incur legal fees in excess of \$5,000 for any specific matter unless the Owners have enacted a resolution authorizing the incurring of such fees by a vote of seventy-five

percent (75%) of the voting rights present in person or by absentee ballot or proxy at a meeting at which a quorum is constituted. This limitation shall not be applicable to legal fees incurred in defending the Association or the Board of Directors from claims or litigation brought against them. The limitation set forth in this paragraph shall increase by \$500 on each fifth anniversary of the recording of this Declaration.

(g) **Borrow Money, Hold Title and Make Conveyances.** The Association may borrow and repay moneys for the purpose of performing its duties under this Declaration, and subject to Section 4.4(e) above, encumber the Common Areas as security for the repayment of such borrowed money. The Association may acquire, hold title to and convey, with or without consideration, real and personal property and interest therein, including but not limited to easements across all or any portion of the Common Area, and shall accept any real or personal property, leasehold or other property interests within [Project Name] conveyed to the Association by Declarant.

(h) **Transfer, Dedication and Encumbrance of Common Area.** Except as otherwise provided in Section 4.4(e) above, the Association may sell, transfer or encumber all or any portion of the Common Area to a person, firm or entity, whether public or private, and dedicate or transfer all or any portion of the Common Area to any public agency, authority, or utility for public purposes.

(i) **Create Classes of Service and Make Appropriate Charges.** The Association may, in its sole discretion, create various classes of service and make appropriate Individual Assessments or charges therefor to the users of such services, including but not limited to reasonable admission and other fees for the use of any and all recreational facilities situated on the Common Areas, without being required to render such services to those of its members who do not assent to such charges and to such other rules and regulations as the Board of Directors deems proper. In addition, the Board of Directors shall have the right to discontinue any service upon nonpayment of Assessments or to eliminate such service for which there is no demand or adequate funds to maintain the same.

(j) **Implied Rights and Obligations.** The Association may exercise any other right or privilege reasonably to be implied from the existence of any right or privilege expressly given to the Association under this Declaration or reasonably necessary to effectuate any such right or privilege.

8.6 **Liability** A member of the Board of Directors or an officer of the Association shall not be liable to the Association or any member thereof for any damage, loss or prejudice suffered or claimed on account of any action or failure to act in the performance of his duties, except for acts of gross negligence or intentional acts. In the event any member of the Board of Directors or any officer of the Association is made a party to any proceeding because the individual is or was a director or officer of the Association, the Association shall indemnify such individual against liability and expenses incurred to the maximum extent permitted by law. The managing agent of the Association, and its officers and employees, shall not be liable to the Owners or any third parties on account of any action or failure to act in the performance of its duties as managing agent, except for acts of gross negligence or intentional acts, and the

Association shall indemnify the managing agent and its officers and employees from any such claims, other than for gross negligence or intentional misconduct.

8.7 **Interim Board; Turnover Meeting.** Declarant shall have the right to appoint an interim board of three directors, who shall serve as the Board of Directors of the Association until replaced by Declarant or until their successors take office at the Turnover Meeting following termination of Class B membership. Declarant shall call a meeting of the Association for the purpose of turning over administrative responsibility for the Property to the Association not later than ninety (90) days after termination of the Class B membership in accordance with Section 8.3 above. At the Turnover Meeting the interim directors shall resign and their successors shall be elected by the Owners as provided in this Declaration and in the Bylaws of the Association. If Declarant fails to call the Turnover Meeting required by this Section, any Owner or mortgagee of a Lot may call the meeting by giving notice as provided in the Bylaws.

8.8 **Contracts Entered into by Declarant or Prior to Turnover Meeting.** Notwithstanding any other provision of this Declaration, any management contracts, service contracts or employment contracts entered into by the Declarant or the Board of Directors on behalf of the Association prior to the Turnover Meeting shall have a term not in excess of three (3) years. In addition, any such contract shall provide that it may be terminated without cause or penalty by the Association or Board of Directors upon not less than thirty (30) days' notice to the other party given not later than sixty (60) days after the Turnover Meeting.

8.9 **Bylaws.** The Bylaws of the Association and any amendment or modification of the Bylaws shall be recorded in the Deed Records of [County Name] County, Oregon. Declarant hereby adopts, on behalf of the Association, the initial Bylaws attached as Exhibit A to this Declaration.

8.10 **Project Associations.** Nothing in this Declaration shall be construed as prohibiting the formation of Project Associations within [Project Name]. The Board of Directors of the Association shall assist the Project Associations in the performance of their duties and obligations under their respective Project Declarations, if any, and the Association shall cooperate with each Project Association so that each of those entities can most efficiently and economically provide their respective services to Owners. It is contemplated that from time to time either the Association or a Project Association may use the services of the other in the furtherance of their respective obligations, and they may contract with each other to better provide for such cooperation. The payment for such contract services or a variance in services provided may be reflected in an increased Assessment by the Association for the particular Project or by an item in the Project Association's budget which shall be collected through Project Assessments and remitted to the Association. If a Project Association fails or is unable to perform a duty or obligation required by its Project Declaration, then the Association at its option may, after reasonable notice and an opportunity to cure given to the Project Association, perform such duties or obligations until such time as the Project Association is able to resume such functions, and the Association may charge the Project Association or the Owners within the Project a reasonable fee for the performance of such functions.

Article 9 **Maintenance, Utilities And Services**

9.1 **Maintenance of Common Areas and Front Yards.** The Association shall perform all maintenance upon the Common Areas, Common Easement Areas, and Limited Common Areas, including but not limited to landscaping, irrigation, walks, private roads, entrance monuments and gates, fences, walls, and signs, parking areas, walkways and trails, unless the maintenance thereof is assumed by a public body. Unless the Board of Directors adopts a resolution to the contrary, the Association shall also maintain the landscaping and irrigation of the Front Yards. Such areas shall be maintained in an attractive condition and in a good and workmanlike manner such as to carry out the purpose for which such areas are intended.

9.2 **Maintenance of Utilities.** The Association shall perform or contract to perform maintenance of all private utilities within Common Areas, such as sanitary sewer service lines, domestic water service lines, storm drainage lines and water detention facilities, except to the extent such maintenance is performed by the utilities furnishing such services. The Association shall not be liable for any interruption or failure of such services. Each Owner shall be responsible for maintaining utility lines within his Lot.

9.3 **Security.** The Association may, but shall not be obligated to, maintain or support certain activities within the Property designed to make the Property safer than it otherwise might be, including, without limitation, exterior lighting for Common Areas. Neither the Association, Declarant, nor any successor Declarant shall in any way be considered insurers or guarantors of security within the Property, nor shall any of them be held liable for any loss or damage by reason of failure to provide adequate security or of ineffectiveness of security measures undertaken. No representation or warranty is made that any fire protection system, burglar alarm system or other security system cannot be compromised or circumvented, nor that any such systems or security measures undertaken will in all cases prevent loss or provide the detection or protection for which the system is designed or intended. Each Owner acknowledges, understands and covenants to inform its tenants that the Association, its Board of Directors and committees, Declarant, and any successor Declarant are not insurers and that each person using the Property assumes all risks for loss or damage to person, to property and to the contents of Lots resulting from acts of third parties and releases such parties from any liability therefor.

9.4 **Services.** The Association shall provide or contract for such services as the Board may reasonably deem to be of benefit to the Property, including, without limitation, landscape services, garbage and trash removal for Common Areas and security services.

9.5 **Project Maintenance.** The Association may at its option, in the discretion of the Board of Directors, assume the maintenance responsibilities set out in any Project Declaration for any Project located on the Property, after giving the responsible Project Owner or Association reasonable notice and an opportunity to correct its deficient maintenance. In such event, all costs of such maintenance shall be assessed only against the Owner or Owners of Lots in the Project to which the services are provided and shall be Individual Assessments for purposes of this Declaration. The assumption of this responsibility may take place either by contract or because, in the opinion of the Association Board of Directors, the level and quality of service than being provided is not consistent with the community-wide standard of [Project Name].

9.6 **Owner's Responsibility.** Except as otherwise provided in this Declaration, applicable Project Declarations, or by written agreement with the Association, all maintenance of the Lots and Improvements thereon as provided in Section 6.5 above shall be the sole responsibility of the Owner thereof, who shall maintain such Lot, other than the Front Yard, in a neat and attractive condition in accordance with the community-wide standard of [Project Name]. If the Board of Directors elects to discontinue Front Yard maintenance, then the Owner shall be responsible for irrigating and maintaining the Front Yard, including any street trees. The Association shall, in the discretion of the Board of Directors, assume the maintenance responsibilities of such Owner if, in the opinion of the Board of Directors, the level and quality of maintenance being provided by such Owner does not satisfy such standard, and the Project Association or the Project in which the Lot is located has failed to adequately provide such maintenance. Before assuming the maintenance responsibilities, the Board of Directors shall notify the Owner and any applicable Project Association in writing of its intention to do so, and if such Owner or the Project Association has not commenced and diligently pursued remedial action within fifteen (15) days after mailing of such written notice, then the Association shall proceed. The expenses of such maintenance by the Association shall be reimbursed to the Association by the Owner, together with interest as provided in Section 11.5 below. Such charges shall be an Individual Assessment and lien on the Lot as provided in Section 10.8 and 11.2 below.

9.7 **Damage Liability.** Any damage to any Common Area by Owners, their children, agents visitors, friends, relative, tenants, occupants or service personnel shall be repaired by the Owner within fifteen (15) days following the date on which notice is mailed by the Association informing the Owner of such violation. If the damage has not been repaired within such time, then the Association shall perform such repair and the cost shall be assessed to the Owner as an Individual Assessment.

Article 10 **Assessments**

10.1 **Purpose of Assessments.** The Assessments levied by the Association shall be used exclusively for the purpose of promoting the recreation, health, safety, and welfare of the Owners and occupants of [Project Name] and for the improvement, operation and maintenance of the Common Areas.

10.2 **Types of Assessments.** The Association may levy Annual Assessments, Special Assessments, Emergency Assessments, Limited Common Area Assessments and Individual Assessments, all as more particularly described below.

10.3 **Apportionment of Assessments.** Lots owned by Declarant shall not be subject to Annual Assessments, Special Assessments or Emergency Assessments until such time as the Lot is occupied for residential use, except that Annual Assessments for reserves as described in Section 10.11(b) below shall begin accruing for all Lots, including Lots owned by Declarant, from the date the first Lot is conveyed. Declarant, however, may defer payment of the accrued reserve assessments for a lot until the date the Lot is conveyed, but not beyond the date of the Turnover Meeting or, if no Turnover Meeting is held, the date the Owners assume administrative control of the Association. The books and records of the Association shall reflect the amount

owing from the Declarant for all reserve assessments. All Lots other than unoccupied Lots owned by Declarant shall be subject to assessment and shall pay an equal share of the Annual Assessments, Special Assessments and Emergency Assessments. Notwithstanding the provisions of this Section, however, a supplemental declaration annexing a specific Common Area facility may specify a special allocation of assessing the costs of operating and maintaining the facility on such Common Area in order to more fairly allocate such cost, taking into account the extent of use or other factors. Declarant may elect to delay collection of Annual Assessments against all Lots, but in such case shall pay all common expenses of the Association until such Assessments commence. No Owner by the Owner's own action may claim exemption from liability for contribution towards common expenses by waiver by the Owner of use of enjoyment of any of the Common Area or by abandonment by the Owner of the Owner's Lot. An Owner may not claim an offset against an Assessment for failure of the Association to perform its obligations, and no Owner may offset amounts owing or claimed to be owing by the Association or Declarant to the Owner.

10.4 **Annual Assessments.** The Board of Directors of the Association shall from time to time and at least annually prepare an operating budget for the Association, taking into account the current costs of maintenance and services and future needs of the Association, any previous over assessment and any common profits of the Association. The budget shall take into account the numbers of Lots subject to assessment as of the first day of the fiscal year for which the budget is prepared and the number of Lots reasonably anticipated becoming subject to assessment during the fiscal year. The budget shall provide for such reserve or contingency funds as the Board deems necessary or as may be required by law, but not less than the reserves required by Section 10.11 below. Annual Assessments for such operating expenses and reserves ("**Annual Assessments**") shall then be apportioned among the Lots as provided in Section 10.3 above. Within thirty (30) days after adopting the annual budget, the Board of Directors shall provide a summary for the Budget to all Owners. If the Board of Directors fails to adopt an annual budget, the last adopted budget shall continue in effect. The manner of billing and collection of Assessments shall be as provided in the Bylaws.

10.5 **Special Assessments.** In addition to the Annual Assessment authorized above, the Board of Directors may levy during any fiscal year a Special Assessment ("Special Assessment"), applicable to that year only, for the purpose of deferring all or any part of the cost of any construction or reconstruction, unexpected repair, or acquisition or replacement of a described capital improvement, or for any other one-time expenditure not to be paid for out of Annual Assessments. Special Assessments which in the aggregate in any fiscal year exceed an amount equal to fifteen percent (15%) of the budgeted gross expenses of the Association for the fiscal year may be levied only if approved by a majority of the voting rights voting on such matter, together with the written consent of the Class B member, if any. Before the Turnover Meeting, any Special Assessment for acquisition or construction of new capital improvements or additions must be approved by not less than fifty percent (50%) of the Class A voting rights, together with the written consent of the Class B member. Special Assessments shall be apportioned as provided in Section 10.3 above and may be payable in lump sum or in installments, with or without interest or discount, as determined by the Board of Directors.

10.6 **Emergency Assessments.** If the Annual Assessments levied at any time are, or will become, inadequate to meet all expenses incurred under this Declaration for any reason,

including nonpayment of any Owner's Assessments on a current basis, the Board of Directors of the Association shall immediately determine the approximate amount of such inadequacy and issue a supplemental budget, noting the reason therefor, and levy an Emergency Assessment for the amount required to meet all such expenses on a current basis ("**Emergency Assessment**"). Any Emergency Assessment which in the aggregate in any fiscal year would exceed an amount equal to five percent (5%) of the budgeted gross expenses of the Association for the fiscal year may be levied only if approved by not less than a majority of the voting rights voting on such matter, together with the written consent of the Class B member, if any. Prior to the Turnover Meeting described in Section 8.7, and the Special Assessment must be approved by not less than fifty percent (50%) of the Class A voting rights, together with the written consent of the Class B member. Emergency Assessments shall be apportioned as set forth in Section 10.3 above and payable as determined by the Board of Directors.

10.7 **Limited Common Area Assessments.** Annual Assessments, Special Assessments and Emergency Assessments relating to maintenance, upkeep, repair, replacement or improvements to Limited Common Areas ("**Limited Common Area Assessments**") shall be assessed exclusively to the Lots having the right to use such Association Limited Common Areas.

10.8 **Individual Assessments.** Any common expense or any part of a common expense benefiting fewer than all of the Lots may be assessed exclusively against the Lots benefited ("**Individual Assessment**"). Individual Assessments include, without limitation, charges for services provided under Sections 8.5(i), 8.10, 9.5, 9.6 and 9.7 and any common expense that is the fault of the Owner and not paid by insurance. Individual Assessments shall also include default assessments levied against any Lot to reimburse the Association for costs incurred in bringing such Lot or its Owner into compliance with the provisions of this Declaration or the rules and regulations of the Association and for fines or other charges imposed pursuant to this Declaration for violation thereof. Unless otherwise provided by the Board of Directors, Individual Assessments shall be due 30 days after the Board of Directors has given written notice thereof to the Owners subject to the Individual Assessments.

10.9 **Annexation of Additional Property.** When Additional Properties are annexed to [Project Name], the Lots included therein shall become subject to Assessments from the date of such annexation to the extent provided in Section 10.3. The Board of Directors of the Association, however, at its option may elect to recompute the budget based upon the additional Lots subject to assessment and additional Common Areas and recomputed Annual Assessments for all Lots, including the new Lots, for the balance of the fiscal year. Notwithstanding any provision of this declaration apparently to the contrary, a declaration annexing Additional Property may provide that such additional property does not have the right to use a particular Common Area or facility located thereon, in which case such Additional Property shall not be assessed for the costs of operating, maintaining, repairing, replacing or improving such Common Area or facility.

10.10 **Operations Fund.** The Association shall keep all funds received by it as Assessments, other than reserves described in Section 10.11, separate and apart from its other funds, in a bank account in the State of Oregon in the name of the Association to be known as the "Operations Fund." All expenses of the Association shall be paid from the Operations Fund

or the Reserve Fund referred to in Section 10.11. The Association shall use such funds exclusively for the purpose of promoting the recreation, health, safety and welfare of the residents within the Property and in particular for the improvement and maintenance of properties, services and facilities devoted to this purpose and related to the use and enjoyment of the Common Areas and of the Lots situated upon the Property, including but not limited to:

(a) Payment of the cost of maintenance, utilities and services as described in Article 9.

(b) Payment of the cost of insurance as described in the Bylaws of the Association.

(c) Payment of taxes assessed against the Common Areas and any improvements thereon.

(d) Payment of the cost of other services which the Association deems to be of general benefit to the Owners, including but not limited to accounting, legal and secretarial services.

10.11 **Reserve Fund.**

(a) **Establishment of Account.** Declarant shall conduct a reserve study as described in paragraph (c) of this section and establish a bank account in the State of Oregon in the name of the Association (the “**Reserve Fund**”) for replacement of common properties that will normally require replacement in whole or in part in more than three (3) and less than thirty (30) years, for exterior painting if the Common Areas or other property to be maintained by the Association include exterior painted surfaces, and for other items, whether or not involving Common Areas, if the Association has responsibility to maintain the items. The Reserve Fund need not include those items that could reasonably be funded from operating Assessments or for those items for which one or more Owners are responsible for maintenance and replacement under the provisions of this Declaration or the Bylaws.

(b) **Funding of Reserve Fund.** The Reserve Fund shall be funded by Assessments against the individual Lot assessed for maintenance of the items for which the Reserve Fund is being established, which sums shall be included in the regular Annual Assessment for the Lot. The Reserve Fund shall be established in the name of the Association. The Association is responsible for administering the Reserve Fund and making periodic payments into it.

(c) **Reserve Studies.** The reserve portion of the initial Assessment determined by Declarant shall be based on a reserve study described in paragraph (c) or other sources of information. The Board of Directors annually shall conduct a reserve study, or review and update an existing study, to determine the Reserve Fund requirements and may adjust the amount of payments as indicated by the study or update and provide other reserve items that the Board of Directors, in its discretion, may deem appropriate. The reserve study shall include:

(i) Identification of all items for which reserves are to be established;

(ii) The estimated remaining useful life of each item as of the date of the reserve study;

(iii) An estimated cost of maintenance, repair or replacement of each item at the end of its useful life;

(iv) A thirty (30) year plan with regular and adequate contributions, adjusted by estimated inflation and interest earned on reserves, to meet the maintenance, repair and replacement schedule.

(d) **Use of Reserve Fund.** The Reserve Fund shall be used only for the purposes for which the reserves have been established and shall be kept separate from other funds. After the Turnover Meeting, however, the Board of Directors may borrow funds from the Reserve Fund to meet high seasonal demands on the regular operating funds or to meet unexpected increases in expenses if the Board of Directors has adopted a resolution, which may be an annual continuing resolution, authorizing the borrowing of funds. Funds so borrowed from the Reserve Fund must be repaid from Assessments. Not later than the adoption of the budget for the following year, the Board of Directors shall adopt by resolution a written payment plan providing for repayment of the borrowed funds within a reasonable period. Nothing in this section shall prohibit prudent investment of the Reserve Fund. In addition to the authority of the Board of Directors under paragraph (c) of this section, following the second year after the Turnover Meeting, the Association may elect to reduce or increase future Assessments for the Reserve Fund by an affirmative vote of not less than seventy-five percent (75%) of the voting power of the Association and may, on an annual basis by a unanimous vote, elect not to fund the Reserve Fund. Assessments paid into the Reserve Fund are the property of the Association and are not refundable to sellers or Owners of Lots. Sellers of the Lots, however, may treat their outstanding share of the Reserve Fund as a separate item in any sales agreement.

10.12 **Creation of Lien and Personal Obligation of Assessments.** Declarant, for each Lot owned by it within the Property, does hereby covenant, and each Owner of any lot by acceptance of a conveyance thereof, whether or not so expressed in any such 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 Association Bylaws. Such assessments and charges, together with any interest, expenses or attorneys' fees imposed pursuant to Section 11.5, shall be a charge on the land and shall be a continuing lien upon the Lot against which each such Assessment or charge is made. Such Assessments, charges and other costs shall also be the personal obligation of the person who was the Owner of such Lot at the time when the Assessment or charge fell due. Such liens and personal obligations shall be enforced in the manner set forth in Article 11 below.

10.13 **Voluntary Conveyance.** In a voluntary conveyance of a Lot the grantee shall be jointly and severally liable with the grantor for all unpaid assessments against the grantor of the Lot up to the time of the grant or conveyance, without prejudice to the grantee's right to recover from the grantor the amounts paid by the grantee therefor. However, upon request of a prospective purchaser, the Board of Directors of the Association shall make and deliver a statement of the unpaid Assessments against the prospective grantor or the Lot, and the grantee in that case shall not be liable for, nor shall the Lot when conveyed be subject to, a lien filed

thereafter for any unpaid Assessments against the grantor in excess of the amount set for the in the statement.

Article 11 **Enforcement**

11.1 **Violation of General Protective Covenants.** In the event any Owner constructs or permits to be constructed on his Lot an Improvement contrary to the provisions of this Declaration, or shall violate any provisions of this Declaration, the Bylaws of the Association or the rules and regulations, then the Association acting through its Board of Directors shall notify the Owner in writing of any such specific violations. If the Owner is unable, unwilling or refuses to comply with the Association's specific directives for remedy or abatement, or the Owner and the Association cannot agree to a mutually acceptable solution within the framework and intent of this Declaration, after notice and opportunity to be heard and within fifteen (15) days of written notice to the Owner, then the Association acting through its Board of Directors, shall have the right to do any or all of the following:

(a) Assess reasonable fines against such Owner, based upon a resolution adopted by the Board of Directors that is delivered to each Lot, mailed to the mailing address of each Lot or mailed to the mailing address designated by the Owner of each Lot in writing, which fines shall constitute Individual Assessments for purposes of this Declaration;

(b) Enter the offending Lot and remove the cause of such violation, or alter, repair or change the item which is in violation of this Declaration in such a manner as to make it conform thereto, in which case the Association may assess such Owner for the entire cost of the work done, which amount shall be payable to the Association as an Assessment, provided that no items of construction shall be altered or demolished in the absence of judicial proceedings;

(c) Cause any vehicle parked in violation of this Declaration or the rules and regulations to be towed and impounded at the Owners' expense;

(d) Suspend the voting rights for the period that the violations remain unabated, provided that the Association shall not deprive any Owner of access to and from his Living Unit; and

(e) Bring suit or action against the Owner on behalf of the Association and other Owners to enforce this Declaration.

11.2 **Default in Payment of Assessments; Enforcement of Lien.** If an Assessment or other charge levied under this Declaration is not paid within thirty (30) days of its due date, such Assessment or charge shall become delinquent and shall bear interest from the due date at the rate set forth below. In such event the Association may exercise any or all of the following remedies:

(a) The Association may suspend such Owner's voting rights, any utility services paid for out of Assessments and right to use the Common Areas until such amounts, plus other charges under this Declaration, are paid in full and may declare all remaining periodic

installments of any Annual Assessment immediately due and payable. In no event, however, shall the Association deprive any Owner of access to and from his Lot.

(b) The Association shall have a lien in accordance with ORS 94.709 against each Lot for any Assessment levied against the Lot, including any fines or other charges imposed under this Declaration or the Bylaws against the Owner of the Lot.

(c) 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 paragraph (b) above. Recovery on any such action, however, shall operate to satisfy the lien, or the portion thereof, for which recovery is made.

(d) The Association shall have any other remedy available to it by law or in equity.

11.3 **Reports to First Mortgagees.** In response to a written request of any first mortgagee of a Lot, the Association shall report to such mortgagee whether such Lot is current or past due with respect to Assessments.

11.4 **Subordination of Lien to Mortgages.** The lien of the Assessments or charges provided for in this Declaration shall be subordinate to the lien of any mortgage or deed of trust on such Lot which was made in good faith and for value and which was recorded prior to the recordation of the notice of lien. Sale or transfer of any Lot shall not affect the Assessment lien, but the sale or transfer of any Lot which is subject to any mortgage or deed of trust pursuant to a decree of foreclosure thereunder or any deed or proceeding, deed or assignment in lieu of foreclosure shall extinguish any lien of an Assessment notice of which was recorded after the recording of the mortgage or trust deed. The unpaid Assessments as a result of such foreclosure or sale shall become a common expense of all Owners, including the mortgagee or purchaser, and such sale or transfer shall not release the Lot from liability for any Assessments or charges thereafter becoming due or from the lien of such Assessments or charges.

11.5 **Interest, Late Charges and Expenses.** 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 which is the greater of eighteen percent (18%) per annum or three percentage points per annum above the prevailing Portland, Oregon prime rate as of the due date, or such other rate as may be established by the Board of Directors, 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 of Directors, which resolution is delivered to each Lot, mailed to the mailing address of each Lot or mailed to the mailing address designated by the Owner in writing, together with all expenses incurred by the Association in collecting such unpaid assessments, including attorneys' fees (whether or not suit is instituted). In the event the Association shall file 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 of Directors of the Association.

11.6 **Costs and Attorneys' Fees.** In the event the Association shall bring any suit or action to enforce this Declaration, the Bylaws of the Association or the Rules and Regulations, or

to collect any money due hereunder or to foreclose a lien, the Owner-defendant shall pay to the Association all costs and expenses incurred by it 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 or in connection with any bankruptcy proceedings or special bankruptcy remedies.

11.7 **Nonexclusiveness and Accumulation of Remedies.** An election by the Association to pursue any remedy provided for violation of this Declaration shall not prevent concurrent or subsequent exercise of another remedy permitted under this Declaration. 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, 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.

11.8 **Enforcement by City of [City].** The provisions of this Declaration relating to preservation and maintenance of Common Areas shall be deemed to be for the benefit of the City of [City] as well as the Association and Owners of Lots, 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 become a lien upon the Property.

Article 12 **Dispute Resolution**

12.1 **Mediation.**

(a) Except as otherwise provided in this section, before initiating litigation, arbitration or an administrative proceeding in which the Association and an Owner have an adversarial relationship, the party that intends to initiate litigation, arbitration or an administrative proceeding shall offer to use any dispute resolution program available within [County Name] County, Oregon, that is in substantial compliance with the standards and guidelines adopted under ORS 36.175. The written offer must be hand delivered or mailed by certified mail, return receipt requested, to the address, contained in the records of the Association, for the other party.

(b) If the party receiving the offer does not accept the offer within ten (10) days after receipt of the offer, such acceptance to be made by written notice, hand delivered or mailed by certified mail, return receipt requested, to the address, contained in the records of the Association, for the other party, the initiating party may commence the litigation, arbitration or administrative proceeding. The notice of acceptance of the offer to participate in the program must contain the name, address and telephone number of the body administering the dispute resolution program.

(c) If a qualified dispute resolution program exists within [County Name] County, Oregon, and an offer to use the program is not made as required under paragraph (a) of this section, then litigation, arbitration or an administrative proceeding may be stayed for thirty

(30) days upon a motion of the noninitiating party. If the litigation, arbitration or administrative action is stayed under this paragraph, both parties shall participate in the dispute resolution process.

(d) Unless a stay has been granted under paragraph (c) of this section, if the dispute resolution process is not completed within thirty (30) days after receipt of the initial offer, the initiating party may commence litigation, arbitration or an administrative proceeding without regard to whether the dispute resolution is completed.

(e) Once made, the decision of the court, arbitrator or administrative body arising from litigation, arbitration or an administrative proceeding may not be set aside on the grounds that an offer to use a dispute resolution program was not made.

(f) The requirements of this section do not apply to circumstances in which irreparable harm to a party will occur due to delay or to litigation, arbitration or an administrative proceeding initiated to collect Assessments, other than Assessments attributable to fines.

12.2 **Arbitration.** Any claim, controversy or dispute by or among Declarant, Association, the Architectural Control Committee or one or more Owners, or any of them, arising out of or related to this Declaration, the Bylaws of the Association, the Rules and Regulations or the Property shall be first subject to mediation as described in Section 12.1 above, or otherwise, and if not timely settled by mediation, resolved by arbitration in accordance with this Article 12. The decisions and award of the arbitrator shall be final, binding and nonappealable. The arbitration shall be conducted in [City], Oregon, pursuant to the arbitration statutes of the State of Oregon, and any arbitration award may be enforced by any court with jurisdiction. Filing for arbitration shall be treated the same as filing in court for purposes of filing a notice of pending action (“**lis pendens**”).

12.3 **Selection of Arbitrator.** A single arbitrator selected by mutual agreement of the parties shall conduct the arbitration. The arbitrator selected shall be neutral and unbiased, except to the extent the arbitrator’s prior relationship with any party is fully disclosed and consented to by the other party or parties. If the parties are unable to agree upon the arbitrator within ten (10) days after a party’s demand for arbitration, upon application of any party, the Presiding Judge of the Circuit Court of [County Name] County, Oregon shall designate the arbitrator.

12.4 **Consolidated Arbitration.** Upon demand by any party, claims between or among the parties and third parties shall be submitted in a single, consolidated arbitration.

12.5 **Discovery.** The parties to the arbitration shall be entitled to such discovery as would be available to them in an action in [County Name] County Circuit Court. The arbitrator shall have all of the authority of the Court incidental to such discovery, including without limitation authority to issue orders to produce documents or other materials, to issue orders to appear and submit to deposition, and to impose appropriate sanctions including without limitation award against a party for failure to comply with any order.

12.6 **Evidence.** The parties to the arbitration may offer such evidence as they desire and shall produce such additional evidence, as the arbitrator may deem necessary for an understanding and determination of the dispute. The arbitrator shall determine the admissibility

of the evidence offered. All evidence shall be taken in the presence of the arbitrator and all of the parties, except where any of the parties is absent in default or has waived its right to be present.

12.7 **Excluded Matters.** Notwithstanding the foregoing, the following matters shall not be subject to mediation or arbitration under this Article 12 (but shall be subject to the applicable provisions of Section 12.6 below): (a) actions relating to the collection of fees, assessments, fines and other charges imposed or levied by the Association (other than disputes as to the validity or amount of such fees, assessments, fines or charges, which disputes shall be subject to mediation/arbitration as provided above), and (b) actions to enforce any order, decision or award rendered by arbitration pursuant to this Article 12. The filing of a lis pendens or the application to any court for the issuance of any provisional process or similar remedy described in the Oregon or Federal Rules of Civil Procedure shall not constitute a waiver of the right or duty to utilize the procedures specified in this Article 12.

12.8 **Costs and Attorneys' Fees.** The fees of any mediator and the costs of mediation shall be divided and paid equally by the parties. Each party shall pay its own attorneys' fees and costs in connection with any mediation. The fees of any arbitrator and the costs of arbitration shall be paid by the nonprevailing party or parties; if none, such fees and costs shall be divided and paid equally by the parties. Should any suit, action or arbitration be commenced in connection with any dispute related to or arising out of this Declaration, the Bylaws or Rules and Regulations, to obtain a judicial construction of any provision of this Declaration, the Bylaws or the Rules and Regulations, to rescind this Declaration or to enforce or collect any judgment or decree of any court or any award obtained during arbitration, the prevailing party shall be entitled to recover its costs and disbursements, together with such investigation, expert witness and attorneys' fees incurred in connection with such dispute, as the court or arbitrator may adjudge reasonable, at trial, in the arbitration, upon any motion for reconsideration, upon petition for review, and on any appeal of such suit, action or arbitration proceeding. The determination of who is the prevailing party and the amount of reasonable attorneys' fees to be paid to the prevailing party shall be decided by the arbitrator (with respect to attorneys' fees incurred prior to and during the arbitration proceeding) and by the court or courts, including any appellate or review court, in which such matter is tried, heard or decided, including a court that hears a request to compel or enjoin arbitration or that hears exceptions made to an arbitration award submitted to it for confirmation as a judgment (with respect to attorneys' fees incurred in such proceedings).

12.9 **Survival.** The mediation and arbitration agreement set forth in this Article 12 shall survive the transfer by any part of its interest or involvement in the Property and any Lot therein and the termination of this Declaration.

Article 13 **Mortgages**

13.1 **Reimbursement of First Mortgages.** First mortgagees of Lots may, jointly or singly, pay taxes or other charges which are in default and which may or have become a charge against any Common Area and may pay overdue premiums on hazard insurance policies or secure new hazard insurance coverage on the lapse of a policy, for such Common Area. First

mortgagees making such payments shall be owed immediate reimbursement therefor from the Association to the extent the same was the responsibility of the Association.

13.2 **Right of First Mortgagees Relating to Maintenance.** At any time that the Common Areas are not maintained or repaired by the Association to the extent reasonably necessary to protect and preserve the value of the Property for security purposes, then the record mortgagee, upon giving written notice as provided in this paragraph, shall be entitled to exercise the rights of the Owner of the Lot as a member of the Association to vote at all regular and special meetings of the members of the Association for a period of one year following the date of such notice. During this one-year period, the Association shall give notice of all regular and special meetings to both the Owner and the mortgagee, and the Owner may attend such meetings as an observer. Notice from the mortgagee under this Section shall quote this Section 13.2 and shall be sent postage prepaid by certified United States mail, return receipt requested, to the Owner with a copy sent by regular mail to the Association at the last known address of each.

13.3 **FHA/VA Approval.** As long as there is a Class B membership, the following actions will require the prior approval of the Federal Housing Administration (“FHA”) or the Veterans Administration (“VA”), if this Declaration was previously approved by such agencies: annexation of Additional Properties other than as provided in the Master Plan, mergers and consolidations, mortgaging of Common Areas, dissolution of the Association and amendment of this Declaration or the Articles of Incorporation or the Bylaws of the Association.

Article 14 **Amendment and Repeal**

14.1 **How Proposed.** Amendments to or repeal of this Declaration shall be proposed by either a majority of the Board of Directors or by Owners holding thirty percent (30%) or more of the Association’s voting rights. The proposed amendment or repeal must be reduced to writing and shall be included in the notice of any meeting at which action is to be taken thereon or attached to any request for consent to the amendment or repeal.

14.2 **Approval Required.** 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 representing not less than seventy-five percent (75%) of the Lots, based upon one vote for each such Lot, together with the written consent of the Class B member, if such Class B membership has not been terminated as provided in this Declaration. In no event shall an amendment under this Section create, limit or diminish special Declarant rights without Declarant’s written consent, or change the boundaries of any Lot or any uses to which any Lot is restricted unless the Owners of the affected Lots unanimously consent to the amendment. Declarant may not amend this Declaration to increase the scope of special declarant rights reserved in this Declaration after the sale of the first Lot unless owners representing seventy-five percent (75%) of the total vote, other than Declarant, agree to the amendment. To the extent any amendment relates to the preservation or maintenance of the Common Areas or private utility lines, or the existence of an entity responsible for accomplishing the same, such amendment shall be approved by the Zoning Administrator of the City of [City].

14.3 **Recordation.** Any such amendment or repeal shall become effective only upon recordation in the Deed Records of [County Name] County, Oregon of a certificate of the president and secretary of the Association setting forth in full the amendment, amendments or repeal so approved and certifying that such amendment, amendments or repeal have been approved in the manner required by this Declaration and ORS 94.590, and acknowledged in the manner provided for acknowledgment of deeds.

14.4 **Regulatory Amendments.** Notwithstanding the provisions of Section 14.1 above, until the Turnover Meeting has occurred, Declarant shall have the right to amend this Declaration or the Bylaws of the Association in order to comply with the requirements of any applicable statute, ordinance or regulation or of the Federal Housing Administration, the United States Department of Veterans Affairs, the Farmers Home Administration of the United States, the Federal National Mortgage Association, the Government National Mortgage Association, the Federal Home Mortgage Loan 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 which insures, guarantees or provides financing for a planned community or lots in a planned community. After the Turnover Meeting, any such amendment shall require the approval of a majority of the voting rights of the Association voting in person, by proxy or by ballot at a meeting or ballot meeting of the Association at which a quorum is represented.

Article 15 **Miscellaneous Provisions**

15.1 **Lessees and Other Invitees.** Lessees, employees, 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 his Lot and other areas within the Property. The Owner shall be responsible for obtaining 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 himself.

15.2 **Nonwaiver.** Failure by the Association or by any Owner to enforce any covenant or restriction contained in this Declaration shall in no event be deemed a waiver of the right to do so thereafter.

15.3 **Construction; Severability; Number; Captions.** This Declaration shall be liberally construed as an entire document to accomplish the purposes thereof as stated in the introductory paragraphs hereof. Nevertheless, each provision of this Declaration shall be deemed independent and severable, and the invalidity or partial invalidity of any provision shall not affect the validity or enforceability of the remaining part of that or any other provision.

As used in this Declaration, the singular shall include the plural and the plural the singular, and the masculine and neuter shall each include the masculine, feminine and neuter, as the context requires. All captions used herein are intended solely for convenience of reference and shall in no way limit any of the provisions of this Declaration.

15.4 **Notices and Other Documents.** Any notice or other document permitted or required by this Declaration may be delivered either personally or by mail. Delivery by mail shall be deemed made twenty-four (24) hours after having been deposited in the United States mail as certified or registered mail, with postage prepaid, addressed as follows: If to Declarant or the Association, 7128 SW Gonzaga Street, Suite 100, Tigard Oregon 97223; if to an Owner, at the address given at the time of the Owner's purchase of a Lot, or at the Lot. The address of a party may be changed at any time by notice in writing delivered as provided herein.

IN WITNESS WHEREOF, Declarant has executed this Declaration on the date set forth above.

[DECLARANT NAME], an Oregon limited liability company

By _____
[Incorporator], Manager/Member

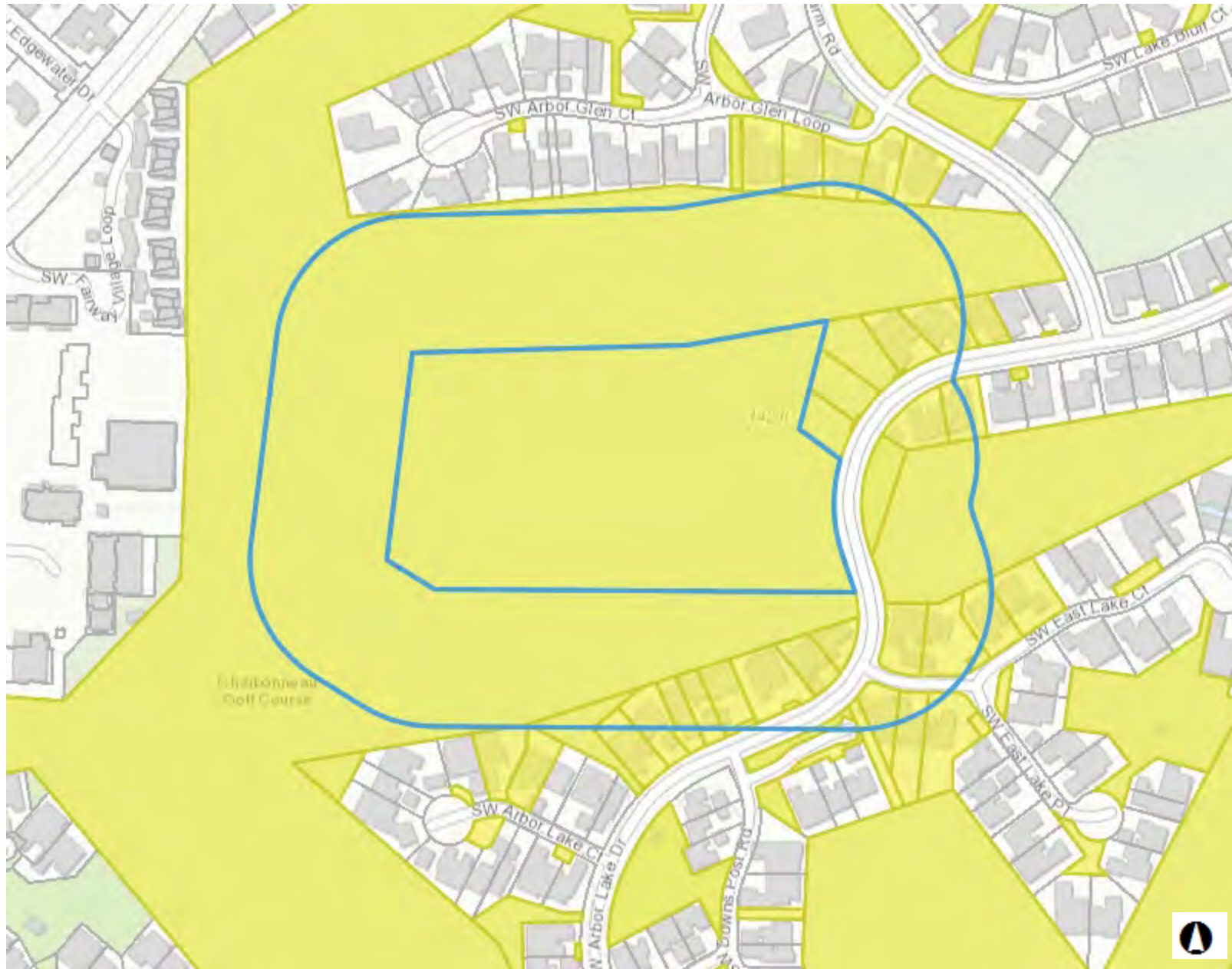
STATE OF OREGON)
)ss.
County of _____)

The foregoing instrument was acknowledged before this _____ day of _____, 20__, by [Incorporator], Manager/Member of [Declarant Name], an Oregon limited liability company, on its behalf.

Notary Public for _____
My commission expires: _____

Exhibit F: Surrounding Property Owners (250 Feet)

31W25 00325 - 250' Radius



Legend

- Subject
- Radius
- Radius Properties

8/2/2016

Notes

0.1 0 0.07 0.1 Miles

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31W24DC03100
Roderick Britt
Po Box 3618
Wilsonville, OR 97070

31W24DC03300
Robert Curran
31665 SW Arbor Glen Loop
Wilsonville, OR 97070

31W24DC03400
Robert & Kathy Herrick
31675 SW Arbor Glen Loop
Wilsonville, OR 97070

31W24DC03500
Alan Southwell
31685 SW Old Farm Rd
Wilsonville, OR 97070

31W24DC03600
April Lewis
31695 SW Old Farm Rd
Wilsonville, OR 97070

31W24DC09900
Ronald Lehl
7320 SW Arbor Lake Dr
Wilsonville, OR 97070

31W24DC10000
Lundberg Family
7370 SW Arbor Lake Dr
Wilsonville, OR 97070

31W24DC10200
Patrick Plover
1460 Gulf Blvd #1101
Clearwater Beach, FL 33767

31W24DC10300
Charbonneau Golf Club Inc
32020 SW Charbonneau Dr
Wilsonville, OR 97070

31W24DC10400
Charbonneau Golf Club Inc
32020 SW Charbonneau Dr
Wilsonville, OR 97070

31W24DC10500
Charbonneau Golf Club Inc
32020 SW Charbonneau Dr
Wilsonville, OR 97070

31W24DC10600
Alfred Van Domelen
7391 SW Arbor Lake Dr
Wilsonville, OR 97070

31W24DC10700
Richard & Sohyon Rahe
7357 SW Arbor Lake Dr
Wilsonville, OR 97070

31W25BA07600
Marla Mae Miklancic
7685 SW Arbor Lake Ct
Wilsonville, OR 97070

31W25BA07700
William & Janet Milne
7675 SW Arbor Lake Ct
Wilsonville, OR 97070

31W25BA08200
Kathleen Dowling
32135 SW Arbor Lake Dr
Wilsonville, OR 97070

31W25BA08300
Jean Brault
32125 SW Arbor Lake Dr
Wilsonville, OR 97070

31W25BA08400
Joseph Kremers
32115 SW Arbor Lake Dr
Wilsonville, OR 97070

31W25BA08500
David & Teresa Janney
2525 Dellwood Dr
Lake Oswego, OR 97034

31W25BA08600
Margaret Bekins
32095 SW Arbor Lake Dr
Wilsonville, OR 97070

31W25BA08800
Larry Baugh
32075 SW Arbor Lake Dr
Wilsonville, OR 97070

31W25BA08900
Dennis Atkin
32065 SW Arbor Lake Dr
Wilsonville, OR 97070

31W25BA09000
Perry & Sandra Esterson
32055 SW Arbor Lake Dr
Wilsonville, OR 97070

31W25BA09200
Larry & Shannon Lynn
7415 SW East Lake Ct
Wilsonville, OR 97070

31W25BA09300
Theodore & Elisabeth Canfield
7375 SW East Lake Ct
Wilsonville, OR 97070

31W25BA09400
Donald & Judy Miller
7335 SW East Lake Ct
Wilsonville, OR 97070

31W25BA09600
William & Janet Watson
7325 SW East Lake Ct
Wilsonville, OR 97070

31W25BA13100
Leo Varty
7380 SW East Lake Ct
Wilsonville, OR 97070

31W25BA13200
Donald Robert Fish
7400 SW East Lake Ct
Wilsonville, OR 97070

31W25BA13300
Jeffrey & Elizabeth Pitts
7410 SW East Lake Ct
Wilsonville, OR 97070

31W25 00212
Charbonneau Golf Club Inc
32020 SW Charbonneau Dr
Wilsonville, OR 97070

31W25 00323
Charbonneau Golf Club Inc
32020 SW Charbonneau Dr
Wilsonville, OR 97070

31W25BA09100
Arbor Lake Townhome Assn
Po Box 949
Wilsonville, OR 97070

31W25BA09101
Arbor Lake Townhome Assn
Po Box 949
Wilsonville, OR 97070

31W25BA13400
Arbor Lake Townhome Assn
Po Box 450
Wilsonville, OR 97070

31W24DC12400
Arbor Lake Townhome Assn
6760 SW Molalla Bend Rd
Wilsonville, OR 97070



Exhibit G: Certification of Assessments and Liens



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: No address

Aka Tax Lot(s) 325 on Map(s) 3S 1W 25

Applicant: AKS Engineering & Forestry (on behalf of Pahlisch Homes, Inc)

Address: 12965 SW Herman Rd, Suite 100
Tualatin, OR 97062

Property Owner: Charbonneau Golf Club

Address: 32020 SW Charbonneau Drive
Wilsonville, OR 97070

In reference to the above, the City of Wilsonville records show that the following amount is due to the City:

Principal Amnt Due \$ 17 Current Non-Current

Comments: No Liens at this time

Dated: 7/29/2010

Finance Department: Kate Macadam

(This certification shall be null and void 120 days following the Finance Department date of signature)



Exhibit H: Geotechnical Engineering Report



Real-World Geotechnical Solutions
Investigation • Design • Construction Support

August 3, 2016
Project No. 16-4153

Dennis Pahlisch
Pahlisch Homes, Inc.
210 SW Wilson Avenue, Suite 100
Bend, Oregon 97702

SUBJECT: GEOTECHNICAL ENGINEERING REPORT
CHARBONNEAU SUBDIVISION
SW ARBOR LAKE DRIVE
WILSONVILLE, OREGON

This report presents the results of a geotechnical engineering study conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above-referenced project. The purpose of our investigation was to evaluate subsurface conditions at the site and to provide geotechnical recommendations for site development. This geotechnical study was performed in accordance with GeoPacific Proposal No. P-5551, dated February 11, 2016, and your subsequent authorization of our proposal and *General Conditions for Geotechnical Services*.

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The project site consists of four tax lots totaling approximately 8.37 acres in size, as summarized below:

Tax Lot No.	Address	Acreage
31W24DC10300	NA	0.24
31W24DC10400	NA	0.19
31W24DC10500	NA	0.15
31W2500325	NA	7.79

The site is located on the west side of SW Arbor Lake Drive, approximately 380 feet west southwest of the intersection of SW Arbor Lake Drive and SW Old Farm Road in Wilsonville, Oregon. The site is located within the central portion of the Charbonneau Golf Club approximately 400 east of the clubhouse and consists primarily of the driving range portion of the golf course. No structures are currently located at the site although several soil berms associated with the golf driving range are located throughout the site. Vegetation at the site consists of grass fields with occasional trees around the perimeter of the site and a tall evergreen hedge along most of the eastern border of the site. Topography at the site is relatively flat to very gently sloping down to the northwest toward the Willamette River.

Preliminary site plans indicate that the proposed development will consist of a 40 lot subdivision for single family home construction, new public streets, driveways, associated underground utilities,

open space, and stormwater treatment facilities. The grading plan provided for our review indicates cuts and fills will be on the order of 4 feet or less.

REGIONAL AND LOCAL GEOLOGIC SETTING

Regionally, the subject site lies within the Willamette Valley/Puget Sound lowland, a broad structural depression situated between the Coast Range on the west and the Cascade Range on the east. A series of discontinuous faults subdivide the Willamette Valley into a mosaic of fault-bounded, structural blocks (Yeats et al., 1996). Uplifted structural blocks form bedrock highlands, while down-warped structural blocks form sedimentary basins.

The subject site is situated in the Southern Willamette Valley structural basin along a strong, northwest-trending topographic lineation. This lineation marks a fluvial channel formed by repeated catastrophic flooding currents flowing between the Willamette and Tualatin drainage basins, the last of which occurred some 13,000 years ago. Regionally, the site is underlain by Plio-pleistocene sedimentary deposits including the Troutdale Formation, Sandy River Mudstone equivalent and Helvetia Formation, which are estimated to be approximately 300 feet thick (Schlicker and Deacon, 1967; Burns et al., 1997; Yeats et al., 1996). These strata are overlain by a mantle of Quaternary catastrophic flood sediment belonging to the Willamette Formation including both fine-grained clayey silt facies and coarse-grained facies consisting of sand, gravel and cobbles (Gannet and Caldwell, 1998).

REGIONAL SEISMIC SETTING

At least three major fault zones capable of generating damaging earthquakes are thought to exist in the vicinity of the subject site. These include the Portland Hills Fault Zone, the Gales Creek-Newberg-Mt. Angel Structural Zone, and the Cascadia Subduction Zone.

Portland Hills Fault Zone

The Portland Hills Fault Zone is a series of NW-trending faults that include the central Portland Hills Fault, the western Oatfield Fault, and the eastern East Bank Fault. These faults occur in a northwest-trending zone that varies in width between 3.5 and 5.0 miles. The combined three faults vertically displace the Columbia River Basalt by 1,130 feet and appear to control thickness changes in late Pleistocene (approx. 780,000 years) sediment (Madin, 1990). The Portland Hills Fault occurs along the Willamette River at the base of the Portland Hills, and is about 11.5 miles northeast of the site. The Oatfield Fault occurs along the western side of the Portland Hills, and is about 9.8 miles northeast of the site. The accuracy of the fault mapping is stated to be within 500 meters (Wong, et al., 2000). No historical seismicity is correlated with the mapped portion of the Portland Hills Fault Zone, but in 1991 a M3.5 earthquake occurred on a NW-trending shear plane located 1.3 miles east of the fault (Yelin, 1992). Although there is no definitive evidence of recent activity, the Portland Hills Fault Zone is assumed to be potentially active (Geomatrix Consultants, 1995).

Gales Creek-Newberg-Mt. Angel Structural Zone

The Gales Creek-Newberg-Mt. Angel Structural Zone is a 50-mile-long zone of discontinuous, NW-trending faults that lies about 10.5 miles west of the subject site. These faults are recognized in the subsurface by vertical separation of the Columbia River Basalt and offset seismic reflectors in the overlying basin sediment (Yeats et al., 1996; Werner et al., 1992). A geologic reconnaissance and photogeologic analysis study conducted for the Scoggins Dam site in the Tualatin Basin revealed no

evidence of deformed geomorphic surfaces along the structural zone (Unruh et al., 1994). No seismicity has been recorded on the Gales Creek Fault or Newberg Fault (the fault closest to the subject site); however, these faults are considered to be potentially active because they may connect with the seismically active Mount Angel Fault and the rupture plane of the 1993 M5.6 Scotts Mills earthquake (Werner et al. 1992; Geomatrix Consultants, 1995).

Cascadia Subduction Zone

The Cascadia Subduction Zone is a 680-mile-long zone of active tectonic convergence where oceanic crust of the Juan de Fuca Plate is subducting beneath the North American continent at a rate of 4 cm per year (Goldfinger et al., 1996). A growing body of geologic evidence suggests that prehistoric subduction zone earthquakes have occurred (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). This evidence includes: (1) buried tidal marshes recording episodic, sudden subsidence along the coast of northern California, Oregon, and Washington, (2) burial of subsided tidal marshes by tsunami wave deposits, (3) paleoliquefaction features, and (4) geodetic uplift patterns on the Oregon coast. Radiocarbon dates on buried tidal marshes indicate a recurrence interval for major subduction zone earthquakes of 250 to 650 years with the last event occurring 300 years ago (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). The inferred seismogenic portion of the plate interface lies roughly along the Oregon Coast at depths of 20 and 40 kilometers below the ocean surface.

FIELD EXPLORATION

Our site-specific exploration for this report was conducted on March 17, 2016. A total of 6 exploratory test pits were excavated with a trackhoe to depths of 5 to 12 feet at the approximate locations shown on Figure 2. Test pit locations were located in the field by pacing or taping distances from apparent property corners and other site features shown on the plans provided. As such, the locations of the explorations should be considered approximate.

A GeoPacific scientist continuously monitored the field exploration program and logged the test pits. Soils observed in the explorations were classified in general accordance with the Unified Soil Classification System. During exploration, our scientist also noted geotechnical conditions such as soil consistency, moisture and groundwater conditions. Logs of test pits are attached to this report. The following report sections are based on the exploration program and summarize subsurface conditions encountered at the site.

SUBSURFACE CONDITIONS

Results of the field exploration program indicate the site is underlain by undocumented fill, topsoil horizon, and soils belonging to the Willamette Formation. The observed soil and groundwater conditions are summarized below.

Soil

Undocumented Fill – Undocumented fill was encountered in test pit TP-5 directly underlying the ground surface. The fill extended to a depth of 16 inches and generally consisted of sub-angular gravel (GM) with trace sandy silt. Ceramic drainage tiles were observed at approximately 3 feet below the surface in test pit TP-5. The fill and ceramic tiles were observed only in a portion of the test pit. Other areas of undocumented fill may be present outside our explorations, especially in

the vicinity of the existing soil berms located throughout the driving range field. The soil berms are approximately 3-5 feet in height and appear to consist of undocumented fill.

Topsoil – The ground surface in test pits TP-1, TP-2, TP-3, TP-4, and TP-6 was directly underlain by a topsoil horizon generally consisting of brown, low to moderately organic silt (ML-OL). The topsoil horizon was loose, contained fine roots throughout and extended to a depth of about 12 to 18 inches below the ground surface. The topsoil horizon was likely thickened by tilling practices. A thin topsoil horizon had developed in the upper 4 inches of the fill in test pit TP-5.

Willamette Formation – Underlying the topsoil horizon in test pits TP-1, TP-2, TP-3, TP-4, and TP-6, and the fill in test pit TP-5 was SILT (ML) with trace clay and sand belonging to the Willamette Formation. Silty soils graded to silty SAND (SM), SAND (SP-SM) with trace silt. These soils were typically medium stiff to medium dense, and light brown in color with subtle to strong orange and gray mottling. Willamette Formation soils extended beyond the maximum depth of explorations (12 feet).

Groundwater

On March 17, 2016, groundwater seepage was not encountered in our explorations which extended to a maximum depth of 12 feet. Soils encountered were damp to moist. However, experience has shown that temporary storm related perched groundwater within surface soils often occur over native fine grained deposits such as some of the shallower deposits beneath the site, particularly during the wet season. It is anticipated that groundwater conditions will vary depending on the season, local subsurface conditions, changes in site utilization, and other factors.

INFILTRATION TESTING

On March 17, 2016, soil infiltration testing was performed using the encased falling-head method in test pits TP-1 and TP-2, per Appendix E of the Clackamas County Stormwater Standards. The approximate locations of subsurface explorations are indicated on Figure 2. Subsurface exploration was conducted with an excavator at potential locations for stormwater facilities. The tests were prepared by carefully inserting 6-inch diameter rigid standpipes, six inches into native soils at the test locations. The test locations were pre-saturated for a period of 3 hours prior to testing. The water level was measured to the nearest 0.1 inch from a fixed point and the change in water level was recorded at regular intervals until three successive measurements showing a consistent infiltration rate were achieved. Table 1 summarizes the results of the encased falling-head infiltration tests. Infiltration rates have been reported without applying a factor of safety. Groundwater seepage was not observed within our explorations conducted at the site which extended to a maximum depth of 12 feet bgs.

Table 1 - Summary of Infiltration Testing Results

Boring	Depth (feet)	Soil Type	Ultimate Infiltration Rate(in/hr)	Hydraulic Head Range (inches)
TP-1	3	SILT (ML)	1.4	12-18
TP-2	5	Sandy SILT (ML)	6.1	12-18

CONCLUSIONS AND RECOMMENDATIONS

Results of this study indicate that the proposed development is geotechnically feasible, provided that the recommendations of this report are incorporated into the design and construction phases of the project. Our explorations indicate the soils on site are medium to stiff and are suitable for development utilizing conventional spread footing foundations.

Undocumented fill was encountered in test pit TP-5 to a depth of 16 inches. Also, in a portion of test pit TP-5, ceramic drainage tiles were observed at approximately 3 feet bgs. It is likely that this fill is related to the installation of the ceramic tile drains, which are likely to be found elsewhere throughout the site as well. Multiple soil berms approximately 3-5 feet in height are located throughout the site and appear to consist of soil removed from other portions of the site and/or immediate vicinity.

Site Preparation

Areas of proposed buildings, streets, and areas to receive fill should be cleared of vegetation and any organic and inorganic debris. Existing fill should be completely removed. Explorations indicate at least 16 inches of fill is present in the vicinity of test pit TP-5. Ceramic tile drains were observed in the subsurface in test pit TP-5 at approximately 3 feet bgs and were surrounded with silty gravel fill. Small soil berms located throughout the grass field at the site are also likely constructed of undocumented fill. Existing buried structures such as septic tanks, should be demolished and any cavities structurally backfilled. Inorganic debris should be removed from the site.

Organic-rich topsoil should then be stripped from native soil areas of the site. The estimated depth range necessary for removal of topsoil in cut and fill areas is approximately 12-18 inches. Deeper removals may be necessary in highly treed areas of the site. The final depth of soil removal will be determined on the basis of a site inspection after the stripping/excavation has been performed. Stripped topsoil should preferably be removed from the site due to the high density of the proposed development. Any remaining topsoil should be stockpiled only in designated areas and stripping operations should be observed and documented by the geotechnical engineer or his representative.

Once topsoil stripping and removal of organic and inorganic debris is approved in a particular area, the area should be ripped or tilled to a depth of at least 12 inches, moisture conditioned, root-picked, and compacted in-place prior to the placement of engineered fill or crushed aggregate base for pavement. Exposed subgrade soils should be evaluated by the geotechnical engineer. For large areas, this evaluation is normally performed by proof-rolling the exposed subgrade with a fully loaded scraper or dump truck. For smaller areas where access is restricted, the subgrade should be evaluated by probing the soil with a steel probe. Soft/loose soils identified during subgrade preparation should be compacted to a firm and unyielding condition, over-excavated and replaced with engineered fill (as described below), or stabilized with rock prior to placement of engineered fill. The depth of overexcavation, if required, should be evaluated by the geotechnical engineer at the time of construction.

Engineered Fill

In general, we anticipate that soils from planned cuts and utility trench excavations will be suitable for use as engineered fill provided they are adequately moisture conditioned prior to compacting. Imported fill material should be reviewed by GeoPacific prior to being imported to the site.

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Oversize material greater than 6 inches in size should not be used within 3 feet of foundation footings, and material greater than 12 inches in diameter should not be used in engineered fill.

Engineered fill should be compacted in horizontal lifts not exceeding 8 inches using standard compaction equipment. We recommend that engineered fill be compacted to at least 95 percent of the maximum dry density determined by ASTM D698 (Standard Proctor). On-site soils may be wet or dry of optimum; therefore, we anticipate that moisture conditioning of native soil will be necessary for compaction operations.

Proper test frequency and earthwork documentation usually requires daily observation and testing during stripping, rough grading, and placement of engineered fill. Field density testing should generally conform to ASTM D2922 and D3017, or D1556. Engineered fill should be periodically observed and tested by the project geotechnical engineer or his representative. Typically, one density test is performed for at least every 2 vertical feet of fill placed or every 500 cubic yards, whichever requires more testing. Because testing is performed on an on-call basis, we recommend that the earthwork contractor be held contractually responsible for test scheduling and frequency.

Anticipated Foundations

The proposed residential structures may be supported on shallow foundations bearing on competent undisturbed, native soils and/or engineered fill, appropriately designed and constructed as recommended in this report. Foundation design, construction, and setback requirements should conform to the applicable building code at the time of construction. For maximization of bearing strength and protection against frost heave, spread footings should be embedded at a minimum depth of 12 inches below exterior grade. The recommended minimum widths for continuous footings supporting wood-framed walls without masonry are 12 inches for single-story, 15 inches for two-story, and 18 inches for three-story homes. Minimum foundation reinforcement should consist of one No. 4 bar at the top of stem wall, and one No. 4 bar at the bottom of the footing. Concrete slab-on-grade reinforcement should consist of No. 4 bars placed on 24-inch centers in a grid pattern.

The anticipated allowable soil bearing pressure is 1,500 lbs/ft² for footings bearing on competent, native soil and/or engineered fill. A maximum chimney and column load of 50 kips is recommended for the site. The recommended maximum allowable bearing pressure may be increased by 1/3 for short-term transient conditions such as wind and seismic loading. For heavier loads, the geotechnical engineer should be consulted. The coefficient of friction between on-site soil and poured-in-place concrete may be taken as 0.42, which includes no factor of safety. The maximum anticipated total and differential footing movements (generally from soil expansion and/or settlement) are 1 inch and 3/4 inch over a span of 20 feet, respectively. We anticipate that the majority of the estimated settlement will occur during construction, as loads are applied. Excavations near structural footings should not extend within a 1H:1V plane projected downward from the bottom edge of footings.

Footing excavations should penetrate through topsoil and any loose soil to competent subgrade that is suitable for bearing support. As previously discussed, we anticipate that the existing berms at the site consist of undocumented fill and undocumented fill was encountered to a depth of 16 inches in test pit TP-5. All footing excavations should be trimmed neat, and all loose or softened soil should be removed from the excavation bottom prior to placing reinforcing steel bars. Due to the moisture sensitivity of on-site native soils, foundations constructed during the wet weather season may require overexcavation of footings and backfill with compacted, crushed aggregate.

Our recommendations are for house construction incorporating raised wood floors and conventional spread footing foundations. If living space of the structures will incorporate basements or slab-on-grade foundations, a geotechnical engineer should be consulted to make additional recommendations for retaining walls, water-proofing, underslab drainage and wall subdrains. After site development, a Final Soil Engineer's Report should either confirm or modify the above recommendations.

Drainage

If the proposed structures will have a raised floor, and no concrete slab-on-grade floors are used, perimeter footing drains would not be required based on soil conditions encountered at the site and experience with standard local construction practices. Where it is desired to reduce the potential for moist crawl spaces, footing drains may be installed. If concrete slab-on-grade floors are used, perimeter footing drains should be installed as recommended below.

Where used, perimeter footing drains should consist of 3 or 4-inch diameter, perforated plastic pipe embedded in a minimum of 1 ft³ per lineal foot of clean, free-draining drain rock. The drain pipe and surrounding drain rock should be wrapped in non-woven geotextile (Mirafi 140N, or approved equivalent) to minimize the potential for clogging and/or ground loss due to piping. Water collected from the footing drains should be directed to the local storm drain system or other suitable outlet. A minimum 0.5 percent fall should be maintained throughout the drain and non-perforated pipe outlet. The footing drains should include clean-outs to allow periodic maintenance and inspection. In our opinion, footing drains may outlet at the curb, or on the back sides of lots where sufficient fall is not available to allow drainage to the street.

Construction should include typical measures for controlling subsurface water beneath the homes, including positive crawlspace drainage to an adequate low-point drain exiting the foundation, visqueen covering the exposed ground in the crawlspace, and crawlspace ventilation (foundation vents). The homebuyers should be informed and educated that some slow flowing water in the crawlspaces is considered normal and not necessarily detrimental to the home given these other design elements incorporated into its construction. Appropriate design professionals should be consulted regarding crawlspace ventilation, building material selection and mold prevention issues, which are outside GeoPacific's area of expertise.

Down spouts and roof drains should collect roof water in a system separate from the footing drains in order to reduce the potential for clogging. Roof drain water should be directed to an appropriate discharge point well away from structural foundations. Grades should be sloped downward and away from buildings to reduce the potential for ponded water near structures.

Excavating Conditions and Utility Trenches

Subsurface test pit exploration indicates that, in general, utility trenches can be excavated using conventional heavy equipment such as dozers and trackhoes. All temporary cuts in excess of 4 feet in height should be sloped in accordance with U.S. Occupational Safety and Health Administration (OSHA) regulations (29 CFR Part 1926), or be shored. The existing, near surface, native soils classify as Type B Soil and shallow, temporary excavation side slope inclinations as steep as 1H:1V may be assumed for planning purposes. This cut slope inclination is applicable to excavations above the water table only. Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Actual slope inclinations at the time of construction should be determined based on safety requirements and actual soil and groundwater conditions.

Saturated soils and groundwater may be encountered in utility trenches, particularly during the wet season. We anticipate that dewatering systems consisting of ditches, sumps and pumps would be adequate for control of perched groundwater. Regardless of the dewatering system used, it should be installed and operated such that in-place soils are prevented from being removed along with the groundwater.

Vibrations created by traffic and construction equipment may cause some caving and raveling of excavation walls. In such an event, lateral support for the excavation walls should be provided by the contractor to prevent loss of ground support and possible distress to existing or previously constructed structural improvements.

PVC pipe should be installed in accordance with the procedures specified in ASTM D2321. We recommend that trench backfill be compacted to at least 95% of the maximum dry density obtained by Standard Proctor ASTM D698 or equivalent. Initial backfill lift thickness for a ¾"-0 crushed aggregate base may need to be as great as 4 feet to reduce the risk of flattening underlying flexible pipe. Subsequent lift thickness should not exceed 1 foot. If imported granular fill material is used, then the lifts for large vibrating plate-compaction equipment (e.g. hoe compactor attachments) may be up to 2 feet, provided that proper compaction is being achieved and each lift is tested. Use of large vibrating compaction equipment should be carefully monitored near existing structures and improvements due to the potential for vibration-induced damage.

Adequate density testing should be performed during construction to verify that the recommended relative compaction is achieved. Typically, one density test is taken for every 4 vertical feet of backfill on each 200-lineal-foot section of trench.

Erosion Control Considerations

During our field exploration program, we did not observe soil types that would be considered highly susceptible to erosion. In our opinion, the primary concern regarding erosion potential will occur during construction, in areas that have been stripped of vegetation. Erosion at the site during construction can be minimized by implementing the project erosion control plan, which should include judicious use of straw wattles and silt fences. If used, these erosion control devices should be in place and remain in place throughout site preparation and construction.

Erosion and sedimentation of exposed soils can also be minimized by quickly re-vegetating exposed areas of soil, and by staging construction such that large areas of the project site are not denuded and exposed at the same time. Areas of exposed soil requiring immediate and/or temporary protection against exposure should be covered with either mulch or erosion control netting/blankets. Areas of exposed soil requiring permanent stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

Wet Weather Earthwork

Soils underlying the site are likely to be moisture sensitive and may be difficult to handle or traverse with construction equipment during periods of wet weather. Earthwork is typically most economical when performed under dry weather conditions. Earthwork performed during the wet-weather season will probably require expensive measures such as cement treatment or imported granular material to compact fill to the recommended engineering specifications. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is difficult to control, the following recommendations should be incorporated into the contract specifications.

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- Earthwork should be performed in small areas to minimize exposure to wet weather. Excavation or the removal of unsuitable soils should be followed promptly by the placement and compaction of clean engineered fill. The size and type of construction equipment used may have to be limited to prevent soil disturbance. Under some circumstances, it may be necessary to excavate soils with a backhoe to minimize subgrade disturbance caused by equipment traffic;
- The ground surface within the construction area should be graded to promote run-off of surface water and to prevent the ponding of water;
- Material used as engineered fill should consist of clean, granular soil containing less than 5 percent fines. The fines should be non-plastic. Alternatively, cement treatment of on-site soils may be performed to facilitate wet weather placement;
- The ground surface within the construction area should be sealed by a smooth drum vibratory roller, or equivalent, and under no circumstances should be left uncompacted and exposed to moisture. Soils which become too wet for compaction should be removed and replaced with clean granular materials;
- Excavation and placement of fill should be observed by the geotechnical engineer to verify that all unsuitable materials are removed and suitable compaction and site drainage is achieved; and
- Geotextile silt fences, straw wattles, and fiber rolls should be strategically located to control erosion.

If cement or lime treatment is used to facilitate wet weather construction, GeoPacific should be contacted to provide additional recommendations and field monitoring.

Pavement Design

We understand that the proposed on site, light duty public streets will be surfaced with asphalt pavement. We assume the proposed new streets will be subjected to an initial two-way ADT (average daily traffic count) of 150 vehicles per day with 2 percent heavy trucks (FHWA Class 5 or greater).

Table 2 presents the recommended section thicknesses for the proposed on-site, light duty public streets that are to be completed as part of the project, in dry weather conditions. In our opinion, this pavement section is suitable to support up to 150 trips per day. If the anticipated levels of traffic loading are greater than 150 trips per day, GeoPacific should be consulted to provide revised section thickness recommendations.

**Table 2 - Recommended Minimum Pavement Section
for Light Duty Public Streets in Dry Weather Conditions**

Material Layer	Section Thickness (in)	Compaction Standard
Asphaltic Concrete (AC)	3	91%/ 92% of Rice Density AASHTO T-209
Crushed Aggregate Base ¾"-0 (leveling course)	2	95% of Modified Proctor AASHTO T-180
Crushed Aggregate Base 1½"-0	8	95% of Modified Proctor AASHTO T-180
Subgrade	12	95% of Standard Proctor AASHTO T-99

Subgrade in pavement areas should be ripped or tilled to a minimum depth of 12 inches, moisture conditioned, and recompact in-place to at least 95 percent of ASTM D698 (Standard Proctor) or equivalent. Any pockets of organic debris or loose fill encountered during subgrade preparation should be removed and replaced with engineered fill (see *Site Preparation* Section). In order to verify subgrade strength, we recommend proof-rolling directly on subgrade with a loaded dump truck during dry weather and on top of base course in wet weather. Soft areas that pump, rut, or weave should be stabilized prior to paving.

The moisture sensitive subgrade soils make the site a difficult wet weather construction project. General recommendations for wet weather construction are provided in the following report section. However, the subgrade and construction plan should be evaluated at the time of construction so that condition-specific recommendations can be provided.

During placement of pavement section materials, density testing should be performed to verify compliance with project specifications. Generally, one subgrade, one base course, and one asphalt compaction test is performed for every 100 to 200 linear feet of paving.

Wet Weather Construction Pavement Section

This section presents our recommendations for wet weather pavement section and construction for new pavement sections at the project. These wet weather pavement section recommendations are intended for use in situations where it is not feasible to compact the subgrade soils to Washington County requirements, due to wet subgrade soil conditions, and/or construction during wet weather.

Based on our site review, we recommend a wet weather section with a minimum subgrade deepening of 6 inches to accommodate a working subbase of additional 1½"-0 crushed rock. Geotextile fabric, Mirafi 500x or equivalent, should be placed on subgrade soils prior to placement of base rock.

In some instances it may be preferable to use Special Treated Base (STB) in combination with overexcavation and increasing the thickness of the rock section. GeoPacific should be consulted for additional recommendations regarding use of STB in wet weather pavement sections if it is desired to pursue this alternative. Cement treatment of the subgrade may also be considered instead of overexcavation. For planning purposes, we anticipate that treatment of the onsite soils

would involve mixing cement powder to approximately 6 percent cement content and a mixing depth on the order of 12 to 18 inches.

With implementation of the above recommendations, it is our opinion that the resulting pavement section will provide equivalent or greater structural strength than the dry weather pavement section currently planned. However, it should be noted that construction in wet weather is risky and the performance of pavement subgrades depend on a number of factors including the weather conditions, the contractor's methods, and the amount of traffic the road is subjected to. There is a potential that soft spots may develop even with implementation of the wet weather provisions recommended in this letter. If soft spots in the subgrade are identified during roadway excavation, or develop prior to paving, the soft spots should be overexcavated and backfilled with additional crushed rock.

During subgrade excavation, care should be taken to avoid disturbing the subgrade soils. Removals should be performed using an excavator with a smooth-bladed bucket. Truck traffic should be limited until an adequate working surface has been established. We suggest that the crushed rock be spread using bulldozer equipment rather than dump trucks, to reduce the amount of traffic and potential disturbance of subgrade soils.

Care should be taken to avoid overcompaction of the base course materials, which could create pumping, unstable subgrade soil conditions. Heavy and/or vibratory compaction efforts should be applied with caution. Following placement and compaction of the crushed rock to project specifications (95 percent of Modified Proctor), a finish proof-roll should be performed before paving.

The above recommendations are subject to field verification. GeoPacific should be on-site during construction to verify subgrade strength and to take density tests on the engineered fill, base rock and asphaltic pavement materials.

Storm Water Management

We understand that on-site storm water management systems are to incorporate subsurface disposal of stormwater through infiltration. In-situ infiltration tests were conducted to assess the infiltration capacity of the soils within the footprint of the proposed pond. Design of stormwater management facilities will be performed by others. The approximate locations of the tests and the stormwater pond are shown on Figure 2, and the test methodology is discussed above in the *Infiltration Testing* section, above. Table 1 summarizes results of the infiltration testing.

Infiltration test results and observed soil conditions indicate that the SILT (ML) soils encountered to depths of approximately 4 feet exhibit an infiltration rate of at least 1.4 inches per hour. Sandy SILT (ML) soils encountered below depths of approximately 4 feet exhibit an infiltration rate of at least 6.1 inches per hour. Soils encountered in our explorations graded to with less silt and increasing sand content with depth, indicating that infiltration rates increase with depth and that no confining layer is present. The infiltration rates presented in this report do not incorporate factors of safety. For the design infiltration rate, the system designer should incorporate an appropriate factor of safety against slowing of the rate over time due to biological and sediment clogging.

Infiltration test methods and procedures attempt to simulate the as-built conditions of the planned disposal system. However, due to natural variations in soil properties, actual infiltration rates may vary from the measured and/or recommended design rates. All systems should be constructed such that potential overflow is discharged in a controlled manner away from structures, and all systems should include an adequate factor of safety. Infiltration rates presented in this report

should not be applied to inappropriate or complex hydrological models such as a closed basin without extensive further studies. Evaluating environmental implications of stormwater disposal at this site are beyond the scope of this study.

Seismic Design

Structures should be designed to resist earthquake loading in accordance with the methodology described in the 2012 International Residential Code (IRC) for One- and Two-Family Dwellings, with applicable Oregon Structural Specialty Code (OSSC) revisions (*current 2014*). We recommend Site Class D be used for design per the OSSC, Table 1613.5.2 and as defined in ASCE 7, Chapter 20, Table 20.3-1. Design values determined for the site using the USGS (United States Geological Survey) 2016 *Seismic Design Maps Summary Report* are summarized in Table 3.

Table 3 - Recommended Earthquake Ground Motion Parameters (USGS 2016)

Parameter	Value
Location (Lat, Long), degrees	45.289, -122.755
Mapped Spectral Acceleration Values (MCE, Site Class D):	
Peak Ground Acceleration	0.404
Short Period, S_s	0.920 g
1.0 Sec Period, S_1	0.407 g
Soil Factors for Site Class D:	
F_a	1.132
F_v	1.593
Residential Site Value = $2/3 \times F_a \times S_s$	0.694 g
Residential Seismic Design Category	D

Soil liquefaction is a phenomenon wherein saturated soil deposits temporarily lose strength and behave as a liquid in response to earthquake shaking. Soil liquefaction is generally limited to loose, granular soils located below the water table. Following development, near-surface on-site soils will consist predominantly of engineered fill, medium stiff fine-grained soils, and medium dense sand above the water table, which are not considered susceptible to liquefaction. However, according to the Oregon HazVu: Statewide Geohazards Viewer, the subject site is regionally characterized as having a high risk of soil liquefaction (DOGAMI: HazVu, 2016).

For construction of single family structures, special design or construction measures are not required by code to mitigate the effects of liquefaction. However, GeoPacific may be consulted to perform further study of seismic hazards on the site if desired. If multi-family residential, high occupancy, or critical structures were to be incorporated into plans for site development, further study and evaluation of seismic hazards would be required by code to more fully evaluate the potential adverse effects due to liquefaction, such as vertical settlement, lateral deformation, and lateral spreading towards the Willamette River. We anticipate that our additional explorations on the site for the purpose of evaluating seismic hazards would include at least two cone penetrometer tests.

UNCERTAINTIES AND LIMITATIONS

We have prepared this report for the owner and their consultants for use in design of this project only. This report should be provided in its entirety to prospective contractors for bidding and estimating purposes; however, the conclusions and interpretations presented in this report should not be construed as a warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations that may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, GeoPacific should be notified for review of the recommendations of this report, and revision of such if necessary.

Sufficient geotechnical monitoring, testing and consultation should be provided during construction to confirm that the conditions encountered are consistent with those indicated by explorations. Recommendations for design changes will be provided should conditions revealed during construction differ from those anticipated, and to verify that the geotechnical aspects of construction comply with the contract plans and specifications.

Within the limitations of scope, schedule and budget, GeoPacific attempted to execute these services in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology at the time the report was prepared. No warranty, expressed or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

We appreciate this opportunity to be of service.

Sincerely,

GEOPACIFIC ENGINEERING, INC.



Stephen Morris
Staff Scientist



Benjamin G. Anderson, P.E.
Project Engineer

Attachments: References
Figure 1 – Vicinity Map
Figure 2 – Site Plan and Exploration Locations
Test Pit Logs (TP-1 – TP-6)

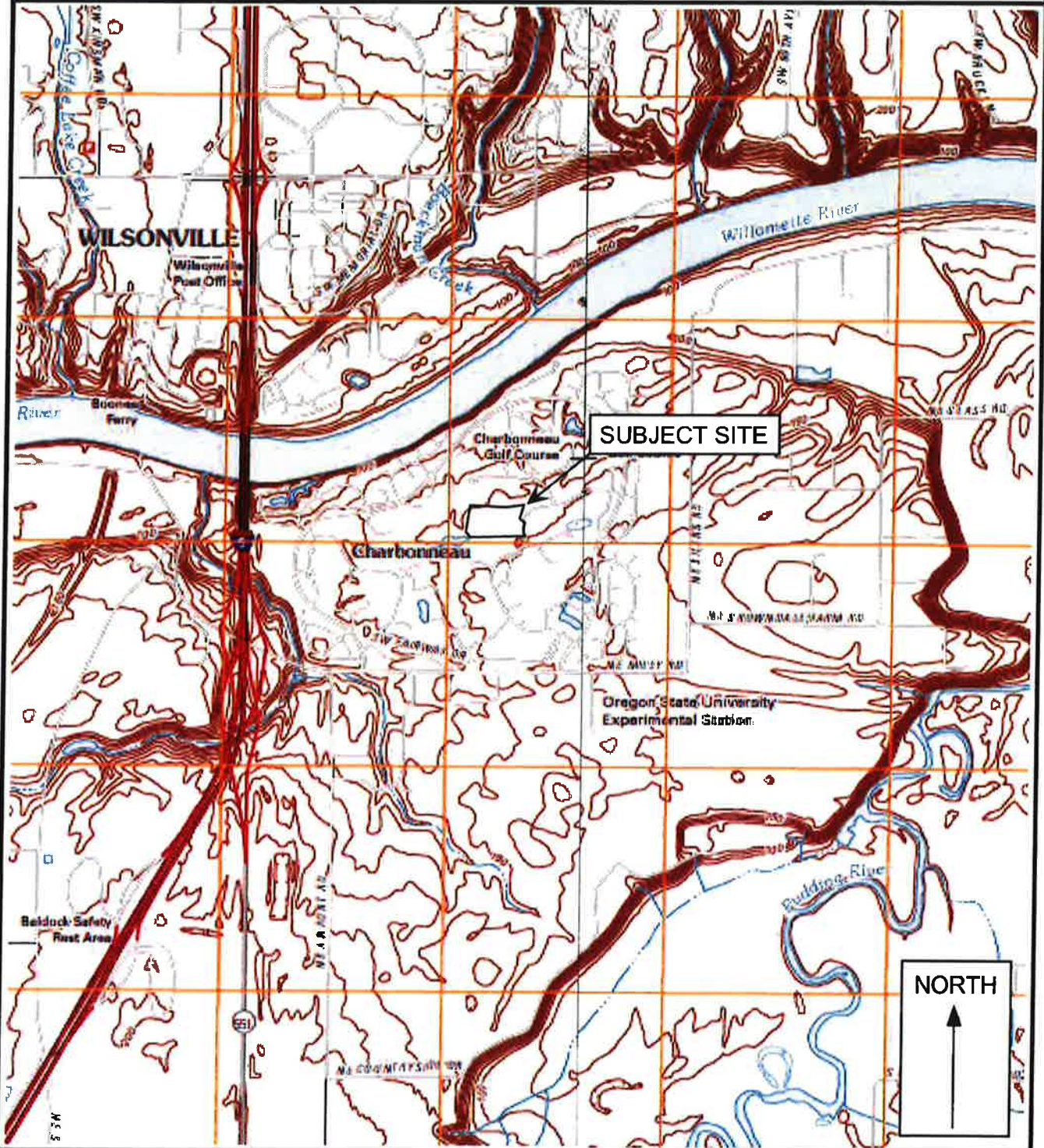
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VICINITY MAP



Legend

Approximate Scale 1 in = 2,000 ft

Date: 8/3/2016
Drawn by: SM

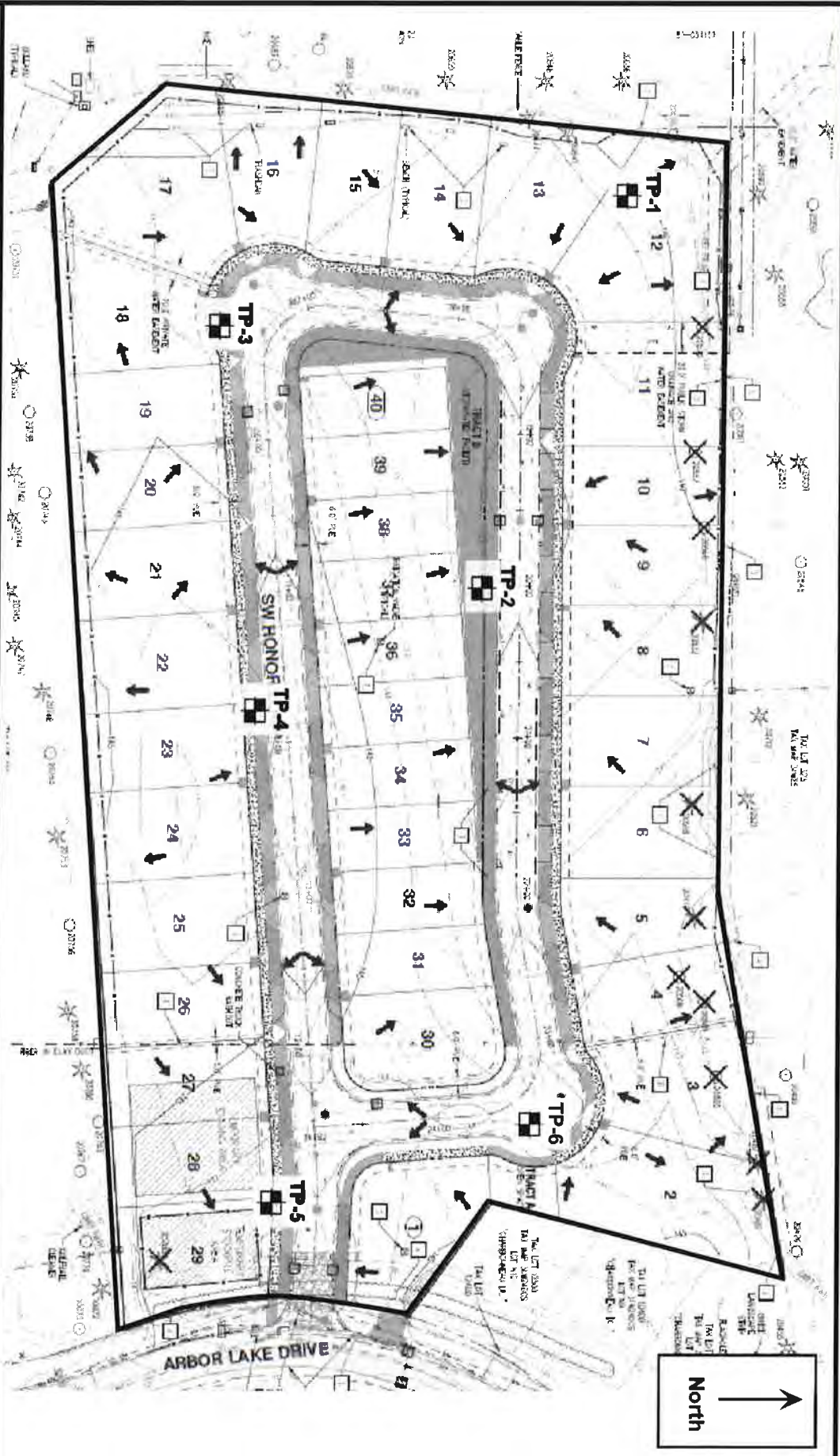
Base maps: U.S. Geological Survey 7.5 minute Topographic Map Series, Sherwood and Canby, Oregon Quadrangles, 2011

Project: Charbonneau Subdivision
Wilsonville, Oregon

Project No. 16-4153

FIGURE 1

**SITE PLAN AND
EXPLORATION LOCATIONS**



Legend

- TP-1 Test Pit Designation and Approximate Location

Date: 8/3/2016
Drawn by: EKR
APPROXIMATE SCALE 1"=100'

Project: Charbonneau Subdivision
Wilsonville, Oregon

Project No. 16-4153

FIGURE 2



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TEST PIT LOG

Project: Charbonneau Subdivision
 Wilsonville, Oregon

Project No. 16-4153

Test Pit No. **TP-1**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1						Moderately organic SILT (OL-ML), light brown, fine roots throughout, soft, moist, tillage zone to approximately 1.5 feet (Topsoil)
2						Medium stiff, SILT (ML), trace clay, light brown, fibrous roots to approximately 2 feet, damp to moist, (Willamette Formation)
3						Grades to sandy SILT (ML), light brown, subtle orange and gray mottling, damp, (Willamette Formation)
4						
5						Test Pit Terminated at 5 Feet.
6						Note: No seepage or groundwater encountered. Infiltration testing was conducted at 3 feet bgs in this test pit.
7						
8						
9						
10						
11						
12						

LEGEND



100 to 1,000 g
Bag Sample



5 Gal. Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/17/2016

Logged By: SM

Surface Elevation:



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TEST PIT LOG

Project: Charbonneau Subdivision
 Wilsonville, Oregon

Project No. 16-4153

Test Pit No. TP-2

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb./ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	2.5					Moderately organic SILT (OL-ML), light brown, fine roots throughout, soft, moist, tillage zone to approximately 1.5 feet (Topsoil)
2	3.0					Medium stiff, SILT (ML), trace sand, light brown, fibrous roots to approximately 2 feet, damp to moist, grades to sandy SILT (ML) (Willamette Formation)
3	3.0					
4	1.0					
5						Medium dense, silty SAND (SM), light brown, micaceous, subtle orange and gray mottling, damp (Willamette Formation)
6						
7						
8						Medium dense, SAND (SP-SM), trace silt, fine-grained light brown, micaceous, subtle orange and gray mottling, damp (Willamette Formation)
9						
10						
11						Medium dense, SAND (SP-SM), trace silt, fine-grained light brown, micaceous, subtle orange and gray mottling, damp (Willamette Formation)
12						
						Test Pit Terminated at 12 Feet.
						Note: No seepage or groundwater encountered. Infiltration testing was conducted at 5 feet bgs in this test pit.

LEGEND



100 to 1,000 g
Bag Sample



5 Gal. Bucket
Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/17/2016

Logged By: SM

Surface Elevation:



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TEST PIT LOG

Project: Charbonneau Subdivision
 Wilsonville, Oregon

Project No. 16-4153

Test Pit No. **TP-3**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	3.5					Moderately organic SILT (OL-ML), light brown, fine roots throughout, soft, moist, tillage zone to approximately 12 inches (Topsoil)
2	4.0					Medium stiff, SILT (ML), trace sand, light brown, damp to moist, light orange and gray mottling, grades to sandy SILT (ML) (Willamette Formation)
3	1.75					
4	4.0					
5						
6						
7						Medium dense, silty SAND (SM), light brown, micaceous, subtle orange and gray mottling, damp (Willamette Formation)
8						
9						
10						
11						Medium dense, SAND (SP-SM), trace silt, light brown, fine-grained, micaceous, damp (Willamette Formation)
12						Test Pit Terminated at 12 Feet.

Note: No seepage or groundwater encountered.

LEGEND



100 to 1,000 g
Bag Sample



5 Gal. Bucket
Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/17/2016

Logged By: SM

Surface Elevation:



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TEST PIT LOG

Project: Charbonneau Subdivision
 Wilsonville, Oregon

Project No. 16-4153

Test Pit No. **TP-4**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb./ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	3.0					Moderately organic SILT (OL-ML), light brown, fine roots throughout, soft, moist, tillage zone to approximately 14 inches (Topsoil)
2	2.75					Medium stiff, SILT (ML), trace sand, light brown, damp to moist, light orange and gray mottling, grades to sandy SILT (ML) (Willamette Formation)
3	4.0					
4	3.25					
5						
6						
7						Medium dense, silty SAND (SM), light brown, micaceous, subtle orange and gray mottling, damp (Willamette Formation)
8						
9						
10						
11						Medium dense, SAND (SP-SM), trace silt, light brown, fine-grained, micaceous, damp (Willamette Formation)
12						Test Pit Terminated at 12 Feet.

Note: No seepage or groundwater encountered.

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/17/2016

Logged By: SM

Surface Elevation:



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TEST PIT LOG

Project: Charbonneau Subdivision
 Wilsonville, Oregon

Project No. 16-4153

Test Pit No. **TP-5**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	2.0					Silty sub-angular GRAVEL (GM), loose, damp with trace sand to approximately 16 inches bgs, (Undocumented Fill)
2	1.5					Medium stiff, SILT (ML), trace sand, light brown, damp to moist, light orange and gray mottling, grades to stiff sandy SILT (ML) (Willamette Formation)
3	3.0					Ceramic drainage tiles encountered at approximately 3 feet below surface, surrounded by silty GRAVEL (GM) fill from approximately 3 to 4 feet bgs
4	3.5					
5						
6						
7						Medium dense, silty SAND (SM), light brown, micaceous, subtle orange and gray mottling, damp (Willamette Formation)
8						
9						
10						
11						
12						Medium, dense, SAND (SP-SM), trace silt, light brown, fine-grained, micaceous damp (Willamette Formation)
Test Pit Terminated at 12 Feet.						

Note: No seepage or groundwater encountered.

LEGEND



Bag Sample



5 Gal. Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/17/2016

Logged By: SM

Surface Elevation:



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TEST PIT LOG

Project: Charbonneau Subdivision
 Wilsonville, Oregon

Project No. 16-4153

Test Pit No. **TP-6**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	1.75					Moderately organic SILT (OL-ML), light brown, fine roots throughout, soft, moist, tillage zone to approximately 1.5 feet (Topsoil)
2	1.0					Medium stiff, SILT (ML), trace sand, light brown, damp to moist, light orange and gray mottling, grades to sandy SILT (ML) (Willamette Formation)
3	2.75					
4	1.75					
5						
6						Medium dense, silty SAND (SM), light brown, micaceous, subtle orange and gray mottling, damp, interbedded layers of stiff sandy SILT(ML) (Willamette Formation)
7						
8						
9						
10						
11						Medium dense, SAND (SM), trace silt, light brown, fine-grained, micaceous, damp (Willamette Formation)
12						Test Pit Terminated at 12 Feet.

Note: No seepage or groundwater encountered.

LEGEND



100 to 1,000 g
Bag Sample



5 Gal Bucket
Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/17/2016

Logged By: SM

Surface Elevation:

Exhibit I: Traffic Study

CHARBONNEAU SUBDIVISION

Transportation Impact Analysis

Prepared for



Prepared by
DKS
August 2016



117 Commercial Street NE
Suite 310
Salem, OR 97301
503.391.8773
www.dksassociates.com

August 26, 2016

Steve Adams
City of Wilsonville
29799 Town Center Loop East
Wilsonville, OR 97070

Subject: Charbonneau Subdivision Transportation Impact Study

Dear Steve:

DKS Associates is pleased to submit this transportation impact study for the proposed Charbonneau Subdivision located west of SW Arbor Lake Drive in Charbonneau north of NE Miley Road in Wilsonville. Please feel free to call if you have any questions or comments regarding this study.

Sincerely,

DKS Associates

A handwritten signature in blue ink that reads "Scott Mansur".

Scott Mansur, P.E., PTOE
Transportation Engineer



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CHAPTER 1: INTRODUCTION AND SUMMARY

This study evaluates the transportation impacts associated with the proposed subdivision located west of SW Arbor Lake Drive in Charbonneau north of NE Miley Road in Wilsonville, Oregon. The purpose of this transportation impact analysis is to identify potential mitigation measures needed to offset transportation impacts that the proposed subdivision would have on the nearby transportation network.

As shown in Figure 1, the impact analysis is focused on the following three study intersections selected for evaluation in coordination with City and Clackamas County staff.¹ Airport Road NE and NE Miley Road are Clackamas County roads while SW French Prairie Road is a City of Wilsonville road.

- NE Miley Road/Airport Road NE
- NE Miley Road/SW French Prairie Road West
- NE Miley Road/SW French Prairie Road East

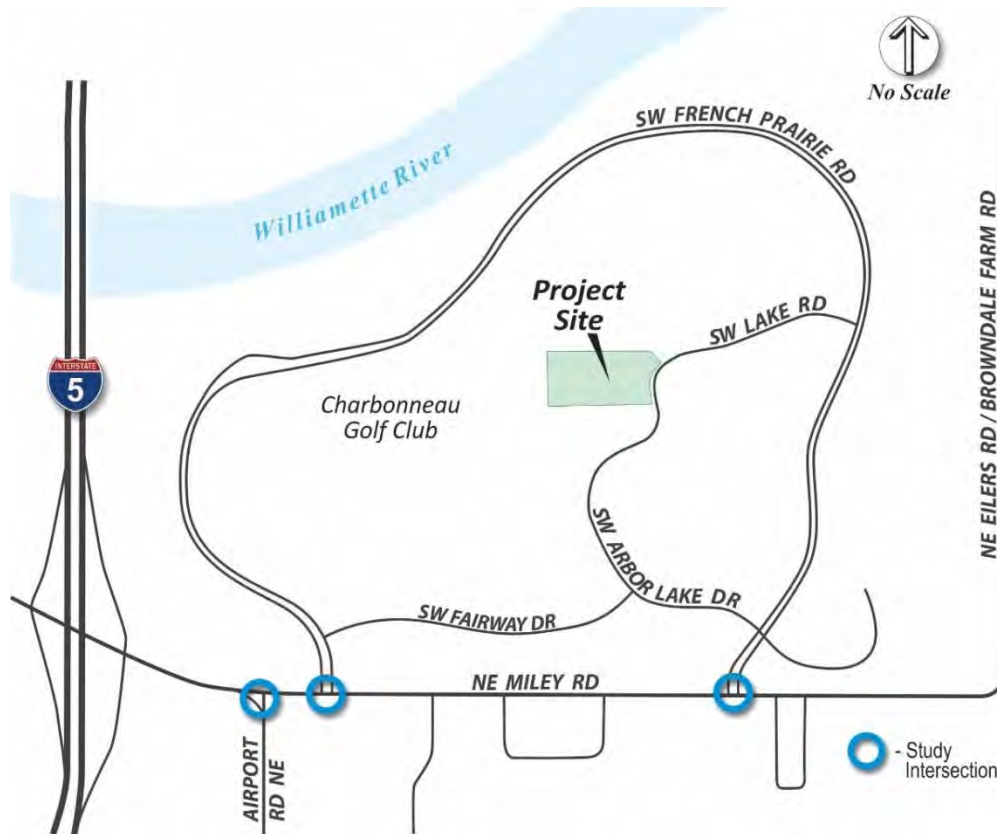


Figure 1: Study Area

This chapter provides an introduction to the proposed subdivision and the steps taken to analyze the associated impacts of the proposed subdivision on the transportation network. It highlights important elements of the remaining chapters, including a description of the project and the findings of the transportation analysis. Table 1 on the following page lists important characteristics of the study area and proposed project.

¹ Email with Steve Adams (City of Wilsonville) and Clackamas County Staff on July 1, 2016.

Table 1: Key Study Area and Proposed Development Characteristics

Characteristics	Information
Study Area	
Number of Study Intersections	3
Analysis Period	Weekday a.m. and p.m. peak hour (Peak hour between 7-9 a.m. and 4-6 p.m.)
Project Site	
Existing Land Use	Golf Course Driving Range
Proposed Development	40 Single Family Homes
Project Access	New internal road located west of SW Arbor Lake Drive

Existing Intersection Operations

Existing traffic operations at the study intersections were determined for the a.m. and p.m. peak hours based on the 2010 Highway Capacity Manual² for unsignalized intersections. The a.m. peak hour analysis is required by Clackamas County since NE Miley Road and Airport Road NE area County facilities. The results were then compared with the City’s and County’s minimum acceptable level of service (LOS) operating standard, which is LOS D for the City and LOS E for the County. Table 2 lists the estimated delay, LOS, and v/c ratio of each study intersection. All study intersections, with the exception of the a.m. peak period for the NE Miley Road/Airport Road NE intersection, meet the County’s operating standard for the a.m. and p.m. peak periods. A discussion of the mitigations can be found in Chapter 3.

Table 2: Existing Study Intersection Operations

Intersection	Operating Standard	AM Peak Existing			PM Peak Existing		
	County (City)	Delay	LOS	v/c	Delay	LOS	v/c
NE Miley Road/Airport Road NE	LOS E	55.2	A/F	0.94	23.4	A/C	0.57
NE Miley Road/SW French Prairie Road West	LOS E (LOS D)	10.0	A/B	0.19	16.0	A/C	0.16
NE Miley Road/SW French Prairie Road East	LOS E (LOS D)	10.1	A/B	0.09	11.2	A/B	0.08

Unsignalized Intersections:

Delay = Critical Movement approach Delay (sec.)

LOS = Level of Service of Major/Minor Street

v/c = Volume-to-Capacity Ratio of Intersection

² 2010 Highway Capacity Manual, Transportation Research Board, Washington DC, 2010.

Proposed Project Site

The proposed subdivision is located west of SW Arbor Lake Drive in Charbonneau Golf Club north of NE Miley Road. The subdivision will include 40 new lots for future construction of single family homes on approximately 7.5 acres.

Trip Generation

Trip generation is the method used to estimate the number of vehicles a development adds to site driveways and the adjacent roadway network during a specified period (i.e., such as the a.m. and p.m. peak hour). Trip generation estimates are performed using trip rates surveyed at similar land uses, as provided by the Institute of Transportation Engineers (ITE).³

The project site is estimated to generate 381 average daily trips including 38 (10 in, 28 out) in the a.m. peak hour and 46 (29 in, 17 out) in the p.m. peak hour. These trips were distributed and added to the roadway network for the future operations analysis to determine whether the site would impact the study intersections. Table 3 lists the peak hour vehicle trip generation estimates for the proposed subdivision.

Table 3: Trip Generation Summary for Proposed Subdivision

Land Use (ITE Code)	DU ^a	Time	Trip Generation Rate ^b	Peak Hour Trips			Daily Trips
				In	Out	Total	
Single-Family Unit (210)	40	AM	0.95 per DU	10	28	38	381
		PM	1.15 per DU	29	17	46	

^a DU = Dwelling Unit

^b The project trip generation rate were calculated based on the ITE equation.

Project Traffic Impact

The impact analysis included trip generation, trip distribution, a.m. and p.m. peak hour project trips through the I-5 interchange areas, and future traffic operating conditions at the study intersections. Typically, the analysis also includes scenarios that account for Stage II approved developments in the area. However, based on coordination with the City and County, there are no planned developments that would add traffic to the study intersections. Therefore, the Stage II analysis does not add any traffic to the system (future scenario analyzed the existing plus project vehicles trips).

The study intersection operating conditions for the future scenarios are listed in Table 4 on the following page. All study intersections, with the exception of the a.m. peak period for the NE Miley Road/Airport Road NE intersection, are expected to meet the City and County operating standards for the a.m. and p.m. peak periods.

Table 4: Future Project Intersection Operations Comparison

Intersection	Operating Standard	AM Peak Existing + Project			PM Peak Existing + Project		
	County (City)	Delay	LOS	v/c	Delay	LOS	v/c

³ *Trip Generation, 9th Edition*, Institute of Transportation Engineers, 2012.

NE Miley Road/Airport Road NE	LOS E	73.7	A/F	> 1.0	26.3	A/D	0.62
NE Miley Road/SW French Prairie Road West	LOS E (LOS D)	13.7	A/B	0.20	16.8	A/C	0.17
NE Miley Road/SW French Prairie Road East	LOS E (LOS D)	10.3	A/B	0.12	11.9	A/B	0.09

Unsignalized Intersections:

Delay = Critical Movement approach Delay (sec.)
 LOS = Level of Service of Major/Minor Street
 v/c = Volume-to-Capacity Ratio of Intersection

Project Impact Summary

The proposed subdivision located west of SW Arbor Lake Drive is anticipated to result in the following impacts:

Trip Generation

- The project site is estimated to generate 381 average daily trips including 38 (10 in, 28 out) in the a.m. peak hour and 46 (29 in, 17 out) in the p.m. peak hour.
- Of the total project trips, 23 a.m. peak hour trips and 28 p.m. peak hour trips are estimated to pass through the I-5/NE Miley Road interchange area.
- Approximately 10 and 12 project trips traveling through the Wilsonville Road interchange area during the a.m. and p.m. peak hours, respectively.

Study Intersection Operations

- The three study intersection along NE Miley Road meet the County’s mobility standard of LOS E for the all scenarios except for the NE Miley Road/Airport Road NE intersection during the a.m. peak period.
- Mitigations considered at NE Miley Road/Airport Road NE include a traffic signal (per the County TSP project SI-P4) which would improve the intersection operating standards for all existing and future traffic condition scenarios.
- By comparing the number of new project trips to total trips at the NE Miley Road/Airport Road NE intersection, a proportionate share of approximately 3.6% was determined. The developer should coordinate with City and County staff to contribute their proportionate share for future intersection improvements including a traffic signal at the NE Miley Road/Airport Road NE intersection.

Site Circulation and Safety

- The site plan provided by the project sponsor shows the proposed 40 single family homes with access along the new proposed road to SW Arbor Lake Drive.
- Two lots are within 50 feet of the proposed intersection of the new road and SW Arbor Lake Drive. Vehicles entering and exiting a potential driveway of the lots may conflict with vehicles using the intersection.
- It is recommended that parking be restricted from Arbor Lake Drive to approximately 100 feet.

Sight Distance

- Sight distance at the NE Miley Road/Airport Road NE intersection was observed to be approximately 425 feet. The AASHTO required intersection sight distance for 45 mph is 500 feet for a left turning vehicle from a stopped position. It is recommended that the County remove the nearby vegetation to meet the sight distance requirements.
- Prior to occupancy, AASHTO sight distance requirements at the proposed access point will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon. Parking restrictions may be required at Arbor Lake Drive to meet AASHSTO requirements.

CHAPTER 2: EXISTING CONDITIONS

This chapter provides documentation of existing study area conditions, including the study area roadway network, pedestrian and bicycle facilities, and existing traffic volumes and operations. Supporting details are provided in the appendix.

Study Area Roadway Network

The subdivision is proposed to consist of 40 new single-family homes on the property that is currently being utilized as the Charbonneau Golf Course’s driving range on the west side of SW Arbor Lake Drive north of NE Miley Road in Wilsonville. Key roadways in the study area are summarized in Table 5 along with their existing roadway characteristics. The functional classifications for City of Wilsonville streets are provided in the *City of Wilsonville Transportation System Plan (TSP)*⁴ and the functional classifications for the Clackamas County streets are provided in the *Clackamas County TSP*.⁵

Table 5: Study Area Roadway Characteristics

Roadway	Classification	Number of Lanes	Posted Speed	Sidewalks	Bike Lanes	On-Street Parking
NE Miley Road	Collector	2	45	No	Partial ^a	Partial ^b
Airport Road NE	Major Arterial	2	55 ^c	No	Yes	No
SW French Prairie Road	Collector	4	25	Partial ^d	No	No

^aBicycle lanes are only on the north side of NE Miley Road.

^bOn-street parking available on the south side of NE Miley Road for approximately 2,000 feet

^cNo posted speed, basic rule applied.

^dSingle sidewalk from NE Miley Road to Country View Lane.

Pedestrian and Bicycle Facilities

Bicycle facilities along NE Miley Road and Airport Road NE include five foot bicycle lanes on one or both sides. There are no sidewalks along the study roads with the exception of some locations along SW French Prairie Road near the Charbonneau Golf Course.

Future Planned Projects

The City of Wilsonville and Clackamas County TSPs includes future planned roadway and intersection projects within the study area.⁶ Furthermore, SW French Prairie Road is also identified in the City’s TSP to have a lack of bike and pedestrian facilities. The following projects are identified in the TSP:

SI-P4: NE Miley Road/Airport Road NE Intersection Improvements:

This project will install a traffic signal and northbound left-turn lane at this intersection.

BW-10 SW French Prairie Drive Pathway:

This project will construct a 10-foot wide shared-use path along SW French Prairie Drive from Country View Lane to NE Miley Road or reconfigure the existing roadway to remove a travel lane in each direction and add bicycle and pedestrian facilities.

⁴ City of Wilsonville Transportation System Plan, 2013.

⁵ Clackamas County Transportation System Plan, 2013.

⁶ Project is also listed in the Clackamas County Transportation System Plan (2013) as Project 1093.

Existing Traffic Volumes and Operations

Existing traffic volume data, shown in Figure 2, was collected at the study intersections.⁷ Existing a.m. and p.m. peak hour traffic operations were analyzed at the following study intersection based on coordination with city and county staff:

- NE Miley Road/Airport Road NE
- NE Miley Road/SW French Prairie Road West
- NE Miley Road/SW French Prairie Road East

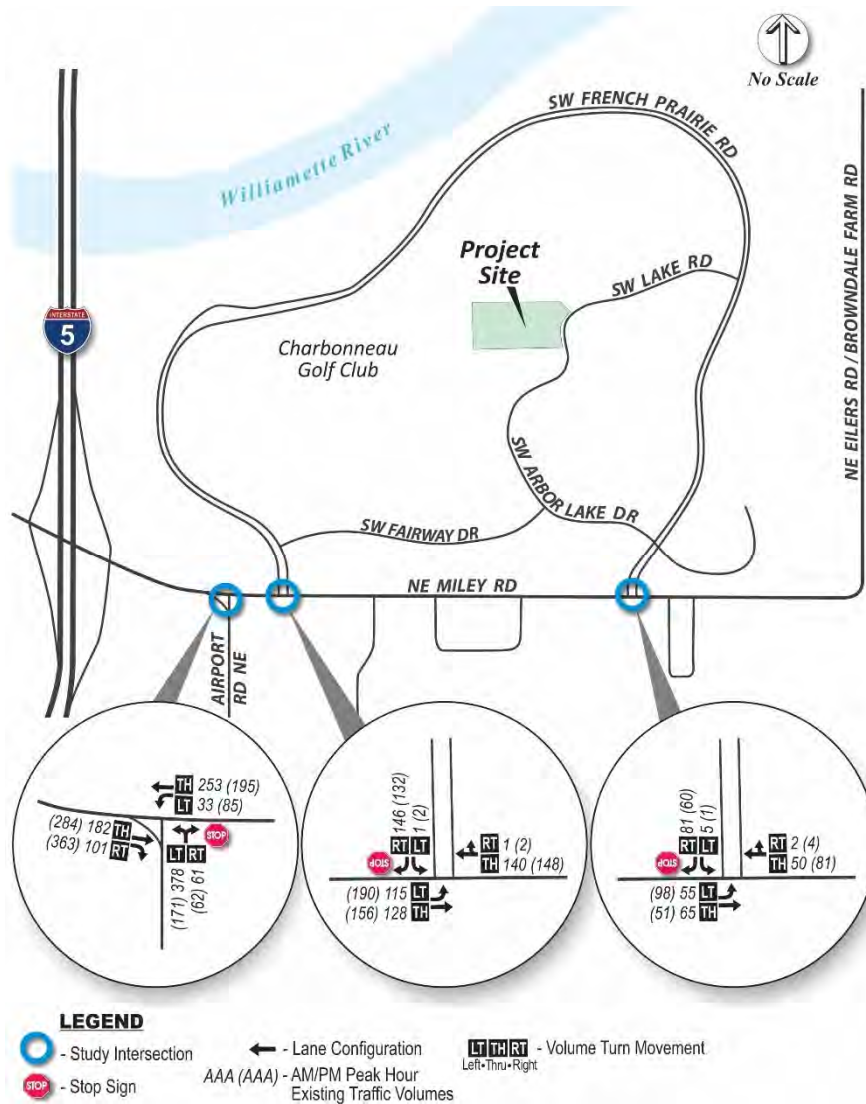


Figure 2: Existing PM Peak Hour Traffic Volumes

The following sections describe intersection operating standards and existing operating conditions. Field observations were completed on August 2, 2016 to observe sight distances at each study intersection.

⁷ Traffic Data was collected by All Traffic Data on Wednesday, July 20, 2016

Intersection Performance Measures

Level of service (LOS) ratings and volume-to-capacity (v/c) ratios are two commonly used performance measures that provide a good picture of intersection operations.

- Level of service (LOS):** A “report card” rating (A through F) based on the average delay experienced by vehicles at the intersection.⁸ LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and demand has exceeded capacity.
- Volume-to-capacity (v/c) ratio:** A decimal representation (typically between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually results in excessive queues and long delays.

Required Operating Standards

The City of Wilsonville requires the study intersections of public streets to meet its minimum acceptable LOS D standard. NE Miley Road and Airport Road NE are a County facility and therefore the results were compared with the County’s minimum acceptable LOS operating standard, which is LOS E.⁹

Existing Operating Conditions

Existing traffic operations at the study intersection were determined for the a.m. and p.m. peak hour based on the 2010 Highway Capacity Manual for unsignalized intersections. The results were then compared with the County’s minimum acceptable LOS operating standard. Table 6 lists the estimated delay, LOS , and v/c ratio of each study intersection.

Table 6: Existing Study Intersection Operations

Intersection	Operating Standard	AM Peak Existing			PM Peak Existing		
	County (City)	Delay	LOS	v/c	Delay	LOS	v/c
NE Miley Road/Airport Road NE	LOS E	55.2	A/F	0.94	23.4	A/C	0.57
NE Miley Road/SW French Prairie Road West	LOS E (LOS D)	10.0	A/B	0.19	16.0	A/C	0.16
NE Miley Road/SW French Prairie Road East	LOS E (LOS D)	10.1	A/B	0.09	11.2	A/B	0.08

Unsignalized Intersections:

Delay = Critical Movement approach Delay (sec.)

LOS = Level of Service of Major/Minor Street

v/c = Volume-to-Capacity Ratio of Intersection

⁸ A description of Level of Service (LOS) is provided in the appendix and includes a list of the delay values (in seconds) that correspond to each LOS designation.

⁹ Clackamas County Comprehensive Plan, Table 5-2b, June 2016.

Collision Analysis

Five years of collision records (2011-2015) for the study area were obtained from ODOT’s online database. The data identified 12 collisions at the study intersections during the five-year period. A breakdown of the collisions by severity is provided in Table 7. As shown, there were zero fatal crashes and eight injury crashes (one serious injury) at the study intersections between 2011 and 2015.

Table 7 shows the total reported collisions at each study intersection as well as the calculated observed and critical crash rates. The crash rate for the NE Miley Road/Airport Road NE intersection is above the ODOT critical crash rate for similar intersections (0.29 for urban three-leg unsignalized intersections) and warrants further investigation of safety performance. The crash rate for the NE Miley Road/SW French Prairie Road (West Charbonneau Entrance) intersection is below the ODOT critical crash rate for similar intersections and there were no collisions at the NE Miley Road/SW French Prairie Road (East Charbonneau Entrance) intersection. Therefore, there is no need for further investigation of safety performance at these intersections.

Table 7: Collision History at Study Intersections

Intersection	Collisions (by Severity)				Collision Rate ^b
	Fatal	Injury	PDO ^a	Total	
NE Miley Road/Airport Road NE	0	5	4	9	0.43
NE Miley Road/SW French Prairie Road West	0	3	0	3	0.26
NE Miley Road/SW French Prairie Road East	0	0	0	0	0.00

^a PDO = Property damage only.

^b Collision rate for intersections = average annual collisions per million entering vehicles (MEV); MEV estimates based on p.m. peak-hour traffic count and applicable factors.

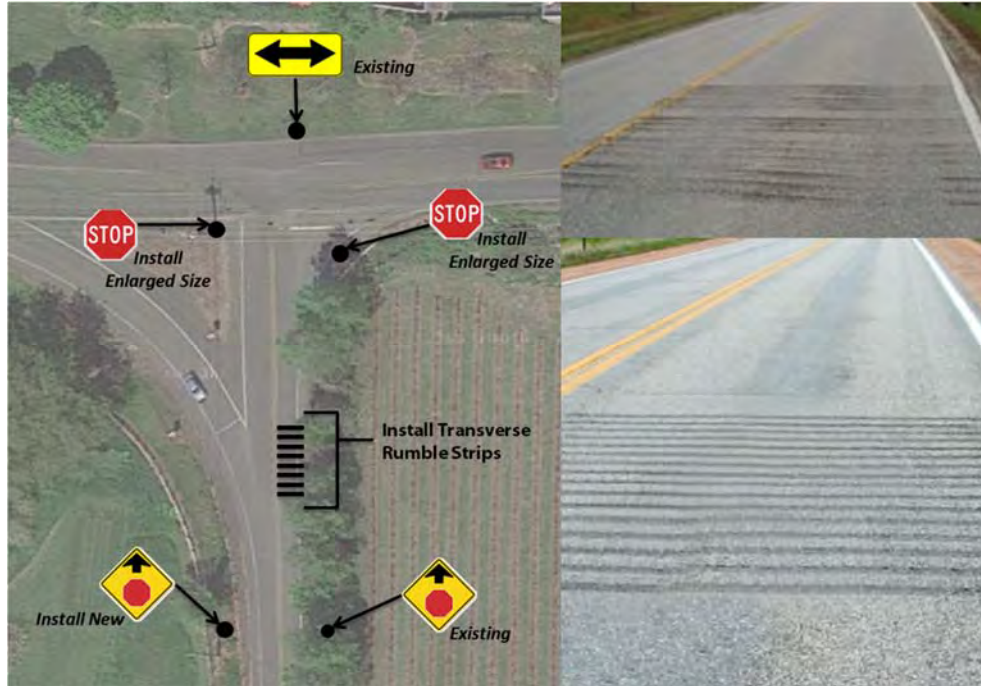
Bold/Highlighted: Intersection collision rate is higher than the ODOT critical crash rate for similar intersection

Safety Evaluation and Recommendations at NE Miley Road/Airport Road NE

NE Miley Road/Airport Road NE had a total on nine crashes from 2011 to 2015. The recorded collision types consisted of fixed object (five), turning (three), and rear end (one) collisions that occurred during daylight hours. Three crashes occurred at night time, two of which were reported as having no lighting. There were no reported bicycle or pedestrian collisions. The crash that resulted in a serious injury was a fixed object crash where a vehicle traveling north along Airport Road NE was reported to run the northbound stop sign and hit fixed objects (trees) north of the intersection.

It is recommended that Clackamas County consider installing enhanced signs and marking improvements and transverse rumble strips or stripes. Sign and marking improvements include advance warning signs, and multiple stop signs at the stop controlled approach. These improvements are documented to reduce right-angle and rear-end crashes by up to 30%, while transverse rumble strips alert drivers to an upcoming stop and may reduce right angle and roadway departure crashes by up to 35%.¹⁰ The figure on the following page shows potential signs and markings as well as transverse rumble strips at the intersection.

¹⁰ *Intersection Safety: A Manual for Local Rural Road Owners*. Office of Safety FHWA. January 2011.



Intersection Safety Improvements: Enhanced Signs and Marking (Left) and Transverse Rumble Strips (Right)

Public Transit Service

South Metro Area Regional Transit (SMART) operates several fixed routes that serve Wilsonville and the surrounding area.¹¹ Route 3 travel on SW French Prairie Road with one stop located on the northwest corner of SW French Prairie Road/SW Louvonne Drive and one stop at Springridge at Charbonneau.

Sight Distance

Sight distance measurements were taken at each study intersection and it was found that at the NE Miley Road/Airport Road NE intersection sight distance (ISD) was approximately 425 feet looking east for northbound stopped vehicles. The ISD requirement for a left turning vehicle from a stop on a collector road with a speed limit of 45 mph in Clackamas County is 500 feet.¹² As shown in the figure to the right, there is overgrown vegetation that limits the sight distance at this intersection. It is recommended that the County remove or trim this vegetation to increase the ISD to meet the required distance.



Sight Distance at NE Miley Road/Airport Road NE

¹¹ South Metro Area Regional Transit (SMART) operates several fixed routes that serve Wilsonville and make connections to TriMet in Portland, Cherriots in Salem, and Canby Area Transit. The City’s transit center, “SMART Central at Wilsonville Station,” provides connections to all SMART routes and to TriMet’s Westside Express Service (WES) commuter rail station.

¹² *Clackamas County Roadway Standards*. Section 240: Table 2-6. February 1, 2013.

CHAPTER 3: PROJECT IMPACTS

This chapter reviews the impacts that the proposed subdivision may have on the study area transportation system. This analysis includes trip generation, trip distribution, future year traffic volumes and operating conditions, and a site plan evaluation. The focus of the impact analysis is on the following study intersection identified by City of Wilsonville staff:

- NE Miley Road/Airport Road NE
- NE Miley Road/SW French Prairie Road West
- NE Miley Road/SW French Prairie Road East

Project Site

The proposed subdivision is located west of SW Arbor Lake Drive in Charbonneau Golf Club north of NE Miley Road. The subdivision will include 40 new lots for future construction of single family homes on approximately 7.5 acres.

Trip Generation

Trip generation is the method used to estimate the number of vehicles a development adds to site driveways and the adjacent roadway network during a specified period (i.e., such as the a.m. and p.m. peak hour). Trip generation estimates are performed using trip rates surveyed at similar land uses, as provided by the Institute of Transportation Engineers (ITE).¹³

The project site is estimated to generate 381 average daily trips including 38 (10 in, 28 out) in the a.m. peak hour and 46 (29 in, 17 out) in the p.m. peak hour. These trips were distributed and added to the roadway network for the future operations analysis to determine whether the site would impact the study intersections. Table 8 lists the a.m. and p.m. peak hour vehicle trip generation estimates for the proposed subdivision.

Table 8: Trip Generation Summary for Proposed Subdivision

Land Use (ITE Code)	DU ^a	Time	Trip Generation Rate ^b	Peak Hour Trips			Daily Trips
				In	Out	Total	
Single-Family Unit (210)	40	AM	0.95 per DU	10	28	38	381
		PM	1.15 per DU	29	17	46	

^a DU = Dwelling Unit

^b The project trip generation rate were back calculated based on the ITE equation.

Trip Distribution

Trip distribution provides an estimation of where project-related trips would be coming from and going to. It is given as percentages at key gateways to the study area and is used to route project trips through the study intersection. Figure 3 on the following page shows the expected trip distribution and project trip routing for the additional traffic generated by the subdivision.

¹³ *Trip Generation, 9th Edition*, Institute of Transportation Engineers, 2012.

The trip distribution was estimated using the existing traffic volumes of the study intersections. It is assumed that approximately 90% of the vehicles entering and exiting the subdivision will use the east leg of SW French Prairie Road and the remaining 10% of the vehicles will use the west leg of SW French Prairie Road to access NE Miley Road.

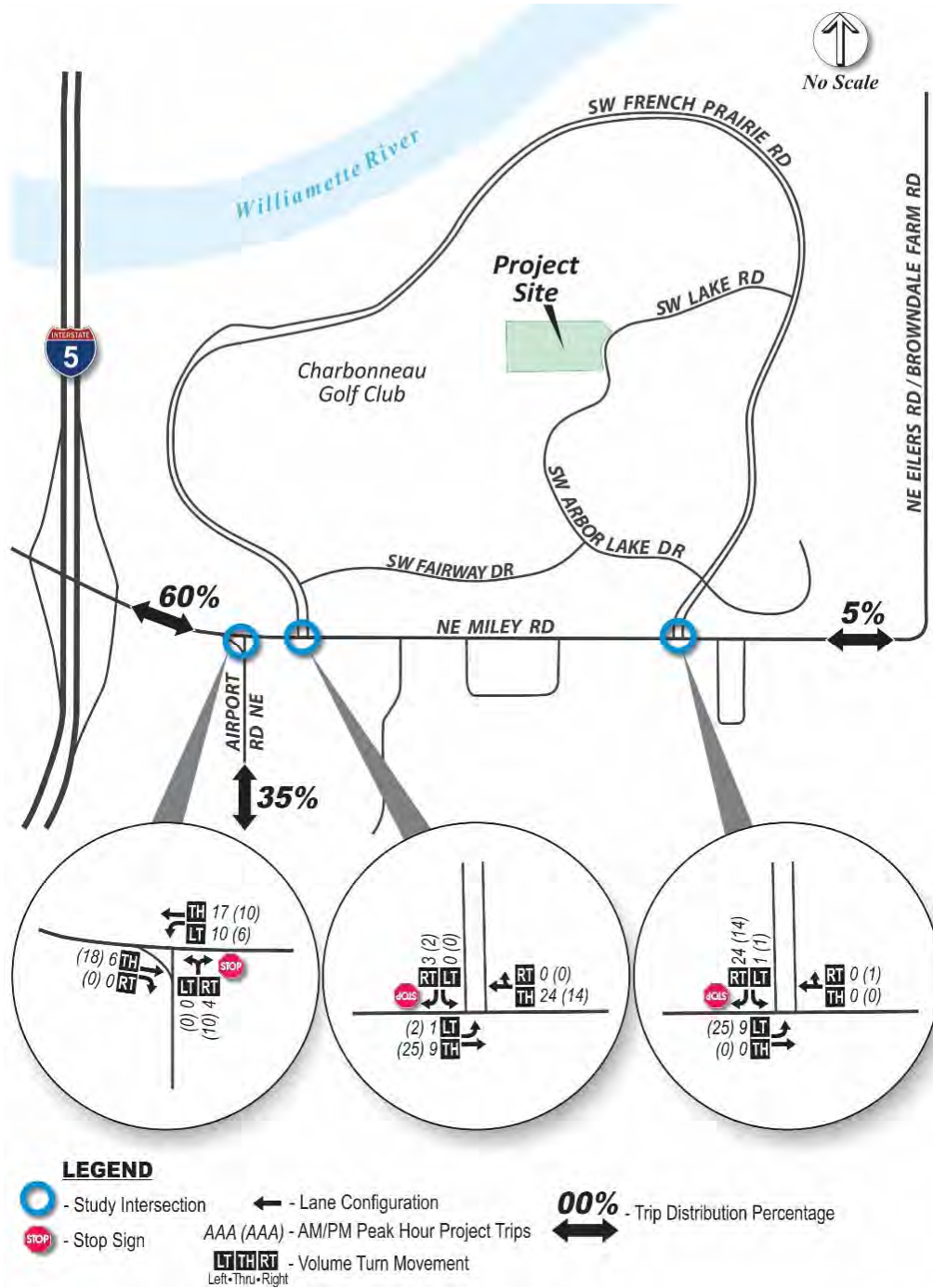


Figure 3: Trip Distribution and Peak Hour Project Volumes

Project Trips Through the I-5 Interchange Area

The project trips through the I-5/NE Miley Road interchange area were estimated based on the trip generation and distribution assumptions as shown in Figure 3. The proposed subdivision is expected to generate 23 a.m. peak hour trips and 28 p.m. peak hour trips through the I-5/NE Miley Road interchange area, with approximately 10 and 12 project trips traveling through the Wilsonville Road interchange area during the a.m. and p.m. peak hours, respectively.¹⁴

Future Traffic Volumes and Operating Conditions

The impact analysis included trip generation, trip distribution, a.m. and p.m. peak hour project trips through the I-5 interchange areas, and future traffic operating conditions at the study intersections. Typically, the analysis also includes scenarios that account for Stage II approved developments in the area; However, based on coordination with the City and County, there are no planned developments that would add traffic to the study intersections. Therefore, the Stage II analysis does not add any traffic to the system (future scenario analyzed the existing plus project vehicles trips).

The future scenario analyzed the existing plus project vehicles trips. Figure 4 on the following page shows the a.m. and p.m. peak hour traffic volumes used to analyze the “Existing plus Project” scenario.

Intersection Operations

The study intersection operating conditions for the future scenario is listed in Table 9. The NE Miley Road/Airport Road NE intersection continue to not meet the County operating standards during the a.m. peak period where the northbound movement is LOS F. The other study intersections continue to meet the County’s operating standards for all scenarios.

Table 9: Future Project Intersection Operations Comparison

Intersection	Operating Standard	AM Peak Existing + Project			PM Peak Existing + Project		
	County (City)	Delay	LOS	v/c	Delay	LOS	v/c
NE Miley Road/Airport Road NE	LOS E	73.7	A/F	> 1.0	26.3	A/D	0.62
NE Miley Road/SW French Prairie Road (West Charbonneau Entrance)	LOS E (LOS D)	13.7	A/B	0.20	16.8	A/C	0.17
NE Miley Road/SW French Prairie Road (East Charbonneau Entrance)	LOS E (LOS D)	10.3	A/B	0.12	11.9	A/B	0.09

Unsignalized Intersections:

Delay = Critical Movement approach Delay (sec.)

LOS = Level of Service of Major/Minor Street

v/c = Volume-to-Capacity Ratio of Intersection

¹⁴ Project trips through I-5/Wilsonville Interchange area from Charbonneau were determine using the 2035 Metro Gamma Model refined for the City of Wilsonville.

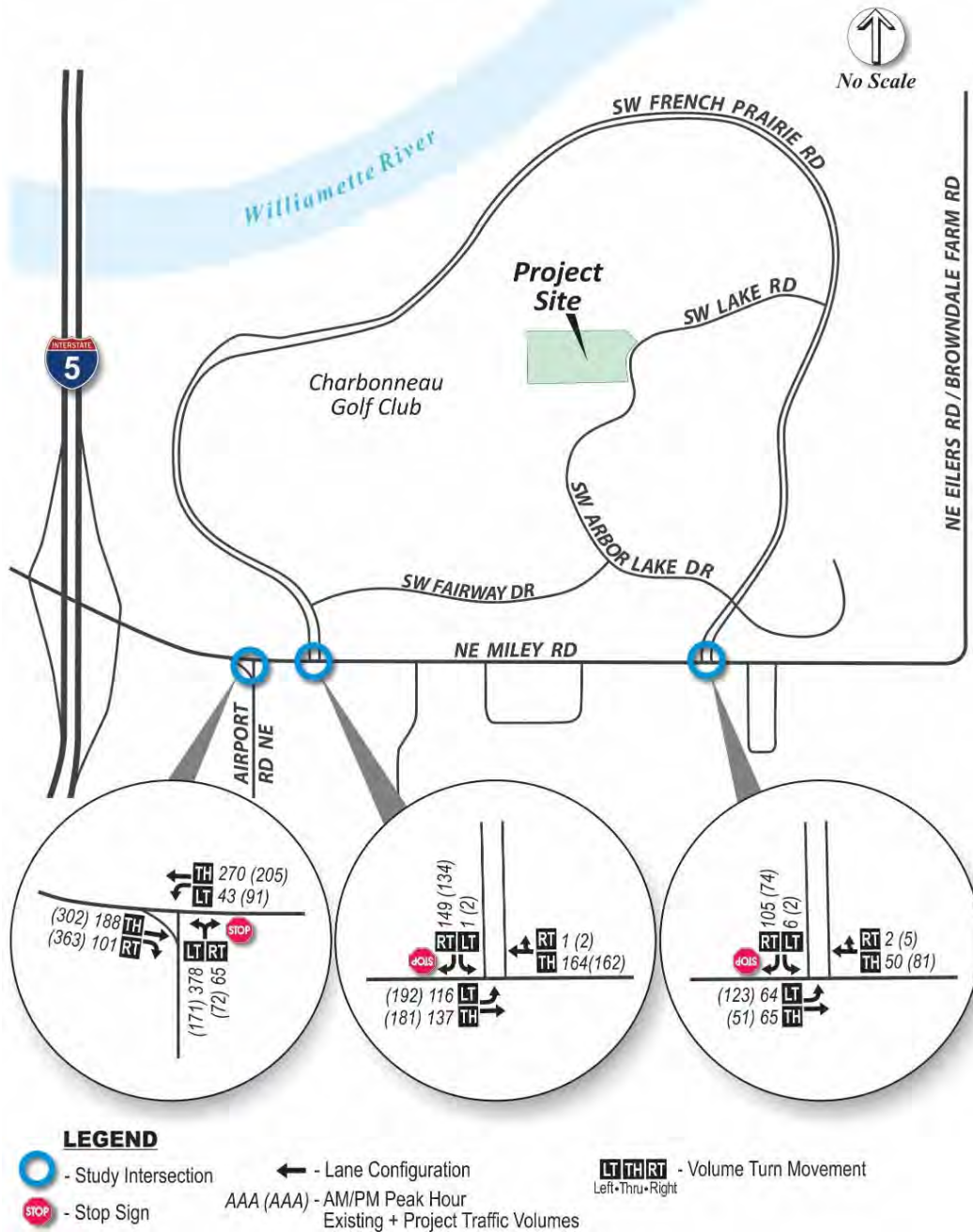


Figure 4: Existing plus Project PM Peak Hour Traffic Volumes

Recommended Mitigations

At the NE Miley Road/Airport Road NE intersection for the existing plus project trips, installing an all-way stop would only shift failure to meet the County’s operating standards from the northbound left turn movement in the a.m. peak period to the eastbound through movement in the p.m. peak period, as shown in Table 10. Therefore modifying this intersection to an all-way stop is not recommended.

As previously noted, the County and City TSPs include a future planned intersection improvements to install a traffic signal and add a northbound left-turn lane. With a traffic signal and additional northbound left-turn lane, the intersection would operate within operating standards for all scenarios. Table 10 of the following page shows the operations results for the recommended mitigations under the existing traffic volume and future traffic volume with include project trip scenarios.

Table 10 : Intersection Operations With Potential Mitigations

NE Miley Road/Airport Road NE	Operating Standard	AM Peak			PM Peak		
	County (City)	Delay	LOS	v/c	Delay	LOS	v/c
Existing + Project Traffic Volumes							
Existing Two-way Stop-Control	LOS E	73.7	A/F	> 1.0	26.3	A/D	0.62
All-way Stop Control	LOS E (LOS D)	28.9	C/D	0.55	56.2	B/F	0.99
Traffic Signal	LOS E (LOS D)	12.4	B	0.54	10.5	B	0.60

Unsignalized Intersections:

Delay = Critical Movement approach Delay (sec.)

LOS = Level of Service of Major/Minor Street

v/c = Volume-to-Capacity Ratio of Intersection

Proportionate Share

The proposed subdivision has minimal impact on the NE Miley Road/Airport Road NE intersection, as shown in Table 11. The developer should coordinate with City and County staff to contribute their proportionate share of approximately 3.6% to improving the intersection.

Table 11: Proportionate Share

	Existing Trips	Project Trips	Total Trips	Percent Difference
AM Peak	1008	37	1045	3.5%
PM Peak	1160	44	1204	3.7%
Total	2168	81	2249	3.6%

System Development Charge

System Development Charge (SDC) credits could be applied to the existing driving range use for current trips using the transportation system. Based on discussion with the Charbonneau Golf Club staff, it was determined that the majority of the driving range users are associated with those using the full golf course and therefore would not be reduced from trips using the transportation system.¹⁵ Therefore no SDC credits are recommended for this project.

¹⁵ Phone conversation with Charbonneau Golf Club staff on August 26, 2016.

Site Plan Evaluation

A site plan showing the proposed subdivision (provided in the appendix) was evaluated to identify potential concerns related to access, circulation and safety, and sight distance.

Site Access

The proposed subdivision is located west of SW Arbor Lake Drive with access on a new proposed road off SW Arbor Lake Drive. The proposed road right-of-way is shown to be approximately 47 feet wide, which is similar to the existing SW Arbor Lake Drive at 50 feet wide. The site plan provided by the project sponsor shows the proposed 40 single family homes with access along the new proposed road.

Circulation and Safety

The existing development infrastructure provides internal circulation with a proposed road providing access to the new homes. The site plan shows the proposed street right-of-way of 47 feet with a 28 foot wide road and 6 foot sidewalk along the outside of the loop and along property fronting Arbor Lake Drive to connect with existing sidewalks.

One potential circulation issue is proposed driveways at two lots are shown to be within 50 feet of the proposed intersection of the new road and SW Arbor Lake Drive. Vehicles entering and exiting these driveways may conflict with other vehicles using the intersection. It is recommended that the driveways be located away from the intersection. Additionally, it is recommended that parking be restricted approximately 100 feet from Arbor Lake Drive.

Sight Distance

Prior to occupancy, AASHTO sight distance requirements at the proposed access point will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon. Parking restrictions along Arbor Lake Drive may be required to meet AASHTO requirements.

Project Impact Summary

The proposed subdivision located west of SW Arbor Lake Drive is anticipated to result in the following impacts:

Trip Generation

- The project site is estimated to generate 381 average daily trips including 38 (10 in, 28 out) in the a.m. peak hour and 46 (29 in, 17 out) in the p.m. peak hour.
- Of the total project trips, 23 a.m. peak hour trips and 28 p.m. peak hour trips are estimated to pass through the I-5/NE Miley Road interchange area.
- Approximately 10 and 12 project trips traveling through the Wilsonville Road interchange area during the a.m. and p.m. peak hours, respectively.

Study Intersection Operations

- The three study intersection along NE Miley Road meet the County's mobility standard of LOS E for the all scenarios except for the NE Miley Road/Airport Road NE intersection during the a.m. peak period.
- Mitigations considered at NE Miley Road/Airport Road NE include a traffic signal (per the County TSP project SI-P4) which would improve the intersection operating standards for all existing and future traffic condition scenarios.
- By comparing the number of new project trips to total trips at the NE Miley Road/Airport Road NE intersection, a proportionate share of approximately 3.6% was determined. The developer should coordinate with City and County staff to contribute their proportionate share for future intersection improvements including a traffic signal at the NE Miley Road/Airport Road NE intersection.

Site Circulation and Safety

- The site plan provided by the project sponsor shows the proposed 40 single family homes with access along the new proposed road to SW Arbor Lake Drive.
- Two lots are within 50 feet of the proposed intersection of the new road and SW Arbor Lake Drive. Vehicles entering and exiting a potential driveway of the lots may conflict with vehicles using the intersection. It is recommended that the driveways of these lots be placed away from the intersection.
- It is recommended that parking be restricted from Arbor Lake Drive to approximately 100 feet.

Sight Distance

- Sight distance at the NE Miley Road/Airport Road NE intersection was observed to be approximately 425 feet. The AASHTO required intersection sight distance for 45 mph is 500 feet for a left turning vehicle from a stopped position. It is recommended that the County remove nearby vegetation to meet the sight distance requirements.
- Prior to occupancy, AASHTO sight distance requirements at the proposed access point will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

Appendix

Site Plan

Existing Peak Hour Traffic Counts

Collision Data

Level of Service Descriptions

HCM Analysis – Existing

HCM Analysis – Existing + Project

HCM Analysis – Project Mitigation



Site Plan

LOT LAYOUT, AREAS, AND DIMENSIONS ARE PRELIMINARY AND SUBJECT TO CHANGE.

PRELIMINARY PLAN

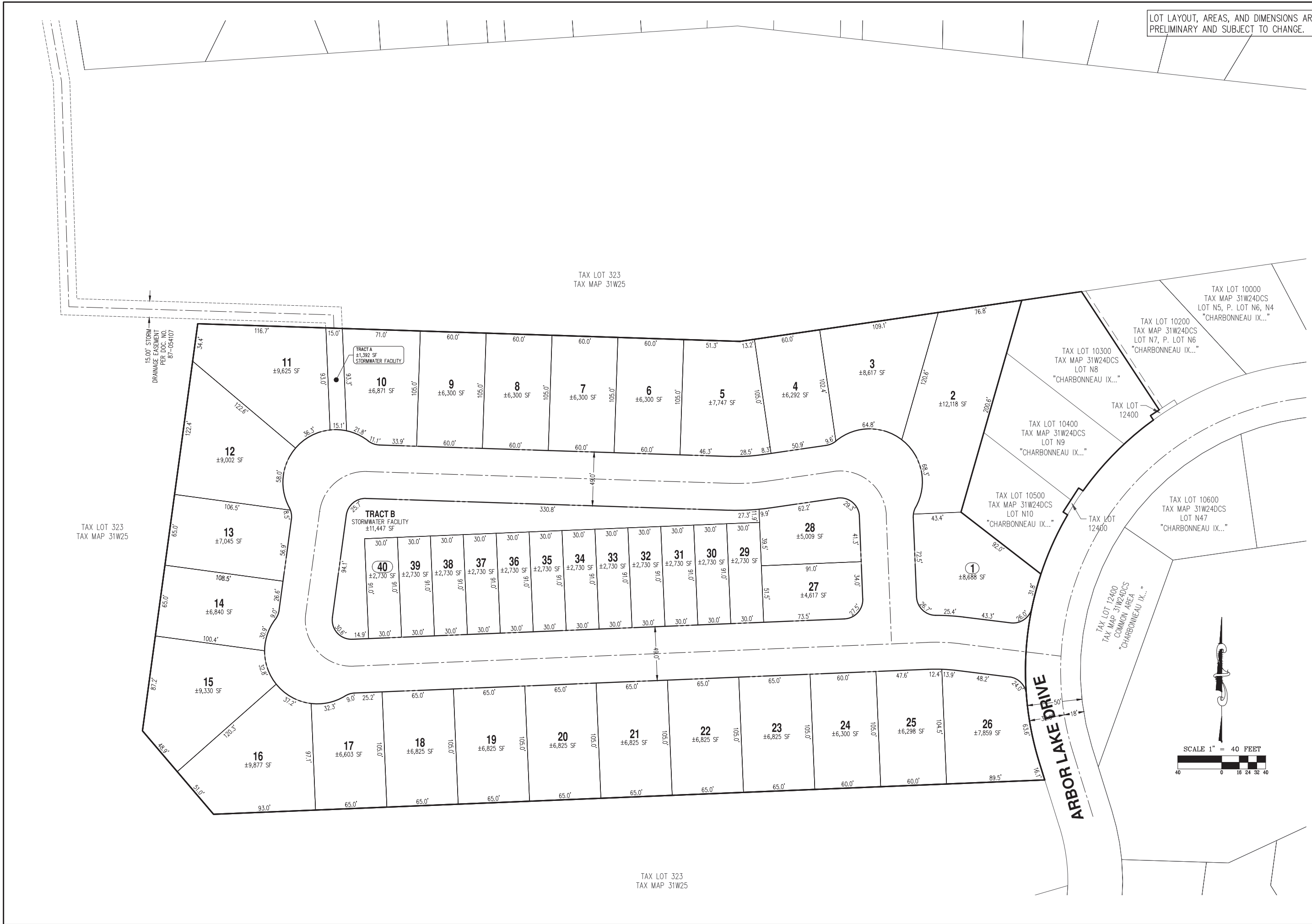
DESIGNED BY: RSW
 DRAWN BY: RSW
 CHECKED BY: MBH
 SCALE: AS NOTED
 DATE: 06/10/2016

PRELIMINARY

REVISIONS

JOB NUMBER
4898

SHEET
1



**CHARBONNEAU
 SUBDIVISION**
WILSONVILLE
 OREGON
 CLATSOP COUNTY MAP 31W25
 TAX LOT 325

**PRELIMINARY PLAN
 WITH AERIAL PHOTO**

DESIGNED BY: RSW
 DRAWN BY: RSW
 CHECKED BY: MBH
 SCALE: AS NOTED
 DATE: 06/10/2016

PRELIMINARY

REVISIONS

JOB NUMBER
4898

SHEET
2



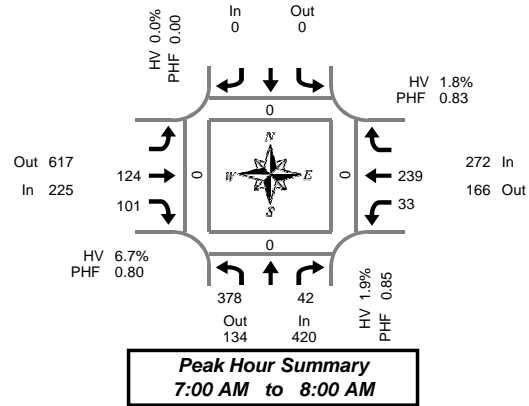


Existing Peak Hour Traffic Counts

Total Vehicle Summary



Clay Carney
(503) 833-2740



NE Airport Rd & NE Miley Rd

Wednesday, July 20, 2016

7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

5-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	L	R	Bikes			Bikes	T	R	Bikes	L	T	Bikes		North	South	East	West
7:00 AM	26	2	0			0	12	14	0	5	13	0	72	0	0	0	0
7:05 AM	35	6	0			0	5	7	0	1	20	0	74	0	0	0	0
7:10 AM	32	2	0			0	4	9	0	2	32	0	81	0	0	0	0
7:15 AM	39	2	0			0	3	9	0	1	19	0	73	0	0	0	0
7:20 AM	38	4	0			0	15	9	0	3	22	0	91	0	0	0	0
7:25 AM	37	4	0			0	11	8	0	2	15	0	77	0	0	0	0
7:30 AM	30	4	0			0	15	12	0	3	20	0	84	0	0	0	0
7:35 AM	30	5	1			0	6	7	0	4	30	0	82	0	0	0	0
7:40 AM	33	6	0			0	9	6	0	5	19	0	78	0	0	0	0
7:45 AM	21	1	1			0	11	6	0	5	19	0	63	0	0	0	0
7:50 AM	32	2	0			0	17	7	3	2	15	0	75	0	0	0	0
7:55 AM	25	4	0			0	16	7	0	0	15	0	67	0	0	0	0
8:00 AM	13	2	0			0	12	7	0	4	23	0	61	0	0	0	0
8:05 AM	23	5	0			0	12	7	0	2	25	0	74	0	0	0	0
8:10 AM	22	6	0			0	10	10	0	4	21	0	73	0	0	0	0
8:15 AM	19	3	0			0	10	6	0	3	16	2	57	0	0	0	0
8:20 AM	17	3	0			0	18	7	0	6	17	0	68	0	0	0	0
8:25 AM	19	4	0			0	13	3	0	2	23	0	64	0	0	0	0
8:30 AM	12	6	0			0	17	2	0	5	19	0	61	0	0	0	0
8:35 AM	25	1	0			0	26	7	0	1	27	0	87	0	0	0	0
8:40 AM	11	1	0			0	15	3	0	2	23	0	55	0	0	0	0
8:45 AM	11	3	0			0	25	5	2	7	17	0	68	0	0	0	0
8:50 AM	9	8	0			0	21	6	0	6	20	0	70	0	0	0	0
8:55 AM	9	3	0			0	19	8	0	2	16	1	57	0	0	0	0
Total Survey	568	87	2			0	322	172	5	77	486	3	1,712	0	0	0	0

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	L	R	Bikes			Bikes	T	R	Bikes	L	T	Bikes		North	South	East	West
7:00 AM	93	10	0			0	21	30	0	8	65	0	227	0	0	0	0
7:15 AM	114	10	0			0	29	26	0	6	56	0	241	0	0	0	0
7:30 AM	93	15	1			0	30	25	0	12	69	0	244	0	0	0	0
7:45 AM	78	7	1			0	44	20	3	7	49	0	205	0	0	0	0
8:00 AM	58	13	0			0	34	24	0	10	69	0	208	0	0	0	0
8:15 AM	55	10	0			0	41	16	0	11	56	2	189	0	0	0	0
8:30 AM	48	8	0			0	58	12	0	8	69	0	203	0	0	0	0
8:45 AM	29	14	0			0	65	19	2	15	53	1	195	0	0	0	0
Total Survey	568	87	2			0	322	172	5	77	486	3	1,712	0	0	0	0

Peak Hour Summary

7:00 AM to 8:00 AM

By Approach	Northbound NE Airport Rd				Southbound NE Airport Rd				Eastbound NE Miley Rd				Westbound NE Miley Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	420	134	554	2	0	0	0	0	225	617	842	3	272	166	438	0	917	0	0	0	0
%HV	1.9%				0.0%				6.7%				1.8%				3.1%				
PHF	0.85				0.00				0.80				0.83				0.91				

By Movement	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total				
	L	R	Total			Total	T	R	Total	L	T	Total					
Volume	378	42	420			0	124	101	225	33	239	272	917				
%HV	1.6%	NA	4.8%	1.9%	NA	NA	NA	0.0%	NA	11.3%	1.0%	6.7%	3.0%	1.7%	NA	1.8%	3.1%
PHF	0.83		0.70	0.85			0.70	0.84	0.80	0.59	0.82	0.83	0.91				

Rolling Hour Summary

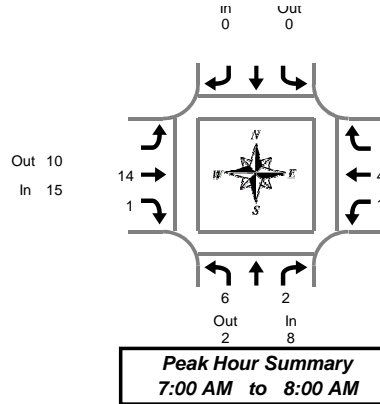
7:00 AM to 9:00 AM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	L	R	Bikes			Bikes	T	R	Bikes	L	T	Bikes		North	South	East	West
7:00 AM	378	42	2			0	124	101	3	33	239	0	917	0	0	0	0
7:15 AM	343	45	2			0	137	95	3	35	243	0	898	0	0	0	0
7:30 AM	284	45	2			0	149	85	3	40	243	0	846	0	0	0	0
7:45 AM	239	38	1			0	177	72	3	36	243	2	805	0	0	0	0
8:00 AM	190	45	0			0	198	71	2	44	247	3	795	0	0	0	0

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



NE Airport Rd & NE Miley Rd

Wednesday, July 20, 2016

7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	L	R	Total			Total	T	R	Total	L	T	Total	
7:00 AM	0	0	0			0	0	0	0	0	0	0	0
7:05 AM	1		2			0	0	0	0	0	0	0	2
7:10 AM	0	0	0			0	0	0	0	1		1	1
7:15 AM	1	0	1			0	1	0	1	0	0	0	2
7:20 AM	0	0	0			0	1	1	2	0	0	0	2
7:25 AM	1	0	1			0	1	0	1	0	1	1	3
7:30 AM	1	0	1			0	3	0	3	0	1	1	5
7:35 AM	0	0	0			0	1	0	1	0	1	1	2
7:40 AM	1	1	2			0	1	0	1	1	0	1	4
7:45 AM	0	0	0			0	0	0	0	0	0	0	0
7:50 AM	0	0	0			0	3	0	3	0	0	0	3
7:55 AM	1	0	1			0	3	0	3	0	0	0	4
8:00 AM	0	1	1			0	1	0	1	0	0	0	2
8:05 AM	0	1	1			0	0	0	0	2		2	3
8:10 AM	0	1	1			0	0	0	0	1	2	3	4
8:15 AM	0	0	0			0	0	0	0	0	0	0	0
8:20 AM	0	0	0			0	1	0	1	0	0	0	1
8:25 AM	0	0	0			0	0	0	0	0	0	0	0
8:30 AM	0	1	1			0	1	0	1	0	0	0	2
8:35 AM	0	0	0			0	1	0	1	0	1	1	2
8:40 AM	0	0	0			0	1	0	1	1	0	1	2
8:45 AM	1	0	1			0	1	0	1	0	0	0	2
8:50 AM	0	0	0			0	0	0	0	1	1	2	2
8:55 AM	0	0	0			0	0	1	1	0	0	0	1
Total Survey	7	6	13			0	20	2	22	4	10	14	49

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	L	R	Total			Total	T	R	Total	L	T	Total	
7:00 AM	1		2			0	0	0	0	0	1	1	3
7:15 AM	2	0	2			0	3	1	4	0	1	1	7
7:30 AM	2	1	3			0	5	0	5	1	2	3	11
7:45 AM	1	0	1			0	6	0	6	0	0	0	7
8:00 AM	0	3	3			0	1	0	1	1	4	5	9
8:15 AM	0	0	0			0	1	0	1	0	0	0	1
8:30 AM	0	1	1			0	3	0	3	1	1	2	6
8:45 AM	1	0	1			0	1	1	2	1	1	2	5
Total Survey	7	6	13			0	20	2	22	4	10	14	49

Heavy Vehicle Peak Hour Summary 7:00 AM to 8:00 AM

By Approach	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	8	2	10	0	0	0	15	10	25	5	16	21	28
PHF	0.67			0.00			0.63			0.42			0.64

By Movement	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	L	R	Total			Total	T	R	Total	L	T	Total	
Volume	6	2	8			0	14	1	15	1	4	5	28
PHF	0.75	0.50	0.67			0.00	0.58	0.25	0.63	0.25	0.33	0.42	0.64

Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	L	R	Total			Total	T	R	Total	L	T	Total	
7:00 AM	6	2	8			0	14	1	15	1	4	5	28
7:15 AM	5	4	9			0	15	1	16	2	7	9	34
7:30 AM	3	4	7			0	13	0	13	2	6	8	28
7:45 AM	1	4	5			0	11	0	11	2	5	7	23
8:00 AM	1	4	5			0	6	1	7	3	6	9	21

Peak Hour Summary



Clay Carney
(503) 833-2740

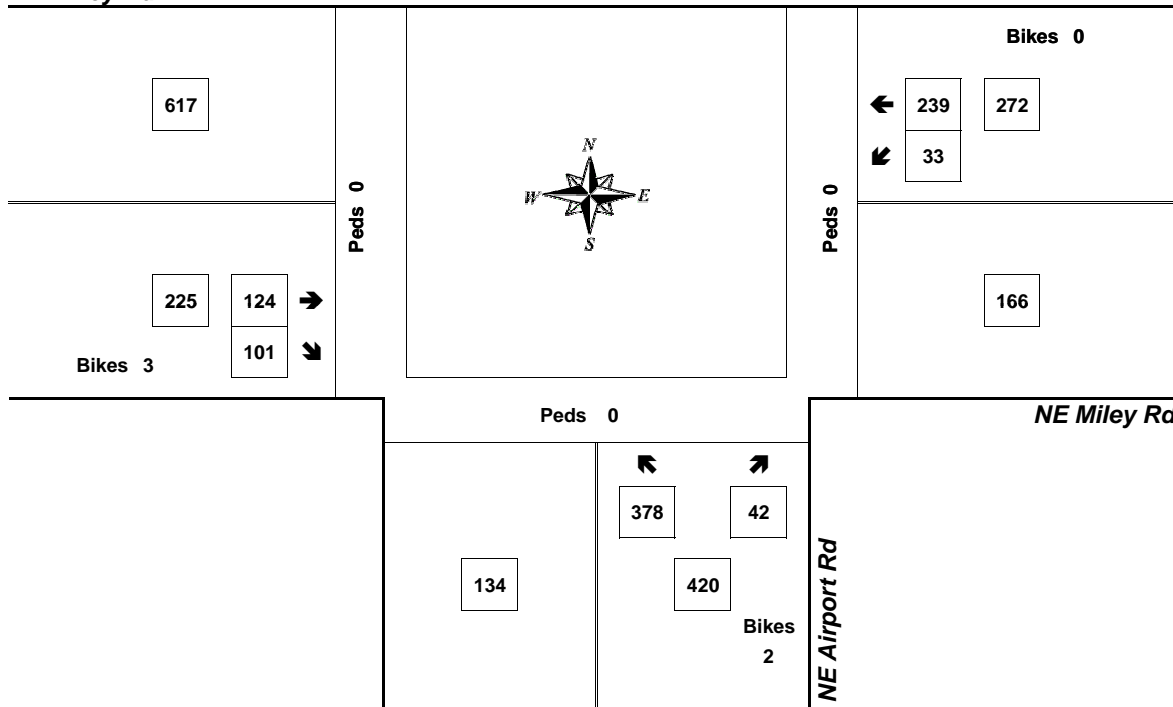
NE Airport Rd & NE Miley Rd

7:00 AM to 8:00 AM
Wednesday, July 20, 2016

Bikes
0

NE Miley Rd

Peds 0



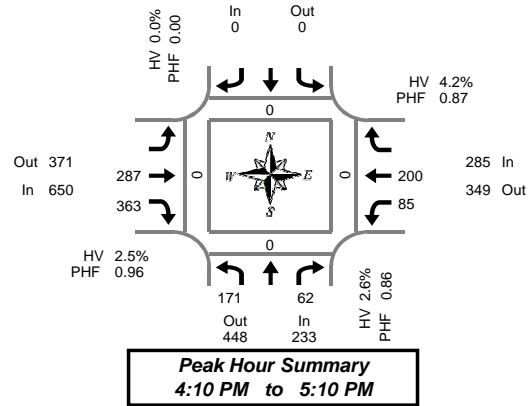
Approach	PHF	HV%	Volume
EB	0.80	6.7%	225
WB	0.83	1.8%	272
NB	0.85	1.9%	420
SB	0.00	0.0%	0
Intersection	0.91	3.1%	917

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Clay Carney
(503) 833-2740



NE Airport Rd & NE Miley Rd

Wednesday, July 20, 2016

4:00 PM to 6:00 PM

5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	L	R	Bikes			Bikes	T	R	Bikes	L	T	Bikes		North	South	East	West
4:00 PM	6	12	0			0	18	27	0	5	21	0	89	0	0	0	0
4:05 PM	13	4	0			0	11	18	0	4	23	0	73	0	0	0	0
4:10 PM	20	6	0			0	22	27	0	7	17	0	99	0	0	0	0
4:15 PM	11	14	0			0	23	32	0	12	14	0	106	0	0	0	0
4:20 PM	12	5	0			0	25	33	0	12	20	0	107	0	0	0	0
4:25 PM	12	1	0			0	21	26	0	3	17	0	80	0	0	0	0
4:30 PM	11	4	0			0	30	30	0	6	12	0	93	0	0	0	0
4:35 PM	16	4	0			0	18	29	0	6	19	0	92	0	0	0	0
4:40 PM	19	6	0			0	23	37	0	5	10	0	100	0	0	0	0
4:45 PM	15	4	1			0	21	35	0	13	15	0	103	0	0	0	0
4:50 PM	11	3	0			0	23	30	0	5	14	0	86	0	0	0	0
4:55 PM	19	6	0			0	24	29	1	5	20	0	103	0	0	0	0
5:00 PM	13	4	0			0	26	31	0	4	22	0	100	0	0	0	0
5:05 PM	12	5	1			0	31	24	0	7	20	0	99	0	0	0	0
5:10 PM	22	8	1			0	14	27	0	5	12	0	88	0	0	0	0
5:15 PM	14	3	0			0	32	29	0	10	14	0	102	0	0	0	0
5:20 PM	12	2	1			0	15	25	0	5	18	1	77	0	0	0	0
5:25 PM	12	6	0			0	22	25	1	3	16	0	84	0	0	0	0
5:30 PM	10	1	0			0	11	38	0	5	17	0	82	0	0	0	0
5:35 PM	15	3	0			0	16	42	0	6	16	0	98	0	0	0	0
5:40 PM	12	4	0			0	24	22	0	8	16	0	86	0	0	0	0
5:45 PM	19	4	0			0	29	20	0	4	16	0	92	0	0	0	0
5:50 PM	23	7	0			0	26	27	0	2	11	0	96	0	0	0	0
5:55 PM	10	5	0			0	27	20	0	5	18	0	85	0	0	0	0
Total Survey	339	121	4			0	532	683	2	147	398	1	2,220	0	0	0	0

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	L	R	Bikes			Bikes	T	R	Bikes	L	T	Bikes		North	South	East	West
4:00 PM	39	22	0			0	51	72	0	16	61	0	261	0	0	0	0
4:15 PM	35	20	0			0	69	91	0	27	51	0	293	0	0	0	0
4:30 PM	46	14	0			0	71	96	0	17	41	0	285	0	0	0	0
4:45 PM	45	13	1			0	68	94	1	23	49	0	292	0	0	0	0
5:00 PM	47	17	2			0	71	82	0	16	54	0	287	0	0	0	0
5:15 PM	38	11	1			0	69	79	1	18	48	1	263	0	0	0	0
5:30 PM	37	8	0			0	51	102	0	19	49	0	266	0	0	0	0
5:45 PM	52	16	0			0	82	67	0	11	45	0	273	0	0	0	0
Total Survey	339	121	4			0	532	683	2	147	398	1	2,220	0	0	0	0

Peak Hour Summary

4:10 PM to 5:10 PM

By Approach	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	233	448	681	2	0	0	0	0	650	371	1,021	1	285	349	634	0	1,168
%HV	2.6%				0.0%				2.5%				4.2%			2.9%	
PHF	0.86				0.00				0.96				0.87			0.94	

By Movement	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total				
	L	R	Total			Total	T	R	Total	L	T	Total					
Volume	171	62	233			0	287	363	650	85	200	285	1,168				
%HV	1.2%	NA	6.5%	2.6%	NA	NA	NA	0.0%	NA	2.8%	2.2%	2.5%	4.7%	4.0%	NA	4.2%	2.9%
PHF	0.86		0.62	0.86					0.89	0.89	0.96	0.69	0.81	0.87		0.87	0.94

Rolling Hour Summary

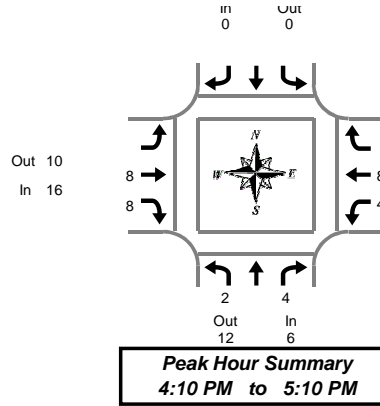
4:00 PM to 6:00 PM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	L	R	Bikes			Bikes	T	R	Bikes	L	T	Bikes		North	South	East	West
4:00 PM	165	69	1			0	259	353	1	83	202	0	1,131	0	0	0	0
4:15 PM	173	64	3			0	279	363	1	83	195	0	1,157	0	0	0	0
4:30 PM	176	55	4			0	279	351	2	74	192	1	1,127	0	0	0	0
4:45 PM	167	49	4			0	259	357	2	76	200	1	1,108	0	0	0	0
5:00 PM	174	52	3			0	273	330	1	64	196	1	1,089	0	0	0	0

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



NE Airport Rd & NE Miley Rd

Wednesday, July 20, 2016

4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	L	R	Total			Total	T	R	Total	L	T	Total	
4:00 PM	0	0	0			0	0	1	1	0	2	2	3
4:05 PM	1	0	1			0	0	2	2	0	0	0	3
4:10 PM	1	0	1			0	1	0	1	0	0	0	2
4:15 PM	0	2	2			0	0	0	0	0	1	1	3
4:20 PM	0	0	0			0	0	0	0	0	2	2	2
4:25 PM	0	0	0			0	0	3	3	0	2	2	5
4:30 PM	1	0	1			0	3	1	4	0	0	0	5
4:35 PM	0	0	0			0	0	2	2	0	0	0	2
4:40 PM	0	1	1			0	1	1	2	0	1	1	4
4:45 PM	0	1	1			0	2	0	2	2	0	2	5
4:50 PM	0	0	0			0	1	1	2	2	0	2	4
4:55 PM	0	0	0			0	0	0	0	0	1	1	1
5:00 PM	0	0	0			0	0	0	0	0	0	0	0
5:05 PM	0	0	0			0	0	0	0	0	1	1	1
5:10 PM	0	0	0			0	0	0	0	0	0	0	0
5:15 PM	0	1	1			0	0	0	0	0	2	2	3
5:20 PM	0	0	0			0	0	0	0	1	3	4	4
5:25 PM	0	0	0			0	0	0	0	1	3	4	4
5:30 PM	0	0	0			0	0	1	1	0	0	0	1
5:35 PM	1	0	1			0	0	0	0	0	1	1	2
5:40 PM	0	0	0			0	1	0	1	0	0	0	1
5:45 PM	0	0	0			0	0	0	0	1	0	1	1
5:50 PM	0	0	0			0	0	0	0	0	0	0	0
5:55 PM	0	0	0			0	0	0	0	0	2	2	2
Total Survey	4	5	9			0	9	12	21	7	21	28	58

Heavy Vehicle 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	L	R	Total			Total	T	R	Total	L	T	Total	
4:00 PM	2	0	2			0	1	3	4	0	2	2	8
4:15 PM	0	2	2			0	0	3	3	0	5	5	10
4:30 PM	1	1	2			0	4	4	8	0	1	1	11
4:45 PM	0	1	1			0	3	1	4	4	1	5	10
5:00 PM	0	0	0			0	0	0	0	0	1	1	1
5:15 PM	0	1	1			0	0	0	0	2	8	10	11
5:30 PM	1	0	1			0	1	1	2	0	1	1	4
5:45 PM	0	0	0			0	0	0	0	1	2	3	3
Total Survey	4	5	9			0	9	12	21	7	21	28	58

Heavy Vehicle Peak Hour Summary

4:10 PM to 5:10 PM

By Approach	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	6	12	18	0	0	0	16	10	26	12	12	24	34
PHF	0.50			0.00			0.44			0.60			0.65

By Movement	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	L	R	Total			Total	T	R	Total	L	T	Total	
Volume	2	4	6			0	8	8	16	4	8	12	34
PHF	0.50	0.50	0.50			0.00	0.50	0.33	0.44	0.25	0.40	0.60	0.65

Heavy Vehicle Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE Airport Rd			Southbound NE Airport Rd			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	L	R	Total			Total	T	R	Total	L	T	Total	
4:00 PM	3	4	7			0	8	11	19	4	9	13	39
4:15 PM	1	4	5			0	7	8	15	4	8	12	32
4:30 PM	1	3	4			0	7	5	12	6	11	17	33
4:45 PM	1	2	3			0	4	2	6	6	11	17	26
5:00 PM	1	1	2			0	1	1	2	3	12	15	19

Peak Hour Summary



Clay Carney
(503) 833-2740

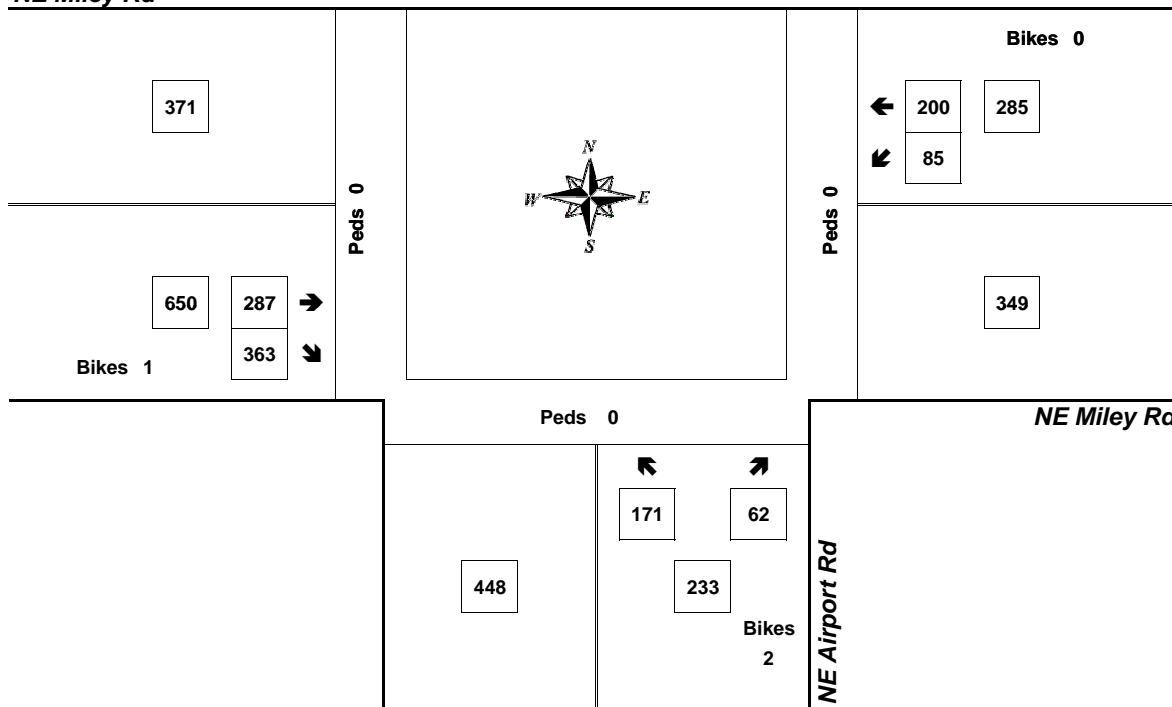
NE Airport Rd & NE Miley Rd

4:10 PM to 5:10 PM
Wednesday, July 20, 2016

Bikes
0

NE Miley Rd

Peds 0



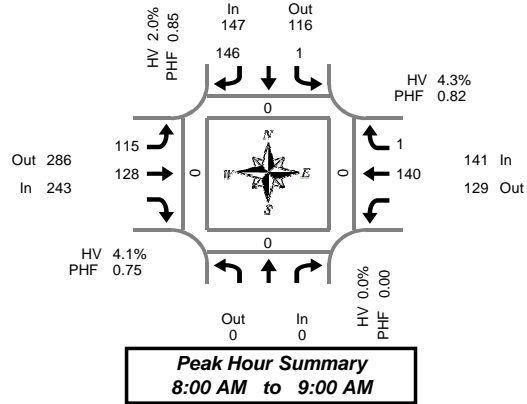
Approach	PHF	HV%	Volume
EB	0.96	2.5%	650
WB	0.87	4.2%	285
NB	0.86	2.6%	233
SB	0.00	0.0%	0
Intersection	0.94	2.9%	1,168

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Clay Carney
(503) 833-2740



French Prairie West & NE Miley Rd

Wednesday, July 20, 2016

7:00 AM to 9:00 AM

5-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	Total	Bikes	L	T	Bikes	T	R	Bikes		North	South	East	West
7:00 AM				0	1	13	0	6	7	0		7	0	0	34	1	0	0	0
7:05 AM				0	0	6	0	5	7	0		10	0	0	28	0	0	0	0
7:10 AM				0	0	20	0	3	3	0		16	0	0	42	0	0	0	0
7:15 AM				0	0	14	0	3	1	0		13	0	0	31	0	0	0	0
7:20 AM				0	0	12	0	14	8	0		10	0	0	44	0	0	0	0
7:25 AM				0	0	8	0	9	3	0		7	0	0	27	0	0	0	0
7:30 AM				0	0	15	0	10	11	0		13	0	0	49	0	0	0	0
7:35 AM				0	0	16	0	7	3	0		14	0	0	40	0	0	0	0
7:40 AM				0	0	8	1	9	6	1		13	0	0	36	0	0	0	0
7:45 AM				0	0	13	0	2	11	0		15	0	0	41	0	0	0	0
7:50 AM				0	0	6	0	11	7	2		7	0	0	31	0	0	0	0
7:55 AM				0	0	5	0	11	9	0		12	0	0	37	0	0	0	0
8:00 AM				0	0	14	0	8	8	0		14	0	0	44	0	0	0	0
8:05 AM				0	0	12	0	5	10	0		13	0	1	40	0	0	0	0
8:10 AM				0	0	13	0	8	8	0		14	0	0	43	0	0	0	0
8:15 AM				0	0	13	0	9	5	0		5	0	2	32	0	0	0	0
8:20 AM				0	0	11	0	7	11	0		13	0	0	42	0	0	0	0
8:25 AM				0	0	8	0	9	11	0		16	0	0	44	0	0	0	0
8:30 AM				0	0	11	0	9	13	0		13	1	0	47	0	0	0	0
8:35 AM				0	0	12	0	15	10	0		9	0	0	46	0	0	0	0
8:40 AM				0	0	14	1	7	9	0		12	0	0	42	0	0	0	0
8:45 AM				0	1	14	0	16	15	0		6	0	0	52	0	0	0	0
8:50 AM				0	0	14	0	12	16	0		16	0	0	58	0	0	0	0
8:55 AM				0	0	10	0	10	12	0		9	0	1	41	0	0	0	0
Total Survey				0	2	282	2	205	204	3		277	1	4	971	1	0	0	0

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	Total	Bikes	L	T	Bikes	T	R	Bikes		North	South	East	West
7:00 AM				0	1	39	0	14	17	0		33	0	0	104	1	0	0	0
7:15 AM				0	0	34	0	26	12	0		30	0	0	102	0	0	0	0
7:30 AM				0	0	39	1	26	20	1		40	0	0	125	0	0	0	0
7:45 AM				0	0	24	0	24	27	2		34	0	0	109	0	0	0	0
8:00 AM				0	0	39	0	21	26	0		41	0	1	127	0	0	0	0
8:15 AM				0	0	32	0	25	27	0		34	0	2	118	0	0	0	0
8:30 AM				0	0	37	1	31	32	0		34	1	0	135	0	0	0	0
8:45 AM				0	1	38	0	38	43	0		31	0	1	151	0	0	0	0
Total Survey				0	2	282	2	205	204	3		277	1	4	971	1	0	0	0

Peak Hour Summary

8:00 AM to 9:00 AM

By Approach	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Total	Pedestrians Crosswalk					
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out		Total	North	South	East	West	
Volume	0	0	0	0	147	116	263	1	243	286	529	0	141	129	270	4	531	0	0	0	0
%HV	0.0%				2.0%				4.1%			4.3%			3.6%						
PHF	0.00				0.85				0.75			0.82			0.87						

By Movement	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Total		
	Total	L	R	Total	L	T	Total	T	R	Total							
Volume	0	1	146	147	115	128	243	140	1	141	531						
%HV	NA	NA	NA	0.0%	0.0%	NA	2.1%	2.0%	4.3%	3.9%	NA	4.1%	NA	4.3%	0.0%	4.3%	3.6%
PHF		0.00	0.25	0.87	0.85	0.76	0.74	0.75	0.83	0.25	0.82	0.87					

Rolling Hour Summary

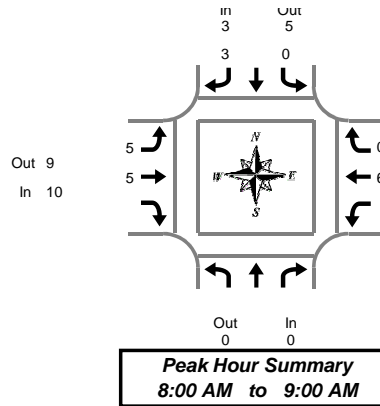
7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	Total	Bikes	L	T	Bikes	T	R	Bikes		North	South	East	West
7:00 AM				0	1	136	1	90	76	3		137	0	0	440	1	0	0	0
7:15 AM				0	0	136	1	97	85	3		145	0	1	463	0	0	0	0
7:30 AM				0	0	134	1	96	100	3		149	0	3	479	0	0	0	0
7:45 AM				0	0	132	1	101	112	2		143	1	3	489	0	0	0	0
8:00 AM				0	1	146	1	115	128	0		140	1	4	531	0	0	0	0

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



French Prairie West & NE Miley Rd

Wednesday, July 20, 2016

7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	1	0	1	0	0	0	1
7:10 AM	0	0	0	1	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	0	1	0	0	0	1
7:20 AM	0	0	0	0	0	1	1	1	2	0	0	0	2
7:25 AM	0	0	0	1	1	1	0	1	2	0	0	0	2
7:30 AM	0	0	0	0	0	2	1	1	3	1	0	1	4
7:35 AM	0	0	0	0	0	1	0	1	2	1	0	1	2
7:40 AM	0	0	0	1	1	0	1	1	2	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	0	0	0	0	2	1	3	5	0	0	0	3
7:55 AM	0	0	0	0	0	2	1	3	5	0	0	0	3
8:00 AM	0	0	0	0	0	1	2	3	5	0	0	0	3
8:05 AM	0	0	0	0	0	1	0	1	2	3	0	3	4
8:10 AM	0	0	0	1	1	0	1	1	2	1	0	1	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	1	2	4	0	0	0	2
8:35 AM	0	0	0	1	1	1	0	1	2	0	0	0	2
8:40 AM	0	0	0	0	0	0	1	1	2	1	0	1	2
8:45 AM	0	0	0	0	0	1	0	1	2	0	0	0	1
8:50 AM	0	0	0	1	1	0	0	0	1	1	0	1	2
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	6	6	16	10	26	42	8	0	8	40

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
7:00 AM	0	0	0	1	1	1	0	0	1	0	0	0	2
7:15 AM	0	0	0	1	1	3	1	1	4	0	0	0	5
7:30 AM	0	0	0	1	1	3	2	2	5	2	0	2	8
7:45 AM	0	0	0	0	0	4	2	2	6	0	0	0	6
8:00 AM	0	0	0	1	1	2	3	5	5	4	0	4	10
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	1	2	2	4	4	1	0	1	6
8:45 AM	0	0	0	1	1	1	0	1	2	1	0	1	3
Total Survey	0	0	0	6	6	16	10	26	42	8	0	8	40

Heavy Vehicle Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	3	5	8	10	9	19	6	5	11	19
PHF	0.00			0.75			0.50			0.38			0.48

By Movement	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	Total	L	R	Total	L	T	Total	T	R	Total	T	R	
Volume	0	0	0	3	3	5	5	10	6	0	6	6	19
PHF	0.00	0.00		0.75	0.75	0.63	0.42	0.50	0.38	0.00	0.38	0.48	

Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
7:00 AM	0	0	0	3	3	11	5	5	16	2	0	2	21
7:15 AM	0	0	0	3	3	12	8	8	20	6	0	6	29
7:30 AM	0	0	0	2	2	9	7	7	16	6	0	6	24
7:45 AM	0	0	0	2	2	8	7	7	15	5	0	5	22
8:00 AM	0	0	0	3	3	5	5	5	10	6	0	6	19

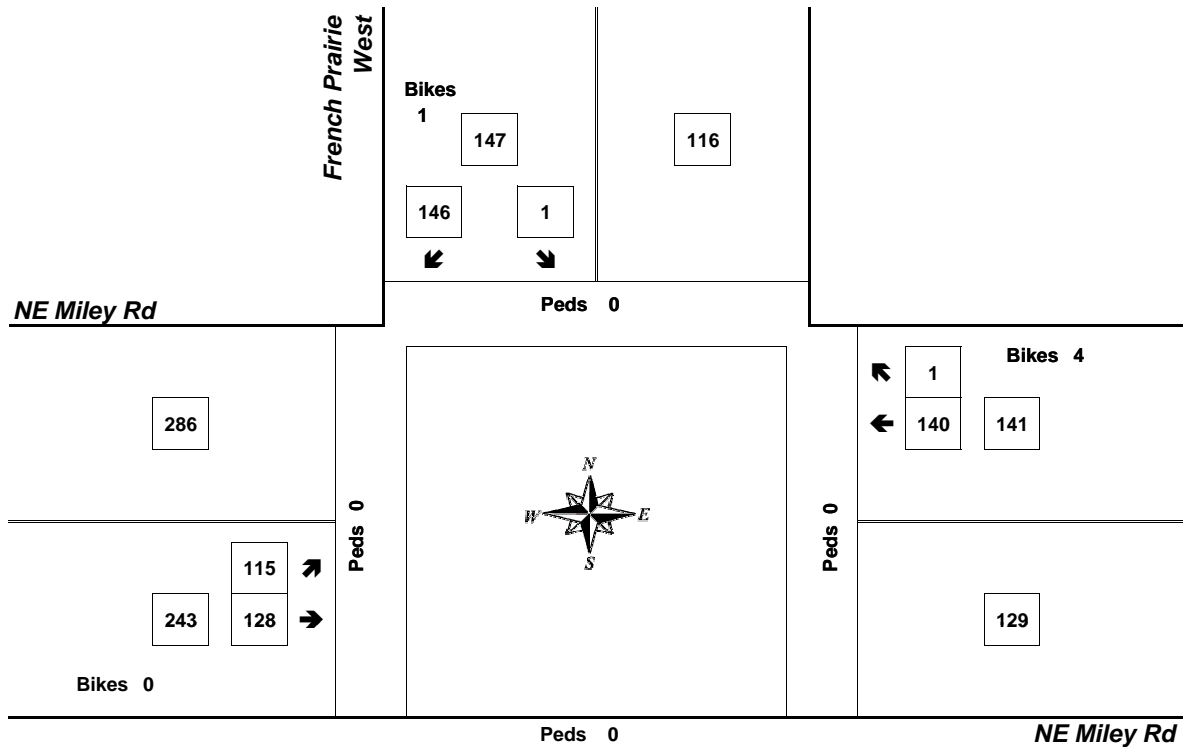
Peak Hour Summary



Clay Carney
(503) 833-2740

French Prairie West & NE Miley Rd

8:00 AM to 9:00 AM
Wednesday, July 20, 2016



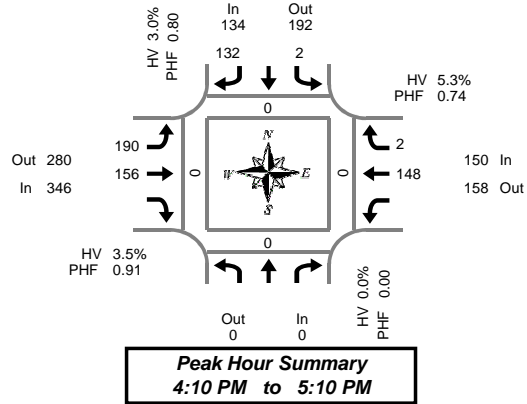
Approach	PHF	HV%	Volume
EB	0.75	4.1%	243
WB	0.82	4.3%	141
NB	0.00	0.0%	0
SB	0.85	2.0%	147
Intersection	0.87	3.6%	531

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Clay Carney
(503) 833-2740



French Prairie West & NE Miley Rd

Wednesday, July 20, 2016

4:00 PM to 6:00 PM

5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	Bikes	L	T	Bikes	T	R	Bikes	North		South	East	West	
4:00 PM				0	0	9	0	11	14	0	16	1	0	51	0	0	0	0	
4:05 PM				0	0	19	0	11	8	0	14	0	0	52	0	0	0	0	
4:10 PM				0	0	4	0	15	12	0	14	0	0	45	0	0	0	0	
4:15 PM				0	0	11	0	24	13	0	17	0	0	65	0	0	0	0	
4:20 PM				0	0	13	0	13	16	0	20	0	0	62	0	0	0	0	
4:25 PM				0	1	7	0	9	11	0	8	1	0	37	0	0	0	0	
4:30 PM				0	0	12	0	23	14	0	8	1	0	58	0	0	0	0	
4:35 PM				0	0	14	0	15	6	0	12	0	0	47	0	0	0	0	
4:40 PM				0	1	11	0	14	14	0	6	0	0	46	0	0	0	0	
4:45 PM				0	0	16	0	12	12	0	11	0	0	51	0	0	0	0	
4:50 PM				0	0	12	0	14	14	0	7	0	0	47	0	0	0	0	
4:55 PM				0	0	11	0	15	16	0	15	0	0	57	0	0	0	0	
5:00 PM				0	0	12	0	15	12	0	15	0	0	54	0	0	0	0	
5:05 PM				0	0	9	0	21	16	0	15	0	0	61	0	0	0	0	
5:10 PM				0	0	13	0	11	14	1	7	0	0	45	0	0	0	0	
5:15 PM				0	1	13	0	19	12	0	9	0	0	54	0	0	0	0	
5:20 PM				0	0	8	0	15	5	0	10	0	0	38	0	0	0	0	
5:25 PM				0	0	10	0	12	13	0	10	1	0	46	0	0	0	0	
5:30 PM				0	0	17	0	8	7	0	9	0	0	41	0	0	0	0	
5:35 PM				0	1	11	0	6	10	0	10	0	0	38	0	0	0	0	
5:40 PM				0	0	8	0	13	18	0	14	0	0	53	0	0	0	0	
5:45 PM				0	0	13	0	13	18	0	7	0	0	51	0	0	0	0	
5:50 PM				0	0	8	0	28	8	0	5	0	0	49	0	0	0	0	
5:55 PM				0	0	14	0	17	12	0	11	0	0	54	0	0	0	0	
Total Survey				0	4	275	0	354	295	1	270	4	0	1,202	0	0	0	0	

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	Bikes	L	T	Bikes	T	R	Bikes	North		South	East	West	
4:00 PM				0	0	32	0	37	34	0	44	1	0	148	0	0	0	0	
4:15 PM				0	1	31	0	46	40	0	45	1	0	164	0	0	0	0	
4:30 PM				0	1	37	0	52	34	0	26	1	0	151	0	0	0	0	
4:45 PM				0	0	39	0	41	42	0	33	0	0	155	0	0	0	0	
5:00 PM				0	0	34	0	47	42	1	37	0	0	160	0	0	0	0	
5:15 PM				0	1	31	0	46	30	0	29	1	0	138	0	0	0	0	
5:30 PM				0	1	36	0	27	35	0	33	0	0	132	0	0	0	0	
5:45 PM				0	0	35	0	58	38	0	23	0	0	154	0	0	0	0	
Total Survey				0	4	275	0	354	295	1	270	4	0	1,202	0	0	0	0	

Peak Hour Summary

4:10 PM to 5:10 PM

By Approach	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Total	Pedestrians Crosswalk					
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out		Total	North	South	East	West	
Volume	0	0	0	0	134	192	326	0	346	280	626	0	150	158	308	0	630	0	0	0	0
%HV	0.0%				3.0%				3.5%			5.3%			3.8%						
PHF	0.00				0.80				0.91			0.74			0.92						

By Movement	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Total		
	Total	L	R	Total	L	T	Total	T	R	Total	T	R	Total				
Volume	0	2	132	134	190	156	346	148	2	150	630						
%HV	NA	NA	NA	0.0%	0.0%	NA	3.0%	3.0%	3.2%	3.8%	NA	3.5%	NA	5.4%	0.0%	5.3%	3.8%
PHF		0.00	0.50	0.80	0.80	0.91	0.89	0.91	0.73	0.25	0.74	0.92					

Rolling Hour Summary

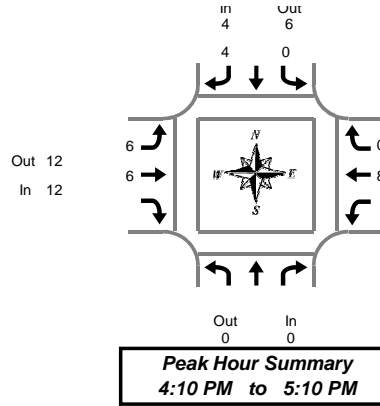
4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie West				Southbound French Prairie West				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	Bikes	L	T	Bikes	T	R	Bikes	North		South	East	West	
4:00 PM				0	2	139	0	176	150	0	148	3	0	618	0	0	0	0	
4:15 PM				0	2	141	0	186	158	1	141	2	0	630	0	0	0	0	
4:30 PM				0	2	141	0	186	148	1	125	2	0	604	0	0	0	0	
4:45 PM				0	2	140	0	161	149	1	132	1	0	585	0	0	0	0	
5:00 PM				0	2	136	0	178	145	1	122	1	0	584	0	0	0	0	

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



French Prairie West & NE Miley Rd

Wednesday, July 20, 2016

4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	0	0	0	1	1	1	2	0	0	0	2
4:15 PM	0	0	0	1	1	1	0	1	1	0	0	0	2
4:20 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
4:25 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
4:30 PM	0	0	0	0	0	2	1	3	0	0	0	0	3
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	1	1	1	0	2	2	0	0	0	3
4:45 PM	0	0	0	1	1	2	1	3	2	0	2	6	6
4:50 PM	0	0	0	0	0	0	1	1	1	1	0	1	2
4:55 PM	0	0	0	1	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	1	0	1	1	1
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	1	1	1	1	2	0	0	0	0	3
5:20 PM	0	0	0	0	0	0	0	0	4	0	4	4	4
5:25 PM	0	0	0	1	1	0	0	0	4	0	4	5	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	1	1	0	0	0	0	0	0	0	1
5:40 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
5:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	1
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	1	1	0	0	0	1	0	1	2	2
Total Survey			0	0	9	9	8	7	15	20	0	20	44

Heavy Vehicle 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
4:00 PM	0	0	0	0	0	0	1	1	2	3	0	3	5
4:15 PM	0	0	0	1	1	1	0	1	1	4	0	4	6
4:30 PM	0	0	0	1	1	2	3	5	0	0	0	0	6
4:45 PM	0	0	0	2	2	2	2	4	3	0	3	9	9
5:00 PM	0	0	0	0	0	0	0	0	1	0	1	1	1
5:15 PM	0	0	0	2	2	1	1	2	8	0	8	12	12
5:30 PM	0	0	0	1	1	1	0	1	0	0	0	0	2
5:45 PM	0	0	0	2	2	0	0	0	1	0	1	3	3
Total Survey			0	0	9	9	8	7	15	20	0	20	44

Heavy Vehicle Peak Hour Summary

4:10 PM to 5:10 PM

By Approach	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	4	6	10	12	12	24	8	6	14	24
PHF	0.00			0.50			0.50			0.50			0.55

By Movement	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
Volume	0	0	0	4	4	8	6	6	12	8	0	8	24
PHF	0.00	0.00		0.50	0.50		0.75	0.38	0.50	0.50	0.00	0.50	0.55

Heavy Vehicle Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie West			Southbound French Prairie West			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
4:00 PM	0	0	0	4	4	8	6	6	12	10	0	10	26
4:15 PM	0	0	0	4	4	8	5	5	10	8	0	8	22
4:30 PM	0	0	0	5	5	10	5	6	11	12	0	12	28
4:45 PM	0	0	0	5	5	10	4	3	7	12	0	12	24
5:00 PM	0	0	0	5	5	10	2	1	3	10	0	10	18

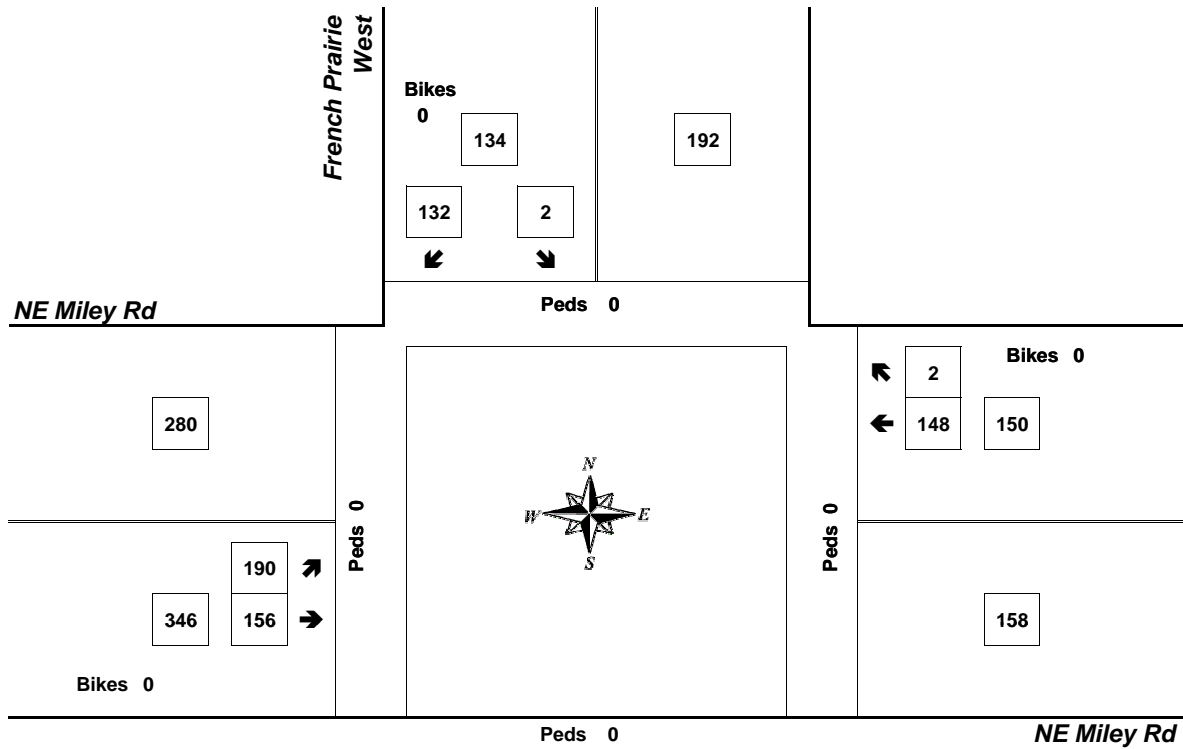
Peak Hour Summary



Clay Carney
(503) 833-2740

French Prairie West & NE Miley Rd

4:10 PM to 5:10 PM
Wednesday, July 20, 2016



Bikes
0

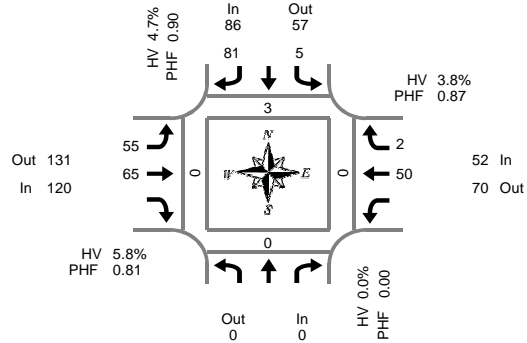
Approach	PHF	HV%	Volume
EB	0.91	3.5%	346
WB	0.74	5.3%	150
NB	0.00	0.0%	0
SB	0.80	3.0%	134
Intersection	0.92	3.8%	630

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Clay Carney
(503) 833-2740



**Peak Hour Summary
8:00 AM to 9:00 AM**

French Prairie East & NE Miley Rd

Wednesday, July 20, 2016

7:00 AM to 9:00 AM

5-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd			Westbound NE Miley Rd				Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	T	Bikes	L	T	Bikes	T	R	Bikes	North		South	East	West	
7:00 AM	0	0	0	0	1	0	2	6	0	3	0	0	0	0	0	0	0	0	0	
7:05 AM	0	0	0	0	7	0	3	5	0	1	0	0	0	0	0	0	0	0	0	
7:10 AM	0	0	0	0	9	0	2	1	0	6	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	10	0	1	0	0	3	0	0	0	0	0	0	0	0	0	
7:20 AM	0	0	0	0	5	0	1	2	0	4	0	0	0	0	0	0	0	0	0	
7:25 AM	0	0	0	0	3	0	3	4	0	2	1	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	5	0	2	8	0	8	1	0	0	0	0	0	0	0	0	
7:35 AM	0	1	13	0	13	0	2	4	0	1	0	0	0	0	0	0	0	0	0	
7:40 AM	0	1	5	0	5	0	1	4	0	6	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	11	0	11	0	5	4	1	2	2	0	0	0	0	0	0	0	0	
7:50 AM	0	0	4	0	5	4	5	4	3	2	0	0	0	0	0	0	0	0	0	
7:55 AM	0	0	9	0	9	0	3	3	0	1	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	10	0	10	0	4	4	0	3	0	0	0	0	0	0	0	0	0	
8:05 AM	0	1	7	0	7	0	6	4	0	4	1	2	0	0	0	0	0	0	0	
8:10 AM	0	0	6	0	6	0	1	5	0	6	0	0	0	0	0	0	0	0	0	
8:15 AM	0	1	4	0	4	0	3	7	0	2	0	2	0	0	0	0	0	0	0	
8:20 AM	0	0	8	0	8	0	3	3	0	4	0	0	0	0	0	0	0	0	0	
8:25 AM	0	0	8	0	8	0	4	8	0	7	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	6	0	6	0	7	6	0	3	0	0	0	0	0	0	0	0	0	
8:35 AM	0	1	7	0	8	2	8	2	0	5	0	0	0	0	0	0	0	0	0	
8:40 AM	0	1	6	0	6	0	4	5	0	5	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	3	0	3	0	3	4	0	2	0	0	0	0	0	0	0	0	0	
8:50 AM	0	0	11	0	11	0	8	13	0	4	1	0	0	0	0	0	0	0	0	
8:55 AM	0	1	5	1	4	4	4	4	0	5	0	0	0	0	0	0	0	0	0	
Total Survey	0	7	163	1	85	110	4	89	6	4	460	3	0	0	0	0	0	0	0	

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd			Westbound NE Miley Rd				Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	T	Bikes	L	T	Bikes	T	R	Bikes	North		South	East	West	
7:00 AM	0	0	0	0	17	0	7	12	0	10	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	18	0	5	6	0	9	1	0	0	0	0	0	0	0	0	
7:30 AM	0	2	23	0	23	0	5	16	0	15	1	0	0	0	0	0	0	0	0	
7:45 AM	0	0	24	0	24	0	13	11	4	5	2	0	0	0	0	0	0	0	0	
8:00 AM	0	1	23	0	23	0	11	13	0	13	1	2	0	0	0	0	0	0	0	
8:15 AM	0	1	20	0	20	0	10	18	0	13	0	2	0	0	0	0	0	0	0	
8:30 AM	0	2	19	0	19	0	19	13	0	13	0	0	0	0	0	0	0	0	0	
8:45 AM	0	1	19	1	15	21	0	11	1	11	1	0	0	0	0	0	0	0	0	
Total Survey	0	7	163	1	85	110	4	89	6	4	460	3	0	0	0	0	0	0	0	

Peak Hour Summary

8:00 AM to 9:00 AM

By Approach	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd				Westbound NE Miley Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	0	0	0	0	86	57	143	1	120	131	251	0	52	70	122	4	258	3	0	0	0
%HV	0.0%				4.7%				5.8%				3.8%				5.0%				
PHF	0.00				0.90				0.81				0.87				0.90				

By Movement	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd				Westbound NE Miley Rd				Total
	Total	L	R	Total	L	T	Total	T	Total	T	R	Total	Total				
Volume	0	5	81	86	55	65	120	50	2	52	258						
%HV	NA	NA	NA	0.0%	0.0%	NA	4.9%	4.7%	7.3%	4.6%	NA	5.8%	NA	4.0%	0.0%	3.8%	5.0%
PHF		0.00	0.63	0.88	0.90	0.72	0.74	0.81	0.83	0.50	0.87	0.90					

Rolling Hour Summary

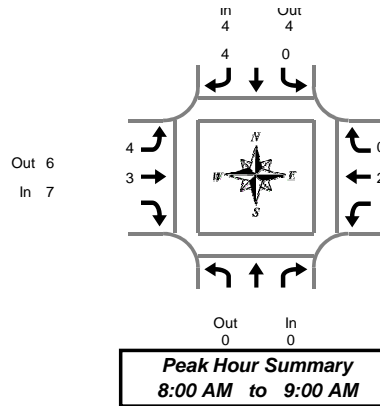
7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd			Westbound NE Miley Rd				Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	L	R	T	Bikes	L	T	Bikes	T	R	Bikes	North		South	East	West	
7:00 AM	0	2	82	0	30	45	4	39	4	0	202	0	0	0	0	0	0	0	0	
7:15 AM	0	3	88	0	34	46	4	42	5	2	218	0	0	0	0	0	0	0	0	
7:30 AM	0	4	90	0	39	58	4	46	4	4	241	3	0	0	0	0	0	0	0	
7:45 AM	0	4	86	0	53	55	4	44	3	4	245	3	0	0	0	0	0	0	0	
8:00 AM	0	5	81	1	55	65	0	50	2	4	258	3	0	0	0	0	0	0	0	

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



French Prairie East & NE Miley Rd

Wednesday, July 20, 2016

7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 AM	0	0	0	0	0	0	1	1	1	0	1	1	2
7:30 AM	0	0	0	0	0	2	0	2	2	1	0	1	3
7:35 AM	0	1	1	0	1	0	0	0	1	0	1	1	2
7:40 AM	0	0	0	0	0	0	1	1	1	0	0	0	1
7:45 AM	0	0	0	0	0	1	0	1	1	0	1	1	2
7:50 AM	0	0	0	0	0	2	0	2	2	0	0	0	2
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	2	3	3	3	1	0	1	4
8:05 AM	0	0	0	1	1	0	0	0	1	0	1	1	2
8:10 AM	0	0	0	2	2	1	0	1	1	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 AM	0	0	0	0	0	0	1	1	1	0	0	0	1
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	1	1	0	0	0	1
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:40 AM	0	0	0	0	0	1	0	1	1	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:50 AM	0	0	0	1	1	0	0	0	0	0	0	0	1
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	1	1	4	4	5	9	5	14	4	2	6	25

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	1	0	1	1	2
7:30 AM	0	1	1	0	1	2	1	3	3	2	0	2	6
7:45 AM	0	0	0	0	0	3	0	3	3	0	1	1	4
8:00 AM	0	0	0	3	3	2	2	4	4	2	0	2	9
8:15 AM	0	0	0	0	0	0	1	1	1	0	0	0	1
8:30 AM	0	0	0	0	0	2	0	2	2	0	0	0	2
8:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	1
Total Survey	0	1	1	4	4	5	9	5	14	4	2	6	25

Heavy Vehicle Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	4	4	8	7	6	13	2	3	5	13
PHF	0.00			0.33			0.44			0.25			0.36

By Movement	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
Volume	0	0	0	4	4	8	4	3	7	2	0	2	13
PHF	0.00	0.00		0.33	0.33		0.50	0.38	0.44	0.25	0.00	0.25	0.36

Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
7:00 AM	0	1	1	0	1	5	2	7	7	2	2	4	12
7:15 AM	0	1	3	4	7	4	11	11	11	4	2	6	21
7:30 AM	0	1	3	4	7	4	11	11	11	4	1	5	20
7:45 AM	0	0	3	3	7	3	10	10	10	2	1	3	16
8:00 AM	0	0	4	4	4	3	7	7	7	2	0	2	13

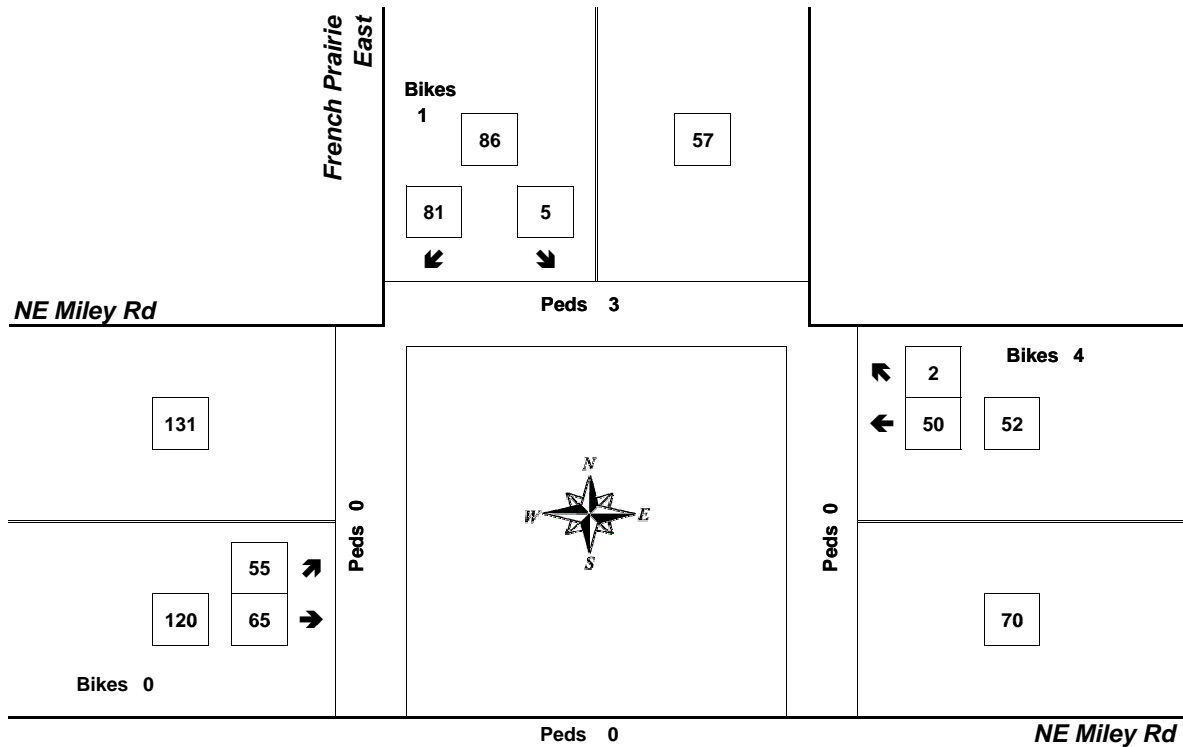
Peak Hour Summary



Clay Carney
(503) 833-2740

French Prairie East & NE Miley Rd

8:00 AM to 9:00 AM
Wednesday, July 20, 2016



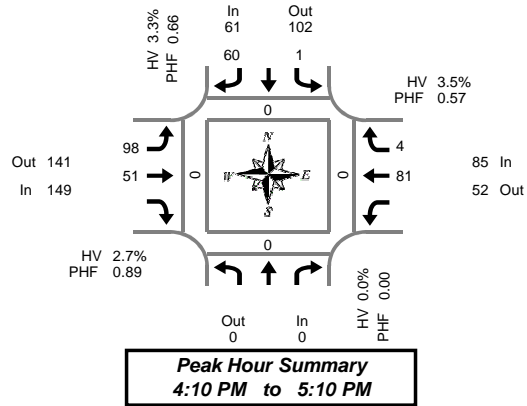
Approach	PHF	HV%	Volume
EB	0.81	5.8%	120
WB	0.87	3.8%	52
NB	0.00	0.0%	0
SB	0.90	4.7%	86
Intersection	0.90	5.0%	258

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Clay Carney
(503) 833-2740



French Prairie East & NE Miley Rd

Wednesday, July 20, 2016

4:00 PM to 6:00 PM

5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	L	T	Bikes	T	R	Bikes		North	South	East	West
4:00 PM					0	0	7	0	11	8	0	7	0	0	33	0	0	0	0
4:05 PM					0	0	6	0	7	1	0	8	0	0	22	0	0	0	0
4:10 PM					0	0	0	0	8	2	0	14	1	0	25	0	0	0	0
4:15 PM					0	0	4	0	6	4	0	12	0	0	26	0	0	0	0
4:20 PM					0	0	10	0	11	3	0	10	0	0	34	0	0	0	0
4:25 PM					0	0	4	0	9	5	0	4	0	0	22	0	0	0	0
4:30 PM					0	0	3	0	7	3	0	3	0	0	16	0	0	0	0
4:35 PM					0	0	5	0	6	4	0	6	1	0	22	0	0	0	0
4:40 PM					0	0	4	0	8	6	0	2	0	0	20	0	0	0	0
4:45 PM					0	0	4	0	6	4	0	7	0	0	21	0	0	0	0
4:50 PM					0	0	4	0	11	4	0	3	2	0	24	0	0	0	0
4:55 PM					0	0	5	0	10	3	0	10	0	1	28	0	0	0	0
5:00 PM					0	0	11	0	6	7	0	3	0	0	27	0	0	0	0
5:05 PM					0	1	6	0	10	6	0	7	0	0	30	0	0	0	0
5:10 PM					0	0	6	1	6	3	0	2	0	0	17	0	0	0	0
5:15 PM					0	0	4	0	11	4	0	4	1	0	24	0	0	0	0
5:20 PM					0	0	3	0	3	2	0	7	1	0	16	0	0	0	0
5:25 PM					0	1	7	0	9	3	0	4	0	0	24	0	0	0	0
5:30 PM					0	0	3	0	5	2	0	5	0	0	15	0	0	0	0
5:35 PM					0	0	5	0	10	1	0	5	0	1	21	0	0	0	0
5:40 PM					0	0	11	0	7	5	0	3	0	0	26	0	0	0	0
5:45 PM					0	0	3	0	10	8	0	4	0	0	25	0	0	0	0
5:50 PM					0	0	4	0	5	1	0	1	0	0	11	0	0	0	0
5:55 PM					0	1	7	0	9	6	0	5	0	0	28	0	0	0	0
Total Survey					0	3	126	1	191	95	0	136	6	2	557	0	0	0	0

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	L	T	Bikes	T	R	Bikes		North	South	East	West
4:00 PM					0	0	13	0	26	11	0	29	1	0	80	0	0	0	0
4:15 PM					0	0	18	0	26	12	0	26	0	0	82	0	0	0	0
4:30 PM					0	0	12	0	21	13	0	11	1	0	58	0	0	0	0
4:45 PM					0	0	13	0	27	11	0	20	2	1	73	0	0	0	0
5:00 PM					0	1	23	1	22	16	0	12	0	0	74	0	0	0	0
5:15 PM					0	1	14	0	23	9	0	15	2	0	64	0	0	0	0
5:30 PM					0	0	19	0	22	8	0	13	0	1	62	0	0	0	0
5:45 PM					0	1	14	0	24	15	0	10	0	0	64	0	0	0	0
Total Survey					0	3	126	1	191	95	0	136	6	2	557	0	0	0	0

Peak Hour Summary

4:10 PM to 5:10 PM

By Approach	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd			Westbound NE Miley Rd			Total	Pedestrians Crosswalk					
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out		Total	North	South	East	West	
Volume	0	0	0	0	61	102	163	0	149	141	290	0	85	52	137	1	295	0	0	0	0
%HV	0.0%				3.3%				2.7%			3.5%			3.1%						
PHF	0.00				0.66				0.89			0.57			0.87						

By Movement	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd			Westbound NE Miley Rd			Total		
	In	Out	Total	Bikes	In	Out	Total	Bikes	L	T	Total	T	R	Total			
Volume	0	0	0	0	60	61	121	0	98	51	149	86	4	90			
%HV	NA	NA	NA	0.0%	0.0%	NA	3.3%	3.3%	0.0%	7.8%	NA	2.7%	NA	3.7%	0.0%	3.5%	3.1%
PHF				0.00	0.25	0.68	0.66	0.91	0.80	0.89	0.56	0.50	0.57	0.87			

Rolling Hour Summary

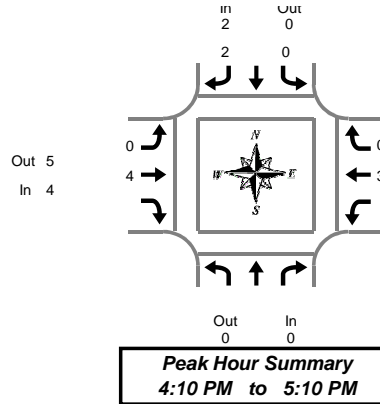
4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie East				Southbound French Prairie East				Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	L	T	Bikes	T	R	Bikes		North	South	East	West
4:00 PM					0	0	56	0	100	47	0	86	4	1	293	0	0	0	0
4:15 PM					0	1	66	1	96	52	0	69	3	1	287	0	0	0	0
4:30 PM					0	2	62	1	93	49	0	58	5	1	269	0	0	0	0
4:45 PM					0	2	69	1	94	44	0	60	4	2	273	0	0	0	0
5:00 PM					0	3	70	1	91	48	0	50	2	1	264	0	0	0	0

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



French Prairie East & NE Miley Rd

Wednesday, July 20, 2016

4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
4:00 PM	0	0	0	1	1	1	1	0	1	1	0	1	3
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
4:25 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
4:50 PM	0	0	0	1	1	0	0	0	0	0	0	0	1
4:55 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	1	1	0	0	0	0	0	0	0	1
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
5:25 PM	0	0	0	2	2	0	0	0	0	1	0	1	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Survey			0	0	5	5	1	4	5	9	0	9	19

Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
4:00 PM	0	0	0	1	1	1	1	0	2	1	0	1	4
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
4:45 PM	0	0	0	1	1	0	2	2	2	0	0	0	3
5:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	2	2	0	0	0	0	4	0	4	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Survey			0	0	5	5	1	4	5	9	0	9	19

Heavy Vehicle Peak Hour Summary 4:10 PM to 5:10 PM

By Approach	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	2	0	2	4	5	9	3	4	7	9
PHF	0.00			0.50			0.50			0.25			0.75

By Movement	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Total
	Total	L	R	Total	L	T	Total	T	R	Total	T	R	
Volume	0	0	0	2	2	0	4	4	4	3	0	3	9
PHF	0.00	0.00		0.50	0.50	0.00	0.50	0.50	0.50	0.25	0.00	0.25	0.75

Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound French Prairie East			Southbound French Prairie East			Eastbound NE Miley Rd			Westbound NE Miley Rd			Interval Total
	In	Out	Total	L	R	Total	L	T	Total	T	R	Total	
4:00 PM	0	0	0	2	2	1	4	5	5	4	0	4	11
4:15 PM	0	0	0	2	2	0	3	3	3	3	0	3	8
4:30 PM	0	0	0	4	4	0	3	3	3	4	0	4	11
4:45 PM	0	0	0	4	4	0	2	2	2	4	0	4	10
5:00 PM	0	0	0	3	3	0	0	0	0	5	0	5	8

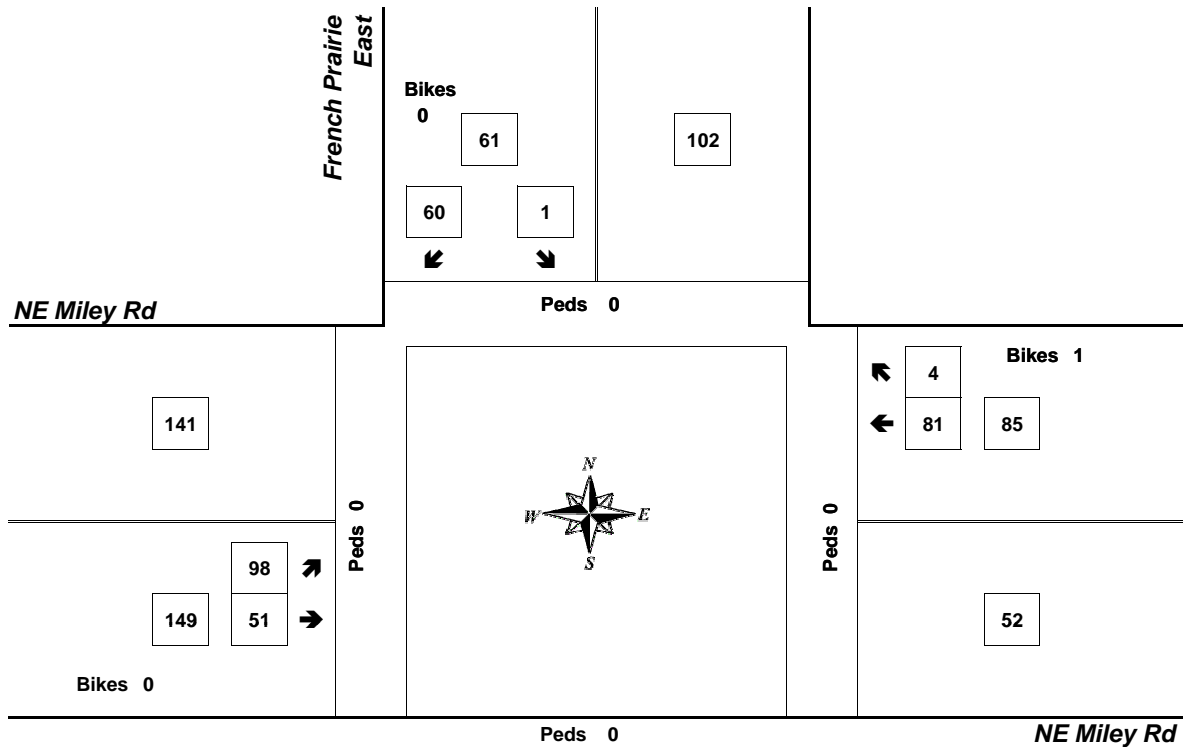
Peak Hour Summary



Clay Carney
(503) 833-2740

French Prairie East & NE Miley Rd

4:10 PM to 5:10 PM
Wednesday, July 20, 2016



Approach	PHF	HV%	Volume
EB	0.89	2.7%	149
WB	0.57	3.5%	85
NB	0.00	0.0%	0
SB	0.66	3.3%	61
Intersection	0.87	3.1%	295

Count Period: 4:00 PM to 6:00 PM



Collision Data

Crash ID	Crash Date	1st Street	2nd Street	Location	Crash	Collision	Severity	Weather	Surface	Light	Cause
1418053	5/14/2011	NE MILEY RD	AIRPORT RD NE	STRGHT	FIX OBJ	FIX	INJC	CLOUDY	DRY	DUSK	DEFECTIVE STEERING
1434933	8/25/2011	NE MILEY RD	SW FRENCH PRAIRIE RD	INTER	O-1TURN	TURN	INJC	CLEAR	DRY	DAYLIGHT	NO YIELD
1435606	8/27/2011	NE MILEY RD	SW FRENCH PRAIRIE RD	INTER	FIX OBJ	FIX	INJC	CLEAR	DRY	DAYLIGHT	IMPROPER TURN
1490106	10/12/2012	NE MILEY RD	AIRPORT RD NE	INTER	FIX OBJ	FIX	PDO	RAIN	WET	DARK-ST LIGHTS	PASSED STOP SIGN
1511268	4/6/2013	NE MILEY RD	AIRPORT RD NE	INTER	ANGL-OTH	TURN	PDO	RAIN	WET	DAYLIGHT	TOO FAST FOR COND
1522748	7/5/2013	NE MILEY RD	AIRPORT RD NE	INTER	FIX OBJ	FIX	INJA	CLEAR	DRY	DARK-NO ST LIGHTS	CARELESS
1525316	7/26/2013	NE MILEY RD	AIRPORT RD NE	INTER	FIX OBJ	FIX	INJC	CLEAR	DRY	DAYLIGHT	PASSED STOP SIGN
1559309	3/16/2014	NE MILEY RD	AIRPORT RD NE	INTER	FIX OBJ	FIX	PDO	CLEAR	DRY	DARK-NO ST LIGHTS	PASSED STOP SIGN
1559922	3/21/2014	NE MILEY RD	AIRPORT RD NE	INTER	ANGL-OTH	TURN	PDO	CLEAR	DRY	DAYLIGHT	NO YIELD
1588938	10/23/2014	NE MILEY RD	AIRPORT RD NE	INTER	ANGL-OTH	TURN	INJC	RAIN	WET	DAYLIGHT	NO YIELD
1629280	12/24/2015	NE MILEY RD	AIRPORT RD NE	INTER	S-1STOP	REAR	INJC	RAIN	WET	DAYLIGHT	TOO FAST FOR COND
1608462	5/12/2015	NE MILEY RD	SW FRENCH PRAIRIE RD	INTER	S-1STOP	REAR	INJC	RAIN	WET	DAYLIGHT	



Level of Service Descriptions

TRAFFIC LEVELS OF SERVICE

Analysis of traffic volumes is useful in understanding the general nature of traffic in an area, but by itself indicates neither the ability of the street network to carry additional traffic nor the quality of service afforded by the street facilities. For this, the concept of level of service has been developed to subjectively describe traffic performance. Level of service can be measured at intersections and along key roadway segments.

Levels of service categories are similar to report card ratings for traffic performance. Intersections are typically the controlling bottlenecks of traffic flow and the ability of a roadway system to carry traffic efficiently is generally diminished in their vicinities. Levels of Service A, B and C indicate conditions where traffic moves without significant delays over periods of peak travel demand. Level of service D and E are progressively worse peak hour operating conditions and F conditions represent where demand exceeds the capacity of an intersection. Most urban communities set level of service D as the minimum acceptable level of service for peak hour operation and plan for level of service C or better for all other times of the day. The Highway Capacity Manual provides level of service calculation methodology for both intersections and arterials¹. The following two sections provide interpretations of the analysis approaches.

¹ *2000 Highway Capacity Manual*, Transportation Research Board, Washington D.C., 2000, Chapter 16 and 17.

UNSIGNALIZED INTERSECTIONS (Two-Way Stop Controlled)

Unsignalized intersection level of service is reported for the major street and minor street (generally, left turn movements). The method assesses available and critical gaps in the traffic stream which make it possible for side street traffic to enter the main street flow. The 2010 Highway Capacity Manual describes the detailed methodology. It is not unusual for an intersection to experience level of service E or F conditions for the minor street left turn movement. It should be understood that, often, a poor level of service is experienced by only a few vehicles and the intersection as a whole operates acceptably.

Unsignalized intersection levels of service are described in the following table.

Level-of-Service Criteria: Automobile Mode

Control Delay (s/vehicle)	LOS by Volume-to-Capacity Ratio	
	$v/c \leq 1.0$	$v/c > 1.0$
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street.
LOS is not calculated for major-street approaches or for the intersection as a whole

SIGNALIZED INTERSECTIONS

For signalized intersections, level of service is evaluated based upon average vehicle delay experienced by vehicles entering an intersection. Control delay (or signal delay) includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. In previous versions of this chapter of the HCM (1994 and earlier), delay included only stopped delay. As delay increases, the level of service decreases. Calculations for signalized and unsignalized intersections are different due to the variation in traffic control. The 2000 Highway Capacity Manual provides the basis for these calculations.

Level of Service	Delay (secs.)	Description
A	<10.00	Free Flow/Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Most vehicles do not stop at all. Progression is extremely favorable and most vehicles arrive during the green phase.
B	10.1-20.0	Stable Operation/Minimal Delays: An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles. This level generally occurs with good progression, short cycle lengths, or both.
C	20.1-35.0	Stable Operation/Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted. Higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, and the number of vehicles stopping is significant.
D	35.1-55.0	Approaching Unstable/Tolerable Delays: The influence of congestion becomes more noticeable. Drivers may have to wait through more than one red signal indication. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. The proportion of vehicles not stopping declines, and individual cycle failures are noticeable.
E	55.1-80.0	Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are a frequent occurrence.
F	>80.0	Forced Flow/Excessive Delays: Represents jammed conditions. Queues may block upstream intersections. This level occurs when arrival flow rates exceed intersection capacity, and is considered to be unacceptable to most drivers. Poor progression, long cycle lengths, and v/c ratios approaching 1.0 may contribute to these high delay levels.

Source: *2000 Highway Capacity Manual*, Transportation Research Board, Washington D.C.



HCM Analysis – Existing

Intersection

Intersection Delay, s/veh 24.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	182	101	33	253	378	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yeild	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	11	1	3	2	2	5
Mvmt Flow	200	111	36	278	415	67

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	200
Stage 1	-	-	-
Stage 2	-	-	-
Follow-up Headway	-	-	2
Pot Capacity-1 Maneuver	-	-	1366
Stage 1	-	-	-
Stage 2	-	-	-
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	-	-	1366
Mov Capacity-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	55

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	512	-	-	1366	-
HCM Lane V/C Ratio	0.942	-	-	0.027	-
HCM Control Delay (s)	55.2	-	-	7.707	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	11.728	-	-	0.082	-

Notes

- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection

Intersection Delay, s/veh 4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	115	128	140	1	1	146
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	165	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	4	4	0	0	2
Mvmt Flow	132	147	161	1	1	168

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	162	0	161
Stage 1	-	-	161
Stage 2	-	-	411
Follow-up Headway	2	-	3
Pot Capacity-1 Maneuver	1405	-	884
Stage 1	-	-	873
Stage 2	-	-	674
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	1405	-	884
Mov Capacity-2 Maneuver	-	-	439
Stage 1	-	-	873
Stage 2	-	-	611

Approach	EB	WB	SB
HCM Control Delay, s	4	0	10

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1405	-	-	-	439	884
HCM Lane V/C Ratio	0.094	-	-	-	0.003	0.19
HCM Control Delay (s)	7.828	-	-	-	13.2	10
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.311	-	-	-	0.008	0.698

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM 2010 TWSC
 3: NE Miley Rd & SW French Prairie Rd (East)

AM Peak Existing
 WV TIA - Charbonneau Subdivision

Intersection

Intersection Delay, s/veh 4.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	55	65	50	2	5	81
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	7	5	4	0	0	5
Mvmt Flow	61	72	56	2	6	90

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	58	0	60
Stage 1	-	-	-
Stage 2	-	-	-
Follow-up Headway	2	-	3
Pot Capacity-1 Maneuver	1515	-	997
Stage 1	-	-	-
Stage 2	-	-	-
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	1511	-	995
Mov Capacity-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	3	0	9

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1511	-	-	-	712	995
HCM Lane V/C Ratio	0.04	-	-	-	0.008	0.09
HCM Control Delay (s)	7.483	-	-	-	10.1	9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.126	-	-	-	0.024	0.298

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection

Intersection Delay, s/veh 5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	284	363	85	195	171	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yeild	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	2	5	4	1	6
Mvmt Flow	302	386	90	207	182	66

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	302
Stage 1	-	-	-
Stage 2	-	-	-
Follow-up Headway	-	-	2
Pot Capacity-1 Maneuver	-	-	1242
Stage 1	-	-	-
Stage 2	-	-	-
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	-	-	1242
Mov Capacity-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	23

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	438	-	-	1242	-
HCM Lane V/C Ratio	0.566	-	-	0.073	-
HCM Control Delay (s)	23.4	-	-	8.126	-
HCM Lane LOS	C			A	
HCM 95th %tile Q(veh)	3.419	-	-	0.235	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM 2010 TWSC
2: NE Miley Rd & SW French Prairie Rd (West)

PM Peak Existing
WV TIA - Charbonneau Subdivision

Intersection

Intersection Delay, s/veh 4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	190	156	148	2	2	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	165	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	4	5	0	0	3
Mvmt Flow	207	170	161	2	2	143

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	163	0	745
Stage 1	-	-	162
Stage 2	-	-	583
Follow-up Headway	2	-	4
Pot Capacity-1 Maneuver	1410	-	384
Stage 1	-	-	872
Stage 2	-	-	562
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	1410	-	328
Mov Capacity-2 Maneuver	-	-	328
Stage 1	-	-	872
Stage 2	-	-	479

Approach	EB	WB	SB
HCM Control Delay, s	4	0	10

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1410	-	-	-	328	880
HCM Lane V/C Ratio	0.146	-	-	-	0.007	0.163
HCM Control Delay (s)	7.991	-	-	-	16	9.9
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.513	-	-	-	0.02	0.581

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection

Intersection Delay, s/veh 4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	98	51	81	4	1	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	8	4	0	0	3
Mvmt Flow	113	59	93	5	1	69

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	98	0	379
Stage 1	-	-	95
Stage 2	-	-	284
Follow-up Headway	2	-	4
Pot Capacity-1 Maneuver	1508	-	627
Stage 1	-	-	934
Stage 2	-	-	769
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	1508	-	580
Mov Capacity-2 Maneuver	-	-	580
Stage 1	-	-	934
Stage 2	-	-	711

Approach	EB	WB	SB
HCM Control Delay, s	5	0	9

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1508	-	-	-	580	959
HCM Lane V/C Ratio	0.075	-	-	-	0.002	0.072
HCM Control Delay (s)	7.58	-	-	-	11.2	9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.242	-	-	-	0.006	0.232

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined



HCM Analysis – Existing + Project

Intersection

Intersection Delay, s/veh 31.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	188	101	43	270	378	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yeild	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	11	1	3	2	2	5
Mvmt Flow	207	111	47	297	415	71

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	207
Stage 1	-	-	-
Stage 2	-	-	-
Follow-up Headway	-	-	2
Pot Capacity-1 Maneuver	-	-	1358
Stage 1	-	-	-
Stage 2	-	-	-
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	-	-	1358
Mov Capacity-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	74

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	481	-	-	1358	-
HCM Lane V/C Ratio	1.012	-	-	0.035	-
HCM Control Delay (s)	73.7	-	-	7.747	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	13.879	-	-	0.108	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection

Intersection Delay, s/veh 4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	116	137	164	1	1	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	165	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	4	4	0	0	2
Mvmt Flow	133	157	189	1	1	171

Major/Minor

	Major1	Major2	Minor2
Conflicting Flow All	190	0	189
Stage 1	-	-	-
Stage 2	-	-	-
Follow-up Headway	2	-	3
Pot Capacity-1 Maneuver	1372	-	853
Stage 1	-	-	-
Stage 2	-	-	-
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	1372	-	853
Mov Capacity-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach

HCM Control Delay, s EB 4 WB 0 SB 10

Minor Lane / Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1372	-	-	-	415	853
HCM Lane V/C Ratio	0.097	-	-	-	0.003	0.201
HCM Control Delay (s)	7.906	-	-	-	13.7	10.3
HCM Lane LOS	A				B	B
HCM 95th %tile Q(veh)	0.322	-	-	-	0.008	0.747

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection

Intersection Delay, s/veh 5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	64	65	50	2	6	105
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	7	5	4	0	0	5
Mvmt Flow	71	72	56	2	7	117

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	58	0	60
Stage 1	-	-	-
Stage 2	-	-	-
Follow-up Headway	2	-	3
Pot Capacity-1 Maneuver	1515	-	997
Stage 1	-	-	-
Stage 2	-	-	-
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	1511	-	995
Mov Capacity-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	4	0	9

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1511	-	-	-	689	995
HCM Lane V/C Ratio	0.047	-	-	-	0.01	0.117
HCM Control Delay (s)	7.5	-	-	-	10.3	9.1
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.148	-	-	-	0.029	0.397

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection

Intersection Delay, s/veh 5.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	302	363	91	205	171	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yeild	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	2	5	4	1	6
Mvmt Flow	321	386	97	218	182	77

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	321
Stage 1	-	-	-
Stage 2	-	-	-
Follow-up Headway	-	-	2
Pot Capacity-1 Maneuver	-	-	1222
Stage 1	-	-	-
Stage 2	-	-	-
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	-	-	1222
Mov Capacity-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	26

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	420	-	-	1222	-
HCM Lane V/C Ratio	0.616	-	-	0.079	-
HCM Control Delay (s)	26.3	-	-	8.199	-
HCM Lane LOS	D			A	
HCM 95th %tile Q(veh)	4.007	-	-	0.258	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection

Intersection Delay, s/veh 4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	192	181	162	2	2	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	165	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	4	5	0	0	3
Mvmt Flow	209	197	176	2	2	146

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	178	0	791
Stage 1	-	-	177
Stage 2	-	-	614
Follow-up Headway	2	-	4
Pot Capacity-1 Maneuver	1392	-	361
Stage 1	-	-	859
Stage 2	-	-	544
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	1392	-	307
Mov Capacity-2 Maneuver	-	-	307
Stage 1	-	-	859
Stage 2	-	-	462

Approach	EB	WB	SB
HCM Control Delay, s	4	0	10

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1392	-	-	-	307	863
HCM Lane V/C Ratio	0.15	-	-	-	0.007	0.169
HCM Control Delay (s)	8.042	-	-	-	16.8	10
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.527	-	-	-	0.021	0.605

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection

Intersection Delay, s/veh 4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	123	51	81	5	2	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	8	4	0	0	3
Mvmt Flow	141	59	93	6	2	85

Major/Minor

	Major1	Major2	Minor2
Conflicting Flow All	99	0	437
Stage 1	-	-	96
Stage 2	-	-	341
Follow-up Headway	2	-	4
Pot Capacity-1 Maneuver	1507	-	581
Stage 1	-	-	933
Stage 2	-	-	725
Time blocked-Platoon, %	-	-	-
Mov Capacity-1 Maneuver	1507	-	527
Mov Capacity-2 Maneuver	-	-	527
Stage 1	-	-	933
Stage 2	-	-	657

Approach

HCM Control Delay, s EB 5 WB 0 SB 9

Minor Lane / Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1507	-	-	-	527	958
HCM Lane V/C Ratio	0.094	-	-	-	0.004	0.089
HCM Control Delay (s)	7.636	-	-	-	11.9	9.1
HCM Lane LOS	A				B	A
HCM 95th %tile Q(veh)	0.31	-	-	-	0.013	0.292

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined



HCM Analysis – Project Mitigation

Intersection

Intersection Delay, s/veh	37
Intersection LOS	E

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	302	363	91	205	171	72
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	2	5	4	1	6
Mvmt Flow	321	386	97	218	182	77
Number of Lanes	1	0	1	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	56.2	12.2	14.6
HCM LOS	F	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	70%	0%	100%	0%
Vol Thru, %	0%	45%	0%	100%
Vol Right, %	30%	55%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	243	665	91	205
LT Vol	0	302	0	205
Through Vol	72	363	0	0
RT Vol	171	0	91	0
Lane Flow Rate	259	707	97	218
Geometry Grp	2	5	7	7
Degree of Util (X)	0.458	1	0.183	0.38
Departure Headway (Hd)	6.383	5.087	6.808	6.281
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	569	715	532	578
Service Time	4.364	3.136	4.477	3.96
HCM Lane V/C Ratio	0.455	0.989	0.182	0.377
HCM Control Delay	14.6	56.2	11	12.7
HCM Lane LOS	B	F	B	B
HCM 95th-tile Q	2.4	16.2	0.7	1.8

Notes

- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM Signalized Intersection Capacity Analysis PM Peak Existing + Project - Signal Mitigations

1: Airport Rd NE & NE Miley Rd

WV TIA - Charbonneau Subdivision

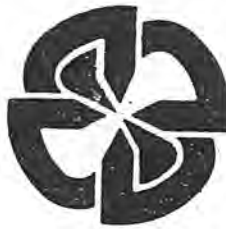


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	302	363	91	205	171	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frbp, ped/bikes	0.99		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.93		1.00	1.00	0.96	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	1699		1719	1827	1707	
Flt Permitted	1.00		0.30	1.00	0.97	
Satd. Flow (perm)	1699		538	1827	1707	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	321	386	97	218	182	77
RTOR Reduction (vph)	59	0	0	0	28	0
Lane Group Flow (vph)	648	0	97	218	231	0
Confl. Bikes (#/hr)		1				2
Heavy Vehicles (%)	3%	2%	5%	4%	1%	6%
Turn Type	NA		Perm	NA	NA	
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	37.5		37.5	37.5	12.7	
Effective Green, g (s)	37.5		37.5	37.5	12.7	
Actuated g/C Ratio	0.64		0.64	0.64	0.22	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1094		346	1177	372	
v/s Ratio Prot	c0.38			0.12	c0.14	
v/s Ratio Perm			0.18			
v/c Ratio	0.59		0.28	0.19	0.62	
Uniform Delay, d1	6.0		4.5	4.2	20.6	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	2.4		0.4	0.1	3.2	
Delay (s)	8.3		4.9	4.3	23.8	
Level of Service	A		A	A	C	
Approach Delay (s)	8.3			4.5	23.8	
Approach LOS	A			A	C	

Intersection Summary

HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	58.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Exhibit J: Ben Altman Setbacks Memo (1980)



Willamette Factors, Inc.
Benj. Franklin Plaza
One Southwest Columbia
Portland, Oregon 97258
(503) 248-1215

RECEIVED
NOV 24 1980
CITY OF WILSONVILLE

November 21, 1980

Mr. Ben Altman
Planner
City of Wilsonville
P.O. Box 220
Wilsonville, Oregon 97070

Re: Setbacks in Charbonneau

Dear Ben:

I have received and reviewed a copy of your memo to the Planning Commission, dated October 30, 1980, entitled "Setbacks in Charbonneau." In this memo, you have asked the Planning Commission to reverse our exception from building setbacks in Charbonneau on two grounds:

1. Our setbacks were supposedly not specifically waived by the City; and/or,
2. We supposedly do not conform to the fire protection provisions of the Building Code.

I am sorry but you are in error in both instances.

We have not, in the first instance, operated under "any assumptions" concerning the City's original waiver of setbacks within the project. The City specifically waived all setbacks within Charbonneau as a portion of the original approval of a 2,000 unit multi-use, staged, planned unit development under Ordinance No. 23 (Sections 12.07 and 12.08) for the Master Plan, as well as Ordinance No. 11 (Section 16.13) for Charbonneau Phase I, and all succeeding phases. I would concurrently point out to you that your August, 1980, Zoning Map includes our 71-5 Master Plan approval of exactly what we are building except for our subsequent voluntary 20% reduction in density within the project. As the City has ratified on over a dozen different approval occasions, we are producing what the City approved and expected to be produced as a result of 71-5. We are, as the City has ratified, in conformance with our Stage II Master Plan approval. And, both the Stage I and Stage II approvals included a waiver of all setback and dimensional requirements within the areas encompassed by the Master Plan.

Page 2
November 21, 1980
Mr. Ben Altman

We have not, in the second instance, failed to conform to the fire protection provisions of the Building Code because of our lack of setbacks. This has been recognized by the issuance of over 600 building permits based on plans approved by the State Fire Marshall and/or his duly appointed representatives. Conjunctively, although it has been pointed out to you on several occasions, the City has failed to recognize that Charbonneau has been specifically accepted from the Department of Commerce's recent zero lot line code interpretations. Attached please find a September 23, 1980, letter from Jane F. Huston, Director, Department of Commerce, delineating our specific exception from these requirements as well as any other fire wall requirements. The zero lot line code interpretation adopted by SCAB on September 30, 1980, specifically dealt with the question raised in your memo:

The Building Code requires the exterior walls to be fire resistive based on distance to the property lines. If these property lines can be eliminated, no exterior wall need be installed. Elimination of property lines can be accomplished by partnerships where owners of two properties go together to form one property covered by one deed. Apartments are under one deed. Condominiums are also one property per the Building Code because the ownership of the building is in common. The sale of the space inside the building is to the tenant to the back of the dwelling unit's interior finish. This is sometimes referred to as "paint to paint ownership."

Legal agreements are also possible between property owners to change the nature of the fire wall. The Building Code assumes that there is no agreement between adjacent property owners, that they are not willing to cooperate. If, however, the adjacent owners can cooperate or the structures are built by the same builder on properties which will be in two different ownerships, then a common wall agreement may be legally established to permit the construction of one fire wall to protect both properties. Even more elaborate legal agreements can be set up to satisfy the safety needs while specifying the legal responsibilities. An example of such a system is the Charbonneau development at Wilsonville. (My underlining.)

As Jane Huston's letter states, the above interpretation was approved by SCAB as well as Clyde Centers, the State Fire Marshall.

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November 21, 1980
Mr. Ben Altman

Therefore, Ben, I would appreciate it if the setback issue could be laid to rest at this juncture since it was specifically dealt with as a portion of the initial approval of the Charbonneau Master Plan (71-5). At the same time, I would appreciate it if the Planning Department would recognize the specific exception granted to Charbonneau from the zero lot line code interpretation concerning fire walls and the parapets discussed in your memo. This exception has been recognized in the issuance of building permits since the September 30 meeting by the City's Building Department.

I have one final request. I have not been officially informed of the existence of the subject memo to the Planning Commission, let alone received one from you or another City official. If we are going to be on the agenda of a public hearing of the Planning Commission, I would think that common courtesy would dictate that we would be informed about it. We have made a sincere effort over the years to be very open in our operations with the elected officials and staff members of the City. Both George and I feel there has been a very rapid deterioration of this relationship on the City's side for most of this year. Essentially, we would like to get our communications with the City back on an even keel. If we can, therefore, provide you with any of the City's records pertaining to the approval of the project, please do not hesitate to call.

Thank you for your time and consideration in this matter.

Cordially,



Patrick C. Jordan
President
Willamette Factors, Inc.

PJ/ps

attachment

cc: William Lowrie, Mayor
Edward Davis, Administrator
Richard Drew, Chairman, Planning Commission
George Marshall



Department of Commerce

OFFICE OF THE DIRECTOR

428 LABOR & INDUSTRIES BLDG., SALEM, OREGON 97310 PHONE 378-4100

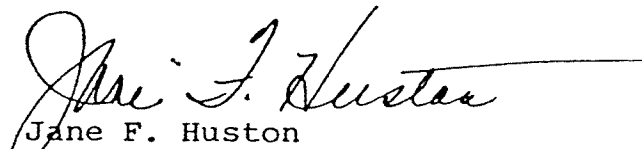
September 23, 1980

Patrick C. Jordan
Sr. Vice President
Benj. Franklin Federal S&L
Benj. Franklin Plaza
One SW Columbia
Portland, OR 97258

As you requested, the zero lot line code interpretation has been redrafted (attached). It will be considered at the September 30th Structural Code Advisory Board meeting which starts at 9:30 a.m. Consideration of this item will probably be after lunch. You are invited, or you may prefer to send a representative.

The draft has been reviewed by a committee from the Building Codes Division, Fire Marshal's Office, and Home Builders' Association. Your representative, George Marshall, attended the last of these meetings.

We believe the revision now accommodates the system used by the Charbonneau Development.


Jane F. Huston
Director

JFH:dl
Enclosure

cc: Walt Friday, Secretary of SCAB
Clyde Centers, State Fire Marshal

TO: THOSE CONCERNED ABOUT ZERO PROPERTY LINE ISSUE

FROM: WALTER FRIDAY SECRETARY STRUCTURAL CODE ADVISORY BOARD

RE: REDRAFT OF ZERO PROPERTY LINE PPPI PAGES

ATTACHED IS THE REDRAFT OF THE PROPOSED INTERPRETATION. YOU ARE ASKED TO CAREFULLY REVIEW IT FOR CONTENT, ORGANIZATION, ETC. PLEASE SEND YOUR COMMENTS TO ME BY SEPT 13, 1968 OR BRING THEM WITH YOU TO THE 10:00 MEETING ON SEPT 8 AT THE HOME BUILDERS ASSOCIATION OFFICE IN SALEM.

DRAFT 8/26/80

OREGON

CODE INTERPRETATION

ZERO LOT LINE - RESIDENTIAL CONSTRUCTION

THIS INTERPRETATION REPLACES NUMBER 4062.

ORIGINAL REQUEST BY: DAVID SPARKS, MAY 27, 1980
OREGON STATE HOME BUILDERS ASSOC.

CLARIFICATION REQUESTS BY:

- * PAT BRIDGES, BUILDER/BOARD MEMBER AUG. 27, 1980
- * PATRICK C JORDAN, SENIOR VICE PRES., BENJ. FRANKLIN
FEDERAL SAVINGS AND LOAN ASSOC. AUG. 18, 1980
- * DAVID O'BRIEN, DEPT OF COMMERCE, HOUSING DIVISION COST
SPECIALIST
- * GARY REID, BUILDER
- * VERN JENNINGS, BUILDING OFFICIAL, CITY OF SALEM

ORIGINAL QUESTION:

(A) IS THE WALL CONNECTING A DUPLEX TYPE STRUCTURE, WHERE EACH SIDE IS PRIVATELY OWNED, CONSIDERED AN EXTERIOR WALL?

CLARIFICATION QUESTIONS:

(B) WHY SHOULD THE BUILDING CODE BE CONCERNED ABOUT FIRE WALLS? SHOULDN'T THIS ISSUE BE LEFT TO THE CIVIL COURTS TO SETTLE DAMAGES BETWEEN ADJOINING PROPERTY OWNERS?

(C) WOULDN'T ELIMINATION OF FIRE WALLS REDUCE THE COST OF HOUSING? IN THIS DAY OF HIGH HOUSING COSTS CAN WE AFFORD THE LUXURY OF THIS AMOUNT OF PROTECTION?

(D) ARE THERE LEGAL WAYS OF NOT INSTALLING THE FIRE WALLS REQUIRED BY THE ANSWER TO QUESTION (A)?

(E) ARE THERE ALTERNATES TO THE PARAPET WALLS REQUIRED IN SECTION 1709?

(F) IF A CODE-COMPLYING PROPERTY LINE FIRE WALL IS INSTALLED AS SPECIFIED IN ANSWER (A), DOES THE FOUNDATION NEED TO ALSO BE SEPARATED?

(G) IS IT INTENDED THAT ABSOLUTELY EVERY SURFACE OF A REQUIRED FIRE WALL BE INSPECTED?

BACKGROUND:

AS THE RESULT OF THE FIRST ISSUANCE OF THIS INTERPRETATION MANY

ADDED QUESTIONS HAVE SURFACED. THESE QUESTIONS HAVE BEEN ADDRESSED AND ADDED TO THE ORIGINAL INTERPRETATION.

THE ORIGINAL INTERPRETATION WAS VALID BUT DID NOT MENTION OTHER SOLUTIONS TO THE FIRE WALL QUESTION WHICH MAY BE ESTABLISHED BY LEGAL AGREEMENTS BETWEEN THE PROPERTY OWNERS WHICH CAN BE USED TO REDUCE THE COST OR EVEN ELIMINATE THE NEED FOR THE REQUIRED FIRE WALLS.

THE USES OF FIRE WALL TO SEPARATE ONE PROPERTY FROM ANOTHER WAS DEVELOPED AS A FIRE PREVENTION STRATEGY AFTER THE LARGE CONFLAGRATION FIRES OF THE NINETEENTH CENTURY. THE IDEA WAS TO COMPARTMENTALIZE SPACES TO KEEP FIRES FROM SPREADING FROM ONE BUILDING TO THE NEXT. WE HAVE HAD FEW CONFLAGRATION FIRES IN THIS CENTURY DUE TO THE SUCCESS OF THIS STRATEGY. HOWEVER, A RECENT EXAMPLE IS A FIRE IN A HOUSTON, TEXAS APARTMENT COMPLEX WHICH DESTROYED MILLIONS OF DOLLARS IN PROPERTY AND SPREAD FROM BUILDING TO BUILDING. NO FIRE WALLS EXISTED AND THE ROOF COVERING WAS OF A COMBUSTIBLE WOOD SHAKES.

THE LIFE, HEALTH AND SAFETY PROVISIONS OF THE CODE ARE THE MOST HEAVILY STRESSED REASONS FOR THE EXISTENCE OF A BUILDING CODE IN OREGON. STATUTE ALSO SPECIFIES OTHER REASONS FOR THE CODE: SECURITY, WELFARE, ACCESS TO THE HANDICAPPED AND CONSERVATION OF SCARCE RESOURCES. FIRE WALLS HAVE THEIR PHILOSOPHICAL BASIS IN SECURITY. CONSTITUTIONALLY WE ALL HAVE AN EXPECTATION OF BEING SECURE IN OUR HOMES. PART OF THIS SECURITY IS THE EXPECTATION THAT OUR NEIGHBOR'S ERRORS IN THE USE OF HIS LAND WILL NOT UNUSUALLY RISK OUR PROPERTY. THE NEIGHBOR HAS THE SAME EXPECTATION FROM US. IF CONSTRUCTION IS NEAR THE PROPERTY LINE, BOTH SIDES HAVE AN OBLIGATION TO PROTECT THE OTHER. HOWEVER, NEIGHBORS MAY ELECT TO AGREE TO ASSUME PART OF THE OTHER'S RISK. THIS WAS CONCEIVED THE USE OF PARTY WALL AGREEMENTS, CONDOMINIUM LAW. THE BUILDING CODE SPECIFIES THE METHOD OF PROTECTION WHEN NO OTHER 'LEGAL' AGREEMENT IS SPECIFIED. SUCH LEGAL AGREEMENTS COME IN VARIED FORMS AND THE BUILDING OFFICIAL IS NOT EXPECTED TO BE ABLE TO RULE ON THEIR LEGALITY. WE SUGGEST VISITING WITH THE JURISDICTION'S LEGAL COUNCIL ON SUCH OCCASIONS.

ANSWER TO (A):

YES, IF THE TWO PROPERTIES ARE IN DIFFERENT OWNERSHIP, AND NO LEGAL AGREEMENT EXISTS SO THE BUILDING OFFICIAL CAN RECOGNIZE THE STRUCTURE AS ONE PROPERTY, THE 'COMMON WALL' OF BOTH UNITS MUST BE TREATED AS IF BOTH BUILDINGS WERE BUILT AT DIFFERENT TIMES AND TWO FIRE WALLS, ONE ON EACH SIDE OF THE PROPERTY LINE, MUST BE CONSTRUCTED.

IF, HOWEVER, ONE OF SEVERAL LEGAL REMEDIES IS EXERCISED THE WALL MAY BE EITHER ELIMINATED (CONDOMINIUM LAW) OR MAY BE CONVERTED INTO A LEGAL PARTY WALL. THE PARTY WALL WOULD BE REQUIRED TO BE EQUAL TO THE SUM OF THE REQUIRED FIRE WALLS, I.E. ONE-HOUR WALL + ONE-HOUR WALL = TWO-HOUR FIRE WALL.

ALTHOUGH ATTRACTIVE FROM A FIRST COST VIEW, THE COMMON WALL MAY BE COSTLY AT THE TIME ONE PROPERTY OWNER ELECTS TO REMOVE HIS PORTION OF THE BUILDING. THE RESULT IS A POSSIBLY UNUSABLE WALL ENCRUCHING ONTO PROPERTY NOW DESIRED FOR NEW DEVELOPMENT. PARTY WALLS HAVE BEEN DISCOURAGED FOR THIS REASON BUT ARE NOT ILLEGAL UNDER OREGON LAW ACCORDING TO THE REAL ESTATE DIVISION.

ANSWER TO (B):

DUE TO THE FIRE AND LIFE SAFETY CONCERNS AND THE SECURITY CONCEPT DEVELOPED IN THE BACKGROUND, IT HAS BEEN PUBLIC POLICY FOR OVER ONE HUNDRED YEARS THAT BUILDING CODES REQUIRE FIRE BREAKS TO SLOW OR PREVENT THE SPREAD OF FIRE FROM ONE PROPERTY TO ANOTHER.

THREE TYPES OF FIRE WALLS ARE USED IN THE UNIFORM BUILDING CODE: EXTERIOR (PROPERTY LINE), AREA SEPARATION, AND OCCUPANCY SEPARATION WALLS. EACH IS USED TO COMPARTMENTALIZE A BUILDING, THE EXTERIOR WALL BEING THE MOST RESISTANT TO FIRE. THE AREA SEPARATION IS NEXT IN RESISTANCE.

ANSWER TO (C):

REDUCTION OF THE FIRST COST IS AN IMPORTANT GOAL BUT MUST BE BALANCED WITH OTHER PUBLIC POLICIES I.E. SAFETY, PRESERVATION OF SCARCE RESOURCES, ETC. THIS BALANCING IS NOT A SCIENTIFIC EVENT BUT MUST BE DONE BY HUMAN JUDGMENT. BY NATURE DIFFERENT PEOPLE DISAGREE ON WHAT IS THE PROPER BALANCE. THE SOLUTION HAS BEEN TO HAVE PEOPLE KNOWLEDGEABLE IN THE ISSUES VOTE ON THE PROPER BALANCE. THE LEADER IN FIRE PROTECTION THEORY IS THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). A VALID QUESTION IS, DOES NFPA INCLUDE PEOPLE WITH CONCERNS ABOUT THE COSTS OF CONSTRUCTION OR ONLY THE SAFETY CONCERNS?

THE COMMON WISDOM HAS BEEN THAT AS PROPERTY BECOMES MORE VALUABLE GREATER CARE IS TAKEN TO PROTECT THE INVESTMENT. IT FOLLOWS AS THE COST OF HOUSING INCREASES THAT MORE PROTECTION BE ADDED NOT LESS.

AS IN ISSUES OF ENERGY CONSERVATION, THE FIRST COST IS NOT THE ONLY COST TO BE CONSIDERED. THE LIFE CYCLE COST IS ALSO IMPORTANT. IT IS FALSE ECONOMY IF THE BUILDING'S SAFETY SYSTEMS ARE OMITTED AND THE BUILDING BURNS TO THE GROUND ON THE FIRST DAY OF USE. THE BUILDING CODE REPRESENTS A CAREFULLY BALANCED SYSTEM OF COMPROMISES BETWEEN PUBLIC POLICY ISSUES. THIS IS NOT TO SAY THAT THIS SYSTEM CANNOT BE CHANGED, BUT IF WE DO CHANGE IT WE NEED TO CAREFULLY WEIGH THE VALUES.

ANSWER TO (D):

THE BUILDING CODE REQUIRES THE EXTERIOR WALLS TO BE FIRE RESISTIVE BASED ON DISTANCE TO THE PROPERTY LINES. IF THESE PROPERTY LINES CAN BE ELIMINATED, NO EXTERIOR WALL NEED BE INSTALLED. ELIMINATION OF PROPERTY LINES CAN BE ACCOMPLISHED BY PARTNERSHIPS WHERE OWNERS OF TWO PROPERTIES GO TOGETHER TO FORM ONE PROPERTY COVERED BY ONE DEED. APARTMENTS ARE UNDER ONE DEED. CONDOMINIUMS ARE ALSO ONE PROPERTY PER THE BUILDING CODE BECAUSE THE OWNERSHIP

IF THE BUILDING IS IN COMMON, THE SALE OF SPACE INSIDE THE BUILDING IS TO THE TENANT TO THE BACK OF THE DWELLING UNITS INTERIOR FINISH. THIS IS SOMETIMES REFERED TO AS 'PAINT TO PAINT OWNERSHIP'.

LEGAL AGREEMENTS ARE ALSO POSSIBLE BETWEEN PROPERTY OWNERS TO CHANGE THE NATURE OF THE FIRE WALL. THE BUILDING CODE ASSUMES THAT THERE IS NO AGREEMENT BETWEEN ADJACENT PROPERTY OWNERS, THAT THEY ARE NOT WILLING TO COOPERATE. IF, HOWEVER, THE ADJACENT OWNERS CAN COOPERATE OR THE STRUCTURES ARE BUILT BY THE SAME BUILDER ON PROPERTIES WHICH WILL BE IN TWO DIFFERENT OWNERSHIPS, THEN A COMMON WALL AGREEMENT MAY BE LEGALLY ESTABLISHED TO PERMIT THE CONSTRUCTION OF ONE FIRE WALL TO PROTECT BOTH PROPERTIES. EVEN MORE ELABORATE LEGAL AGREEMENTS CAN BE SET UP TO SATISFY THE SAFETY NEEDS WHILE SPECIFYING THE LEGAL RESPONSIBILITIES. AN EXAMPLE OF SUCH A SYSTEM IS THE CHARBONNEAU DEVELOPMENT AT WILSONVILLE.

ANSWER TO (E):

SECTION 1709 SPECIFIES FOUR EXCEPTIONS; EACH OF THESE GIVES ALTERNATES TO THE REQUIREMENTS FOR PARAPETS. PARAPETS ARE AN EXTENSION OF THE FIRE WALL THROUGH THE ROOF TO A HEIGHT OF 30 INCHES (MAY BE REQUIRED TO BE HIGHER ON SLOPED ROOFED BUILDINGS). THE THEORY OF PARAPETS IS THAT IT PREVENTS THE SPREAD OF FIRE ACROSS THE ROOF FROM ONE 'COMPARTMENT' TO THE NEXT. ALSO, THE WALL IS SAID TO PROVIDE PROTECTION FOR THE FIREMAN FROM HEAT IN FIGHTING FIRE.

A SYSTEM WHICH IS IN WIDE USE AND APPROVED BY MANY BUILDING OFFICIALS IS THE 'T' PROTECTION AUTHORIZED AT THE TERMINATION OF AREA SEPARATION WALLS IN SECTION 505(D)3 EXCEPTION 2. WHICH SAYS:

EXCEPTION: 2. TWO-HOUR AREA SEPARATION WALLS MAY TERMINATE AT THE UNDERSIDE OF ROOF SHEATHING PROVIDED THAT THE ROOF HAS AT LEAST ONE-HOUR FIRE-RESISTIVE TIME PERIOD FOR A WIDTH OF NOT LESS THAN 5 FEET ON EACH SIDE OF THE AREA SEPARATION WALL TERMINATION.

AS PROVIDED IN SECTION 103(1979 SSC), RECOGNITION OF ALTERNATE METHODS OF CONSTRUCTION, THE EXCEPTION SPECIFIED IN SECTION 505(D)3 EXCEPTION 2. IS, BY RULING, RECOGNIZED AS AN ALTERNATE METHOD OF PROVIDING TERMINATION OF EITHER TWO ONE-HOUR WALLS AS IN ANSWER (A), OR TWO-HOUR PARTY WALL AS IN ANSWER (D). THIS CONCEPT IS ALSO ENDORSED BY THE STATE FIRE MARSHAL.

ANSWER TO (F):

DUE TO THE PAST LEGAL CONFLICTS OVER PARTY WALLS WE BELIEVE IT IS A GOOD IDEA TO PROVIDE FOR THE DIVISION OF THE FOUNDATION SO THAT BUILDINGS ON EITHER SIDE OF THE PROPERTY LINE CAN BE DEMOLISHED WITHOUT ENDANGERING OR ENCRUCHING ONTO THE OTHER PROPERTY. THERE IS ANOTHER CONSIDERATION; THE INVERTED 'T' TYPE FOUNDATION BECOMES AN 'L' TYPE IF HALF IS REMOVED AND THUS IS ECCENTRICALLY LOADED. THE STATE STAFF RAISED THE DIVIDED FOUNDATION ISSUE BUT HAVE RECEIVED LITTLE SUPPORT FOR THEIR CONCERN.

BY RULING UNDER SECTION 105, DIVISION OF THE FOUNDATION, THOUGH OF INTEREST TO THE PROPERTY OWNERS RIGHTS, WILL NOT BE DEEMED A BUILDING CODE ISSUE. THE PROPERTY OWNER IS TO LOOK OUT FOR HIS OWN INTERESTS IN THIS CASE.

ANSWER (G):

THE LEVEL OF INSPECTION PROVIDED TO FIRE WALLS IS A DECISION OF THE BUILDING OFFICIAL WITH JURISDICTION. THE CODE SPECIFIES THAT FIRE WALLS ARE TO BE INSPECTED. WHATS DEEMED IMPORTANT FOR LAKE OSWEGO OR PORTLAND MAY NOT BE NEEDED, ACCEPTED OR FINANCED BY OTHER JURISDICTIONS. BUILDING DENSITY, FAST ENFORCEMENT, AND THE LEVEL OF FIRE SUPPRESSION ARE ALL FACTORS DIFFERENT IN EACH COMMUNITY.

RULING:

THE STRUCTURAL CODE ADVISORY BOARD RECOMMENDED ON SEPTEMBER 30, 1980 THAT THE DIRECTOR OF COMMERCE ADOPT BY RULING THE POSITIONS SPECIFIED BY ANSWERS (A) THROUGH (G) TO THE QUESTIONS PRESENTED.

REFERENCES:

HOME BUILDERS ASSOC. LETTER 5/27/80
ICBO LETTER
SCAB MINUTES
BENJ. FRANKLIN SAVINGS AND LOAN ASSOC LETTER 8/18/80
SCAB MINUTES 9/30/80



Exhibit K: Preliminary Stormwater Report

Charbonneau Range

Preliminary Stormwater Report

Date: August 2016

Client: Pahlisch Homes, Inc.

Engineering Contact: Monty Hurley, PE, PLS

Engineering Firm: AKS Engineering & Forestry, LLC

AKS Job No.: 4898



RENEWAL DATE: 6/30/17



12965 SW Herman Road, Suite 100
Tualatin, OR 97062
P: (503) 563-6151
www.aks-eng.com

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OREGON

Preliminary Stormwater Report

CHARBONNEAU RANGE CITY OF WILSONVILLE, OREGON

1.0 Purpose of Report

The purpose of this report is to analyze the effect development of this site will have on the downstream stormwater conveyance system, document the criteria the proposed stormwater system was designed to meet, identify the sources of information on which the analysis was based, detail the design methodology, and document the results of the analysis.

2.0 Project Description

2.1 Size and Location of Project Site

The project site is located on Tax Lot 325 of Clackamas County Tax Map 3S 1W 25. The project site is located on the west side of SW Arbor Lake Drive within the community of Charbonneau in the City of Wilsonville. This project site consists of approximately ± 7.5 acres.

2.2 Property Zoning

The project site is zoned Planned Development Residential (PDR-3).

2.3 Type of Development/Proposed Improvements

The project will include the subdivision of the site into 40 lots for the future construction of attached and detached single-family homes and the construction of a looped public street connecting to SW Arbor Lake Drive.

3.0 Existing Conditions

3.1 Site Topography

The existing stormwater runoff from this site drains northwest, with slopes ranging from 1% to 5%. The vegetative cover of the site consists of grass and trees.

3.2 Land Use

Currently, the land is utilized as the Charbonneau Golf Course driving range.

3.3 Off-Site Drainage

There is a small grass area along the southern property line that will continue to flow through the site.

3.4 Soil Type

The soils present on the site are classified as Latourell loam (hydrologic group "B") and Quatama loam (hydrologic group "C") by the USDA Soil Survey for Clackamas County. Information on these soil types is provided in Appendix 7-1.

3.5 Point of Discharge

Stormwater runoff from the site currently flows toward the northwest corner of the site, where it is collected and routed by the existing storm drain conveyance system. The existing conveyance system consists of various-sized underground pipes that ultimately discharge into the Willamette River.

3.6 Infiltration Test Result

Per the Geotechnical Engineering Report prepared by GeoPacific Engineering, Inc. dated August 3, 2016, encased falling-head infiltration testing conducted on the project site demonstrated a minimum measured infiltration rate of 6.1 inches per hour at a depth of 5.0 feet. The stormwater facilities are planning to be installed at a depth of at least 5.0 feet. Therefore, an infiltration rate of 2.0 inches per hour (a safety factor of 3 was apply to the test rate) will be utilized for the design.

3.7 Hydrologic Analysis

Per City of Wilsonville 2015 Stormwater and Surface Water Design and Construction Standards, stormwater management facilities for the site will be sized for all impervious area created by the subdivision, including all residences on individual lots at the current rate of 2,750 square feet of impervious surface area per dwelling unit.

4.0 Developed Conditions

4.1 Developed Site Drainage Conditions

The post-developed site topography will be altered from the pre-developed site topography to allow for the construction of public streets, 40 single-family residential lots, open space, landscaping, and stormwater facilities. Within the development, stormwater runoff will be collected through infiltration vegetated swales for infiltration, treatment, and detention. Only overflow stormwater runoff from large storm events (greater than 10-year) will release into downstream conveyance storm drain systems and discharge into the Willamette River.

4.2 Off-Site Basin

There are no significant off-site basins that may affect the development.

4.3 Downstream Analysis

The infiltration vegetated swales will retain and infiltrate stormwater runoff from the development up to the 10-year storm to the maximum extent practicable. Therefore, this development will not increase the peak stormwater runoff to the downstream stormwater conveyance systems.

4.4 Hydraulic Design

Stormwater inlets for the site will be placed at locations that will adequately control overflow stormwater runoff. The stormwater pipes will be sized using Manning's equation, based on peak flows for the 25-year, 24-hour storm event.

4.5 BMP Sizing Tool

Infiltration vegetated swales will address the water quality treatment and flow control requirements for all impervious area on site. The BMP Sizing Tool was utilized to size the LID facility. Per the BMP Sizing Tool report, 22,000 square feet of infiltration vegetated swale is required for with this development. However, to reduce facility surface area by 25% (5,500 square feet), growing media depth will be increased to 30 inches. The planned total area of infiltration vegetated swale on site will exceed the required 16,500 square feet. The location of these infiltration vegetated swales is provided in Appendix 5-1.

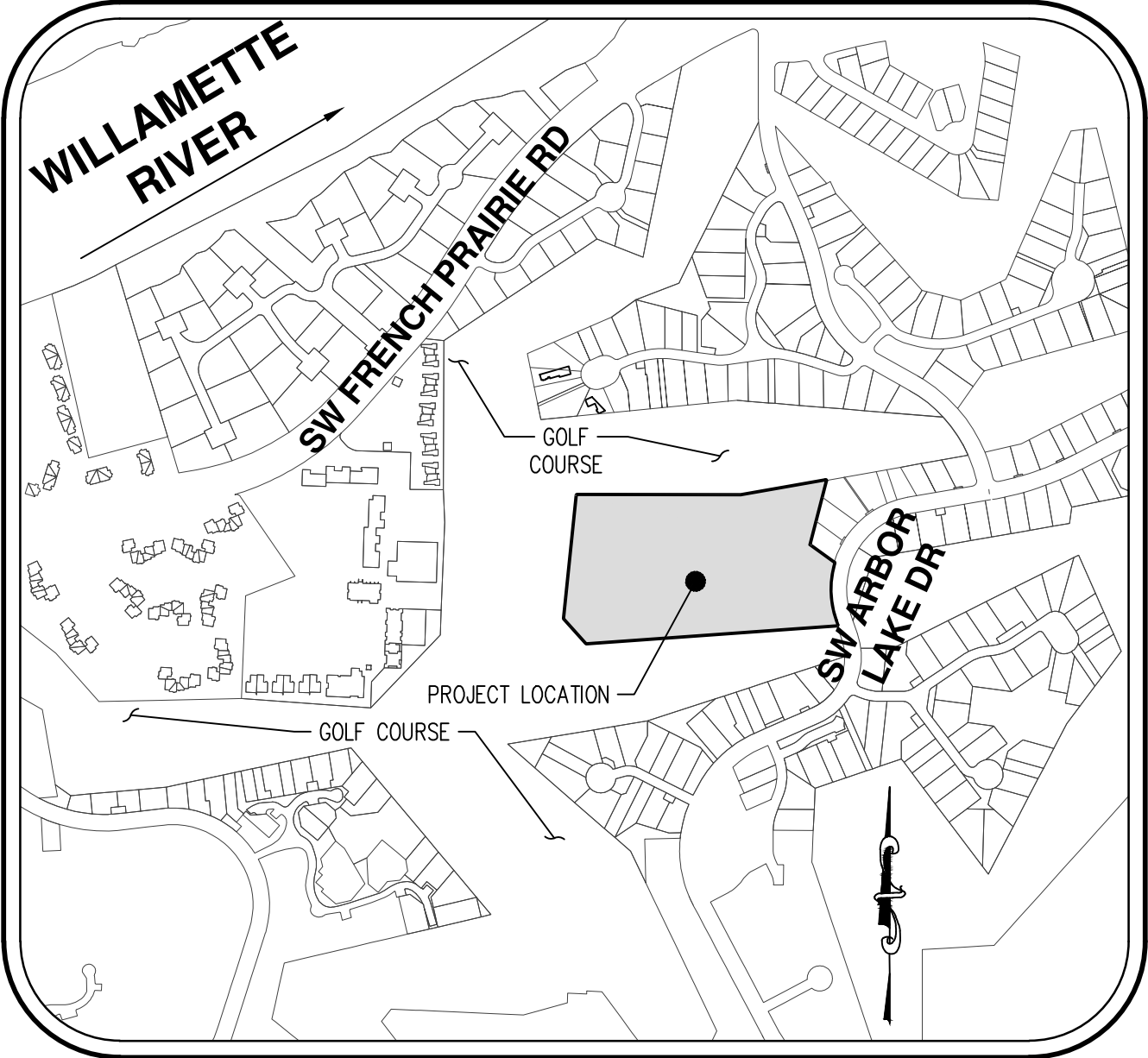
4.6 Overflow Design

The stormwater facilities were designed to allow the stormwater overflow to rise through the facilities, drain out through the swale inlets/outlets onto the gutter, and sheet flow downhill into overflow storm

drain conveyance systems.



APPENDIX 1-1
VICINITY MAP



VICINITY MAP

N.T.S.

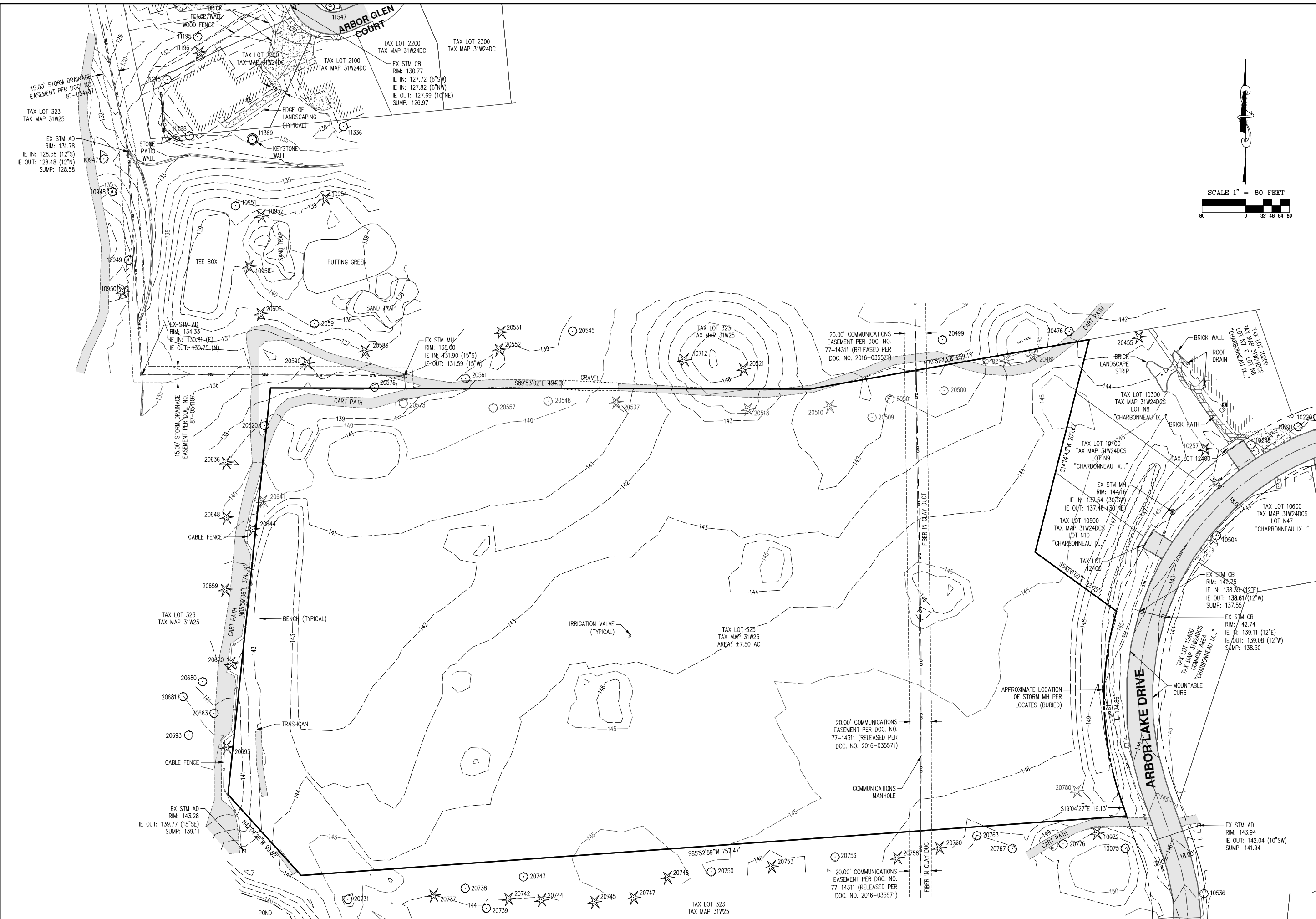
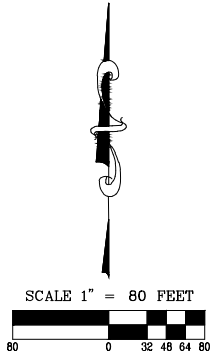
APPENDIX 2-1

PRE-DEVELOPED BASIN MAP

DESIGNED BY:
 DRAWN BY: JOH
 CHECKED BY: NSW
 SCALE: AS NOTED
 DATE: 08/04/2016

**PRELIMINARY
 NOT FOR
 CONSTRUCTION**

REVISIONS:
 JOB NUMBER
4898
 SHEET
1



AKS DRAWING FILE: 4898 PRE MAP.DWG | LAYOUT: PRE

APPENDIX 3-1

BMP SIZING TOOL REPORT

WES BMP Sizing Report

Project Information

Project Name	Charbonneau Range
Project Type	Subdivision
Location	Tax Lot 325, Clackamas County Tax Map 3S 1W 25
Stormwater Management Area	326527
Project Applicant	Pahlish Homes, Inc.
Jurisdiction	OutofDistrict

Drainage Management Area

Name	Area (sq-ft)	Pre-Project Cover	Post-Project Cover	DMA Soil Type	BMP
Roof Area	110,000	Grass	Roofs	B	Vegetated Swale
Pavement	47,120	Grass	ConventionalConcrete	B	Vegetated Swale
Sidewalk	10,050	Grass	ConventionalConcrete	B	Vegetated Swale
Driveway Approach	8,500	Grass	ConventionalConcrete	B	Vegetated Swale
Landscape	128,857	Grass	LandscapeBsoil	B	Vegetated Swale

LID Facility Sizing Details

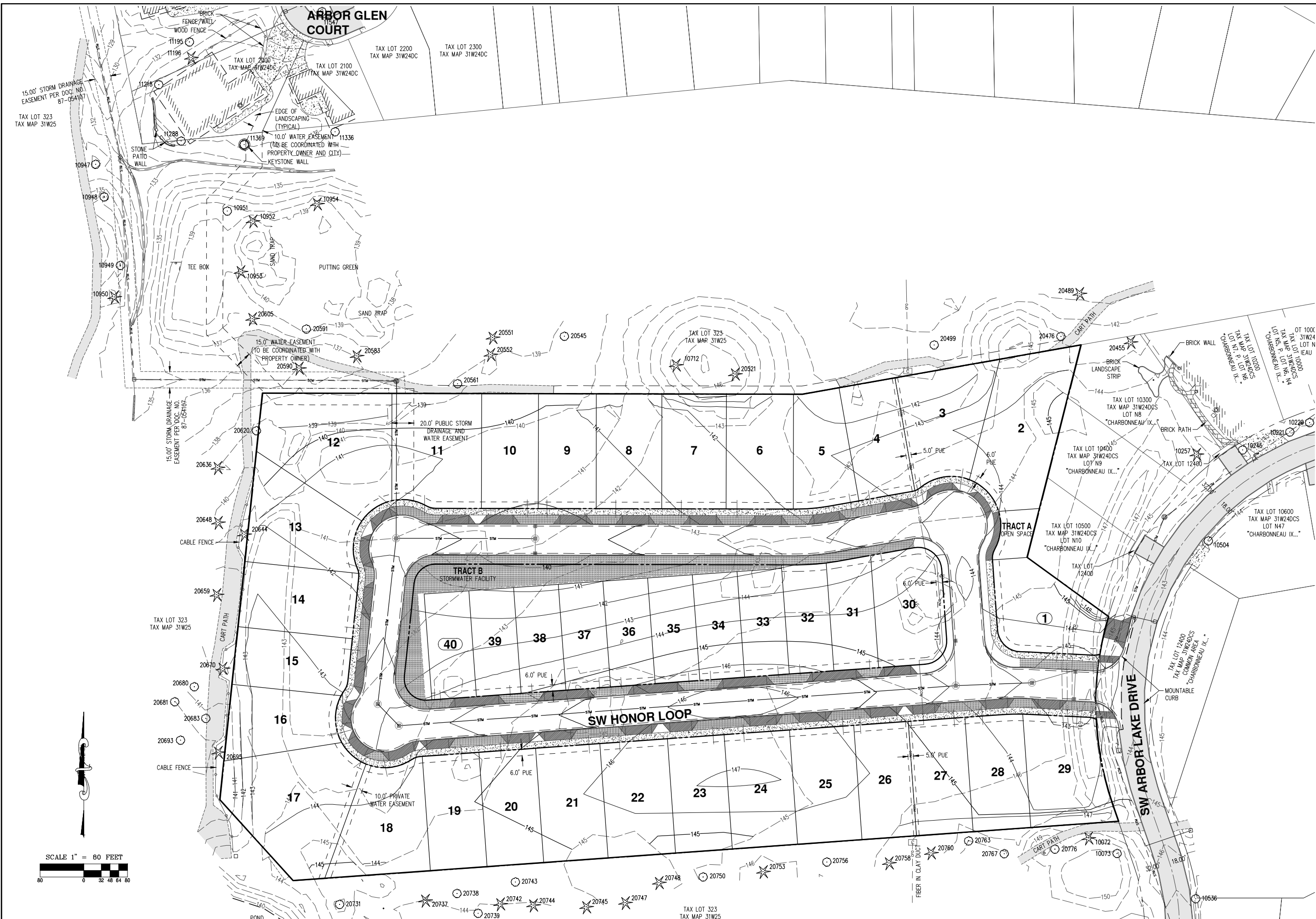
LID ID	Design Criteria	BMP Type	Facility Soil Type	Minimum Area (sq-ft)	Planned Areas (sq-ft)	Orifice Diameter (in)
Vegetated Swale	FlowControlAndTreatment	Vegetated Swale - Infiltration	A1	21,432.7	22,000.0	0.0

Pond Sizing Details

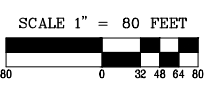
1. FCWQT = Flow control and water quality treatment, WQT = Water quality treatment only
2. Depth is measured from the bottom of the facility and includes the three feet of media (drain rock, separation layer and growing media).
3. Maximum volume of the facility. Includes the volume occupied by the media at the bottom of the facility.
4. Maximum water storage volume of the facility. Includes water storage in the three feet of soil media assuming a 40 percent porosity.

APPENDIX 4-1

POST-DEVELOPED BASIN MAP



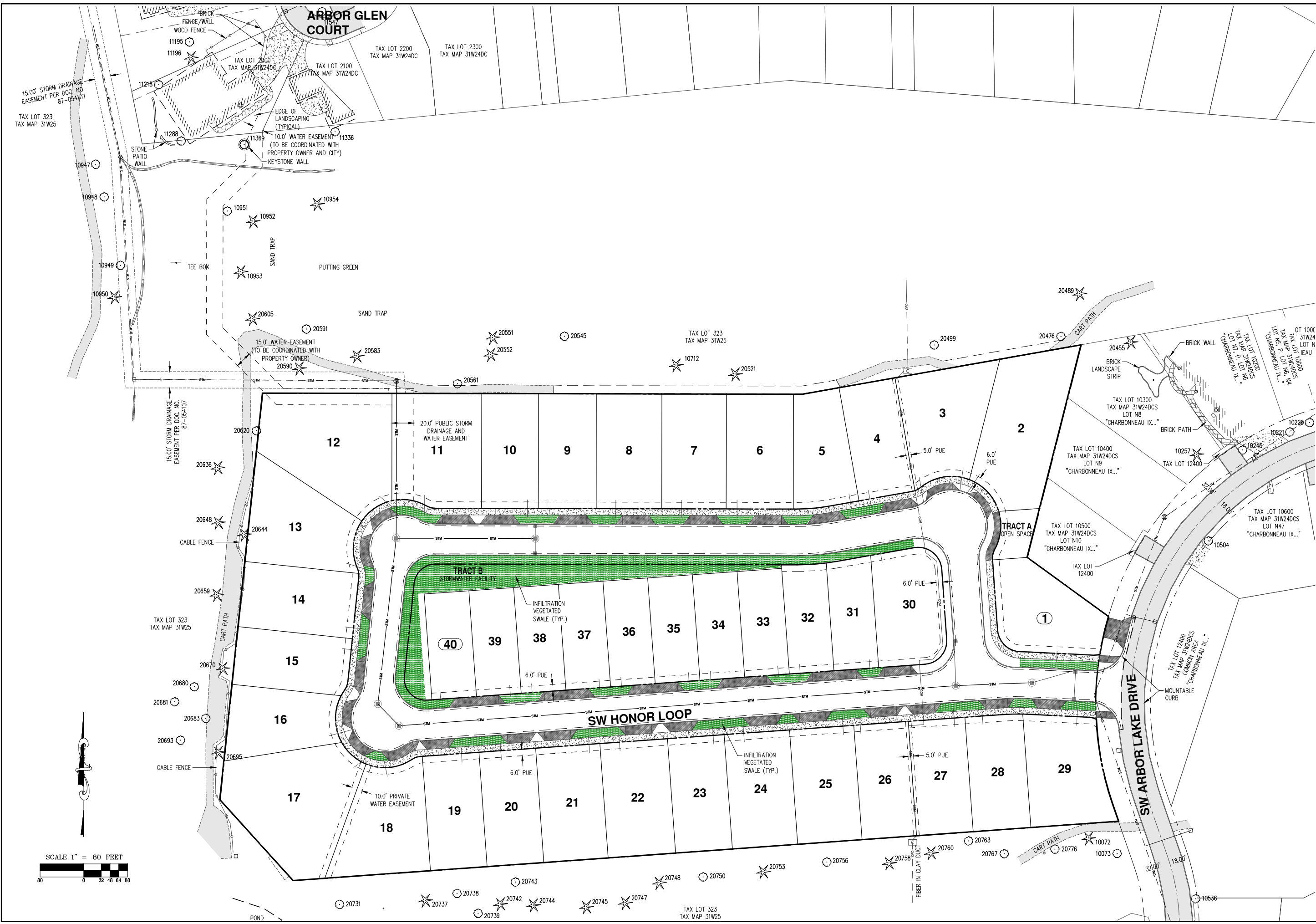
AKS DRAWING FILE: 4898 POST MAP.DWG | LAYOUT: POST



APPENDIX 5-1

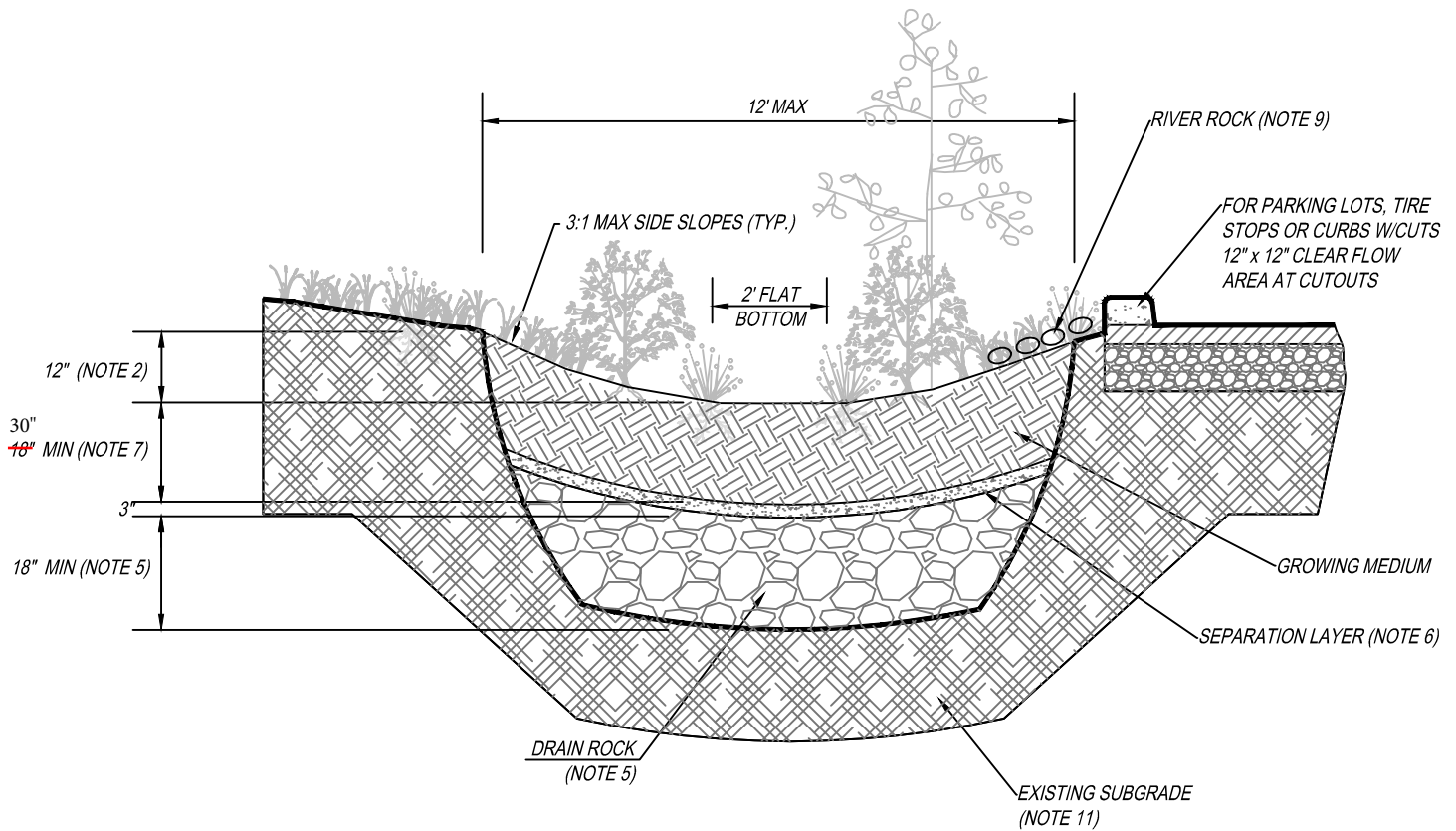
STORMWATER FACILITIES
LOCATION AND DETAIL

DESIGNED BY:	RSW
DRAWN BY:	JDR/JRN
CHECKED BY:	MBH
SCALE:	AS NOTED
DATE:	08/10/2016
PRELIMINARY NOT FOR CONSTRUCTION	
REVISIONS:	
JOB NUMBER	4898
SHEET	1



AKS DRAWING FILE: 4898 POST MAP.DWG | LAYOUT: LOCATION

This Detail Drawing may not be altered or changed in any manner except by the City Engineer. It is the responsibility of the user to acquire the most current version.



GENERAL NOTES:

1. **PROVIDE PROTECTION** FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, DURING AND AFTER CONSTRUCTION. UNLESS REQUIRED BY SITE CONDITIONS, UNLINED SWALES ARE PREFERRED TO ALLOW MAXIMUM INFILTRATION.
2. **DIMENSIONS:**
 - DEPTH OF SWALE (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION); 12"
 - LONGITUDINAL SLOPE OF SWALE: 6.0% OR LESS
 - FLAT BOTTOM WIDTH: 2'
 - SIDE SLOPES OF SWALE: 3:1 MAXIMUM
3. **SETBACKS (FROM MIDPOINT OF FACILITY):**
 - INFILTRATION VEGETATED SWALES SHALL BE 10' FROM FOUNDATIONS AND 5' FROM PROPERTY LINES.
4. **OVERFLOW:**
 - EMERGENCY OVERFLOW PATH SHALL BE IDENTIFIED ON THE STORMWATER MANAGEMENT PLAN.
5. **DRAIN ROCK:**
 - SIZE: 1 1/2" - 3/4" WASHED
 - DEPTH: 18"
6. **SEPARATION** BETWEEN DRAIN ROCK AND GROWING MEDIUM: SHALL BE A 3" LAYER OF 3/4" - 1/4" OPEN GRADED AGGREGATE.
7. **GROWING MEDIUM:**
 - 18" MINIMUM
 - SEE APPENDIX C FOR SPECIFICATION OR USE SAND/LOAM/COMPOST 3-WAY MIX.
 - FACILITY SURFACE AREA MAY BE REDUCED BY 25% WHEN GROWING MEDIA DEPTH IS INCREASED TO 30" OR MORE.
8. **VEGETATION:** FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX A.
9. **INSTALL RIVER ROCK** SPLASH PAD OVER NON WOVEN GEO TEXTILE FABRIC TO TRANSITION FROM INLETS TO GROWING MEDIUM. SIZE OF ROCK SHALL BE 1" TO 3", 4 SQUARE FEET, 6" DEEP.
10. **CHECK DAMS:** SHALL BE PLACED ACCORDING TO FACILITY DESIGN. REFER TO DETAIL ST-6100 FOR PROFILE AND SPACING.
11. **SEASONAL HIGH GROUNDWATER SEPARATION:**
 - SEPARATION DISTANCE AS REQUIRED BY CITY.

Vegetated Swale - Infiltration

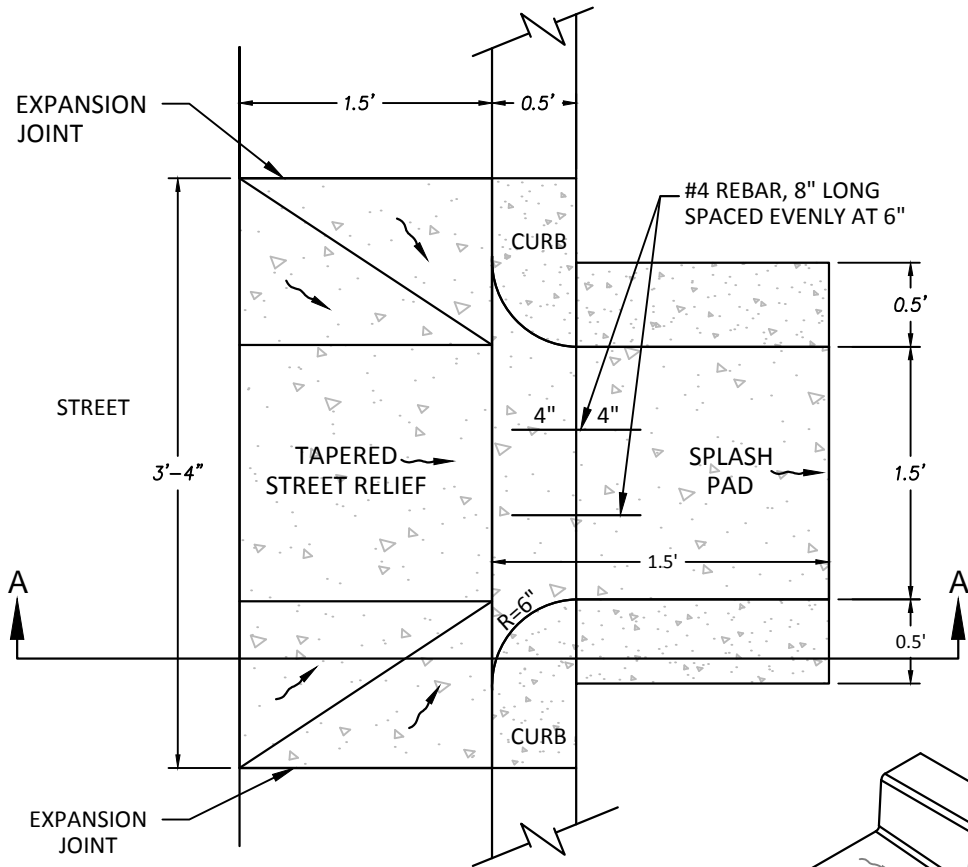
DRAWING NUMBER: ST-6050	DRAWN BY: SR	SCALE: N.T.S.
FILE NAME: ST-6050.DWG	APPROVED BY: NK	DATE: 6/3/16

CITY OF
WILSONVILLE

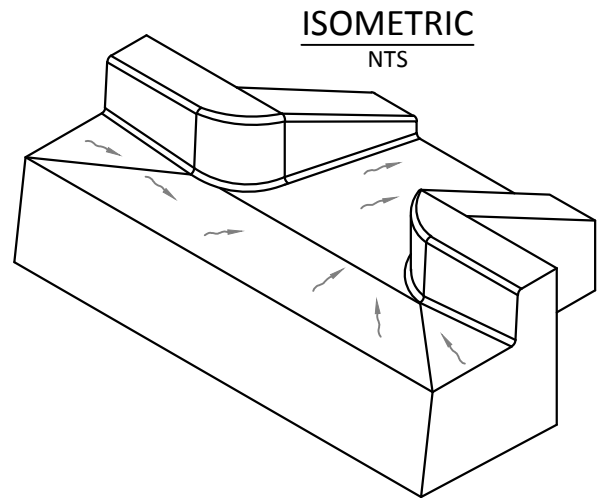


PUBLIC WORKS STANDARDS

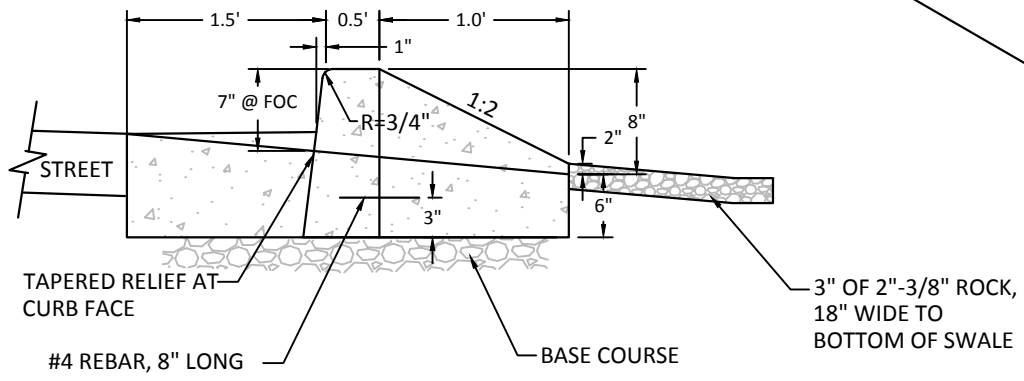
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SWALE INLET
NTS




ISOMETRIC
NTS



SECTION A-A
NTS

- Notes:
- Concrete shall be commercial mix, minimum compressive strength of 3300 PSI at 28 days and incorporate micro-reinforcement "Fibermesh 300" or approved equal.
 - Base rock to be 3/4"-0 compacted to 95% of AASHTO T-180 and shall be to sub grade, street structure, or 4" in depth, whichever is greater.
 - Base course shall be thoroughly watered immediately prior to placement of concrete when the measured or forecasted ascending air temperature is 80 degrees or greater.

Swale Inlet			CITY OF WILSONVILLE  PUBLIC WORKS STANDARDS
DRAWING NUMBER: ST-6012	DRAWN BY: SR	SCALE: N.T.S.	
FILE NAME: ST-6012.dwg	APPROVED BY: NK	DATE: 09/28/15	

Vegetated Swales Operations & Maintenance Plan

What to Look For	What to Do
Structural Components, including inlets and outlets/overflows, shall freely convey stormwater.	
Clogged inlets or outlets	-Remove sediment and debris from catch basins, trench drains, curb inlets and pipes to maintain at least 50% conveyance capacity at all times.
Cracked Drain Pipes	-Replace/seal cracks. Replace when repair is insufficient.
Check Dams	-Maintain 4 - 10 inch deep rock check dams at design intervals.
Vegetation	
Dead or strained vegetation	-Replant per original planting plan, or substitute from Appendix A. -Irrigate as needed. Mulch banks annually. DO NOT apply fertilizers, herbicides, or pesticides.
Tall Grass and Vegetation	-Cut back to 4-6 inches, 1-2 times per year. Remove cuttings
Weeds	-Manually remove weeds. Remove all plant debris.
Growing/Filter Medium, including soil and gravels, shall sustain healthy plant cover and infiltrate within 72 hours.	
Gullies	-Fill, lightly compact, and plant vegetation to disperse flow.
Erosion	-Restore or create outfalls, checkdams, or splash blocks where necessary.
Slope Sippage	-Stabilize Slope.
Ponding	-Rake, till, or amend to restore infiltration rate.

Annual Maintenance Schedule:

Summer. Make any structural repairs. Improve filter medium as needed. Clear drain. Irrigate as needed.

Fall. Replant exposed soil and replace dead plants. Remove sediment and plant debris.

Winter. Monitor infiltration/flow-through rates. Clear inlets and outlets/overflows to maintain conveyance.

Spring. Remove sediment and plant debris. Replant exposed soil and replace dead plants. Mulch.

All seasons. Weed as necessary.

Maintenance Records: Record date, description, and contractor (if applicable) for all structural repairs, landscape maintenance, and facility cleanout activities. Keep work orders and invoices on file and make available upon request of the inspector.

Access: Maintain ingress/egress to design standards.

Infiltration/Flow Control: All facilities shall drain within 72 hours. Record time/date, weather, and site conditions when ponding occurs.

Pollution Prevention: All sites shall implement best management practices to prevent hazardous or solid wastes or excessive oil and sediment from contaminating stormwater. Contact _____ for immediate assistance responding to spills. Record time/date, weather, and site conditions if site activities contaminate stormwater.

Vectors (Mosquitoes & Rodents): Stormwater facilities shall not harbor mosquito larvae or rats that pose a threat to public health or that undermine the facility structure. Monitor standing water for small wiggling sticks perpendicular to the water's surface.

Note holes/burrows in and around facilities. Call Clackamas County Vector Control for immediate assistance to eradicate vectors. Record time/date, weather, and site conditions when vector activity observed.

Vegetated Swale O & M Plan

DRAWING NUMBER: ST-6055

DRAWN BY: SR

SCALE: N.T.S.

FILE NAME: ST-6055.DWG

APPROVED BY: NK

DATE: 10/8/14

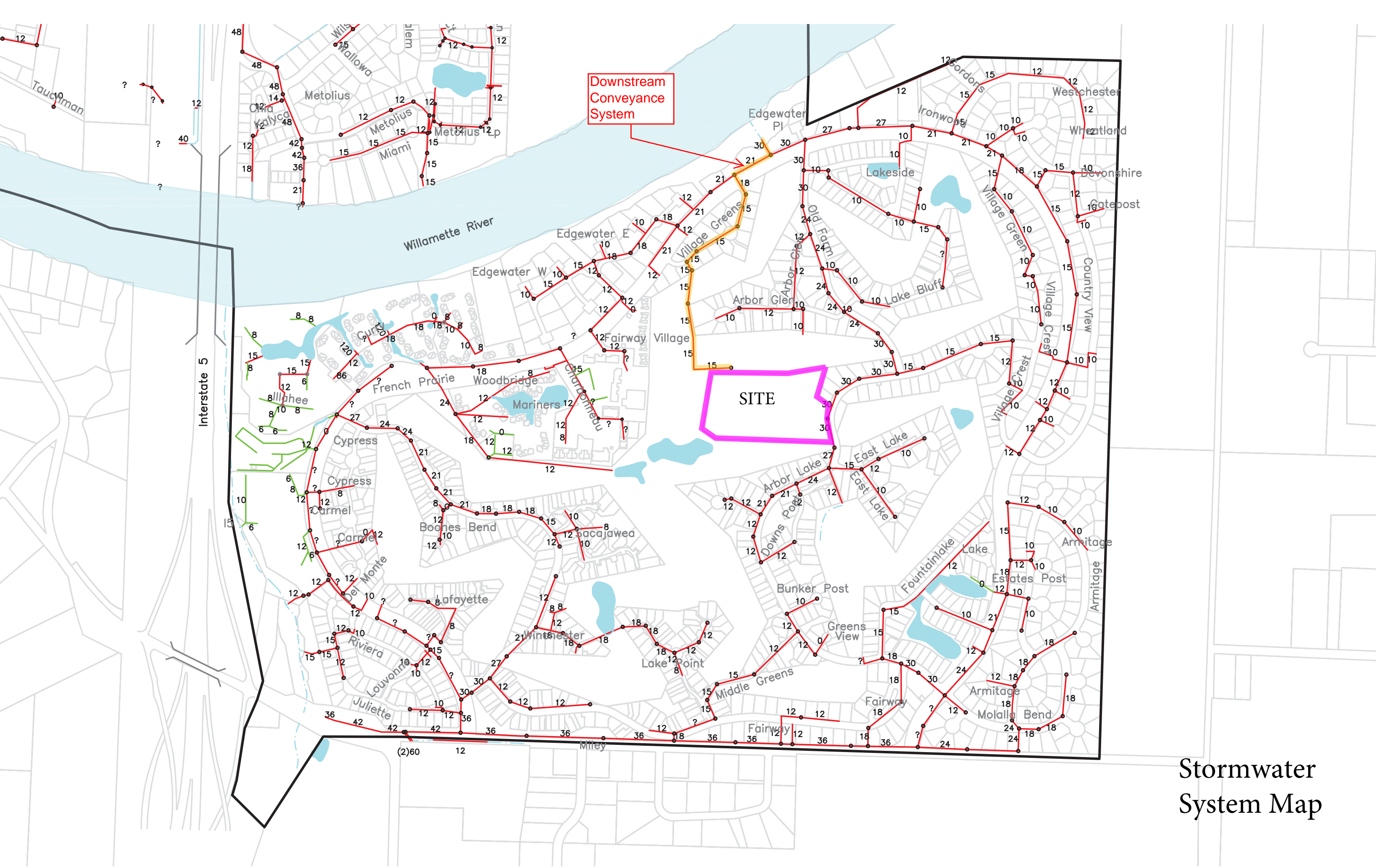
CITY OF
WILSONVILLE



PUBLIC WORKS STANDARDS

APPENDIX 6-1

DOWNSTREAM CONVEYANCE
SYSTEMS PLAN



Downstream
Conveyance
System

SITE

Stormwater
System Map

APPENDIX 7-1

SOIL INFORMATION FROM THE USDA
SOIL SURVEY OF CLACKAMAS
COUNTY, OREGON



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Clackamas County Area, Oregon**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

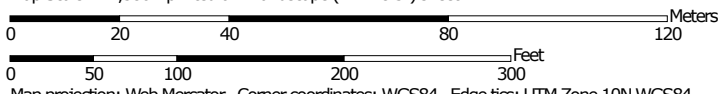
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:1,380 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84




MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot


 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clackamas County Area, Oregon
 Survey Area Data: Version 10, Sep 18, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 8, 2010—Sep 4, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Clackamas County Area, Oregon (OR610)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
53B	Latourell loam, 3 to 8 percent slopes	3.8	44.7%
71A	Quatama loam, 0 to 3 percent slopes	4.7	55.3%
Totals for Area of Interest		8.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If

Custom Soil Resource Report

intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Clackamas County Area, Oregon

53B—Latourell loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 225k
Elevation: 50 to 400 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Latourell and similar soils: 90 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Latourell

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Stratified glaciolacustrine deposits

Typical profile

H1 - 0 to 15 inches: loam
H2 - 15 to 48 inches: loam
H3 - 48 to 60 inches: gravelly sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B

71A—Quatama loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 226p
Elevation: 100 to 1,400 feet

Custom Soil Resource Report

Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Quatama and similar soils: 85 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Quatama

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Stratified glaciolacustrine deposits

Typical profile

H1 - 0 to 18 inches: loam
H2 - 18 to 38 inches: clay loam
H3 - 38 to 60 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Other vegetative classification: Moderately Well Drained < 15% Slopes (G002XY004OR)

Minor Components

Delena

Percent of map unit: 4 percent
Landform: Terraces, hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Interfluve, riser
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Poorly Drained (G002XY006OR)

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Custom Soil Resource Report

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

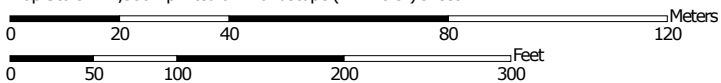
Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report Map—Hydrologic Soil Group




Map Scale: 1:1,380 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84











MAP LEGEND









Area of Interest (AOI)
 Area of Interest (AOI)

Soils





Soil Rating Polygons

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available


Soil Rating Lines

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available






Soil Rating Points

-  A
-  A/D
-  B
-  B/D


Water Features

-  Streams and Canals





Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

-  Aerial Photography

Other Legend Items:

-  C
-  C/D
-  D
-  Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clackamas County Area, Oregon
 Survey Area Data: Version 10, Sep 18, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 8, 2010—Sep 4, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Clackamas County Area, Oregon (OR610)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
53B	Latourell loam, 3 to 8 percent slopes	B	3.8	44.7%
71A	Quatama loam, 0 to 3 percent slopes	C	4.7	55.3%
Totals for Area of Interest			8.5	100.0%

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

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American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

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Exhibit L: 30-Foot-Wide Driveway Approval

Joey Shearer

From: Adams, Steve <adams@ci.wilsonville.or.us>
Sent: Friday, August 19, 2016 1:46 PM
To: Joey Shearer; Pauly, Daniel
Cc: Monty Hurley; Matt Gillette
Subject: RE: Charbonneau Subdivision - Driveway Widths

Categories: Filed by Newforma

Joey,

Sometimes the local HOA limits driveway widths. Is this area within one of the established HOA's in Charbonneau? If not then engineering is OK with the 30-ft driveway. If the developer plans to form their own HOA they may want to consider adding language to the CCR's addressing driveway widths.

-Steve

Steve R. Adams, P.E.
Development Engineering Manager
City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, OR 97070

ph: 503-682-4960
email: adams@ci.wilsonville.or.us

PUBLIC RECORDS LAW DISCLOSURE: Messages to and from this e-mail address is a public record of the City of Wilsonville and may be subject to public disclosure. This e-mail is subject to the State Retention Schedule.

From: Joey Shearer [mailto:shearerj@aks-eng.com]
Sent: Friday, August 19, 2016 1:43 PM
To: Adams, Steve; Pauly, Daniel
Cc: Monty Hurley; Matt Gillette
Subject: Charbonneau Subdivision - Driveway Widths

Steve/Dan,

I did not see this addressed in the Development Code, so I'm looking for some clarification. Pahlisch Homes is planning for 19 of the 40 homes to have standard 2-car garages with max 24' wide driveways. They are also looking at 21 of the 40 homes having 3-car garages and/or golf cart bays. This would kick the driveway width up to 30' for these 21 homes.

I found the [Residential Driveway drawing in the Public Works Standards](#), which states a 30' maximum width can be approved on a case-by-case basis.

Is a 30' driveway width for 21 of the planned homes acceptable? Are there any other related standards or criteria we should be aware of?

Thank you,

Joey Shearer



AKS ENGINEERING & FORESTRY, LLC

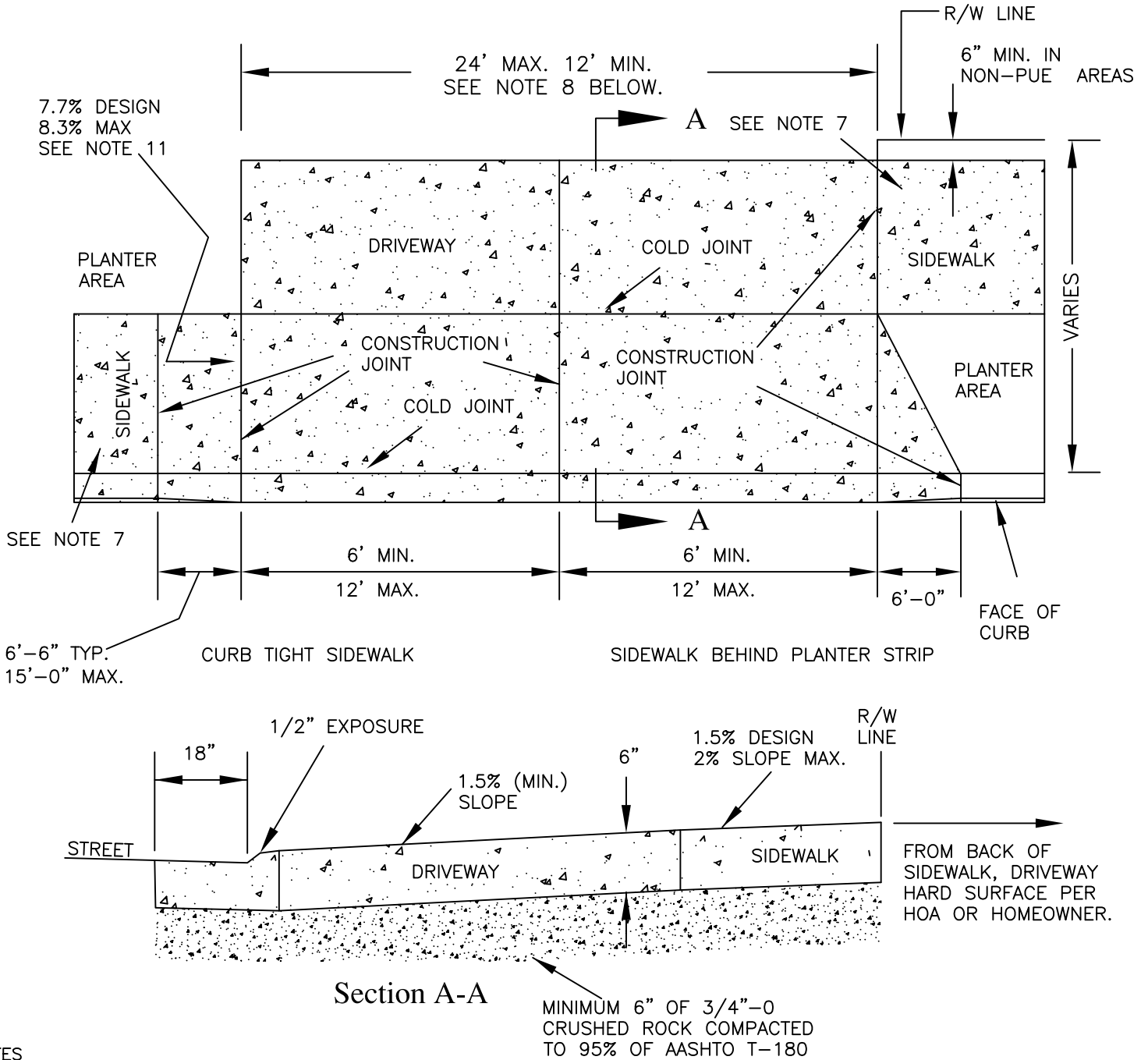
12965 SW Herman Road, Suite 100 | Tualatin, OR 97062

P: 503.563.6151 Ext. 273 | F: 503.563.6152 | www.aks-eng.com | shearerj@aks-eng.com

Offices in: Tualatin, OR | Salem-Keizer, OR | Vancouver, WA

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This Detail Drawing may not be altered or changed in any manner except by the City Engineer. It is the responsibility of the user to acquire the most current version.



NOTES

1. DRIVEWAYS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH "PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY" (PROWAG) JULY, 2011 EDITION.
2. CONCRETE SHALL BE COMMERCIAL MIX, MIN. COMPRESSIVE STRENGTH OF 3300 PSI AT 28 DAYS.
3. BASE COURSE SHALL BE THOROUGHLY WATERED IMMEDIATELY PRIOR TO PLACEMENT OF CONCRETE WHEN THE MEASURED OR FORECASTED ASCENDING AIR TEMPERATURE IS 80 DEGREES OR GREATER.
4. CURB JOINT SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG THE BACK OF CURB.
5. CONTRACTION JOINT SPACING SHALL NOT EXCEED 12 FEET.
6. USE EXISTING CURB EXPANSION JOINT OR SAW CUT AND PLACE COLD JOINT.
7. SIDEWALK THICKNESS SHALL BE 6 INCHES MINIMUM AND EXTEND TO AT LEAST ONE PANEL BEYOND DRIVEWAY APRON.
8. 30 FOOT MAXIMUM DRIVEWAY WIDTHS FOR 3-CAR GARAGES SHALL BE APPROVED ON A CASE-BY-CASE BASIS BY CITY'S AUTHORIZED REPRESENTATIVE.
9. DRIVEWAY FINISH SHALL MATCH FINISH OF THE CONCRETE SIDEWALK, PER DETAIL RD-1075.
10. IF NO EXISTING SIDEWALKS, FROM BACK OF CURB, DRIVEWAY HARD SURFACE PER HOA OR HOMEOWNER.
11. ON STEEP SLOPES, SIDEWALK RAMPS SHALL HAVE A MAXIMUM SLOPE OF 8.3% OR MAXIMUM LENGTH OF 15 FEET CONSTRUCTED AT A CONSTANT SLOPE.
12. THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE DESIGNED AT 1.5% AND NOT EXCEED 2%.

Residential Driveway

CITY OF
WILSONVILLE



DRAWING NUMBER: RD-1090

DRAWN BY: SR

SCALE: N.T.S.

FILE NAME: RD-1090.DWG

APPROVED BY: NK

DATE: 4/2/14

PUBLIC WORKS STANDARDS



Exhibit M: Preliminary Title Report



Fidelity National Title
Company of Oregon

PRELIMINARY REPORT

In response to the application for a policy of title insurance referenced herein Fidelity National Title Company of Oregon hereby reports that it is prepared to issue, or cause to be issued, as of the specified date, a policy or policies of title insurance describing the land and the estate or interest hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.

The printed Exceptions and Exclusions from the coverage of said policy or policies are set forth in Exhibit One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby.

The policy(s) of title insurance to be issued hereunder will be policy(s) of Fidelity National Title Insurance Company, a/an California corporation.

Please read the exceptions shown or referred to herein and the Exceptions and Exclusions set forth in Exhibit One of this report carefully. The Exceptions and Exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

This preliminary report is for the exclusive use of the parties to the contemplated transaction, and the Company does not have any liability to any third parties nor any liability until the full premium is paid and a policy is issued. Until all necessary documents are placed of record, the Company reserves the right to amend or supplement this preliminary report.

Countersigned



Fidelity National Title®

Company of Oregon

5400 SW Meadows Road, Suite 100, Lake Oswego, OR 97035
(503)684-9236 FAX (503)684-7274

PRELIMINARY REPORT

ESCROW OFFICER: Samuel Goid
TITLE OFFICER: David Boutin

ORDER NO.: 45141613041

TO: Fidelity National Title Company of Oregon
5400 SW Meadows Road, Suite 100
Lake Oswego, OR 97035

ESCROW LICENSE NO.: 850600361

OWNER/SELLER: Charbonneau Golf Club, Inc.

BUYER/BORROWER: Pahlisch Homes, Inc.

PROPERTY ADDRESS: 7420 SW Arbor Lake Drive, Wilsonville, OR 97070

EFFECTIVE DATE: May 23, 2016, 12:00 AM

1. THE POLICY AND ENDORSEMENTS TO BE ISSUED AND THE RELATED CHARGES ARE:

	<u>AMOUNT</u>	<u>PREMIUM</u>
ALTA Owner's Policy 2006	\$ 4,250,000.00	\$ 6,975.00
Government Lien Search		\$ 120.00

2. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

A Fee

3. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

Charbonneau Golf Club, Inc., an Oregon corporation

4. THE LAND REFERRED TO IN THIS REPORT IS SITUATED IN THE CITY OF WILSONVILLE, COUNTY OF CLACKAMAS, STATE OF OREGON, AND IS DESCRIBED AS FOLLOWS:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"
Legal Description

Parcel I:

Lots N8, N9 and N10, CHARBONNEAU IX, THE VILLAGE AT WILSONVILLE, in the City of Wilsonville, County of Clackamas and State of Oregon, EXCEPT that part of Lot N8, described in Deed to John H. Link, et ux, recorded April 2, 1987, as Fee No. 87 14582

Parcel II:

A tract of land located in a portion of the George L. Curry Donation Land Claim No. 43 in the Southeast one-quarter of the Southwest one-quarter and the Southwest one-quarter of the Southeast one-quarter of Section 24, Township 3 South, Range 1 West of the Willamette Meridian, City of Wilsonville, County of Clackamas and State of Oregon, and more fully described as follows:

Beginning at a one inch iron pipe at the Northwest corner of Lot N8 of , CHARBONNEAU IX, THE VILLAGE AT WILSONVILLE, a subdivision recorded 2 November 1979 in Book 80, Page 4, Plat No. 2462, Clackamas County Record of Town Plats, said point being also an angle point of said plat; thence South 79° 57' 13" West, 259.17 feet; thence North 89° 53' 02" West, 494.00 feet; thence South 5° 59' 06" West, 374.04 feet; thence South 42° 09' 28" East, 99.82 feet; thence North 85° 52' 59" East 757.47, feet to the West right-of-way line of Arbor Lake Drive as platted by said CHARBONNEAU IX; thence North 19° 04' 27" West along said "CHARBONNEAU IX 16.13 feet to a one inch iron pipe; thence on a 282.00 foot radius curve right (long chord bears North 1° 18' 39" West 172.07 feet) along said CHARBONNEAU IX an arc distance of 174.85 feet to a one inch iron pipe at the most Southerly corner of Lot N10 of said CHARBONNEAU IX; thence North 54° 00' 00" West along said Lot N10 of said CHARBONNEAU IX 92.05 feet to a one inch iron pipe at the most Westerly corner of said Lot N10; thence North 14° 14' 43" East along Lots N10, N9 and N8 of said CHARBONNEAU IX 200.62 feet to the true point of beginning.

AS OF THE DATE OF THIS REPORT, ITEMS TO BE CONSIDERED AND EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN THE POLICY FORM WOULD BE AS FOLLOWS:

GENERAL EXCEPTIONS:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests or claims, which are not shown by the Public Records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.
3. Easements, or claims of easement, which are not shown by the Public Records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
4. Any encroachment (of existing improvements located on the Land onto adjoining land or of existing improvements located on adjoining land onto the subject Land), encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the subject Land.
5. Any lien or right to a lien for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the Public Records.

SPECIFIC ITEMS AND EXCEPTIONS:

6. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2016-17.
7. The Land has been classified as Open Space, as disclosed by the tax roll. If the Land becomes disqualified, said Land may be subject to additional taxes and/or penalties.
Affects Parcel II
8. City Liens, if any, in favor of the City of Wilsonville. None found as of June 2, 2016.
9. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: The Pacific Telephone and Telegraph Company
Purpose: Right of way
Recording Date: May 1, 1913
Recording No: Book 5, Page 353, **Miscellaneous Records**
Recording Date: May 1, 1913
Recording No.: Book 5, Page 354
Recording Date: September 11, 1913
Recording No.: Book 5, Page 437
Affects: Exact location not disclosed

The Company is in the process of ordering the above three documents. When the requested information is available, an amended report may be issued.

10. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: The Pacific Telephone and Telegraph Company
Purpose: Underground utilities
Recording Date: January 1, 1929
Recording No: Book 207, Page 577

Affects: Parcel II

Amendment(s)/Modification(s) of said easement

Recording Date: June 23, 1969
Recording No: 69011578

11. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Portland General Electric Company
Purpose: Electrical and telephone transmission lines and all appurtenances thereto
Recording Date: June 29, 1950
Recording No: Book 433, Page 42
Affects: Parcel II

12. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: April 6, 1977
Recording No: 77012613
Affects Parcel I

Amendment(s)/Modification(s) of said covenants, conditions and restrictions

Recording Date: April 10, 1978
Recording No: 78014485

Amendment(s)/Modification(s) of said covenants, conditions and restrictions

Recording Date: August 8, 1979
Recording No: 79034184

13. Liens and assessments, if any, by the Charbonneau Country Club, Inc.

14. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: August 8, 1979
Recording No: 79034184
Affects Parcel I

15. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: November 27, 1984
Recording No: 84041558
Affects Parcel I

16. Please be advised that our search did not disclose any open Deeds of Trust of record. If you should have knowledge of any outstanding obligation, please contact the Title Department immediately for further review prior to closing.
17. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below.

Name of Corporation: Charbonnau Golf Club, Inc.

- a) A Copy of the corporation By-laws and Articles of Incorporation
- b) An original or certified copy of a resolution authorizing the transaction contemplated herein.
- c) If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

ADDITIONAL REQUIREMENTS/NOTES:

- A. Note: Property taxes for the fiscal year shown below are paid in full.

Fiscal Year: 2015-16
Amount: \$350.39
Levy Code: 086-014
Account No.: 00824781
Map No.: 31W24DC10300
Affects Lot N8 of Parcel I

- B. Note: Property taxes for the fiscal year shown below are paid in full.

Fiscal Year: 2015-16
Amount: \$233.54
Levy Code: 086-014
Account No.: 00824790
Map No.: 31W24DC10400
Affects Lot N9 of Parcel I

- C. Note: Property taxes for the fiscal year shown below are paid in full.

Fiscal Year: 2015-16
Amount: \$233.54
Levy Code: 086-014
Account No.: 00824807
Map No.: 31W24DC10500
Affects Lot N10 of Parcel I

D. Note: Property taxes for the fiscal year shown below are paid in full.

Fiscal Year: 2015-16
Amount: \$10,873.44
Levy Code: 086-014
Account No.: 01427156
Map No.: 31W25 00325
Affects Parcel II

Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.

In addition to the standard policy exceptions, the exceptions enumerated above shall appear on the final 2006 ALTA Policy unless removed prior to issuance.

- E. Note: No utility search has been made or will be made for water, sewer or storm drainage charges unless the City/Service District claims them as liens (i.e. foreclosable) and reflects them on its lien docket as of the date of closing. Buyers should check with the appropriate city bureau or water service district and obtain a billing cutoff. Such charges must be adjusted outside of escrow.
- F. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below.

Name of Corporation: Pahlisch Homes, Inc.

- a) A Copy of the corporation By-laws and Articles of Incorporation
- b) An original or certified copy of a resolution authorizing the transaction contemplated herein.
- c) If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

- G. Note: There are NO conveyances affecting said Land recorded within 24 months of the date of this report.
- H. Note: There are no matters against the party(ies) shown below which would appear as exceptions to coverage in a title insurance product:

Parties: Pahlisch Homes, Inc., an Oregon corporation

- I. Note: Effective January 1, 2008, Oregon law (ORS 314.258) mandates withholding of Oregon income taxes from sellers who do not continue to be Oregon residents or qualify for an exemption. Please contact your Escrow Closer for further information.

J. Recording Charge (Per Document) is the following:

County	First Page	Each Additional Page
Multnomah	\$46.00	\$5.00
Washington	\$41.00	\$5.00
Clackamas	\$53.00	\$5.00
Yamhill	\$41.00	\$5.00

Note: When possible the company will record electronically. An additional charge of \$5.00 applies to each document that is recorded electronically.

K. THE FOLLOWING NOTICE IS REQUIRED BY STATE LAW: YOU WILL BE REVIEWING, APPROVING AND SIGNING IMPORTANT DOCUMENTS AT CLOSING. LEGAL CONSEQUENCES FOLLOW FROM THE SELECTION AND USE OF THESE DOCUMENTS. YOU MAY CONSULT AN ATTORNEY ABOUT THESE DOCUMENTS. YOU SHOULD CONSULT AN ATTORNEY IF YOU HAVE QUESTIONS OR CONCERNS ABOUT THE TRANSACTION OR ABOUT THE DOCUMENTS. IF YOU WISH TO REVIEW TRANSACTION DOCUMENTS THAT YOU HAVE NOT SEEN, PLEASE CONTACT THE ESCROW AGENT.

L. Note: This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances or acreage shown thereon.

EXHIBIT ONE

2006 AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (06-17-06) EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses that arise by reason of:

- (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning) restricting, regulating, prohibiting or relating to
 - the occupancy, use, or enjoyment of the Land;
 - the character, dimensions or location of any improvement erected on the land;
 - the subdivision of land; or
 - environmental protection;or the effect of any violation of these laws, ordinances or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
- Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
- Defects, liens, encumbrances, adverse claims, or other matters
 - created, suffered, assumed or agreed to by the Insured Claimant;
 - not known to the Company, not recorded in the Public Records at Date of Policy, but known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;

- resulting in no loss or damage to the Insured Claimant;
 - attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
 - resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
- Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with the applicable doing-business laws of the state where the Land is situated.
 - Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
 - Any claim, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - a fraudulent conveyance or fraudulent transfer, or
 - a preferential transfer for any reason not stated in the Covered Risk 13(b) of this policy.
 - Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage.

SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

- Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
- Facts, rights, interests or claims which are not shown by the Public Records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.
- Easements, or claims of easement, not shown by the Public Records; reservations or exceptions in patents or in Acts authorizing the issuance thereof, water rights, claims or title to water.
- Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land. The term "encroachment" includes encroachments of existing improvements located on the Land onto adjoining land, and encroachments onto the Land of existing improvements located on adjoining land.
- Any lien for services, labor or material heretofore or hereafter furnished, or for contributions due to the State of Oregon for unemployment compensation or worker's compensation, imposed by law and not shown by the Public Records.

2006 AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (06-17-06) EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses that arise by reason of:

- (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning) restricting, regulating, prohibiting or relating to
 - the occupancy, use, or enjoyment of the Land;
 - the character, dimensions or location of any improvement erected on the land;
 - the subdivision of land; or
 - environmental protection;or the effect of any violation of these laws, ordinances or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
- Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
- Defects, liens, encumbrances, adverse claims, or other matters
 - created, suffered, assumed or agreed to by the Insured Claimant;
 - not known to the Company, not recorded in the Public Records at Date of Policy, but known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;

- resulting in no loss or damage to the Insured Claimant;
 - attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
- Any claim, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - a fraudulent conveyance or fraudulent transfer, or
 - a preferential transfer for any reason not stated in the Covered Risk 9 of this policy.
 - Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage.

SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

- Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
- Facts, rights, interests or claims which are not shown by the Public Records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.
- Easements, or claims of easement, not shown by the Public Records; reservations or exceptions in patents or in Acts authorizing the issuance thereof, water rights, claims or title to water.
- Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land. The term "encroachment" includes encroachments of existing improvements located on the Land onto adjoining land, and encroachments onto the Land of existing improvements located on adjoining land.
- Any lien for services, labor or material heretofore or hereafter furnished, or for contributions due to the State of Oregon for unemployment compensation or worker's compensation, imposed by law and not shown by the Public Records.

FIDELITY NATIONAL FINANCIAL, INC.
PRIVACY NOTICE
Effective: April 1, 2016

Order No.: 45141613041-SG

At Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF", "our" or "we"), we value the privacy of our customers. This Privacy Notice explains how we collect, use, and protect your information and explains the choices you have regarding that information. A summary of our privacy practices is below. We also encourage you to read the complete Privacy Notice following the summary.

<p><u>Types of Information Collected.</u> You may provide us with certain personal information, like your contact information, social security number (SSN), driver's license, other government ID numbers, and/or financial information. We may also receive information from your Internet browser, computer and/or mobile device.</p>	<p><u>How Information is Collected.</u> We may collect personal information directly from you from applications, forms, or communications we receive from you, or from other sources on your behalf, in connection with our provision of products or services to you. We may also collect browsing information from your Internet browser, computer, mobile device or similar equipment. This browsing information is generic and reveals nothing personal about the user.</p>
<p><u>Use of Your Information.</u> We may use your information to provide products and services to you (or someone on your behalf), to improve our products and services, and to communicate with you about our products and services. We do not give or sell your personal information to parties outside of FNF for their use to market their products or services to you.</p>	<p><u>Security Of Your Information.</u> We utilize a combination of security technologies, procedures and safeguards to help protect your information from unauthorized access, use and/or disclosure. We communicate to our employees about the need to protect personal information.</p>
<p><u>Choices With Your Information.</u> Your decision to submit personal information is entirely up to you. You can opt-out of certain disclosures or use of your information or choose to not provide any personal information to us.</p>	<p><u>When We Share Information.</u> We may disclose your information to third parties providing you products and services on our behalf, law enforcement agencies or governmental authorities, as required by law, and to parties with whom you authorize us to share your information.</p>
<p><u>Information From Children.</u> We do not knowingly collect information from children under the age of thirteen (13), and our websites are not intended to attract children.</p>	<p><u>Privacy Outside the Website.</u> We are not responsible for the privacy practices of third parties, even if our website links to those parties' websites.</p>
<p><u>Access and Correction.</u> If you desire to see the information collected about you and/or correct any inaccuracies, please contact us in the manner specified in this Privacy Notice.</p>	<p><u>Do Not Track Disclosures.</u> We do not recognize "do not track" requests from Internet browsers and similar devices.</p>
<p><u>The California Online Privacy Protection Act.</u> Certain FNF websites collect information on behalf of mortgage loan servicers. The mortgage loan servicer is responsible for taking action or making changes to any consumer information submitted through those websites.</p>	<p><u>International Use.</u> By providing us with your information, you consent to the transfer, processing and storage of such information outside your country of residence, as well as the fact that we will handle such information consistent with this Privacy Notice.</p>
<p><u>Your Consent To This Privacy Notice.</u> By submitting information to us and using our websites, you are accepting and agreeing to the terms of this Privacy Notice.</p>	<p><u>Contact FNF.</u> If you have questions or wish to contact us regarding this Privacy Notice, please use the contact information provided at the end of this Privacy Notice.</p>

FIDELITY NATIONAL FINANCIAL, INC. PRIVACY NOTICE

FNF respects and is committed to protecting your privacy. We pledge to take reasonable steps to protect your Personal Information (as defined herein) and to ensure your information is used in compliance with this Privacy Notice.

This Privacy Notice is only in effect for information collected and/or owned by or on behalf of FNF, including collection through any FNF website or online services offered by FNF (collectively, the "Website"), as well as any information collected offline (e.g., paper documents). The provision of this Privacy Notice to you does not create any express or implied relationship, nor create any express or implied duty or other obligation, between FNF and you.

Types of Information Collected

We may collect two (2) types of information: Personal Information and Browsing Information.

Personal Information. The types of personal information FNF collects may include, but are not limited to:

- contact information (e.g., name, address, phone number, email address);
- social security number (SSN), driver's license, and other government ID numbers; and
- financial account or loan information.

Browsing Information. The types of browsing information FNF collects may include, but are not limited to:

- Internet Protocol (or IP) address or device ID/UDID, protocol and sequence information;
- browser language;
- browser type;
- domain name system requests;
- browsing history;
- number of clicks;
- hypertext transfer protocol headers; and
- application client and server banners.

How Information is Collected

In the course of our business, we may collect *Personal Information* about you from the following sources:

- applications or other forms we receive from you or your authorized representative, whether electronic or paper;
- communications to us from you or others;
- information about your transactions with, or services performed by, us, our affiliates or others; and
- information from consumer or other reporting agencies and public records that we either obtain directly from those entities, or from our affiliates or others.

We may collect *Browsing Information* from you as follows:

- **Browser Log Files.** Our servers automatically log, collect and record certain Browsing Information about each visitor to the Website. The Browsing Information includes only generic information and reveals nothing personal about the user.
- **Cookies.** From time to time, FNF may send a "cookie" to your computer when you visit the Website. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. When you visit the Website again, the cookie allows the Website to recognize your computer, with the goal of providing an optimized user experience. Cookies may store user preferences and other information. You can choose not to accept cookies by changing the settings of your Internet browser. If you choose not to accept cookies, then some functions of the Website may not work as intended.

Use of Collected Information

Information collected by FNF is used for three (3) main purposes:

- To provide products and services to you, or to one or more third party service providers who are performing services on your behalf or in connection with a transaction involving you;
- To improve our products and services; and
- To communicate with you and to inform you about FNF's products and services.

When We Share Information

We may share your Personal Information (excluding information we receive from consumer or other credit reporting agencies) and Browsing Information with certain individuals and companies, as permitted by law, without first obtaining your authorization. Such disclosures may include, without limitation, the following:

- to agents, representatives, or others to provide you with services or products you have requested, and to enable us to detect or prevent criminal activity, fraud, or material misrepresentation or nondisclosure;
- to third-party contractors or service providers who provide services or perform other functions on our behalf;
- to law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoenas or court orders; and/or
- to other parties authorized to receive the information in connection with services provided to you or a transaction involving you.

We may disclose Personal Information and/or Browsing Information when required by law or in the good-faith belief that such disclosure is necessary to:

- comply with a legal process or applicable laws;
- enforce this Privacy Notice;
- investigate or respond to claims that any information provided by you violates the rights of a third party; or
- protect the rights, property or personal safety of FNF, its users or the public.

We make efforts to ensure third party contractors and service providers who provide services or perform functions on our behalf protect your information. We limit use of your information to the purposes for which the information was provided. We do not give or sell your information to third parties for their own direct marketing use.

We reserve the right to transfer your Personal Information, Browsing Information, as well as any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of our bankruptcy, reorganization, insolvency, receivership or an assignment for the benefit of creditors. You expressly agree and consent to the use and/or transfer of this information in connection with any of the above described proceedings. We cannot and will not be responsible for any breach of security by any third party or for any actions of any third party that receives any of the information that is disclosed to us.

Choices With Your Information

Whether you submit your information to FNF is entirely up to you. If you decide not to submit your information, FNF may not be able to provide certain products or services to you. You may choose to prevent FNF from using your information under certain circumstances ("opt out"). You may opt out of receiving communications from us about our products and/or services.

Security And Retention Of Information

FNF is committed to protecting the information you share with us and utilizes a combination of security technologies, procedures and safeguards to help protect it from unauthorized access, use and/or disclosure. FNF trains its employees on privacy practices and on FNF's privacy and information security policies. FNF works hard to retain information related to you only as long as reasonably necessary for business and/or legal purposes.

Information From Children

The Website is meant for adults. The Website is not intended or designed to attract children under the age of thirteen (13). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

Access and Correction

To access your Personal Information in the possession of FNF and correct inaccuracies, please contact us by email at privacy@fnf.com or by mail at:

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

Your Consent To This Privacy Notice

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of information by FNF in compliance with this Privacy Notice. We reserve the right to make changes to this Privacy Notice. If we change this Privacy Notice, we will post the revised version on the Website.

Privacy Outside the Website

The Website may contain links to other websites, including links to websites of third party service providers. FNF is not and cannot be responsible for the privacy practices or the content of any of those other websites.

International Users

Because FNF's headquarters is located in the United States, we may transfer your Personal Information and/or Browsing Information to the United States. By using our website and providing us with your Personal Information and/or Browsing Information, you understand and consent to the transfer, processing and storage of such information outside your country of residence, as well as the fact that we will handle such information consistent with this Privacy Notice.

Do Not Track Disclosures

Currently, our policy is that we do not recognize "do not track" requests from Internet browsers and similar devices.

The California Online Privacy Protection Act

For some websites which FNF or one of its companies owns, such as the Customer CareNet ("CCN"), FNF is acting as a third party service provider to a mortgage loan servicer. In those instances, we may collect certain information on behalf of that mortgage loan servicer, including:

- first and last name;
- property address;
- user name and password;
- loan number;
- social security number - masked upon entry;
- email address;
- security questions and answers; and
- IP address.

The information you submit is then transferred to your mortgage loan servicer by way of CCN. **The mortgage loan servicer is responsible for taking action or making changes to any consumer information submitted through this website. For example, if you believe that your payment or user information is incorrect, you must contact your mortgage loan servicer.**

CCN does not share consumer information with third parties, other than those with which the mortgage loan servicer has contracted to interface with the CCN application. All sections of this Privacy Notice apply to your interaction with CCN, except for the sections titled Choices with Your Information, and Access and Correction. If you have questions regarding the choices you have with regard to your personal information or how to access or correct your personal information, contact your mortgage loan servicer.

Contact FNF

Please send questions and/or comments related to this Privacy Notice by email at privacy@fnf.com or by mail at:

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

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EFFECTIVE AS OF APRIL 1, 2016

STATUTORY WARRANTY DEED

191-617

~~\$20.00~~
\$105.00

Willamette Factors, Inc., a corporation duly organized and existing under the laws of the State of Oregon ("Grantor"), in consideration of the sum of Two Million Four Hundred Eighty-Four Thousand Two Hundred Twenty-Seven and No/100 Dollars (\$2,484,227.00) (the true consideration), which consideration includes value paid for personal property, conveys and warrants to Charbonneau Golf Club, Inc., an Oregon corporation ("Grantee"), the real property situated in Clackamas County, Oregon, described on Exhibit A attached hereto and incorporated herein by this reference (the "Property") free of encumbrances, except as described on Exhibit B attached hereto and incorporated herein by this reference.

The following conditions and agreements apply:

(1) Parcels 6 and 7 herein granted shall be continuously operated by Grantee and Grantee's permitted successors and assigns as a golf practice facility commonly known as a "driving range" and not developed or used for any other purpose for a period of 15 years from the date of this Deed (the "Parcels 6 and 7 Exclusive Use Period"). If Grantee develops or uses all or any portion of Parcels 6 and 7 for any other purpose at any time within the Parcels 6 and 7 Exclusive Use Period and such development or use shall continue for fifteen (15) days, Grantor shall have the right, at any time within sixty (60) days of Grantor's actual notice of a violation, to send Grantee notice that the foregoing restriction has been violated and, unless such violation is cured by Grantee within ten (10) days after such notice is given (the "Cure Period") Grantor shall have the right to repurchase Parcels 6 and 7 (the "Repurchase Right") on the terms and conditions set forth in the paragraph below entitled "Repurchase Provisions." The Cure Period shall be extended solely for the benefit of a lender approved in writing by Grantor for a period of thirty (30) days or such longer period as the lender may reasonably require, so long as the lender is diligently attempting to effect the cure by restoring Parcels 6 and 7 to use as a driving range. Grantor's Repurchase Right shall be senior to, and have priority over, all liens, encumbrances and interests in Parcels 6 and 7 which attach after recordation of this deed. Grantor shall have the right to terminate the foregoing restriction requiring Parcels 6 and 7 to be operated as a driving range by written document recorded in the deed records; and (2) Parcels 1 through 5 and Parcel 8 herein granted shall be continuously operated by Grantee and its permitted successors and assigns as a "golf course" and not developed or used for any other purpose for a period of 30 years from the date of this Deed (the "Parcels 1 through 5 and Parcel 8 Exclusive Use Period"). If Parcels 1 through 5 and Parcel 8 are used or developed for purposes other than a golf course at any time within 30 years from the date of

Recorded by TICOR TITLE

1 - STATUTORY WARRANTY DEED

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this Deed, the interest of the Grantee shall automatically terminate and Parcels 1 through 5 and Parcel 8 shall revert to Grantor; provided, however, a lender approved in writing by Grantor shall have a right to cure a violation of the deed restriction on Parcels 1 through 5 and Parcel 8; the cure period afforded by an approved lender will be thirty (30) days or such longer period as the lender may reasonably require, so long as the lender is diligently attempting to effect the cure by restoring Parcels 1 through 5 and Parcel 8 to use as a golf course.

REPURCHASE PROVISIONS

The terms and conditions of Grantor's Repurchase Right as to Parcels 6 and 7 are as follows:

- (1) The Repurchase Right shall be exercisable immediately after expiration of the Cure Period and at any time within one (1) year thereafter, regardless of whether such one (1) year period extends beyond the Exclusive Use Period;
- (2) The Repurchase Right shall be exercisable upon written notice of Grantor's election to exercise the Repurchase Right.
- (3) The purchase price for Parcels 6 and 7 upon exercise of the Repurchase Right shall be \$1,000,000 (the "Repurchase Price"). The entire Repurchase Price shall be paid in cash by Grantor at closing;
- (4) The repurchase shall close in escrow within sixty (60) days after Grantor's notice of election to exercise the Repurchase Right, at a title insurance company selected by Grantor. Grantee shall furnish Grantor with a standard ALTA owner's policy of title insurance for Parcels 6 and 7 (free and clear of all matters except those matters existing immediately before the conveyance of Parcels 6 and 7 to Grantee) in the amount of the Repurchase Price, the cost of which shall be paid by Grantee. All escrow fees and recording fees in connection with the repurchase shall be paid by Grantee. Real property taxes shall be prorated as of the date of closing;
- (5) At closing of the repurchase, Grantee shall convey Parcels 6 and 7 to Grantor by special warranty deed, free and clear of all taxes, assessments, liens, claims, encumbrances and other interests except those existing prior to recordation of this deed;

(6) Because Parcels 6 and 7 are a unique parcel of real property, in the event of a breach by Grantee, the provisions of this Repurchase Right shall be specifically enforceable by Grantor;

(7) If Grantee fails to pay any sum required to be paid by it in connection with the repurchase, then, in addition to all other remedies available to Grantor, Grantor may pay such sum on Grantee's behalf and deduct the amount of such payment from the Repurchase Price. Without limiting the scope of the preceding sentence, Grantor may offset against the Repurchase Price Grantor's costs and expenses in discharging all liens and encumbrances against Parcels 6 and 7 (except those existing prior to the recordation of this deed), the cost of purchasing an ALTA owner's policy of title insurance in the amount of the Repurchase Price, and any other expenses, including without limitation, reasonable attorney's fees incurred to enforce the Repurchase Right;

(8) If suit or action is instituted to interpret or enforce the provisions of this Repurchase Right, the prevailing party shall be entitled to recover reasonable attorney fees from the losing party, including attorney fees on appeal; and

(9) Notices to Grantee shall be sent to Grantee's registered agent at its registered office or, at Grantor's sole option, to Grantee's Board of Directors at the address to which property tax statements for Parcels 6 and 7 are mailed, and shall be deemed given two (2) days after deposit in the United States mail as certified mail, return receipt requested.

By acceptance of this deed Grantee acknowledges that the purchase price for the Parcels 6 and 7 described herein has been negotiated based on the limited use of Parcels 6 and 7 as a driving range and not for development or other use. Accordingly, Grantee agrees that if the Repurchase Right is held unenforceable in a final judgment by a court of competent jurisdiction, Grantee shall thereupon pay Grantor \$1,000,000 in cash which is the agreed value for the right to use Parcels 6 and 7 other than as a driving range.

As used in this deed, the term "Grantee" includes Grantee and its successors and assigns, and the term "Grantor" includes Grantor and its successors and assigns.

Done by order of the Grantor's Board of Directors on
March 20, 1990.

3 - STATUTORY WARRANTY DEED

THE PROPERTY DESCRIBED IN THIS INSTRUMENT MAY NOT BE WITHIN A FIRE PROTECTION DISTRICT PROTECTING STRUCTURES. THE PROPERTY IS SUBJECT TO LAND USE LAWS AND REGULATIONS, WHICH, IN FARM OR FOREST ZONES, MAY NOT AUTHORIZE CONSTRUCTION OR SITING OF A RESIDENCE. 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 APPROVED USES AND EXISTENCE OF FIRE PROTECTION FOR STRUCTURES.

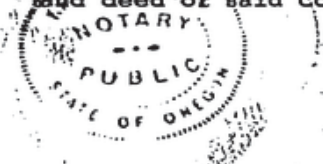
THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES.

WILLAMETTE FACTORS, INC.

By: Robert L. Foote
Its: Recorded

STATE OF OREGON)
 Clackamas) ss.
County of ~~Multnomah~~)

On this 31 day of May, 1990, before me, appeared Robert L. Foote, to me personally known, who being duly sworn did say that he is the President of Willamette Factors, Inc. and that the foregoing instrument was signed in behalf of said Corporation by authority of its Board of Directors, and acknowledged that said instrument is the free act and deed of said Corporation.



Kathy Jensen
Notary Public for Oregon
My Commission Expires: 11-2-93

After recording, return to:

Morris Galen
Tonkon, Torp, et al.
1600 Pioneer Tower
888 SW Fifth Avenue
Portland, Oregon 97204-2099

4 - STATUTORY WARRANTY DEED

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Until a change is requested, all tax statements shall be sent to the following address:

President
Charbonneau Golf Club, Inc.
32000 Charbonneau Drive
Wilsonville, Oregon 97070

5 - STATUTORY WARRANTY DEED

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IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON

PARCEL 1:

A tract of land located in a portion of the George L. Curry D.L.C. No. 43 in the southeast one-quarter of Section 23, the south one-half of Section 24 and the north one-half of Section 25, Township 3 South, Range 1 West of the W.M., more fully described as follows:

Beginning at the initial point of "Fairway Village Condominium", a condominium recorded June 28, 1984, in Book 86, page 17, Clackamas County Book of Plats, said point being North 2469.00 feet and West 3684.03 feet from a stone marked with an "X" at the southeast corner of the George L. Curry D.L.C. No. 43 in Section 25, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon, and the true point of beginning of the tract; thence North 00° 07' 39" East 449.00 feet along the east line of said "Fairway Village Condominium" to a one inch iron pipe; thence North 56° 28' 55" East 554.15 feet to a one inch iron pipe; thence South 68° 24' 44" East 149.49 feet to a one inch iron pipe; thence North 11° 26' 40" East 587.98 feet to a one inch iron pipe on the south right-of-way line of French Prairie Road as platted by Edgewater at Charbonneau, a subdivision recorded December 30, 1983, in Book 86, page 3, Clackamas County Book of Plats; thence North 59° 17' 53" East along said French Prairie Road south right-of-way line 45.38 feet to a one inch iron pipe; thence on a 1578.00 foot radius curve right (long chord bears North 62° 46' 35" East 191.48 feet) an arc distance of 191.60 feet to a one inch iron pipe on the west right-of-way line of Old Farm Road as platted by Charbonneau IX, The Village at Wilsonville, a subdivision recorded November 2, 1979 in Book 80, page 4, Clackamas County Book of Plats; thence on a 15.00 foot radius curve right (long chord bears South 56° 52' 22" East 25.12 feet) along said west right-of-way line of Old Farm Road an arc distance of 29.78 feet to a one inch iron pipe; thence South along said west right-of-way line of Old Farm Road 231.43 feet to a one inch iron pipe; thence on a 532.00 foot radius curve left (long chord bears South 01° 51' 48" East 34.60 feet) along said west right-of-way line of Old Farm Road an arc distance of 34.60 feet along the said south right-of-way line to a one-inch iron pipe; thence South 26° 19' 31" West 541.47 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 68° 57' 45" West 139.28 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 54° 01' 10" West 90.21 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 66° 35' 02" West 276.80 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 11° 21' 55" East 202.98 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence North 84° 24' 50" East 595.83 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 85° 22' 55" East 622.85 feet along the boundary of said Charbonneau IX to a one inch iron pipe on the west right-of-way

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EXHIBIT "A", PAGE 2 OF 13

line of said Old Farm Road; thence on a 418.00 foot radius curve right (long chord bears South 33° 11' 37" East 137.94 feet) an arc distance of 138.58 feet along the west right-of-way line of said Old Farm Road to a one inch iron pipe, which is a point on the northeast corner of Lot N1 of Charbonneau IX; thence South 79° 57' 13" West 436.84 feet along the boundary of said Charboneau IX to a one inch iron pipe; thence South 79° 57' 13" West 259.18 feet; thence North 89° 53' 02" West 494.00 feet; thence South 05° 59' 06" West 374.04 feet; thence South 42° 09' 28" East 99.82 feet; thence North 85° 52' 59" East 757.47 feet to the west right-of-way line of Arbor Lake Drive as platted by said Charbonneau IX; thence South 19° 04' 26" East 44.88 feet along the west right-of-way line of said Arbor Lake Drive to a one inch iron pipe; thence on a 168.00 foot radius curve right (long chord bears South 09° 50' 59" East 53.86 feet) along the west right-of-way line of said Arbor Lake Drive an arc distance of 54.09 feet to a one inch iron pipe on the north line of Charbonneau VI, The Village at Wilsonville, a subdivision recorded January 19, 1978 in Book 74, page 13, Clackamas County Book of Plats; thence South 71° 57' 42" West 626.17 feet along the boundary of said Charbonneau VI to a one inch iron pipe; thence South 80° 34' 54" West 427.77 feet along the boundary of said Charbonneau VI to a one inch iron pipe; thence South 48° 57' 23" East 491.90 feet along the boundary of said Charbonneau VI to a one inch iron pipe; thence South 25° 37' 38" East 601.13 feet along the boundary of said Charbonneau VI to a one inch iron pipe; thence South 26° 00' 01" West 408.33 feet along the boundary of said Charbonneau VI to a two inch iron pipe, said iron pipe being the initial corner of said Charbonneau VI; thence North 77° 35' 00" East 30.95 feet to the north right-of-way line of Middle Green Road as shown by the plat of said Charbonneau VI; thence South 75° 32' 08" West 167.14 feet to a point; thence on a 100.00 foot radius curve left (long chord bears South 57° 16' 37" West 62.66 feet) an arc distance of 63.73 feet to the east line of Lot G50 of Charbonneau V, The Village at Wilsonville, a subdivision recorded March 8, 1976 in Book 69, page 22, Clackamas County Book of Town Plats; thence North 40° 14' 11" West 138.81 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod; thence North 39° 24' 02" East 362.35 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod; thence North 36° 15' 14" West 204.61 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod at the southeast corner of that tract of land conveyed to Bernard J. and Shirley A. Corsetti by Warranty Deed recorded November 19, 1982, Fee No. 82 31846, Clackamas County Deed Records; thence North 36° 15' 14" West 4.15 feet along the boundary of said Corsetti tract to the northeast corner of said Corsetti tract; thence North 87° 39' 36" West 45.92 feet along the boundary of said Corsetti tract; thence South 02° 20' 24" West 8.54 feet along the boundary of said Corsetti tract to the northeast corner of a tract of land conveyed to Ellsworth D. and Elenora W. Purdy by Warranty Deed

recorded November 25, 1982, Fee No. 82 31435, Clackamas County Deed Records; thence North 87° 39' 36" West 57.06 feet along the north boundary of said Purdy tract to the northwest corner of said Purdy tract; thence South 02° 20' 24" West 29.00 feet along the west boundary of said Purdy tract to a 3/4-inch iron rod at the northwest corner of Lot G38 of said Charbonneau V; thence South 74° 20' 24" West 137.21 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod; thence North 87° 25' 01" West 399.41 feet along the boundary of said Charbonneau V, to a 3/4-inch iron rod; thence South 38° 05' 20" West 47.01 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod; thence South 37° 01' 19" East 377.00 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod; thence South 60° 56' 43" East 102.96 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod; thence South 31° 13' 55" East 109.93 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod; thence South 21° 48' 05" West 113.09 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod; thence South 79° 39' 05" West 357.27 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod on the north right-of-way line of Fairway Drive; thence on a 332.00 foot radius curve left (long chord bears North 78° 38' 48" West 44.76 feet) along the boundary of said Charbonneau V and north right-of-way line of Fairway Drive an arc distance of 44.80 feet to a 3/4-inch iron rod; thence North 70° 46' 36" West 698.83 feet along the boundary of said Charbonneau V to a 3/4-inch iron rod on the east right-of-way line of Boones Bend Road as platted by Charbonneau, a subdivision recorded November 18, 1971 in Book 53, page 8, Clackamas County Book of Plats; thence North 31° 55' 02" East 27.63 feet along the boundary of said Charbonneau and the east right-of-way line of said Boones Bend Road to a 3/4-inch iron rod; thence on a 268.00 foot radius curve right (long chord bears North 41° 59' 43" East 93.79 feet) along the boundary of said Boones Bend Road right-of-way and Charbonneau, an arc distance of 94.28 feet to a 3/4-inch iron rod at an angle point of Charbonneau IV, the Village at Wilsonville, a subdivision recorded May 16, 1973 in Book 60, page 30, Clackamas County Book of Plats; thence South 89° 21' 11" East 611.99 feet along the boundary of said Charbonneau IV to a 3/4-inch iron rod; thence North 35° 05' 45" East 45.22 feet along the boundary of said Charbonneau IV to a 3/4-inch iron rod; thence North 51° 16' 31" West 414.02 feet along the boundary of said Charbonneau IV to a 3/4-inch iron rod; thence North 12° 20' 57" East 173.00 feet along the boundary of said Charbonneau IV to a 3/4-inch iron rod at an angle point of said Charbonneau and Charbonneau II, a subdivision recorded May 3, 1972 in Book 55, page 25, Clackamas County Book of Plats; thence North 76° 49' 52" East 640.85 feet along the boundary of said Charbonneau II to a 3/4-inch iron rod; thence North 39° 59' 44" West 656.58 feet along the boundary of said Charbonneau II to a 3/4-inch iron rod; thence South 78° 02' 20" West 569.36 feet along

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the boundary of said Charbonneau II to a 3/4-inch iron rod; thence South 84° 51' 33" West 290.17 feet along the boundary of said Charbonneau II to a 3/4-inch iron rod; thence North 54° 20' 41" West 56.61 feet along the boundary of said Charbonneau II to a 3/4-inch iron rod; thence North 09° 44' 55" West 230.33 feet along the boundary of said Charbonneau II to a 3/4-inch iron rod; thence North 60° 53' 43" West 371.75 feet along the boundary of said Charbonneau II to a 3/4-inch iron rod on the east right-of-way line of Boones Bend Road as platted by said Charbonneau; thence on a 162.00 foot radius curve left (long chord bears North 71° 27' 17" West 159.22 feet) along the boundary of said Charbonneau an arc distance of 166.44 feet to a one-inch iron pipe at an angle point of Charbonneau VII, The Village at Wilsonville, a subdivision recorded May 3, 1978 in Book 75, page 8, Clackamas County Book of Plats; thence North 08° 42' 33" West 87.52 feet along the boundary of said Charbonneau VII to a one-inch iron pipe; thence North 56° 11' 34" East 222.65 feet along the boundary of said Charbonneau VII to a one-inch iron pipe on the south right-of-way line of French Prairie Road; thence South 48° 39' 35" East 632.65 feet to a one inch iron pipe at an angle point of a tract of land conveyed to Mariner's Village Apartments, Inc. an George Marshall, a joint venture, by Bargain and Sale Deed recorded September 15, 1978, Fee No. 78 39923, Clackamas County Deed Records; thence North 88° 48' 03" East 42.11 feet along the boundary of said Mariner's Village tract to a one inch iron pipe at an angle point of said Mariner's Village tract; thence North 88° 48' 03" East 127.98 feet to a one inch iron pipe at an angle point of said Mariner's Village tract; thence North 88° 48' 03" East 254.35 feet along the boundary of said Mariner's Village tract to a one-inch iron pipe at an angle point of said Mariner's Village tract; thence North 88° 48' 03" East 5.66 feet to a one nch iron pipe; thence South 86° 02' 59" East 391.93 feet; thence North 43° 31' 52" East 303.45 feet; thence North 02° 11' 23" East 75.37 feet to the southeast corner of a tract of land conveyed to Charbonneau Country Club by Warranty Deed recorded March 28, 1980, Fee No. 80 11544, Clackmas County Deed Records; thence North 02° 11' 23" East along said Country Club tract 264.87 feet; thence North 02° 20' 14" West 98.08 feet to the true point of beginning. (Parcel I, Golf Course)

PARCEL 2:

A tract of land located in a portion of the George L. Curry D.L.C. No. 43 in the west one-half of the northwest one-quarter of Section 23 and the northeast one-quarter of the northeast one-quarter of Section 26, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon and more fully described as follows:

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Beginning at the initial point of Charbonneau VII, the Village at Wilsonville, a subdivision recorded May 3, 1978, in Book 75, page 8, Clackamas County Book of Plats, said point being North 999.00 feet and West 5363.03 feet from a stone marked with an "X" at the southeast corner of the George L. Curry D.L.C. No. 43 in Section 25, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon; thence North 13° 17' 27" West 51.76 feet along the boundary of said Charbonneau VII to a one inch iron pipe at the southeast corner of Lot D30 of said Charbonneau, said pipe being also the southeast corner of a tract of land conveyed to Lewis M. and Dorothy C. Fox by Warranty Deed recorded January 18, 1980, Fee No. 80 2084, Clackamas County Deed Records; thence North 16° 42' 40" East 31.65 feet along the east boundary of said Fox tract; thence North 29° 22' 47" West 57.11 feet along the east boundary of said Fox tract to a one-half inch iron pipe at the northeast corner of said Fox tract and the northeast corner of said Lot D30 of said Charbonneau VII; thence North 13° 17' 27" West 126.95 feet along the boundary of said Charbonneau VII to a one inch iron pipe; thence North 15° 52' 33" West 113.32 feet along the east line of said Charbonneau VII to a one inch iron pipe; thence North 02° 45' 39" East 394.46 feet along the east line of said Charbonneau VII to a one-inch iron pipe; thence North 01° 57' 55" West 219.53 feet along the east line of said Charbonneau VII to a one inch iron pipe on the south right-of-way line of Boones Bend Road; thence on a 268.00 foot radius curve left (long chord bears North 83° 55' 08" East 44.82 feet) along the south right-of-way line of said Boones Bend Road an arc distance of 44.87 feet to a one inch iron pipe; thence North 79° 07' 21" East 22.85 feet along the south right-of-way line of said Boones Bend Road to a one inch iron pipe on the west line of Charbonneau, a subdivision recorded November 18, 1971 in Book 53, page 8, Clackamas County Book of Plats; thence South 24° 20' 35" East 639.30 feet along the west boundary of said Charbonneau to a 3/4-inch iron rod; thence South 04 33' 27" West 276.88 feet along the west boundary of said Charbonneau to a 3/4-inch iron rod; thence South 75° 57' 50" East 41.23 feet along the boundary of said Charbonneau to a 3/4-inch iron rod; thence North 68° 42' 23" East 481.91 feet along the boundary of said Charbonneau to a 3/4-inch iron rod; thence North 71° 13' 55" East 109.70 feet along the boundary of said Charbonneau to a 3/4-inch iron rod at an angle point of Charbonneau VI, The Village at Wilsonville, a subdivision recorded May 16, 1973 in Book 60, page 30, Clackamas County Book of Plats; thence South 46° 46' 51" East 223.85 feet along the boundary of Charbonneau IV to a 3/4-inch iron rod; thence South 18° 48' 28" West 606.53 feet along the boundary of said Charbonneau IV to a 3/4-inch iron rod on the right-of-way line of Boones Bend Road; thence on a 318.00 foot radius curve left (long chord bears South 38° 54' 20" West 77.38 feet) along said boundary of said Charbonneau and right-of-way line of said Boones Bend Road an arc distance of 77.57 feet to 3/4-inch iron rod; thence South 31° 55' 02" West along the boundary of said Charbonneau and Boones

EXHIBIT "A", PAGE 6 OF 13

Bend right-of-way line 48.56 feet to a 3/4-inch iron rod at an angle point of Charbonneau III, a subdivision recorded August 1, 1972 in Book 56, page 26, Clackamas County Book of Plats; thence North 79° 41' 43" West 137.40 feet along the boundary of said Charbonneau III to a 3/4-inch iron rod; thence North 44° 29' 35" West 79.91 feet along the boundary of said Charbonneau III to a 3/4-inch iron rod; thence North 01° 28' 53" West 116.04 feet along the boundary of said Charbonneau III to a 3/4-inch iron rod; thence North 30° 15' 23" East 69.46 feet along the boundary of said Charbonneau III to a 3/4-inch iron rod; thence North 43° 47' 19" East 234.11 feet along the boundary of said Charbonneau III to a 3/4-inch iron rod; thence North 31° 18' 36" East 113.53 feet along the boundary of said Charbonneau III to a 3/4-inch iron rod; thence North 40° 27' 44" West 44.69 feet along the boundary of said Charbonneau III to a 3/4-inch iron rod; thence South 83° 42' 02" West 309.87 feet along the boundary of said Charbonneau III to a 3/4-inch iron rod; thence South 87° 08' 15" West 440.55 feet along the boundary of said Charbonneau III to the true point of beginning. (Parcel 2, Golf Course)

PARCEL 3:

A tract of land located in a portion of the George L. Curry D.L.C. No. 43 in the east one-half of Section 24, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon, and more fully described as follows:

Beginning at the initial point of Charbonneau IX, the Village at Wilsonville, a subdivision recorded November 2, 1979 in Book 80, page 4, Clackamas County Book of Plats, said point being North 2970.00 feet and West 1529.03 feet from a stone marked with an "X" at the southeast corner of the George L. Curry D.L.C. No. 43 in Section 25, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon; thence North 23° 09' 59" West 233.86 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence North 13° 57' 51" West 385.39 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 83° 25' 05" West 78.52 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 23° 37' 46" West 489.00 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 65° 08' 41" West 149.88 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence North 75° 37' 07" West 120.78 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence North 41° 42' 19" West 390.24 feet along the boundary of said Charbonneau IX to a one-half inch iron pipe at the southeast corner of Lot Q81 and that portion of the Charbonneau Golf Course conveyed to George J. Marshall and Robar Properties, Inc. by Warranty Deed recorded December 19, 1979, Fee No. 79 56189,

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Clackamas County Deed Records; thence North 24° 07' 40" West 40.00 feet along the east boundary of said Marshall and Robar Properties tract; thence South 65° 52' 20" West 12.67 feet along the north boundary of said Marshall and Robar Properties tract to one-half inch iron pipe at the northeast corner of said Lot Q81 of said Charbonneau IX; thence North 41° 42' 19" West 231.84 feet along the boundary of said Charbonneau IX to a One inch iron pipe on the east right-of-way line of Old Farm Road; thence on a 482.00 foot radius curve right (long chord bears North 02° 44' 47" West 46.19 feet) along the boundary of said Charbonneau IX and the east right-of-way line of Old Farm Road an arc distance of 46.21 feet to a one inch iron pipe; thence North 59.10 feet along the boundary of said Charbonneau IX and the East right-of-way line of Old Farm Road to a 5/8-inch iron rebar on the South line of "LAKESIDE AT CHARBONNEAU", a subdivision recorded 5 February 1988 in Book 90, page 28, Plat No. 2786, Clackamas County Book of Plats; thence South 60° 14' 00" East along the South line of said "LAKESIDE AT CHARBONNEAU" 648.58 feet to a 5/8-inch iron rebar; thence South 85° 52' 40" East along the South line of said "LAKESIDE AT CHARBONNEAU" 111.29 feet to a 5/8-inch iron rebar; thence North 08° 32' 55" East along the East line of said "LAKESIDE AT CHARBONNEAU" 643.39 feet to the South right-of-way line of French Prairie Road as platted by said "LAKESIDE AT CHARBONNEAU"; thence on a 1578.00 foot radius curve right (long chord bears South 82° 04' 46" East 24.59 feet) along the South right-of-way of French Prairie Road an arc distance of 24.59 feet to a one-inch iron pipe set by Clackamas County Survey No. P-19365; thence on a 1078.00 foot radius curve right (long chord bears South 76° 42' 06" East 185.33 feet) along the South right-of-way line of French Prairie an arc distance of 185.56 feet to a 2-inch by 36-inch galvanized iron pipe at the Initial Point of said "LAKESIDE AT CHARBONNEAU", said iron pipe being also the Initial Point of "CHARBONNEAU SINGLE FAMILY EAST - FIFTH ADDITION", a subdivision recorded 8 December 1987, Book 90, page 18, Plat No. 2776, Clackamas County Record of Plats and the Initial Point of "VILLAGE GREEN II AT CHARBONNEAU", a subdivision recorded 11, March 1988 in Book 91, page 2, Plat No. 2790, Clackamas County Record of Plats; thence South 27° 46' 45" East along the West line of said "VILLAGE GREEN II" 782.39 feet to a 5/8-inch iron rebar; thence South 09° 51' 28" East along the West line of said "VILLAGE GREEN II" 124.00 feet to a 5/8-inch iron rebar at the Southwest corner of said "VILLAGE GREEN II", said rebar being also the Northwest corner of Parcel No. 1 of "CHARBONNEAU X, THE VILLAGE AT WILSONVILLE", a subdivision recorded 25 March 1988 in Book 91, page 5, Plat No. 2793, Clackamas County Record of Plats; thence South 09° 51' 28" East along the West line of said Parcel No. 1 of "CHARBONNEAU X" 185.57 feet to a 5/8-inch iron rebar; thence South 63° 15' 31" West along the North line of said Parcel No. 1 of "CHARBONNEAU X" 124.00 feet to a 5/8-inch iron rebar at the Northeast corner of Lot P2 of said "CHARBONNEAU IX"; thence South 63° 15' 31" West 602.73 feet along the boundary of said "CHARBONNEAU IX" to a one-inch iron pipe; thence south 76° 49' 01" West 112.13 feet along the boundary of said "CHARBONNEAU IX" to a one-inch iron pipe on the East right-of-

way line of Old Farm Road; thence on a 468.00 foot radius curve left (long chord bears North 31° 47' 44" West 155.66 feet) along the boundary of said "CHARBONNEAU IX" and the East right-of-way line of Old Farm Road an arc distance of 156.39 feet to a one-inch iron pipe; thence North 35° 17' 50" East 138.78 feet along the boundary of said "CHARBONNEAU IX" to a one-inch iron pipe; thence North 74° 38' 02" East 543.43 feet along the boundary of said "CHARBONNEAU IX" to the True Point of Beginning. (Parcel 3, Golf Course)

EXCEPT a tract of land described as follows:

Beginning at a 5/8-inch iron rebar at the Southwest corner of Lot 4, "VILLAGE GREEN II AT CHARBONNEAU"; thence South 62° 13' 15" West 7.00 feet; thence North 27° 46' 45" West 75.00 feet; thence North 62° 13' 15" East 7.00 feet to a 5/8-inch iron rebar at the Northwest corner of said Lot 4; thence South 27° 46' 45" East 75.00 feet along the West line of said Lot 4, to the point of beginning.

PARCEL 4:

A tract of land located in a portion of the George L. Curry D.L.C. No. 43 in the southwest one-quarter of the southeast one-quarter of Section 24 and in the west one-half of the east one-half of Section 25, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon and more fully described as follows:

Beginning at the initial point of Charbonneau VIII, The Village at Wilsonville, a subdivision recorded October 24, 1978 in Book 76, page 16, Clackamas County Book of Plats, said point being North 1308.00 feet and West 2041.03 feet from a stone marked with an "X" at the southeast corner of the George L. Curry D.L.C. No. 43 in Section 25, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon; thence North 27° 33' 57" East 512.14 feet along the boundary of said Charbonneau VIII to a one inch iron pipe; thence North 36° 57' 14" East 272.80 feet along the boundary of said Charbonneau VIII to a one inch iron pipe; thence North 23° 48' 56" West 316.99 feet along the boundary of said Charbonneau VIII to a one inch iron pipe; thence South 63° 21' 11" West 626.55 feet along the boundary of said Charbonneau VIII to a one inch iron pipe; thence West 97.27 feet along the boundary of said Charbonneau VIII to a one inch iron pipe at the northeast corner of Charbonneau VI, The Village at Wilsonville, a subdivision recorded January 19, 1978 in Book 74, page 13, Clackamas County Book of Plats and at an angle point of Charbonneau IX, the Village at Wilsonville, a subdivision recorded November 2, 1979 in Book 80, page 4, Clackamas County Book of Plats, said pipe being on the east right-of-way line of Arbor Lake Drive; thence on a 218.00 foot radius curve left (long chord bears North 13° 05' 10" West 45.49 feet) along the boundary of said Charbonneau IX and east right-of-way line of Arbor Lake Drive an arc

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distance of 45.57 feet to a one inch iron pipe; thence North 19° 04' 27" West 41.69 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence North 18° 05' 50" East 200.20 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence North 80° 06' 49" East 599.91 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence North 08° 07' 48" East 49.50 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence North 78° 49' 55" East 237.50 feet along the boundary of said Charbonneau IX to a one inch iron pipe; thence South 12° 30' 29" East 52.15 feet along the boundary of said Charbonneau IX to a one inch iron pipe at the southwest corner of Lot P21 of said Charbonneau IX; thence South 12° 30' 29" East 548.10 feet; thence South 16° 54' 08" West 189.17 feet; thence South 42° 02' 42" West 809.30 feet; thence South 86° 34' 18" West 217.39 feet; thence South 460.94 feet to the north right-of-way line of Arbor Lake Drive; thence on a 432.00 foot radius curve right (long chord bears South 88° 17' 26" West 88.84 feet) along the boundary of said Charbonneau VI and the north right-of-way line of said Arbor Lake Drive an arc distance of 88.99 feet to a one inch iron pipe; thence North 18° 33' 13" West 767.47 feet along the boundary of said Charbonneau VI to a one inch iron pipe; thence North 02° 34' 03" East 223.22 feet along the boundary of said Charbonneau VI to a one inch iron pipe; thence North 71° 18' 04" East 162.44 feet along the boundary of said Charbonneau VI to a one inch iron pipe at the southeast corner of Lot M90 of said Charbonneau VI said pipe being an angle point of said Charbonneau VIII; thence North 71° 18' 04" East 112.05 feet along the boundary of said Charbonneau VIII to a one inch iron pipe; thence South 37° 03' 16" East 434.80 feet along the boundary of said Charbonneau VIII to the true point of beginning. (Parcel 4, Golf Course)

PARCEL 5:

A tract of land located in a portion of the George L. Curry D.L.C. No. 43 in the southeast one-quarter of the northwest one-quarter and the southwest one-quarter of the northeast one-quarter of Section 25, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon, and more fully described as follows:

Beginning at a one inch iron pipe at the east corner of Lot NN of Charbonneau VI, The Village at Wilsonville, a subdivision recorded January 19, 1978 in Book 74, page 13, Clackamas County Book of Plats, said point being on the south right-of-way line of Arbor Lake Drive and being also North 574.45 feet and West 2203.59 feet from a stone marked with an "X" at the southeast corner of the George L. Curry D.L.C. No. 43 in Section 25, Township 3 South, Range 1 West of the W.M., Clackamas County, Oregon; thence on a 482.00 foot radius curve left (long chord bears South 85° 31' 43" East 260.52 feet) along the south right-of-way line of said Arbor Lake Drive an arc distance of 263.80 feet to a one inch iron pipe;

EXHIBIT "A", PAGE 10 OF 13

thence South 00° 10' 43" East 169.45 feet; thence South 41° 25' 25" West 113.36 feet; thence North 89° 35' 53" West 285.01 feet; thence North 85° 15' 58" West 585.19 feet to a 3/4-inch iron rod at an angle point on the east line of Lot G51 of Charbonneau V, The Village at Wilsonville, a subdivision recorded March 8, 1976 in Book 69, page 22, Clackamas County Book of Town Plats; thence North 85° 15' 58" West 57.00 feet along the boundary of said Lot G51 and Lot G50 of said Charbonneau V to a 3/4-inch iron rod; thence North 40° 14' 11" West 0.71 feet; thence on a 70.00 foot radius curve right (long chord bears North 54° 55' 36" East 49.28 feet) an arc distance of 50.36 feet; thence North 75° 32' 08" East 177.63 feet to a point; thence on a 215.00 foot radius curve left (long chord bears North 61° 18' 40" East 105.66 feet) an arc distance of 106.75 feet to the south boundary of said Charbonneau VI; thence North 77° 35' 00" East 51.07 feet to a one-half inch iron pipe at the southwest corner of Lot M44 of said Charbonneau VI, said point being the west corner of the Golf Course tract of land conveyed to Stanley A. and N. Kay Thomson by Warranty Deed recorded January 18, 1980, Fee No. 80 2081, Clackamas County Deed Records; thence South 32° 15' 00" East 8.00 feet along the west line of said Thomson tract to the southwest corner of said Thomson tract; thence North 71° 50' 41" East along the south line of said Thomson tract 75.27 feet to the southeast corner of said M44 of Charbonneau VI; thence North 77° 35' 00" East 152.57 feet along the south line of said Charbonneau VI to the southwest corner of Lot M50 of said Charbonneau VI and the west corner of Parcel II conveyed to William E. and Helen V. McPherson by Warranty Deed recorded August 11, 1980, Fee No. 80 29577, Clackamas County Deed Records; thence North 88° 45' 16" East along the south line of said Parcel II of said McPherson tract 92.82 feet; thence North 31° 35' 00" East along the east line of said Parcel II of said McPherson tract 25.00 feet to the south line of Lot NN of said Charbonneau VI; thence North 77° 35' 00" East 55.93 feet along the south line of said Charbonneau VI to the true point of beginning. (Parcel 5 Golf Course)

PARCEL 6

Lots N8, N9 & N10, CHARBONNEAU IX, THE VILLAGE AT WILSONVILLE,

Except that part of Lot N8, described in Deed to John H. Link, et ux, recorded April 2, 1987, as Fee No. 87 14582. (Part of Driving Range)

PARCEL 7

A tract of land located in a portion of the George L. Curry D.L.C. No. 43 in the Southeast one-quarter of the Southwest one-quarter and the Southwest one-quarter of the Southeast one-quarter of Section 24, Township 3 South, Range 1 West of the W.M., City of Wilsonville, and more fully described as follows:

Beginning at a one inch iron pipe at the Northwest corner of Lot N8 of "CHARBONNEAU IX, THE VILLAGE AT WILSONVILLE", a subdivision recorded 2 November 1979 in Book 80, page 4, Plat No. 2462, Clackamas County Record of Town Plats, said point being also an angle point of said plat; thence South 79° 57' 13" West 259.17 feet; thence North 89° 53' 02" West 494.00 feet; thence South 5° 59' 06" West 374.04 feet; thence South 42° 09' 28" East 99.82 feet; thence North 85° 52' 59" East 757.47 feet to the West right-of-way line of Arbor Lake Drive as platted by said "CHARBONNEAU IX"; thence North 19° 04' 27" West along said "CHARBONNEAU IX" 16.13 feet to a one inch iron pipe; thence on a 282.00 foot radius curve right (long chord bears North 1° 18' 39" West 172.07 feet) along said "CHARBONNEAU IX" an arc distance of 174.85 feet to a one inch iron pipe at the most Southerly corner of Lot N10 of said "CHARBONNEAU IX"; thence North 54° 00' 00" West along said Lot N10 of said "CHARBONNEAU IX" 92.05 feet to a one inch iron pipe at the most Westerly corner of said Lot N10; thence North 14° 14' 43" East along Lots N10, N9 and N8 of said "CHARBONNEAU IX" 200.62 feet to the True Point of Beginning. (Part of Driving Range)

PARCEL 8

A portion of a tract of land conveyed by Marie Barnett Cooper to Willamette Factors, Inc., by Warranty Deed Recorded 14 December 1970, Fee No. 70 27593, Clackamas County Deed Records, and located in a portion of the George L. Curry D.L.C. No. 43 in the Southeast one-quarter of the Southwest one-quarter of Section 24 and the Northeast one-quarter of the Northwest one-quarter of Section 25, Township 3 South, Range 1 West, of the W.M., Clackamas County, Oregon and more fully described as follows:

Beginning at the Southeast corner of a tract of land conveyed by Willamette Factors, Inc., to the Charbonneau Country Club by Warranty Deed recorded 28 March 1980, Fee No. 80 11544, said point being 2106.32 feet North and 3690.15 feet West of a stone marked with an "X" at the Southeast corner of the George L. Curry D.L.C. No. 43, Section 25, Township 3 South, Range 1 West of the W.M., and on a boundary of a tract of land (Charbonneau Golf Course) mortgaged to Benj. Franklin Federal Savings and Loan Association of Portland by deed recorded 12 August 1971, Fee No. 71 19507; thence

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North 88° 20' 44" West along the south line of said Country Club tract 45.77 feet to a 5/8-inch iron rebar; thence South 01° 39' 16" West 108.33 feet to a 5/8-inch iron rebar; thence North 88° 20' 44" West 70.00 feet to the southeast corner (foundation corner) of the Charbonneau Country Club Building tract as conveyed by Willamette Factors, Inc. to the Charbonneau Country Club by Warranty Deed recorded 4 April 1984, Fee No. 84 11122, Clackamas County Deed Records; thence South 01° 39' 16" West 71.00 feet to the southeast corner (foundation corner) of the Charbonneau Pro-Shop; thence North 88° 20' 44" West 50.33 feet to the southwest foundation corner of the Charbonneau Pro-Shop; thence South 42° 15' 40" West 57.11 feet to a 5/8-inch iron rebar; thence South 01° 39' 16" West 78.63 feet to a 5/9-inch iron rod at an angle point of said Charbonneau Golf Course; thence North 43° 31' 52" East 303.45 feet to an angle point of said Charbonneau Golf Course; thence North 02° 11' 23" East 75.37 feet to the true point of beginning. (Additional Golf Course tract)

PARCEL 9

"Intentionally Deleted"

PARCEL 10

Lot 196, CHARBONNEAU SINGLE FAMILY EAST - SIXTH ADDITION, THE VILLAGE AT WILSONVILLE.

TOGETHER WITH a non-exclusive easement over MIDDLE GREENS ROAD described as follows:

A non-exclusive roadway, access, storm drainage and utility easement across a tract of land (Middle Greens Road) located in a portion of the George L. Curry Donation Land Claim No. 43 in the Southeast Quarter of the Northwest Quarter of Section 25, Township 3 South, Range 1 West of the Willamette Meridian, City of Wilsonville, Clackamas County, Oregon and more fully described as follows:

Beginning at a two inch iron pipe set 6-inches below the surface of the ground at the Initial Corner of "CHARBONNEAU VI, THE VILLAGE AT WILSONVILLE", a subdivision recorded 19 January 1978 in Book 74, Page 13, Clackamas County Book of Plats, said point being North 468.00 feet and West 3039.03 feet from a stone marked with an "x" at the Southeast corner of the George L. Curry Donation Land Claim No. 43 in Section 25, Township 3 South, Range 1 West of the Willamette Meridian, Clackamas County, Oregon, thence North 77° 35' 00" East along the South line of said "CHARBONNEAU VI" 30.95 feet to the True Point of Beginning, said point being on the North right-of-way line of Middle Greens Road as shown by the plat of said "CHARBONNEAU VI"; thence South 75° 32' 08" West 167.14 feet along the proposed right-of-way line of said Middle Greens Road; thence on a 100.00 foot radius curve

left (long chord bears South 57° 16' 38" West 62.66 feet) along said proposed North right-of-way line of Middle Greens Road an arc distance of 63.73 feet to the East line of Lot G50 of "CHARBONNEAU V, THE VILLAGE AT WILSONVILLE", a subdivision recorded 8 March 1976 in Book 69, Page 22, Clackamas County Book of Town Plats; thence South 40° 14' 11" East 30.78 feet along the boundary of said Lot G50 of said "CHARBONNEAU V" to the proposed South right-of-way line of said Middle Greens Road; thence on a 70.00 foot radius curve right (long chord bears North 54° 55' 36" East 49.28 feet) along the proposed South right-of-way line of said Middle Greens Road an arc distance of 50.36 feet; thence North 75° 32' 08" East 177.63 feet along the proposed South right-of-way line of said Middle Greens Road; thence on a 215.00 foot radius curve left (long chord bears North 61° 18' 40" East 105.66 feet) along the proposed South right-of-way line of said Middle Greens Road an arc distance of 106.75 feet to the South boundary of said "CHARBONNEAU VI"; thence South 77° 35' 00" West along the South Boundary of said "CHARBONNEAU VI" 112.98 feet to the True Point of Beginning.

Said tract containing 0.207 acres.

Grantee, its successor and assigns, agree to promptly repair or replace any improvements on the property granted by this easement if damaged or destroyed by grantee, its successors or assigns, or its agents or invitees.

EXHIBIT B, PAGE 1 OF 3

1. Real Property taxes, if any, a lien but not yet payable.

2. As disclosed by the tax roll, the premises herein described have been classified as open space lands. In the event of withdrawal from such use, the premises will be subject to additional taxes and interest as provided by ORS 308.770. (Affects Tax Lots 3300, 200, 300, and 301).

3. Right of way, including the terms and provisions thereof, from Johanna Wagner and Louisa Wagner, to The Pacific Telephone and Telegraph Company, recorded September 11, 1913, Book 5, page 437, Miscellaneous Records. (Affects Parcels 1, 3, 4, 5 and 7)

4. Right of way, including the terms and provisions thereof, from Isaac A. Miley to The Pacific Telephone and Telegraph Company, dated April 12, 1913, recorded May 1, 1913, Book 5, page 353, Miscellaneous Records. (In east one-half of Section 24; location indefinite)

5. Right of way, including the terms and provisions thereof, from Mrs. Maria Miley, Mrs. F.R. Feighner, formerly August M. Miller, John H. Miley, Isaac A. Miley, William J. Miley, Catharine Turner, Dunda Campbell, Legatees to Estate of Jacob Miley, deceased, to The Pacific Telephone and Telegraph Company, dated April 11, 1913, recorded May 1, 1913, Book 5, page 354, Miscellaneous Records. (In east one-half of Section 24; southwest one-quarter of Section 24; northeast one-quarter of Section 25, Location indefinite)

6. Right of way, including the terms and provisions thereof, from J.H. Miley, to The Pacific Telephone and Telegraph Company, dated May 21, 1929, recorded June 20, 1929, Book 201, page 577, Fee No. 82773, Deed Records.

Said right of way was released except for a 20-foot strip as described in instrument recorded June 23, 1969, Fee No. 69 11578, and in instrument recorded April 19, 1977, Fee No. 77 14311. (Affects Parcels 1, 3, 4, 5 and 7)

7. The easement, including the terms and provisions thereof, in favor of United States of America, recorded September 17, 1947, in Volume 396, page 389, Fee No. 12881, Deed Records. (Affects Parcels 3, 4 & 5)

EXHIBIT B, PAGE 2 OF 3

8. The easement, including the terms and provisions thereof, in favor of Portland General Electric Company, a corporation of Oregon, recorded June 29, 1950, in Volume 433, page 42, Fee No. 8054, Deed Records. (Affects Parcels 1, 3, 5 & 7)

9. Conditions and Restrictions in Declarations, to which reference is hereby made, filed by Patrick C. Jordan and Ken Lien, recorded August 8, 1979, Fee No. 79 34184. (Affects Parcel 6)

10. The easement, including the terms and provisions thereof, for sanitary sewer, being 15 feet in width, from Willamette Factors, Inc., to City of Wilsonville, a municipal corporation, dated February 12, 1981, recorded October 2, 1981, Fee No. 81 34289. (Affects Parcels 1 and 8)

11. Conditions and Restrictions in Declaration, to which reference is hereby made, filed by Willamette Factors, recorded November 27, 1984, Fee No. 84 41558. (Affects Parcel 6)

12. The easement, including the terms and provisions thereof, for water main and sanitary sewer, from Willamette Factors, Inc., to City of Wilsonville, a municipal corporation, dated November 25, 1987, recorded December 2, 1987, Fee No. 87 54106. (Affects Parcels 1, 3 and other property)

13. The easement, including the terms and provisions thereof, for water, sanitary sewer and storm drainage, from Willamette Factors, to City of Wilsonville, a municipal corporation, dated August 11, 1987, recorded December 2, 1987, Fee No. 87 54107. (Affects Parcels 1, 3 and other property)

14. Conditions, Restrictions and Easements in Declaration, to which reference is hereby made, filed by Willamette Factors, Inc., recorded April 6, 1977, Fee No. 77 12613, and as incorporated in Bargain and Sale Deed to Mariner's Village Apartments, recorded September 15, 1978, Fee No. 78 39924, and by instrument recorded January 2, 1979, Fee No. 79 3039, and as incorporated in Warranty Deed recorded November 28, 1979, Fee No. 79 52749, and by Annexation recorded June 27, 1984, Fee No. 84 21743, and by Declaration of Annexation recorded May 2, 1989, Fee No. 89 18494, and by Declaration of Annexation recorded October 13, 1989, Fee No. 89 45952. (Affects Parcels 6, 7, 8, 10 and other property)

15. Maintenance Assessments and Special Assessments for Capital Improvements as disclosed by Declaration of Restrictions set forth as Exception No. 14 above. (Affects Parcel 6, 7, 8, 10 and other property)

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EXHIBIT B, PAGE 3 OF 3

16. Powers of the Charbonneau Country Club, a non-profit corporation including the powers of assessment as set forth by instrument in Exception No. 14 above.

17. Conditions and Restrictions in Declaration, to which reference is hereby made, filed by Willamette Factors, Inc., an Oregon corporation, recorded July 31, 1989, Fee No. 89 32821. (Affects Parcel 10)

18. Maintenance Assessments and Special Assessments for Capital Improvements as disclosed by Declaration of Restrictions set forth as Exception No. 17 above. (Affects Parcel 10)

19. Ten-foot utility and fence easement as reserved on the plat. (Affects west and south lines of Parcel 10)

20. Utility easement along the northerly portion as reserved on the plat. (Affects various portions of Parcel 10)

21. Fifteen-foot utility easement as reserved on the plat. (Affects northerly 15 feet of Parcel 10)

STATE OF OREGON
County of Clackamas
I, John F. Kauffman, County Clerk, for the County of Clackamas, do hereby certify that the instrument of writing was received for recording in the records of said county at

1990 JUN -1 PM 1:44



Witness my hand and seal this
John F. Kauffman
John F. KAUFFMAN
County Clerk

90 25764

E. F. Riley,

Subscribed in my presence and sworn to before me by E. F. Riley this 25th day of April, 1913.

(Seal of Notary.)

Vera Casch,

Notary Public for Oregon.

Filed and recorded May 1, 1913, at 8:49 A. M.

R. B. Dedman, County Recorder,

C.

By A. R. Williams, Deputy.

Portland, Ore., April 12, 1913.

For and in consideration of the sum of One Dollar (\$1.00) receipt whereof is hereby acknowledged, a right of way is hereby granted to The Pacific Telephone and Telegraph Company, its successors and assigns, with the right to erect and maintain poles, guys and anchors with the necessary wires and fixtures thereon, and to keep same free from foliage across that certain property belonging to Isaac A. Miley, and situated in the county of Clackamas, State of Oregon, and described as follows.

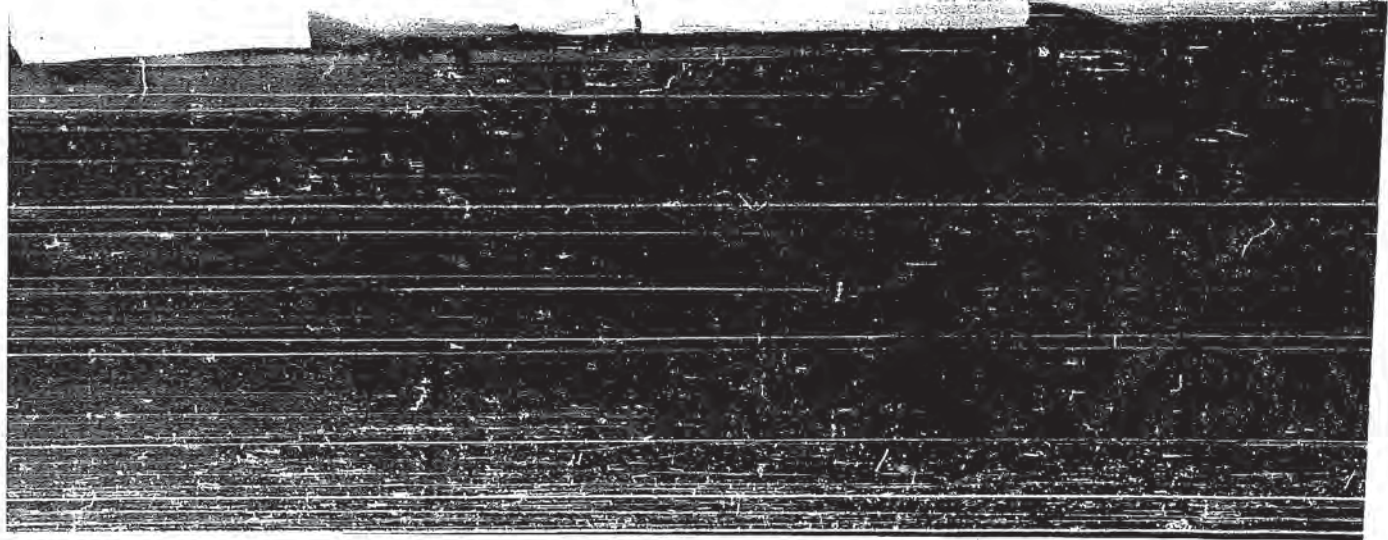
That certain parcel of land located in the East one-half ($\frac{1}{2}$) of Section twenty-four (24) Township three (3) South, Range one (1) west of the Willamette Meridian.

All anchors and guys to be placed as close to present fence as possible in case one anchor or guys are not placed close to present fence said Telephone company agrees to move said fence or fence to said anchors and guys to prevent any animals from running in to same.

The grantors further agree not to grant any right or permit for the erection or maintenance of any power or transmission line or lines upon or over said property parallel and within Two Hundred (200) feet of the lines placed by the Telephone Company upon the said right of way, or for the erection or maintenance of any such line or lines across the lines placed by the Telephone Company upon said right of way, at an angle of less than thirty-five (35) degrees.

It is understood that the employes of said Telephone Company shall, at any time when necessary, have access to said right of way and the poles and wires thereon, for purpose of repairs, etc., provided always that said Telephone Company shall be responsible for any damage which may be unnecessarily done to the property above described.

*Approved by Isaac A. Miley
Isaac A. Miley*



Witness: E. B. Schonenbach,

Isaac A. Miley,

State of Oregon,)
) SS
County of Multnomah,)

Subscribed and sworn to before me this 12th day of April, 1913.

(Seal of Notary.)

E. B. Schonenbach,
Notary Public for and in the
State of Oregon.

Filed and recorded May 1, 1913, at 2:01 P. M.

C.

E. P. Dedman, County Recorder.

Portland, Ore., April 11th, 1913.

For and in consideration of the sum of One Dollar (\$1.00) receipt whereof is hereby acknowledged, a right of way is hereby granted to The Pacific Telephone and Telegraph Company, its successors and assigns, with the right to erect and maintain poles, guys and anchors, with the necessary wires and fixtures thereon, and to keep same free from foliage across that certain property belonging to the estate of Jacob Miley, (deceased) and situated in the county of Clatsop, State of Oregon, and described as follows:

That certain tract of land located in the East one-half ($\frac{1}{2}$) of section twenty-four (24) the Southwest quarter ($\frac{1}{4}$) of section twenty-four (24) and the Northeast quarter ($\frac{1}{4}$) of section twenty-five (25) Township three (3) South, range one (1) West of the Willamette Meridian.

The right of way granted enters the property above described at a point fronting on the Willamette River Thirty (30) feet more or less from the East line of the said property and goes thence in a southeasterly direction to the East line of the property thence south parallel with east line of property to its intersection with private road Six hundred (600) feet more or less from river. Right of way is to follow said private road from its intersection with east line of property to its junction with public road at Southwest corner of said property. Poles supporting two spans of wire nearest river are to be so located and guyed as to properly support fixtures carrying wires across river. All other poles are to be erected and maintained as near east line of property and fence lines along private road as practicable. The grantors further agree not to grant any right or permit for the erection or maintenance of any power or transmission or lines upon or over said property parallel and within Two Hundred (200) feet of the lines placed by the Telephone Company upon the said right of way, or for the erection or maintenance of any such line or lines across the lines placed by the Telephone Company upon said right of way, at an angle of less than thirty-five (35) degrees.

It is understood that the employees of said Telephone Company, shall, at any time when necessary, have access to said right of way and the poles and wires thereon, for purposes of repairs, etc., provided always that said Telephone Company shall be responsible for any damage which may be unnecessarily done to the property above described.

Approved as to form

Witness:

F. R. Feighner,
E. B. Schonenbach,

her
Mrs. Maria X Miley,
mark
Mrs. F. R. Feighner, (formerly
Augusta M. Miller)
John H. Miley,
Isaac A. Miley,
William J. Miley,
Catharine Turner,
Dunda Campbell,
to
Legatees, estate of Jacob
Miley, (deceased.)

State of Oregon,)
County of Multnomah,)

Subscribed and sworn to before me this 11th day of April, 1913.
(Seal of Notary.) E. B. Schonenbach,
Notary Public for and in the State of
Oregon.

Filed and recorded May 1, 1913, at 2:02 P. M.
E. P. Dedman, County Recorder

ASSIGNMENT.

For the consideration of one (\$1.00) Dollar and other valuable considerations I, M. A. Elliott, hereby assign, set over and transfer unto John W. Loder, that certain contract made by S. J. Rogers to M. A. Elliott recorded Feb. 14, 1913, Book 5 page 275 Miscellaneous Records of Clackamas County, Oregon, and also all right, title and interest of every kind and nature which I, the said M. A. Elliott hold in and to that certain contract recorded Vol. 4, page 19 of said Miscellaneous Records on June 16, 1911, by S. J. Rogers to John W. Loder.

Witness my hand and seal April 25, 1913.
I. E. Boyle, M. A. Elliott, Seal.

Alice Bailey,
I. E. Boyle
State of Oregon,)
County of Clackamas,) SS

On this day personally appeared before me M. A. Elliott, known to me to be the identical person described in and who executed the foregoing instrument and acknowledged to me that he executed the same.

Witness my hand and Notarial Seal, April 25, 1913.
(Seal of Notary.) Alice Bailey,
Notary Public for Oregon.

Filed and recorded May 1, 1913, at 2:11 P. M. E. P. Dedman, County Recorder.

KNOW ALL MEN BY THESE PRESENTS, That we, Carl Lunde and Pearl Lunde husband and wife, of the Dominion of Canada, Province of Saskatchewan, in consideration of the sum of ten and no/100 dollars to us paid by Burley Perry, of Portland, County of Multnomah, State of Oregon have bargained and sold and by these presents do grant bargain sell and convey unto said Burley Perry his heirs and assigns, all the following bounded and described real property situated in the county of Clackamas, and State of Oregon. Lots nineteen (19) two (20) twenty one (21) twenty two (22) twenty three (23) and twenty four (24) block forty four (44) Minthorne Addition to Portland in the county of Clackamas, State of Oregon according to the duly recorded maps and plats thereof, together with all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and also all our estate, right, title and interest in and to the same including dower and claim of dower. TO HAVE AND TO HOLD the above described and granted premises unto the said Burley Perry his heirs and assigns forever. And we Carl Lunde and Pearl Lunde, husband and wife, the grantors above named do covenant to and with Burley Perry the above named grantee, his heirs and assigns that we will and our heirs executors, and administrators shall warrant and defend the above granted premises and every part and parcel thereof against the acts and deeds of said grantee and all persons claiming by from through or under the said grantors unto the said grantee his heirs and assigns forever.

In Witness Whereof we the grantors above named hereunto set our hands and seals this 29th day of December A D 1928

Executed in the presence of
 Madelene Jasnioke Carl Lunde (Wafar Seal)
 Essie A J Andrews Pearl Lunde (Wafar Seal)
 Dominion of Canada)
 Province of Saskatchewan)

BE IT REMEMBERED that on this 29th day of December AD 1928 before me the undersigned a Notary Public in and for said Dominion of Canada, Province of Saskatchewan, personally appeared the within named Carl Lunde and Pearl Lunde, husband and wife, who are known to me to be the identical individuals described in and who executed the within instrument and acknowledged to me that they executed the same freely and voluntarily.

In Testimony Whereof I have hereunto set my hand and official seal the day and year last above written

(Seal of Notary) F E Jasnioke
 My Comm Exp Notary Public for the Dominion of Canada
 Dominion of Canada)
 Province of Saskatchewan)

I, Madelene Jasnioke and I Essie A J Andrews, being each duly sworn each for himself says that I am a resident and inhabitant of Lussland of the Province of Saskatchewan, Dominion of Canada; that I subscribed my name to the foregoing instrument as a witness in the presence of the grantors who subscribed their names thereto in my presence and in the presence of my co-witness.

Madelene Jasnioke
 Essie A J Andrews

Subscribed and sworn to before me this 29 day of December 1928

(Seal of Notary) F E Jasnioke
 My Comm Exp Notary Public for the Dominion of Canada
 Dominion of Canada)
 Province of Saskatchewan)

I, James E Rodney, do hereby certify that I am the clerk of the District Court of the Judicial District of Kerrobert, a Court of record of said Province and as such have the seal of said court in my possession, and I do hereby certify that F E Jasnioke, the above named Notary Public

is duly and regularly appointed and qualified to act as Notary Public in the aforesaid Province and that his signature affixed and his seal are authentic and regular.

(Seal of D C of J Dist.) James E Rodney
 Clerk of the District Court of the Judicial District of Kerrobert
 Filed and recorded June 19 1929 at 3:56 PM E C Hackett, County Recorder
 By E Croner, Deputy

May 21st 1929

For and in consideration of the sum of One (\$1.00) dollar receipt whereof is hereby acknowledged a right of way is hereby granted to The Pacific Telephone and Telegraph Company its successors and assigns with the right to place and maintain underground conduit and manholes with the necessary cables therein across that certain property belonging to Robert A Armstrong and Gladys H Armstrong his wife and situated in the county of Clackamas, State of Oregon and described as follows: The NE 1/4 of the SW 1/4 of section 25, T 3 S R 1 W T M and a strip of land 20 feet wide along the east end of Lot 3, in said section 25, said strip of land being recorded in book 178, page 635.

It is understood that the employees of said Telephone Company, shall at any time when necessary have access to said right of way and the manholes, conduit and cables therein for purposes of repairs, etc., provided always that said Telephone Company shall be responsible for any damage which may be necessarily done to the property above described.

Witness: E B Schoonenbeek Robert A Armstrong
 Form Approved, Carey & Kerr Gladys H Armstrong
 By Omar C Speneer.
 State of Oregon)
 County of Clackamas)

BE IT REMEMBERED that on this 12th day of May A D 1929 before me, the undersigned a Notary Public in and for said County and state, personally appeared the within named Robt. A Armstrong and Gladys Armstrong his wife who are known to me to be the identical individuals who executed the within instrument and acknowledged to me that they executed the same freely and voluntarily.

In Witness Whereof I have hereunto set my hand and notarial seal the day and year last written above

(Seal of Notary) E B Schoonenbeek
 My Comm Exp Jan 2 1932 Notary Public for Oregon
 Filed and recorded June 20 1929 at 8:30 A M E C Hackett, County Recorder
 EC

May 21st 1929

For and in consideration of the sum of One (\$1.00) dollar receipt whereof is hereby acknowledged, a right of way is hereby granted to The Pacific Telephone and Telegraph Company its successors and assigns, that the right to place and maintain underground conduit and manholes with the necessary cables therein across that certain property belonging to J N Wiley, a single man and situated in the county of Clackamas, State of Oregon and described as follows: That portion of the west 1/2 of the east 1/2 of section 24 lying south of the Willamette River and that portion of the west 1/2 of the northeast 1/4 of section 25 lying north of the county road running through said section 25, all of the above property being in town-

ship (S) three south range (1) West W.M.
 It is understood that the employees of said Telephone Company shall at any time when necessary have access the said right of way and the manholes conduits and cables therein for purposes of repairs, etc., provided always that said Telephone Company shall be responsible for any damage which may be necessarily done to the property above described.

Witness E B Schonenbach J H Miley
 Form Approved, Carey & Kerr
 By Omar C Spencer
 State of Oregon)
 County of Clackamas) ss
 BE IT REMEMBERED, That on this 21st day of May A D 1929 before me the undersigned a Notary Public in and for the said county and state, personally appeared the within named J H Miley a single man who is known to me to be the identical individual who executed the within instrument and acknowledged to me that he executed the same freely and voluntarily.
 In Witness Whereof I have hereunto set my hand and seal the day and year last written above:
 (Seal of Notary) E B Schonenbach
 My Comm Exp Jan 2 1933 Notary Public for Oregon
 Filed and recorded June 20 1929 at 8:32 A M E C Hackett, County Recorder
 EC

May 21st 1929

For and in consideration of the sum of One (\$1.00) dollar, receipt whereof is hereby acknowledged, a right of way is hereby granted to The Pacific Telephone and Telegraph Company, its successors and assigns with the right to place and maintain underground conduit and manholes with the necessary cables therein across that certain property belonging to Echo M Leabo and Ralph Leabo her husband and W A Giesy a single man and situated in the county of Clackamas, State of Oregon, and described as follows: That certain tract of land containing 73.77 acres more or less, and located in the south 1/4 of the SW 1/4 of Section 28, and in the north 1/4 of the NW 1/4 of section 28, all in T 3 S R 1 W said tract of land being recorded in book 134 page 492 record of Deeds Clackamas County, Oregon. It is understood that the employees of said Telephone Company shall at any time when necessary have access to said right-of-way and the manholes, conduit and cables therein for purposes of repairs, etc., provided always that said Telephone Company shall be responsible for any damage which may be unnecessarily done to the property above described.

Witness E B Schonenbach Echo M Leabo
 Form Approved Carey & Kerr Ralph Leabo
 By Omar C Spencer W A Giesy
 State of Oregon)
 County of Clackamas) ss
 BE IT REMEMBERED that on this 21st day of May A D 1929 before me the undersigned a Notary Public in and for the said county and state, personally appeared the within named Echo M Leabo and Ralph Leabo her husband and W A Giesy a single man who are known to me to be the identical individuals who executed the within instrument and acknowledged to me that they executed the same freely and voluntarily.
 In Witness Whereof I have hereunto set my hand and notarial seal the day and year last written above
 (Seal of Notary) E B Schonenbach
 My Comm Exp Jan 2 1933 Notary Public for Oregon
 Filed and recorded June 20 1929 at 8:34 A M E C Hackett, County Recorder
 EC

May 22 1929

For and in consideration of the sum of One (\$1.00) dollar receipt whereof is hereby acknowledged a right of way is hereby granted to The Pacific Telephone and Telegraph Company its successors and assigns with the right to place and maintain underground conduit and manholes with the necessary cables therein, across that certain property belonging to A H Giesy a widower, and situated in the county of Clackamas, State of Oregon and described as follows: The north one half (1/2) of the west one half (1/2) of the John Anderson D L C in section 28, township 3 south range 1 West W M and that certain tract of land situated in the northwest 1/4 of section 36 township 3 south range 1 West W M and recorded in book 173 page 522, record of deeds Clackamas County Oregon. It is understood that the employees of said Telephone Company shall, at any time when necessary have access to said right-of-way and the manholes conduit and cables therein, for purposes of repairs etc., provided always that said Telephone Company shall be responsible for any damage which may be unnecessarily done to the property above described.

Witness E B Schonenbach A H Giesy
 Form Approved Carey & Kerr
 By Omar C Spencer
 State of Oregon)
 County of Multnomah) ss
 BE IT REMEMBERED that on this 22nd day of May A D 1929 before me the undersigned a Notary Public in and for the said county and state, personally appeared the within named A H Giesy a widower who is known to me to be the identical individual who executed the within instrument and acknowledged to me that he executed the same freely and voluntarily.
 In Witness Whereof I have hereunto set my hand and notarial seal the day and year last written above:
 (Seal of Notary) E B Schonenbach
 My Comm Exp Jan 2 1933 Notary Public for Oregon.
 Filed and recorded June 20 1929 at 8:38 A M E C Hackett, County Recorder
 EC

KNOW ALL MEN BY THESE PRESENTS That Strong and MacNaughton Trust Company, a corporation organized under the laws of the State of Oregon in consideration of the sum of Ten and no/100 dollars to it paid by The Oregon Iron and Steel Company an Oregon corporation, of the county of Multnomah, State of Oregon has bargained and sold, and by these presents, does grant, bargain, sell and convey unto the said The Oregon Iron and Steel Company, its successors and assigns all the following bounded and described real property situated in the county of Clackamas, State of Oregon to-wit: Beginning at the intersection of the north line of the Josiah Franklin D L C Number forty three (43) with the meander line on the left bank of the Willamette River; thence northwesterly along said northerly line to an intersection with the easterly line of the right of way donated to the Beaverton and Willaburg Railroad Company, by The Oregon Iron and Steel Company by deed dated December 3 1907, thence southerly along said easterly line to the iron pipe at the most northerly corner of that tract of land donated to the Portland Cement Company by deed dated September 26 1911; thence along the easterly line of the last mentioned tract of land south two degrees ten minutes thirty seconds east (S 2°10'30" E) three hundred seventy eight and six tenths (378.6) feet to a point of tangency with a curve to the left having a radius of twelve hundred ninety two and thirteen hundredths (1292.13) feet thence on said curve to the left for a distance of two hundred

Whereas, on the 21st day of May, 1929, J. N. Hiley, a single man, granted to Pacific Northwest Bell Telephone Company, hereinafter referred to as the "Telephone Company" or to its successors in interest, an easement or right of way upon the following described property situated in Clackamas County, State of Oregon, which easement or right of way is recorded in the Office of the County Recorder of said County Book 201 of Deeds, at page 527:

That portion of the west half of the east half of Section 24 lying South of the Willamette River and that portion of the West half of the Northeast quarter of Section 25 lying North of the county road running through said section 25, all of the above property being in Township (3) Three South Range (1) One West W.M.

Now, Therefore, for a valuable consideration, receipt of which is hereby acknowledged, the Telephone Company hereby releases to Grantor and Grantor's successors in interest any right, title, interest, easement or right of way said Telephone Company now has in the real property described above, except a 20.00' strip of land lying northerly of the southerly boundary of the George L. Curry D.L.C. #43 in Sections 24 and 25, Township 3 South, Range 1 West of the Willamette Meridian, Clackamas County, Oregon, said 20.00' strip being 10' on each side of our existing underground telephone conduit system through the George L. Curry D.L.C. #43, and as more particularly described on Attachment "A".

In all other respects the said easement shall and does remain in full force and is not affected in any other manner by this partial release.

In Witness Whereof, the Telephone Company has caused these presents to be executed this 18th day of June, 1969.

PACIFIC NORTHWEST BELL TELEPHONE COMPANY

By J. W. DeYoung, Jr.
Right of Way Supervisor

STATE OF OREGON)
County of Multnomah) ss.

On this 18th day of June, 1969, before me personally appeared J. W. DeYoung, Jr. of me known to be the Right of Way Supervisor of the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute said instrument.

In Witness Whereof, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

George P. Sherritt
Notary Public in and for the State of Oregon

My commission expires: Jan. 8, 1971

Approved as to Form
By Ernest J. Gunn
Attorney for
Pacific Northwest Bell Telephone Company

ORE 4-1-68

69 11578

RECORDED IN THE OFFICE OF THE COUNTY CLERK OF CLATSOP COUNTY, OREGON, THIS DEED BEING FIRST FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK OF CLATSOP COUNTY, OREGON, ON THE 27th DAY OF JANUARY, 1911.

ATTACHMENT "A"

Beginning at an iron rod in the division line of the George Curry D.L.C. #43, which iron rod bears West (Basis for Bearings) along the southerly boundary of said George Curry D.L.C. #43, 2703.36 feet and North 0°00'40" West along said division line, 4070.80 feet from the southeast corner of said D.L.C. From said place of beginning; thence leaving said division line North 64°41'30" East 102.30 feet to the centerline of said 20.00 foot strip of land and the true place of beginning of the 20.00 foot strip of land to be described. From said true place of beginning; thence 10.00 feet on each side of the following described centerline; South 15°18' West 235.50 feet to a point of curve; thence southerly along a curve to the left having a radius of 286.62 feet through a central angle of 14°09' a distance of 70.27 feet to a point of tangent; thence South 1°15' West 713.47 feet to an angle point in said centerline; thence South 0°47' East 999.30 feet to an angle point; thence South 0°23' West 501.03 feet to an angle point; thence South 0°27' West 1222.80 feet to a point of curve; thence southerly along a curve to the left having a radius of 833.59 feet through a central angle of 15°46' a distance of 229.39 feet to a point of reverse curve (Radial bears North 74°41' East); thence southerly along a curve to the right having a radius of 729.12 feet through a central angle of 14°23' a distance of 183.04 feet to a point of tangent. For the purpose of this description said last mentioned point of tangent is the terminus of said 20.00 foot strip centerline and bears South 74°38' East 63.05 feet from an iron rod in the southerly boundary of said George Curry D.L.C. #43, which iron rod bears West along said southerly boundary, 2703.36 feet from the southeast corner of said D.L.C.

69-11578

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STATES OF OREGON,
County of Clatsop.

I, George D. Payne, County Clerk, do hereby certify that the foregoing is a true and correct copy of the original as the same appears from the records of the County of Clatsop, Oregon, and I hereby certify that the same has been recorded in the office of the County Clerk of Clatsop County, Oregon, on the 27th day of January, 1911.

DEED

280 JAN 27 AM 11 57

RECORDED OF CONVEYANCES
CLATSOP COUNTY, OREGON

George D. Payne
County Clerk

68
4P

Clackamas County Official Records
Sherry Hall, County Clerk

2016-035571

After Recording return to:
Right-of-Way Department
Qwest Corporation dba CenturyLink QC
1208 NE 64th St, 4th Floor
Seattle WA 98115



\$68.00

01952959201600355710040044

06/01/2016 12:35:44 PM

D-ER Cnt=1 Stn=54 COUNTER2
\$20.00 \$16.00 \$22.00 \$10.00

RELEASE OF EASEMENT

This Release of EASEMENT (“Release”) is made by CenturyTel of Oregon, Inc. (“CenturyLink”), a successor, formerly known as The Pacific Telephone and Telegraph Company.

BACKGROUND:

J.H. Miley, a single man (“Grantor”) signed as grantor that certain EASEMENT dated May 29th, 1929 (“Easement”), whereby Grantor granted easement rights to CenturyLink, formerly known as The Pacific Telephone and Telegraph Company, over certain real property then owned by Grantor and described in the Easement (“Easement Tract”).

The Easement was filed of record on June 20th 1929 in the Clackamas County Recorder’s Office, Oregon in Book Number 201, Page 577-578. A copy of the Easement is attached to this Release as Exhibit A and incorporated by reference into this Release.

A Partial Release of Easement was filed of record on June 18th, 1969 in the Clackamas County Recorder’s Office, Oregon as Instrument Number 77 14311. A copy of the Partial Release of Easement is attached to this Release as Exhibit B and incorporated by reference into this Release.

The current owners of the Easement Tract, Charbonneau Golf Club, Inc., an Oregon Corporation, have requested that CenturyLink relinquish the rights granted to it in the Easement. CenturyLink is willing to so relinquish such rights pursuant to this Release.

RELEASE:

As of the date CenturyLink signs this Release, and for good and valuable consideration, the receipt and sufficiency of which are acknowledged, CenturyLink vacates and releases all of its right, title and interest in and to any and all Easements and Easement Rights acquired by CenturyLink pursuant to the Easement, and otherwise releases the Easement.

This action shall not diminish, reduce or otherwise affect any other rights CenturyLink has on this property or the surrounding property.

This Release must be recorded with the Clackamas County Recorder’s Office, Clackamas County, Oregon, within 180 days of the date that this document is executed below. If this document is not recorded with 180 days of execution, it shall become null and void.

CenturyTel of Oregon, Inc., d/b/a CenturyLink

By: Thomas L. Sassone
Printed Name: Thomas L. Sassone
Title: Negotiator
Signature Date: April 4, 2016

THE STATE OF Nevada)
COUNTY OF Clark)

BE IT REMEMBERED, that on this 4th day of April, 2016 before me, a Notary Public in and for said County and State, came Thomas L. Sassone, who is the Negotiator of CenturyTel of Oregon Oregon Corp., and is personally known to me to be the same person who signed this Release as the act and deed of the Negotiator.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal the day and year last above written.

Donni Jo Fields
Notary Public

My appointment expires:
May 17, 2017



EXHIBIT A TO RELEASE OF EASEMENT

Easement

- 1) The Pacific Telephone and Telegraph Company easement recorded in book 201, page 577-578, dated May 29th, 1929 and filed of record June 20th, 1929.

EXHIBIT B TO RELEASE OF EASEMENT

Partial Release of Easement

1.) The Pacific Northwest Bell Telephone Company partial release of easement recorded as instrument number 77-14311; dated June 18th, 1969 and filed of record April 19th, 1977.

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BOOK **433** PAGE **42**

KNOW ALL MEN BY THESE PRESENTS, That **MERRILL B. LUCAS and EDITH C. LUCAS,**
husband and wife

of **Marion** County, Oregon,

in consideration of **One and No/100ths (\$1.00)** Dollars,
and other good and valuable considerations, the receipt of which is hereby acknowledged, hereby grant unto the
PORTLAND GENERAL ELECTRIC COMPANY, a corporation of Oregon, its successors and assigns, an easement

and/or right-of-way, situated in **Clackamas** County, Oregon, of such width as may be reasonably necessary
to accomplish the purposes of this easement on either side of a center line more particularly described as follows:

Beginning at a point on the south line of George L. Curry
D.L.C. No. 43, 2703.36 feet West and 2036.76 feet South of the
northeast corner of Section 25, T.3 S., R.1 W., W.M., Clackamas
County, Oregon; running thence over and across the land of the
Grantors, North 2325 feet; thence N.1° 15' W. a distance of 1681.8
feet to a second point; thence N.25° 40' W. to the Willamette River;
Also, running from said second point N.77° 10' E. for a distance of
50 feet. Said centerline being as shown in red on print of drawing
EB 3231 attached hereto and by reference made a part hereof.

TO HAVE AND TO HOLD the above described easement and right-of-way unto the said Grantee, its successors
and assigns, together with the right of ingress and egress to and from the above described right-of-way, over and across
the adjacent land of the Grantor **...** for the purpose of the erection, construction, maintenance and operation therein
thereon and thereover, of electrical transmission lines, telephone lines, together with such poles, conduits, wires, guys, sup-
ports, electrical equipment and facilities as may be reasonably connected therewith or appurtenant thereto; provided, that
the Grantee shall have the right to cut and/or trim and keep cut and/or trimmed any tree growth or other growth upon
or adjacent to said right-of-way which may interfere with or menace the construction, maintenance, or operation of said
lines; provided, also, that the Grantor, **...** their heirs and assigns, shall always have the right to reason-
ably use and enjoy said above described right-of-way for all purposes which may not interfere or be inconsistent with the
use by the Grantee for the purposes above mentioned; and, provided also, that if the Grantee, its successors and assigns,
shall fail to use said right-of-way for the purposes above mentioned for a continuous period of one year after construc-
tion of said pole line, then and in that event this right-of-way and easement shall terminate and all rights and privileges
granted hereunder shall revert to the Grantor, **...** their heirs and assigns.

The Grantor **...** for **themselves** and **their** heirs and assigns,
covenant to and with the Grantee, its successors and assigns, that the Grantee, its successors and assigns, shall peaceably
enjoy the rights and privileges herein granted.

IN WITNESS WHEREOF, the Grantor **...** has **caused** this easement to be executed this **22nd** day of

Witnesses: **May** 19**50**

Merrill B. Lucas (SEAL)
Edith C. Lucas (SEAL)

(SEAL)
(SEAL)
(SEAL)
(SEAL)

Approved:
General Div. Manager or Sup. of Distribution

Approved by the Department:
Engineer

Approved:
Right-of-Way Engineer

STATE OF OREGON, }
County of Marion }

On this 22nd day of May, 1950, before me, the undersigned, a Notary Public
in and for said County and State, personally appeared MERRILL B. LUCAS and EDITH C. LUCAS,
husband and wife

to me known to be the
individuals described in and who executed the foregoing conveyance and acknowledged to me that they executed
the same freely and voluntarily for the purposes and uses aforementioned.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal this, the day and year in
this instrument first written.

[Signature]
Notary Public for Oregon.

My commission expires _____
NOTARY PUBLIC FOR OREGON
MY COMMISSION EXPIRES JAN. 20, 1951



STATE OF OREGON, }
County of _____ }

On this _____ day of _____, 19____, before me, the undersigned, a Notary Public
in and for said County and State, personally appeared _____

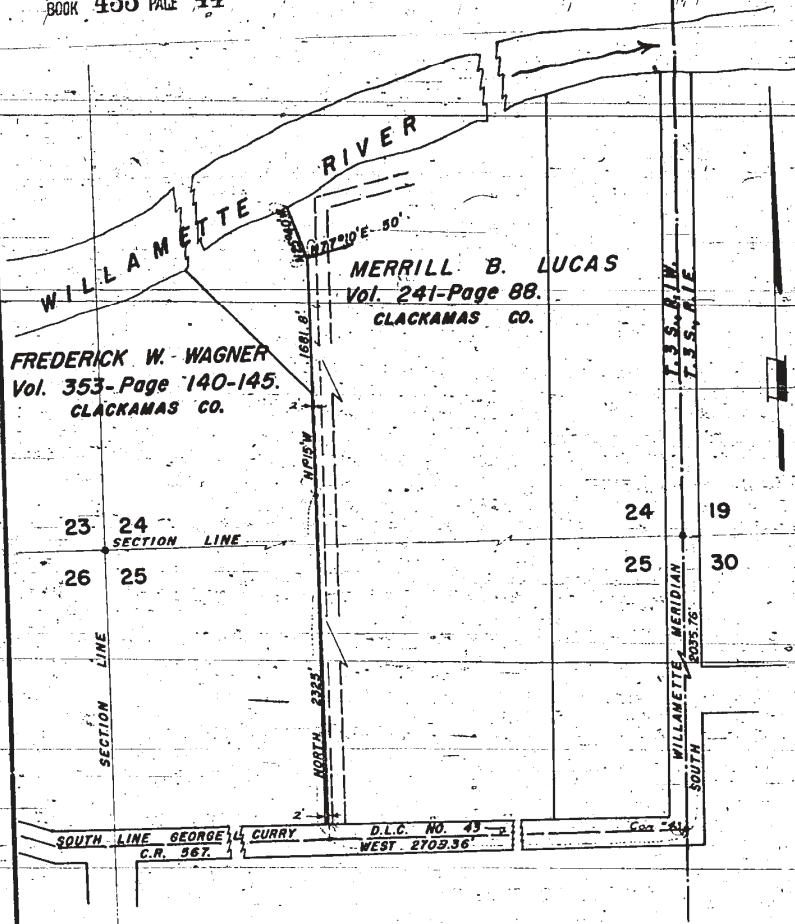
to me known to be the
individuals described in and who executed the foregoing conveyance, and acknowledged to me that _____ executed
the same freely and voluntarily for the purposes and uses aforementioned.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal, this, the day and year in
this instrument first written.

My commission expires _____
Notary Public for Oregon.

Document
PAGE _____ OF COUNTY _____ ORG.
NOTARIAL
Central Electric Company

BOOK 433 PAGE 44



SOUTH LINE GEORGE CURRY
C.R. 567

D.L.C. NO. 43
WEST 2709.36'

PORTLAND GENERAL ELECTRIC CO.
PORTLAND, OREGON
POWER LINE EASEMENT
MERRILL B. & EDITH C. LUCAS
SEC'S 23 & 24, T. 3 S., R. 1 W.
SCALE NONE DATE 8-5-50
DRAWN BY TRACED BY CHECKED
APPROVED APPROVED
DRG. NO. EB 3231

RECORDED JUN 29 1950 9:57 AM H. PAGE, COUNTY CLERK

**NOTICE
REGARDING
CERTAIN DISCRIMINATORY RESTRICTIONS, IF APPLICABLE**

Omitted from the attached document is any covenant or restriction that is based upon, but not necessarily limited to, race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal law, except to the extent that such covenant or restriction is permitted by applicable law.

Oregon Version 20150707

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D 18

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CONVENANTS, CONDITIONS AND RESTRICTIONS
FOR
CHARBONNEAU COUNTRY CLUB
Clackamas County, Oregon

The following shall constitute the Covenants, Conditions and Restrictions for Charbonneau Country Club, Clackamas County, Oregon.

The undersigned hereby declare that the real property described on Exhibit "A" attached hereto and made a part hereof shall be held and conveyed upon and subject to the easements, conditions, covenants, restrictions and reservations hereinafter set forth; all of which are for the purpose of enhancing and protecting the value, desirability and attractiveness of said property. These easements, covenants, restrictions, conditions and reservations shall constitute covenants which run with the land and shall be binding upon all persons claiming under them and also these conditions, covenants, restrictions, easements and reservations shall inure to the benefit of and be limitations upon all future owners of said property, or any interest therein.

ARTICLE I
DEFINITIONS

Section 1. "Club" shall mean and refer to CHARBONNEAU COUNTRY CLUB, a non-profit corporation organized under the laws of the State of Oregon, its successors and assigns.

Section 2. "Said Property" shall mean and refer to that certain real property herein described and such additions thereto

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as may hereafter be brought within the jurisdiction of the Club by recorded declarations in the manner hereinafter set forth.

Section 3. "Common Area" shall mean all real property, and appurtenances thereto, now or hereafter owned, leased or otherwise controlled by the Club for the common use and enjoyment of the members of the Club.

Section 4. "Residence Locations" shall mean and refer to any separately designated parcel of land upon which a residence can be or has been constructed.

Section 5. "Residence" shall mean that portion or part of any structure intended to be occupied by one family as a dwelling, together with attached or detached garage, as the case may be, and the patios, porches, or steps annexed thereto or its equivalent as defined in Article VI, Section 3 (a) and (b).

Section 6. "Member" shall mean and refer to every person or entity who holds membership in the Club.

Section 7. "Owner" shall mean and refer to the record owner, whether one or more persons or entities, of all or any part of said property, including contract sellers, but excluding those having such interest merely as security for the performance of an obligation.

Section 8. "Declarant" shall mean and refer to Willamette Factors, Inc., an Oregon Corporation, its successors and assigns, if such successors or assigns should acquire more than one undeveloped residence location or building from the Declarant for the purpose of development.

ARTICLE II

ANNEXATION OF ADDITIONAL PROPERTY

Real property in addition to that described on Exhibit "A" may be subject to the jurisdiction of the Club, by Declarant recording in the Clackamas County, Oregon Deed Records a declaration of its intention to cause such property to become subject to the jurisdiction of the Club, whereupon automatically it shall be included in any reference herein to "said property" or "said properties".

If within five years from the date of this document any of the owners of residence locations located within the hereinafter described plats wish to join this Club and subject their residence locations to the jurisdiction of the Club, they may do so without the consent of the existing members and without paying any assessments previously assessed by the Club, by executing and recording a document in the Clackamas County, Oregon Deed Records declaring their intention to cause such property to become subject to the jurisdiction of the Club.

Charbonneau, The Village at Wilsonville
Charbonneau II, The Village at Wilsonville
Charbonneau III, The Village at Wilsonville
Charbonneau IV, The Village at Wilsonville
Charbonneau V, The Village at Wilsonville,
Clackamas County, Oregon

Section 1. Within twelve (12) years of the date of this instrument, additional lands may be annexed by Declarant without consent of the members.

Section 2. After the twelfth anniversary of this instrument, annexation of additional property shall require the assent of persons entitled to cast two-thirds (2/3) of the votes of the CLASS A members present in person or by written proxy (except as provided in Section 3 below) and the assent of persons entitled to cast two-thirds (2/3) of the votes of the Class B members present in person or by written proxy at a meeting of the Club duly called for such purpose, written notice of which shall be sent to all members not less than thirty (30) nor more than sixty (60) days in advance of such meeting, setting forth the purpose thereof.

Section 3. The presence of members or of proxies entitled to cast sixty percent (60%) of the votes of each class of membership shall constitute a quorum at such meeting. In the event that a quorum is not forthcoming at any such meeting, another meeting may be called, subject to the notice requirement set forth above, and the required quorum at such meeting shall be one-half of the required quorum at the preceding meeting.

ARTICLE III

MEMBERSHIP

Every person or entity who is a record owner of a fee or undivided fee interest in any residence location which is subject by covenants of record to assessment by the Club, including contract Sellers, shall be a proprietary member of the Club. The foregoing is not intended to include persons or entities who hold an interest merely as security for the performance of an obligation. No owner shall have more than one (1) membership. Membership shall be appurtenant to and may not be separated from ownership of any residence location which is subject to assessment by the Club.

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Ownership of such residence locations shall be the sole qualification for membership and shall automatically commence upon a person becoming such owner and shall automatically terminate when such ownership shall terminate or be transferred.

Each lessee, rentor, or other occupant of a residence within said property not eligible for a proprietary membership, but who satisfies the conditions of the Bylaws of the Club and of these conditions, covenants, and restrictions shall be an associate member which status shall continue in effect during such period as the associate member shall be an authorized non-proprietary tenant of a resident within said property. Associate membership shall carry all of the rights and privileges and shall be subject to all obligations and responsibilities of proprietary membership except the right to vote. At any time an associate member shall cease to be a resident of said property or becomes a proprietary member, his right and privileges as an associate member shall terminate.

ARTICLE IV

VOTING RIGHTS

The Club shall have two classes of voting membership,

CLASS A. Class A members shall be all those owners as defined in Article III with the exception of the Declarant. Class A members shall be entitled to one (1) vote for each residence location or its equivalent as defined in Article VI, Section 3 (a) and (b), in which they hold the interest required for membership of Article III. When more than one person holds such interest in any residence location, all such persons shall be members. The vote for such residence

location shall be exercised as they among themselves determine, or, if unable to agree, they may cast fractional votes proportionate to their ownership interest, but in no event shall more than one (1) Class A vote be cast with respect to any one residence location. The vote applicable to any of said property being sold under a recorded contract of purchase shall be exercised by the contract vendor unless the contract expressly provides otherwise.

CLASS B. The Class B member(s) shall be the Declarant, its successors and assigns. Class B member(s) shall be entitled to three (3) votes for each residence location or its equivalent as defined in Article VI, Section 3 (a) and (b), in which it holds the interest required for membership by Article III; provided that the Class B membership shall be converted to Class A membership on the happening of either of the following events, whichever occurs earlier:

- a. When the total votes outstanding in the Class A membership equal the total votes outstanding in the Class B membership, or
- b. On a date twelve (12) years from the date of recording of these covenants in the county deed records.

ARTICLE V

PROPERTY RIGHTS

Section 1. Members' easements of enjoyment. Every member of the Club shall have a right and easement of enjoyment in and to the common areas and such easements shall be appurtenant to and shall pass with the title to every residence location;

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subject, however, to the following provisions:

- a. The right of the Club to limit the number of guests of members permitted to use the common areas.
- b. The right of the Club to charge reasonable admission fees for the use of any facility situated upon the common areas.
- c. The right of the Club, in accordance with its Articles and ByLaws, to borrow money for the purpose of improving the common areas and in aid thereof to mortgage said common areas for such purposes, and the right of any mortgagee in said properties shall be subordinate to the rights of the members hereunder.
- d. The right of the Club to suspend any member's voting rights and/or right to use of any of the common areas for any period during which any assessment against said member's property remains unpaid; and for a period not to exceed thirty (30) days for each infraction of its published rules and regulations.
- e. The right of the Club to dedicate or transfer all or any part of the common areas to the Declarant or any public agency, authority, or utility for such purposes and subject to such conditions as may be agreed to by the members. No such dedication or transfer shall be effective unless an instrument signed by members entitled to cast a majority of the votes of the Class A membership and a majority of the votes of the Class B membership, if any, has been recorded in the appropriate records of Clackamas County, Oregon, agreeing to such dedication or transfer, and unless written notice of the proposed action is sent to every member not less than thirty (30) days nor more than ninety (90) days prior to such dedication or transfer.
- f. The right of the Club to enter into a lease or other contract with the Declarant regarding the use and occupancy of the proposed clubhouse and proposed recreational facilities subject to such conditions as may be agreed to by the members. No such lease or other contract shall become effective until approved by a vote of not less than a majority of the votes of the Class A membership and a majority of the votes of the Class B membership, if any. (The proposed clubhouse and recreational facilities do not include the existing golf course and the existing restaurant facilities).

g. The right of the Directors of the Club to promulgate reasonable rules and regulations governing such rights of use, from time to time, in the interest of securing maximum safe usage of the common areas by the members without unduly infringing upon the privacy or enjoyment of the owner or occupant of any part of said property, including, without being limited thereto, rules restricting persons under or over designated ages from using certain portions of said property during certain times, and reasonable regulations and restrictions regarding parking.

Section 2. Delegation of use. Any member may delegate, in accordance with the Rules and Regulations adopted from time to time by the Directors, his right of enjoyment to the common areas to the members of his family, his tenants or contract purchasers, providing they reside within a residence.

Section 3. Title to the Common Areas. The Declarant hereby covenants for itself and its successors and assigns that it will convey to the Club fee simple title to the common areas so designated on a plat prior to the conveyance of the first residence location with such plat.

ARTICLE VI

COVENANT FOR MAINTENANCE ASSESSMENTS

Section 1. Creation of the Lien and Personal Obligation of Assessments. The Declarant hereby covenants for all of said property, and each owner of any residence location by acceptance of a deed or contract of purchase therefor, whether or not it shall be so expressed in any such deed or other conveyance or agreement for conveyance, is deemed to covenant and agree to pay to the Club, (1) regular annual or other regular periodic assessments or charges as established by the Club from time to time, and (2) special assessments for capital improvements, such

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assessments to be fixed, established and collected from time to time as hereinafter provided. The regular and special assessments, together with such interest thereon and costs of collection thereof, as hereinafter provided, shall be a charge on the residence location and shall be a continuing lien upon the property against which each such assessment is made. Each such assessment, together with interest, costs and reasonable attorneys' fees, shall also be the personal obligation of the person who was the owner of such property at the time such assessment became due. The obligation shall remain a lien upon the property until paid or foreclosed, but shall not be a personal obligation of successors in title unless expressly assumed by them.

Section 2. Purpose of Assessments. The assessments levied by the Club shall be used exclusively for the purpose of promoting the recreation, health, safety and protection of the residents in Charbonneau and in particular for the improvement and maintenance of the common areas, public thoroughfares within Charbonneau and other property designated by the Directors of the Club.

The Club may also render such additional services as designated by its directors.

Section 3. Basis and Maximum of Annual Assessments. Until January 1, 1978, the MAXIMUM regular monthly assessment shall be \$25.00 for each residence location subject thereto.

- a. Real property which is subject to these covenants and is zoned for apartments shall be equivalent to one residence location until the apartment unit is

initially occupied. Upon the initial occupancy of each unit such unit shall be a residence location for assessment and voting purposes.

- b. Real property which is subject to these covenants and is zoned for commercial structures shall be equivalent to one residence location until the space is initially occupied. Upon the initial occupancy of such commercial space each 5,000 square feet or fraction thereof occupied by a tenant shall be a residence location for assessment and voting purposes.
- c. From and after January 1, 1978, the maximum annual assessment may be increased effective January 1 of each year, beginning January 1, without a vote of the membership in conformance with the rise, if any, of the Consumer Price Index (published by the Department of Labor, Washington, D.C., or successor U.S. governmental agency) from July of the year in which these covenants are recorded to July of the year preceding the year in which such increase becomes effective, taking into consideration prior increases in such maximum, if any.
- d. From and after January 1, 1978, the maximum annual assessment may be increased above that determined by reference to Consumer Price Index, as aforesaid, by a vote of the members, provided that any such increase shall be approved by the affirmative vote of not less than fifty-one percent (51%) of the votes of each class of members who are voting in person or by proxy, at a meeting duly called for this purpose, written notice of which shall be sent to all members not less than thirty (30) days nor more than sixty (60) days in advance of the meeting setting forth the purpose of the meeting. The limitations hereof shall not apply to any change in the maximum flat charge and basis of the assessments undertaken as an incident to a merger or consolidation in which the Association is authorized to participate under its Articles of Incorporation.

Section 4. Special Assessments for Capital Improvements.

In addition to the annual assessments authorized above, the Club may levy in any assessment year, a special assessment applicable to that year only, for the purpose of defraying, in whole or in part, the cost of any construction or reconstruction, unexpected

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repair or replacement of a described capital improvement upon the common areas, including the necessary fixtures and personal property related thereto, provided that any such special assessment for structural alterations, capital additions or capital improvements shall require the assent of fifty-one percent (51%) of the votes of each class of members who are voting in person or by proxy at a meeting duly called for this purpose, written notice of which shall be sent to all members not less than thirty (30) days nor more than sixty (60) days in advance of the meeting setting forth the purpose of the meeting. This section shall not prohibit the Directors from authorizing capital expenditures for replacements or repairs or improvements from funds generated by regular assessments.

Section 5. Uniform Rate of Assessment. Both annual assessments and any special assessments must be fixed at a uniform rate for services rendered for all residence locations and may be collected on an annual, quarterly or monthly basis in the discretion of the Directors. If special services are rendered to specific residence locations at the request of such residence locations, additional assessments shall be charged to such residence locations.

Section 6. Quorum for Any Action Authorized Under Sections 3 and 4. At the first meeting called, as provided in Sections 3 and 4 hereof, the presence at the meeting of members or of proxies entitled to cast sixty percent (60%) of all the votes of each class of membership shall constitute a quorum. If the required quorum is not forthcoming, at any meeting, another meeting may be called, subject to the notice requirement set forth in Sections 3 and 4, and the required quorum at such subsequent meeting shall be one-half

of the required quorum at the preceding meeting. No such subsequent meeting shall be held more than sixty (60) days following the date of the meeting at which no quorum was forthcoming.

Section 7. Date of Commencement of Annual Assessments:

Due Dates: The annual assessments provided for herein shall commence as to all residence locations within a plat on the first day of the month following the conveyance to the Club of the common areas located within such plat. If there are no common areas, the annual assessments provided for herein shall commence as to all residence locations within such plat on the first day of the month following the conveyance of the first lot within the plat. The first regular assessment shall be adjusted according to the number of months remaining in the calendar year. The Board of Directors shall fix the amount of the regular assessment at least thirty (30) days in advance of each annual assessment period. Written notice of the annual assessment shall be sent to every Owner subject thereto. The due dates shall be established by the Board of Directors. The Club shall upon demand at any reasonable time furnish a certificate in writing signed by an officer of the Club setting forth whether the assessments on a specific residence location have been paid. A reasonable charge may be made by the Board for the issuance of these certificates. Such certificate shall be conclusive evidence of payment of any assessment therein stated to have been paid.

Section 8. Effect of Nonpayment of Assessments: Remedies of the Club. Any assessments which are not paid when due shall be delinquent. If the assessment is not paid within thirty (30) days after the due date, the assessment shall bear interest from the

date of delinquency at the rate of ten percent (10%) per annum. The Secretary of the Club shall file in the office of the Director of Records, County Clerk, or appropriate recorder of conveyances of Clackamas County, Oregon, within one hundred twenty (120) days after delinquency, a statement of the amount of any such charges or assessments together with interest as aforesaid, which have become delinquent with respect to any residence location and upon payment in full thereof, shall execute and file a proper release of the lien securing the same. The aggregate amount of such assessment, together with interest, costs, expenses, and a reasonable attorney's fee for the filing and enforcement thereof, shall constitute a lien on the residence location with respect to which it is fixed including any improvement thereon, from the date the notice of delinquency thereof is filed in the office of said Director of Records or County Clerk or other appropriate recording office, until the same has been paid or released as herein provided. Such lien may be enforced by the Club in the manner provided by law with respect to liens upon real property. The owner of said property at the time said assessment becomes due shall be personally liable for the expenses, costs, disbursements and attorneys' fees which shall also be secured by said lien, including additional attorneys' fees incurred on appeal. The owner at the time such assessment is incurred, shall also be liable for any deficiency remaining unpaid after any foreclosure sale. No owner may waive or otherwise escape liability for the assessments provided for herein by nonuse of the common areas or abandonment of his residence location or any improvement thereon.

Section 9. Subordination of the Lien to Mortgages. The lien of the assessments provided for herein shall be inferior, junior and subordinate to the lien of all mortgages and trust deeds now or hereafter placed upon said property or any part thereof. Sale or transfer of any residence location or any other part of said property shall not affect the assessment lien. However, the sale or transfer of any residence location which is subject to any mortgage, pursuant to a decree of foreclosure under such mortgage or any proceeding in lieu of foreclosure thereof, shall extinguish the lien of such assessments as to amounts thereof which became due prior to such sale or transfer. No sale or transfer shall relieve such residence location and any improvements thereon from liability for any assessments thereafter becoming due or from the lien thereof.

Section 10. Exempt Property. The following property subject to this declaration shall be exempt from the assessments created herein: (a) All properties expressly dedicated to and accepted by a local public authority; (b) The common areas; (c) All other properties owned by the Club; and (d) All property owned by Declarant, its successors and assigns, if such successors or assigns should acquire more than one undeveloped residence location for the purpose of development.

ARTICLE VII

ENCROACHMENTS

Section 1. If any portion of a residence or other structure now or hereafter constructed upon said property encroaches upon any part of a common area or upon a residence location or residence locations used or designated for use by another residence locations owner, such encroachment shall be made known to the Architectural

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Committee which will investigate the origin, length of time and extent of the encroachment. If the Committee finds that it would be a hardship on the present owner of the structure which is now encroaching to have the encroaching material removed, then an easement for the encroachment and for the maintenance of same is granted and reserved and shall exist and be binding upon the Declarant, the Club and upon all present and future owners of any part of said property for the benefit of the present and future owners of such encroaching building or structure for the purpose of occupying and maintaining same, and in the event a structure consisting of more than one residence becomes partially or totally destroyed or in need of repair or replacement, mutual and reciprocal easements are granted and reserved upon the common areas and in and upon each residence and residence location for the benefit of the Club and the adjacent owner or owners to the extent reasonably necessary or advisable to make repairs or replacements; and minor encroachments resulting from any such repairs and/or replacements and the maintenance thereof are hereby granted and reserved for the benefit of the present and future owners thereof. The easements for encroachment herein granted and reserved shall run with the land.

ARTICLE VIII

ARCHITECTURAL CONTROL

Section 1. APPROVAL. No building, fence, wall, hedge, structure, improvement, common area, refurbishing, painting, staining, decorating, obstruction, ornament, landscaping or planting shall be placed or permitted to remain upon or be removed from any part of a residence location or the exterior of the

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residence unless a written request for approval thereof has been approved in writing by a majority of the Architectural Committee or by its representative designated by a majority of the Committee.

Section 2. ENFORCEMENT. Notwithstanding a prior approval, if a condition exists or changes have come about which may be caused by any event, time or effect which in the opinion of the majority of the Architectural Committee must be remedied, corrected, altered, modified or eliminated, then said Committee shall so notify the owner thereof, and the owner shall forthwith comply with said notice. If the owner refuses or delays in so complying with said notice, then the Club shall have the right to perform said work specified in the Committee's notice to the owner and the cost of same shall be payable by the owner.

Section 3. ARCHITECTURAL COMMITTEE. The Architectural Committee referred to herein shall be composed of three members appointed by the Board of Directors of the Club. The decision of any two members of the Architectural Committee shall be final and binding, however, applications may be resubmitted. Upon failure of the Committee or its designated representative to approve or disapprove any application for a period of thirty (30) days after it has been submitted in writing to the Chairman of the Committee or his designated representative, said application will be deemed to have been approved. Members shall be elected for a term of three (3) years by the majority vote of the Board of Directors of the Club. If any member of the Committee is unable or unwilling to act, the remaining members shall elect a successor to serve out the unexpired term.

Section 4. NO COMPENSATION. No member of the Architectural Committee, however created or constituted, shall receive any compensation from the Club or make any charge for his services.

Section 5. CONSTRUCTION BY DECLARANT. This article shall not govern the original construction upon portions of said property owned by the Declarant or its successors or assigns. However, Declarant shall approve in writing all plans for original construction prior to the commencement of such construction.

ARTICLE IX

EXTERIOR MAINTENANCE

Each owner, and/or homeowner association shall be responsible for maintaining and keeping in good order and repair the exterior of all residence locations.

If an owner and/or the homeowner association fails to maintain and keep in good order and repair the exterior of any such residence location, the Club, after reasonable notice, may do so and file a lien for such expense pursuant to Article VI, Section 8.

ARTICLE X

USE RESTRICTIONS

The following restrictions shall be applicable to the real property described on Exhibit "A" and shall be for the benefit of and limitations upon all present and future owners and authorized users thereof of said property or of any interest therein.

Section 1. Unless written approval is first obtained from the Architectural Committee, no sign of any kind shall be displayed to the public view on any residence location except one professional

sign of not more than five (5) square feet advertising the residence for sale or rent, or signs used by the developer to advertise the residence location or residence during the construction and sales period.

Section 2. No animals, livestock or poultry of any kind shall be raised, bred or kept on any part of said property, except dogs, cats or other tame, domestic household pets, provided such household pets are not kept, bred or maintained for any commercial purpose. The number of pets kept at each residence may be limited and the control thereof shall be by rules prescribed by the Directors.

Section 3. No part of said property shall be used or maintained as a dumping ground for rubbish, trash, garbage or other waste. No garbage, trash or other waste shall be kept or maintained on any part of said property except in a sanitary container. All incinerators or other equipment for the storage of or disposal of such material shall be kept in a clean and sanitary condition.

Section 4. No noxious or offensive condition or anything which may be or become an annoyance or nuisance to the neighborhood shall be permitted.

Section 5. No trailer, camper-truck, tent, garage, barn, shack or other out-building shall be at any time used as a residence temporarily or permanently on any part of said property.

Section 6. Parking of boats, trailers, motorcycles, trucks, truck-campers and like equipment shall not be allowed on any part of said property nor on public ways adjacent thereto excepting only within the confines of an enclosed garage, and no portion of same

may project beyond the enclosed area except under such circumstances, if any, as may be prescribed by written permit approved by the Architectural Committee. All other parking of equipment shall be prohibited except in such areas, fully screened from public view, as may be approved in writing by the Architectural Committee.

If any of the provisions of this section are violated, the Board of Directors of the Club may employ a tow truck to remove the vehicle after prior written notice to the owner and the owner of the vehicle shall be responsible for any charges arising therefrom.

Section 7. All owners are entitled to an equal share in the rights, interests, privileges, and obligations of the Club. The owners shall have the right to use all common areas subject to the rules, regulations and restrictions applicable thereto.

Section 8. All common areas are to be maintained by the Club and no changes in the equipment, design, decor, landscaping, removal or trimming of trees, lawns or shrubs will be permitted without written authorization by the Architectural Committee.

Section 9. All walks, streets, bike paths and electric cart paths located on common areas are for the use of Club members on an equal basis, subject to reasonable rules and regulations promulgated in writing by the Directors. It shall be the responsibility of each member to allow maximum ease of pedestrian, bike and vehicular ingress and egress over walks, streets, and driveways by prohibiting automobile parking in front of garages or in the driveways, paths or alleyways and allowing no obstruction or barrier on, across or adjacent to sidewalks or paths which would inter-

ferre with any other member's use of the common areas or access to his residence location.

Section 10. Owners are expressly prohibited from painting or changing the exterior of any building, garage, fence or wall without the written permission of the Architectural Committee.

Section 11. All antennae are prohibited outside any building without permission from the Architectural Committee.

Section 12. Club Directors will have jurisdiction over activities permitted in the common areas. All disputes, complaints or matters of change in existing or future use restrictions will be submitted to the Club Directors for arbitration.

ARTICLE XI

EASEMENTS

All conveyances of land situated within said property, made by the Declarant, and by all persons claiming by, through or under Declarant, shall be subject to the foregoing restrictions, conditions and covenants whether or not the same be expressed in the instruments of conveyance, and each and every such instrument of conveyance shall likewise be deemed to grant and reserve, whether or not the same be declared therein, mutual and reciprocal easements over and across all of the common areas for the purpose of traveling by foot, by bike, cart or other conveyance or resting or otherwise being thereon, and over, under and across all portions of said property (except those portions thereof actually intended to be occupied as living space in any building nor or hereafter located upon said property and specifically including [without

being limited thereto] the interior of party walls, attic crawl spaces and the area below the living space in any living units), for the purpose of building, constructing and maintaining underground or concealed electric and telephone lines, gas, water, sewer, storm drainage lines, radio and television antennae and cables, and other utilities and services now or thereafter commonly supplied by public utilities or municipal corporations and upon all neighborhood recreational zones and common areas for constructing and maintaining thereon streets, driveways, community and recreational facilities, ornaments, swimming pools, lawns, landscaping and planted areas thereon; all of said easements shall be for the benefit of all present and future owners of property subjected to the jurisdiction of the Club by recorded covenants and restrictions recorded as hereinabove provided, and their tenants, contract purchasers and guests; said easements and rights of use, however, shall not be unrestricted but shall be subject to reasonable rules and regulations governing said right of use, as promulgated from time to time by the Directors of the Club in the interest of securing maximum safe useage of said easements without unduly infringing upon the privacy of the owner or occupant of any part of said property. An easement over, upon and across all parts of said property is granted and reserved to the Club, its successors and assigns to the extent reasonably required to perform exterior maintenance if necessary, as provided in Article IX, and to the extent reasonably necessary to perform other maintenance reasonably necessary or advisable to protect or preserve the value of said property and the residences thereon.

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All residence locations adjacent to the golf course hereby grant an easement for the retrieval of errant golf balls.

All common area adjacent to a golf course grants an easement for the construction of cart paths thereon, such cart paths to be built of asphalt or other similar materials.

ARTICLE XII

GENERAL PROVISIONS

Section 1. Enforcement. The Club, or any Owner, or the owner of any recorded mortgages on any part of said property shall have the right to enforce, by any proceeding at law or in equity, all restrictions, conditions, covenants, reservations, easements, liens and charges now or hereafter imposed by the provisions of this Declaration. Failure by the Club or by any owner to enforce any covenant or restriction shall not be deemed a waiver of the right to do so thereafter.

Section 2. Severability. Invalidation of any one of these covenants or restrictions by judgment or court order shall in no way affect any other provisions which shall remain in full force and effect.

Section 3. Amendment. The covenants and restrictions of this Declaration shall run with and bind the land, and shall inure to the benefit of and be enforceable by the Club, or the Owner of any residence location subject to this Declaration, their respective legal representatives, heirs, successors and assigns, for a term of twenty-five (25) years from the date appearing on this Declaration, after which time said covenants shall be automatically extended for successive periods of ten (10) years each. Any of the

covenants and restrictions of this Declaration, except the easements herein granted, may be amended by an instrument signed by members entitled to cast not less than seventy-five percent (75%) of the votes of each class of membership. Easements herein granted and reserved shall not be amended except by instrument signed and acknowledged by one hundred percent (100%) of the owners of the property concerned, and by the Architectural Committee. All such amendments must be recorded in the appropriate Deed Records of Clackamas County, Oregon, to be effective.

Section 4. No Right of Reversion. Nothing in this Declaration, or in any form of deed which may be used by Declarant, or its successors and assigns, in selling said property, or any part thereof, shall be deemed to vest or reserve in Declarant or the Club any right of reversion or re-entry for breach or violation of any one or more of the provisions hereof.

Section 5. Right of Mortgagees Relating to Maintenance. At any time that any part of the common area, or any other part of said property or any residence or building or improvement located thereon is not properly maintained and kept in good order and repair, to the extent reasonably necessary to protect and preserve the appearance and value thereof and the appearance and value of the remainder of said property, then the record owner of any mortgage or trust deed upon any part of said property or residence or building thereon, upon giving written notice as hereinafter provided, shall be entitled to exercise the rights of the mortgagor-owner of such

property as a member of the Club to vote at all regular and special meetings of the members of the Club for a period of one year following the date of such notice. During said period of time such mortgagors shall be given notice of all regular and special meetings of the Club, the owner-mortgagor shall receive such notice also and may attend such meetings as an observer. Said notice shall quote this paragraph and shall be sent by Certified United States mail, return receipt requested, to the owner-mortgagor, a copy by regular mail to the Club at last known address of each.

Section 6. Insurance. The Club shall at all times cause all buildings and improvements owned by the Club, to be insured with broad form fire and extended coverage insurance for the full replacement value thereof. This insurance shall be payable to any mortgagees, and to the Club, as their respective interests may appear. The Directors of the Club shall be the attorney in fact for all owners for the adjustment and settlement of any claim or loss under such insurance. The Club shall at all times provide liability insurance with limits of not less than \$200,000 for one person, \$500,000 for any one accident and \$50,000 for property, with the Club and owners as joint insureds.

Section 7. In order to protect and preserve the appearance and value of said properties, each owner is required to repair or rebuild his residence after each loss to it, notwithstanding the fact that there may be no proceeds available for such purpose. If an owner does not promptly so repair or rebuild, then the Club may do so after fifteen (15) days' written notice of its

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intent to so repair or rebuild if the owner fails to commence the same within said period. All expenses incurred by the Club on behalf of said owner shall become a lien upon the owner's residence and the owner's residence location. If said expenses which have been paid by the Club are not repaid by the owner within forty-five (45) days after completion of said repair or rebuilding, then the Club may foreclose upon said lien as provided by law.

Section 8. The provisions contained in this Declaration shall bind and inure to the benefit of and be enforceable by Declarant, the Club and the owner or owners of any portion of said property, and their heirs and assigns, and each of their legal representatives and failure by Declarant or by the Club or by any of the property owners or their legal representatives, heirs, successors or assigns, to enforce any of such conditions, restrictions or charges shall in no event be deemed a waiver of the right to do so.

Section 9. Any or all rights, powers and reservations of Declarant herein contained may be assigned to the Club or to any other corporation or association which is now organized or which may hereafter be organized and which will assume the duties of Declarant hereunder pertaining to the particular rights, powers and reservations assigned; and upon any such corporation or association evidencing its intent in writing to accept such assignment and assume such duties, it shall to the extent of such assignment have the same rights and powers and be subject to the same obligations and duties as are given to and assumed by Declarant herein. All rights of Declarant hereunder reserved or created shall be

25

held and exercised by Willamette Factors, Inc. alone, so long as it owns any interest in any portion of said property.

Section 10. Declarant may construct a clubhouse or recreation hall or other facility upon the property. Until conveyed to the Club such facilities shall be under the authority of the Declarant or its nominee, which may be, but need not be the Club, to govern use, and control the policies of the facilities.

At such time or times as the Declarant or its successor as developer shall deem appropriate, it may convey to the Club some or all of the facilities, provided that any part so conveyed shall be free of debt or encumbrance at the time of conveyance. The Club shall accept each such conveyance and thereupon shall be vested with authority to govern the facility or facilities so conveyed and thereafter shall be entitled to all revenue produced by the facility and shall be responsible to operate, maintain and support the facility and the Declarant thereafter shall have no control over the facility and shall have no obligation or responsibility with respect thereto.

IN WITNESS WHEREOF, the owners of all property described upon Exhibit A have hereunto caused these presents to be executed this 5 day of April, 1977.

WILLAMETTE FACTORS, INC.

By Patrick C. Jordan
President

By Ken Kier
Secretary

26

STATE OF OREGON)
): ss.
County of Multnomah)

On this 5 day of April, 1977, before me appeared
Patrick C. Jordan and KEU LIU
to me personally known, who being duly sworn, did say that they are
the President and Secretary, respectively, of WILLAMETTE FACTORS,
INC., and that the said instrument was signed and sealed in behalf
of said Corporation by the authority of its Board of Directors, and
they acknowledged said instrument to be the free act and deed of
said Corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed
my official seal the day and year last above written.


Donald A. Smith
Notary Public for Oregon
My Commission Expires: My Commission Expires Feb. 15, 1980

EXHIBIT "A"

Lots C-2, C-6 and C-31, Charbonneau III, The Village
at Wilsonville, Clackamas County, Oregon

Lots E-9 and E-21, Charbonneau IV, The Village
at Wilsonville, Clackamas County, Oregon

Lots F-1 through F-14 and F-16 through F-32, Charbonneau
V, The Village at Wilsonville, Clackamas County,
Oregon

Lots G-1 through and including G-18, Charbonneau
V, The Village at Wilsonville, Clackamas County,
Oregon

Lots G-20 through G-56, Charbonneau V, The Village
at Wilsonville, Clackamas County, Oregon

Lots 30 through 38, 40, 41, 42, 45 and 47, Charbonneau
Single Family East, The Village at Wilsonville,
Clackamas County, Oregon

STATE OF OREGON)
County of Clackamas) ss.

I, George D. Poppen, County Clerk, Ex-Officio
Recorder of Conveyances and Ex-Officio, Clerk
of the Circuit Court of the State of Oregon,
the County of Clackamas, do hereby certify that
the within instrument of writing was received for
and recorded in the records of said county at

77 APR 6 P 3:19



Witness my hand and seal this 6th day of April, 1977.
George D. Poppen
County Clerk

Recording Certificate

CCP-14 77 12613


28

**NOTICE
REGARDING
CERTAIN DISCRIMINATORY RESTRICTIONS, IF APPLICABLE**

Omitted from the attached document is any covenant or restriction that is based upon, but not necessarily limited to, race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal law, except to the extent that such covenant or restriction is permitted by applicable law.

Oregon Version 20150707

6
1

Recorded By
Title Insurance Company
No. 41121525


SECOND ADDENDUM
TO
COVENANTS, CONDITIONS AND RESTRICTIONS
FOR
CHARBONNEAU COUNTRY CLUB
Clackamas County, Oregon

Whereas, certain Covenants, Conditions and Restrictions dated April 6, 1977, and recorded at Book 77, page 12613, of the Clackamas County real property records have heretofore been executed and recorded by Willamette Factors, Inc., hereinafter referred to as "Declarant", and,

Whereas, pursuant to Article II, Section 1., of said prior Covenants, Conditions and Restrictions, Declarant desires to add certain additional land to the jurisdiction of the Charbonneau Country Club.

NOW, THEREFORE, Declarant hereby declares that the real property described hereinbelow shall be made a part thereof and shall be held and conveyed upon and subject to the easements, conditions, covenants, restrictions and reservations set forth in the aforementioned Covenants, Conditions and Restrictions for Charbonneau Country Club which were dated April 6, 1977, and recorded at Book 77, page 12613, of the Clackamas County real property records:

- Charbonneau VI, The Village at Wilsonville
- Charbonneau VII, The Village at Wilsonville
- Charbonneau Single-Family East, Second Addition

IN WITNESS WHEREOF, the Declarant hereby causes this document

78 1-1-185

to be executed this 6th day of April, 1978.

WILLAMETTE FACTORS, INC.

By Patrick Jordan
President

By Ken Lien
Secretary

STATE OF OREGON }
County of Multnomah } ss.

On this 6th day of April, 1978, before me appeared Patrick C. Jordan and Ken Lien, to me personally known, who being duly sworn, did say that they are the President and Secretary, respectively, of WILLAMETTE FACTORS, INC., and that the said instrument was signed and sealed in behalf of said Corporation by the authority of its Board of Directors, and they acknowledged said instrument to be the free act and deed of said Corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

Linda M. Haglund
Notary Public for Oregon
My Commission Expires: 1-30-81

AFTER RECORDING, PLEASE
RETURN TO:

Marilyn Sheets
Benj. Franklin Federal Savings
One Southwest Columbia
Portland, Oregon 97258

Page 2

2

STATE OF OREGON
County of Clatsop

I, George D. Phipps, County Clerk, do hereby certify that the foregoing instrument was duly recorded in the County of Clatsop, Oregon, on this 6th day of April, 1978, and that the same instrument of writing was received and recorded in the records of said county as

78 APR 10 AM 8:21

RECORDED OF CLATSOP COUNTY
CLATSOP COUNTY
78 14485

Witness
Marilyn Sheets
Recording Clerk
CCP-104

**NOTICE
REGARDING
CERTAIN DISCRIMINATORY RESTRICTIONS, IF APPLICABLE**

Omitted from the attached document is any covenant or restriction that is based upon, but not necessarily limited to, race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal law, except to the extent that such covenant or restriction is permitted by applicable law.

Oregon Version 20150707

156-705-17

ADDENDUM
TO
COVENANTS, CONDITIONS AND RESTRICTIONS
FOR
CHARBONNEAU COUNTRY CLUB
Clackamas County, Oregon

Whereas, certain Covenants, Conditions and Restrictions dated April 6, 1977, and recorded at Book 77, Page 12613, of the Clackamas County real property records have heretofore been executed and recorded by Willamette Factors, Inc., hereinafter referred to as "Declarant", and,

Whereas, pursuant to Article II, Section 1, of said prior Covenants, Conditions and Restrictions, Declarant desires to add certain additional land to the jurisdiction of the Charbonneau Country Club.

NOW, THEREFORE, Declarant hereby declares that the real property described hereinbelow shall be made a part thereof and shall be held and conveyed upon and subject to the easements, conditions, covenants, restrictions and reservations set forth in the aforementioned Covenants, Conditions and Restrictions for Charbonneau Country Club which were dated April 6, 1977, and recorded at Book 77, Page 12613, of the Clackamas County real property records:

- Charbonneau VIII, The Village at Wilsonville, Lots L-1-10, L-13-40.
- Charbonneau IX, The Village at Wilsonville

IN WITNESS WHEREOF, the Declarant hereby causes this document to be executed this 7th day of August, 1979.

WILLAMETTE FACTORS, INC.

By: Patrick C. Jordan
President

By: Ken Hein
Secretary

'79 34184

Recorded By
Pioneer National
Title Insurance Company

Page Two

STATE OF OREGON)
County of Multnomah) ss.

On this 7th day of August, 1979, before me appeared Patrick C. Jordan and Ken Lien, to me personally known, who being duly sworn, did say that they are the President and Secretary, respectively, of WILLAMETTE FACTORS, INC., and that the said instrument was signed and sealed in behalf of said Corporation by the authority of its Board of Directors, and they acknowledged said instrument to be the free act and deed of said Corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

Marilyn Sheets
Notary Public for Oregon
My Commission Expires:



AFTER RECORDING, PLEASE
RETURN TO:

Marilyn Sheets
Benj. Franklin Federal
Savings & Loan Assn.
One SW Columbia, Suite 1800
Portland, Oregon 97258

STATE OF OREGON)
County of Clatsop) ss.

I, George D. Poppo, County Clerk, Ex-Officio Recorder of Conveyances and Ex-Officio Clerk of the Circuit Court of the State of Oregon, do hereby certify that the within instrument of writing was received for and recorded in the records of said county at

79 AUG 8 P 2: 55

2



Witness
George D. Poppo
Recording Officer
GEORGE D. POPPO
County Clerk

79 34184
CCP-14

**NOTICE
REGARDING
CERTAIN DISCRIMINATORY RESTRICTIONS, IF APPLICABLE**

Omitted from the attached document is any covenant or restriction that is based upon, but not necessarily limited to, race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal law, except to the extent that such covenant or restriction is permitted by applicable law.

Oregon Version 20150707

ACKNOWLEDGMENT AND DECLARATION
OF CONDITIONS AND RESTRICTIONS
FOR ARBOR LAKE TOWNHOME ASSOCIATION, CHARBONNEAU

76-150-44

WHEREAS the undersigned person(s) (referred to, in the singular, as "Homeowner") has a fee simple or contract purchaser's interest in certain real property in the subdivision of Charbonneau, such real property being more particularly described as follows:

Lots 1, 2, 3, 4, 5, 10, 24, 26, 31, 32, 33, 38, 39, 40, 41, 42, 43, 44, 45, 46, 51, 52, 53, 58, 59, 61, 71, CHARBONNEAU IX, Q, THE VILLAGE AT CHARBONNEAU, in Clackamas County, State of Oregon

And WHEREAS Homeowner and other interested persons have become aware that certain conditions and restrictions for the enhancement and protection of the value, desirability and attractiveness of real property at Charbonneau, although declared by Willamette Factors, Inc., have not been declared, extended, and duly recorded as to real property lying in CHARBONNEAU VII, IX and X (with lot designations L, N, P and Q), even though Homeowner has believed and intended that such declaration and extension had been made and have existed as to these real properties, and

WHEREAS Homeowner desires and intends that said conditions and restrictions now and continue hereafter to cover all the abovementioned real properties at Charbonneau, including the named property in which he has an ownership interest, and that Arbor Lake Townhome Association (referred to as "Association") continue to administer said conditions and restrictions as it has, in the past,

THEREFORE, the undersigned Homeowner(s) acknowledges, affirms, declares and covenants that said real property in which he has an ownership interest is and shall be held, sold and conveyed subject to certain the following:

Easements, restrictions, covenants and conditions which are declared, described and set forth in a certain "Supplemental Declaration of Conditions and Restrictions Relating to Charbonneau VI, The Village at Willsonville" which has been executed by Willamette Factors, Inc., recorded on February 10, 1978 at Page 5832 of Book 78 of the Clackamas County Records of Conveyances, with a copy of such declaration having been furnished to Homeowner when he was originally conveyed ownership interest in said real property, and another copy being shown to him this date for inspection.

It is declared, acknowledged, and covenanted that all said easements, restrictions, covenants and conditions do and shall run with the real property subject to them, binding and inuring to the benefit of any and all parties having or acquiring any right, title or interest in such real property or any part thereof, and that they be and continue to be administered by the Association, or proper successor thereof, as if they had been declared, extended and recorded as to all the abovementioned real properties prior to any conveyance by Willamette Factors, Inc. to Homeowner and any other parties.

Homeowner acknowledges that, in the event good consideration for this acknowledgement and declaration is deemed necessary, such consideration has been given, and that it includes, but is not limited to good-faith efforts being made to extend said conditions and restrictions to all affected real properties, by past and continued administration of the conditions and restrictions by the Association, and by other consideration received by Homeowner upon his originally having been conveyed interest in the premises.

IT IS SO ACKNOWLEDGED, DECLARED AND CONVENANTED

Dated this 27th day of November, 1984.

Louis Scherzer
Louis Scherzer, President
Willamette Factors, Inc.

Personally appeared Louis Scherzer and acknowledged the foregoing instrument to be his voluntary act and deed.

Before me:

Walter ...
Notary Public for Oregon
My Commission Expires: 03-05-86

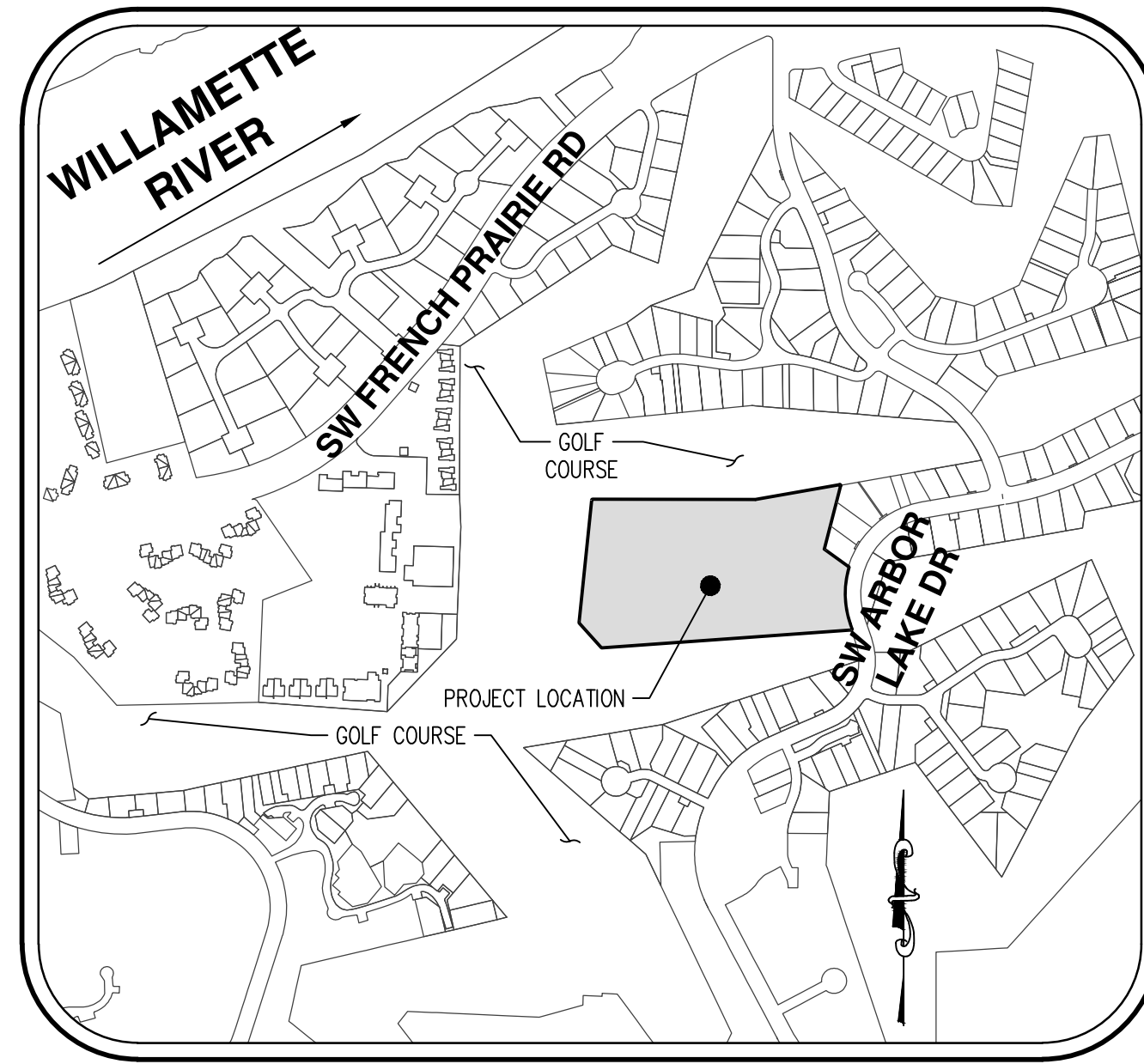


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84 41558

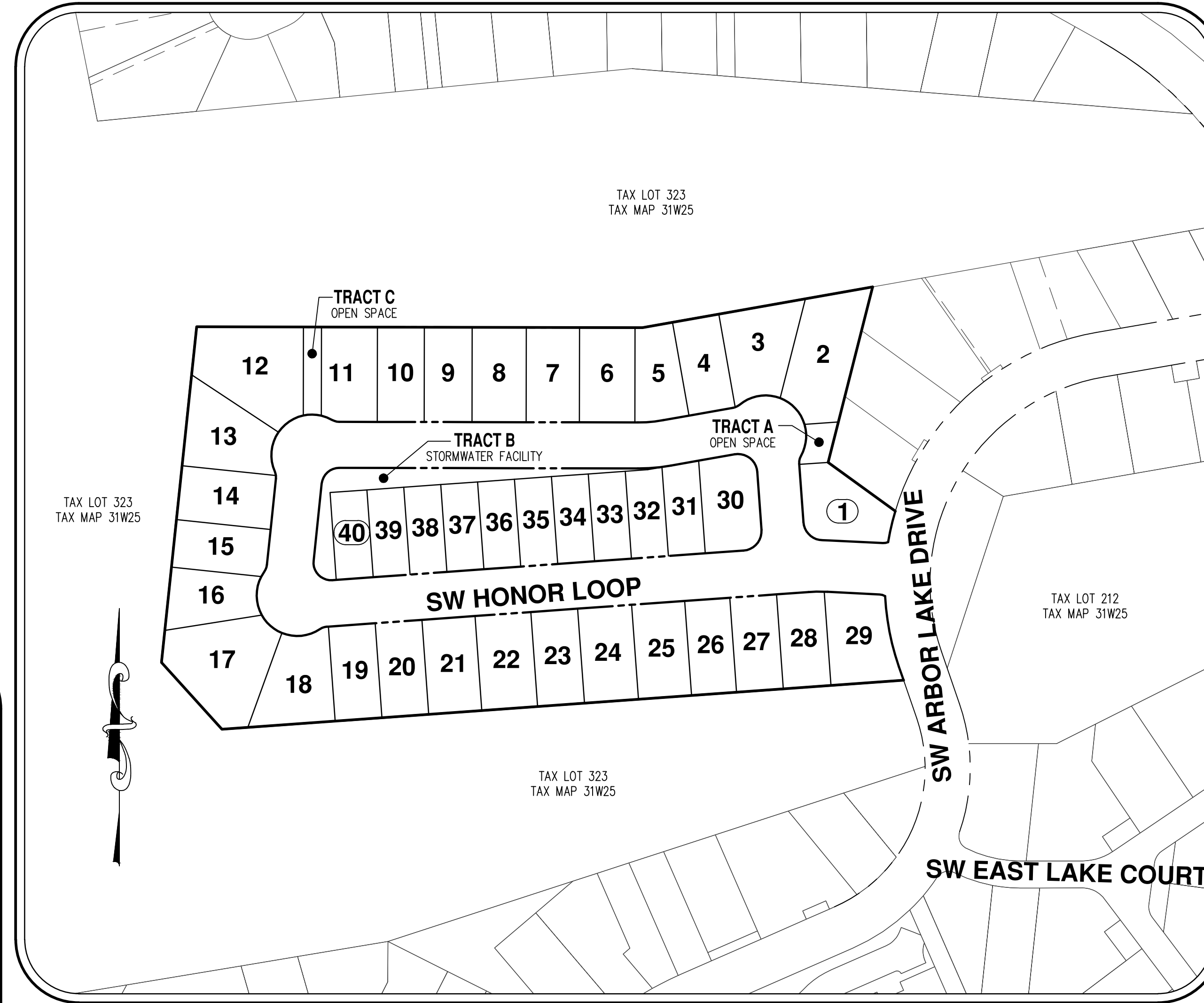
CHARBONNEAU RANGE

PRELIMINARY SUBDIVISION PLANS



VICINITY MAP

1"=500'



SITE MAP

1"=100'

APPLICANT:

PAHLISCH HOMES, INC
210 SW WILSON AVENUE, SUITE 100
BEND, OR 97702

**CONSULTING
PLANNING/
ENGINEERING/
SURVEYING FIRM:**

AKS ENGINEERING & FORESTRY, LLC
CONTACT: MONTY HURLEY
12965 SW HERMAN ROAD, SUITE 100
TUALATIN, OR 97062
PH: 503-563-6151
FAX: 503-563-6152

**PROPERTY
LOCATION:**

SW ARBOR LAKE DRIVE
WILSONVILLE, OR 97070

**PROPERTY
DESCRIPTION:**

TAX LOT 325 CLACKAMAS COUNTY
ASSESSOR'S MAP 3-1W-25 LOCATED IN
SECTION 25, TOWNSHIP 3 SOUTH, RANGE 1
WEST, WILLAMETTE MERIDIAN, CLACKAMAS
COUNTY, OREGON.

EXISTING LAND USE:

EXISTING GOLF COURSE DRIVING RANGE
WITH ASPHALT PAVEMENT CART PATHS,
LAWN, TEE BOXES, AND RAISED GREENS.

PROJECT PURPOSE:

RESIDENTIAL SUBDIVISION

ZONING:

PDR-3

VERTICAL DATUM:

VERTICAL DATUM: ELEVATIONS ARE BASED
ON NGS BENCHMARK DESIGNATION QUEV
(PID: RD1511), LOCATED AT THE NW
CORNER OF AIRPORT ROAD NE AND KEIL
ROAD NE NEAR THE AURORA AIRPORT.
ELEVATION = 190.25 FEET (NAVD 88).

**WATER, SANITARY
SEWER & STORM
DRAINAGE:**

CITY OF WILSONVILLE

IRRIGATION WATER:

CHARBONNEAU WATER COMPANY, LLC

LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
DECIDUOUS TREE			STORM SEWER CLEAN OUT		
CONIFEROUS TREE			STORM SEWER CATCH BASIN		
FIRE HYDRANT			STORM SEWER AREA DRAIN		
WATER BLOWOFF			STORM SEWER MANHOLE		
WATER METER			GAS METER		
WATER VALVE			GAS VALVE		
DOUBLE CHECK VALVE			GUY WIRE ANCHOR		
AIR RELEASE VALVE			POWER POLE		
SANITARY SEWER CLEAN OUT			POWER VAULT		
SANITARY SEWER MANHOLE			POWER JUNCTION BOX		
SIGN			POWER PEDESTAL		
STREET LIGHT			COMMUNICATIONS VAULT		
MAILBOX			COMMUNICATIONS JUNCTION BOX		
			COMMUNICATIONS RISER		

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		
BOUNDARY LINE		
PROPERTY LINE		
CENTERLINE		
DITCH		
CURB		
EDGE OF PAVEMENT		
EASEMENT		
FENCE LINE		
GRAVEL EDGE		
POWER LINE		
OVERHEAD WIRE		
COMMUNICATIONS LINE		
FIBER OPTIC LINE		
GAS LINE		
STORM SEWER LINE		
SANITARY SEWER LINE		
WATER LINE		

SHEET INDEX

- P1-00 COVER SHEET WITH SITE AND VICINITY MAPS
- P1-01 PRELIMINARY EXISTING CONDITIONS PLAN
- P1-02 PRELIMINARY SUBDIVISION PLAT
- P1-03 PRELIMINARY DEMOLITION, GRADING, TREE PRESERVATION & REMOVAL,
& EROSION & SEDIMENT CONTROL PLAN
- P1-04 PRELIMINARY STREET IMPROVEMENTS PLAN
- P1-05 PRELIMINARY STREET PROFILES
- P1-06 PRELIMINARY COMPOSITE UTILITY PLAN
- P1-07 PRELIMINARY SUBDIVISION PLAN WITH AERIAL PHOTOGRAPH
- P1-08 PRELIMINARY LANDSCAPING PLAN

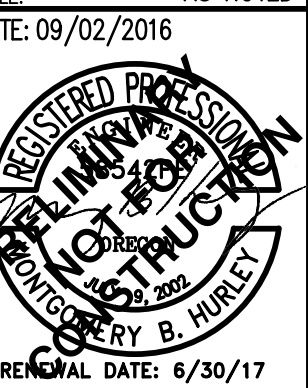


AKS ENGINEERING & FORESTRY, LLC
12965 SW HERMAN RD. STE 100
TUALATIN, OR 97062
P: 503.563.6151
F: 503.563.6152
aks-eng.com

CHARBONNEAU RANGE
WILSONVILLE
OREGON
CLACKAMAS COUNTY ASSESSOR'S MAP 3 1W 25

**COVER SHEET WITH SITE
AND VICINITY MAPS**

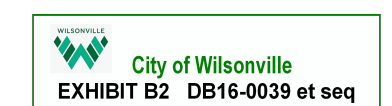
DESIGNED BY: RSW
DRAWN BY: JDR/JRN
CHECKED BY: MBH
SCALE: AS NOTED



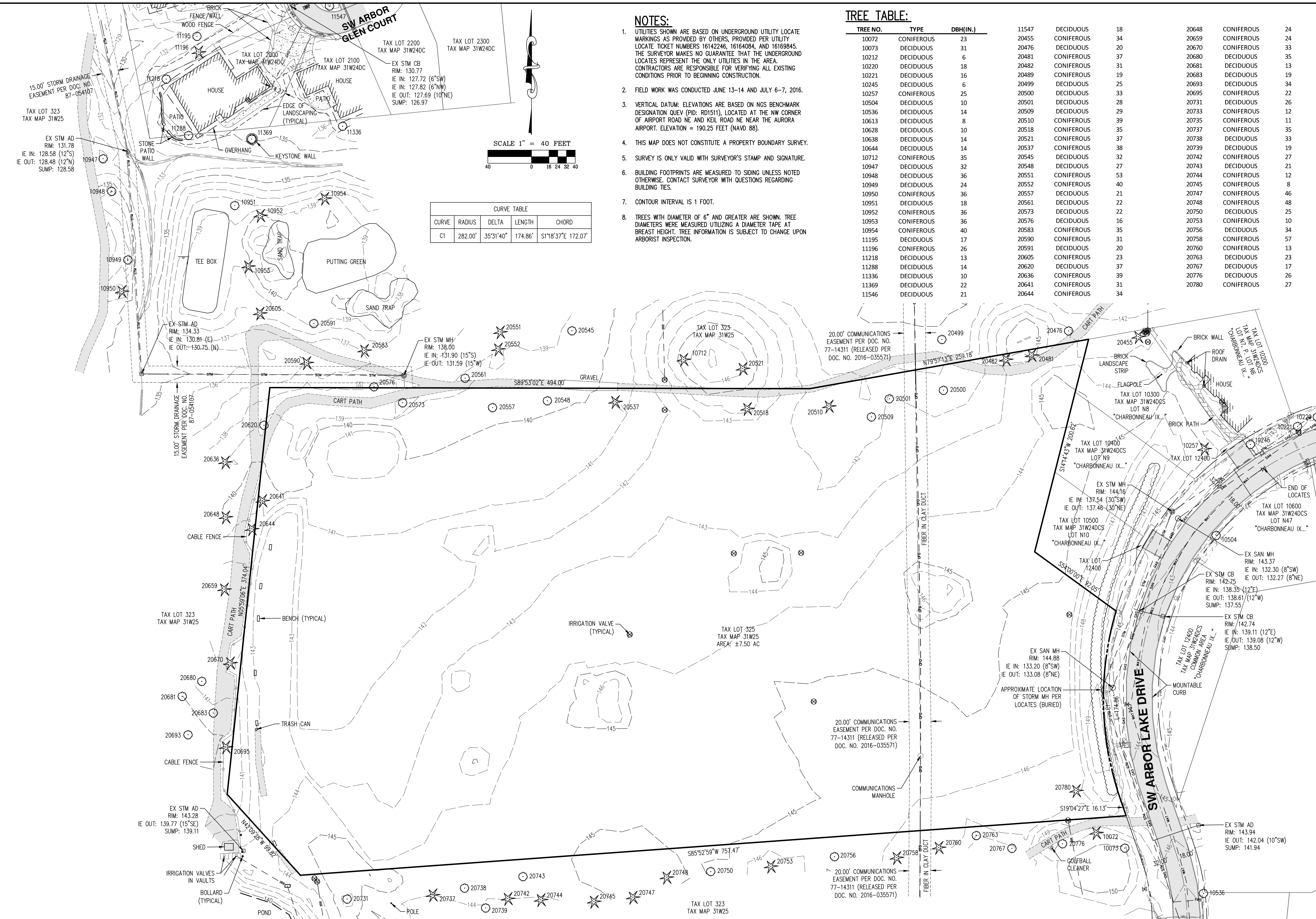
REVISIONS

JOB NUMBER
4898

SHEET
P1-00



City of Wilsonville
EXHIBIT B2 DB16-0039 et seq

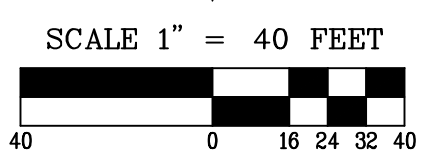


NOTES:

- UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBERS 16142246, 16164084, AND 16169845. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
- FIELD WORK WAS CONDUCTED JUNE 13-14 AND JULY 6-7, 2016.
- VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS BENCHMARK DESIGNATION QUEV (PID: RD1511), LOCATED AT THE NW CORNER OF AIRPORT ROAD NE AND KEIL ROAD NE NEAR THE AURORA AIRPORT. ELEVATION = 190.25 FEET (NAVD 88).
- THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
- SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE.
- BUILDING FOOTPRINTS ARE MEASURED TO SIDING UNLESS NOTED OTHERWISE. CONTACT SURVEYOR WITH QUESTIONS REGARDING BUILDING TIES.
- CONTOUR INTERVAL IS 1 FOOT.
- TREES WITH DIAMETER OF 6" AND GREATER ARE SHOWN. TREE DIAMETERS WERE MEASURED UTILIZING A DIAMETER TAPE AT BREAST HEIGHT. TREE INFORMATION IS SUBJECT TO CHANGE UPON ARBORIST INSPECTION.

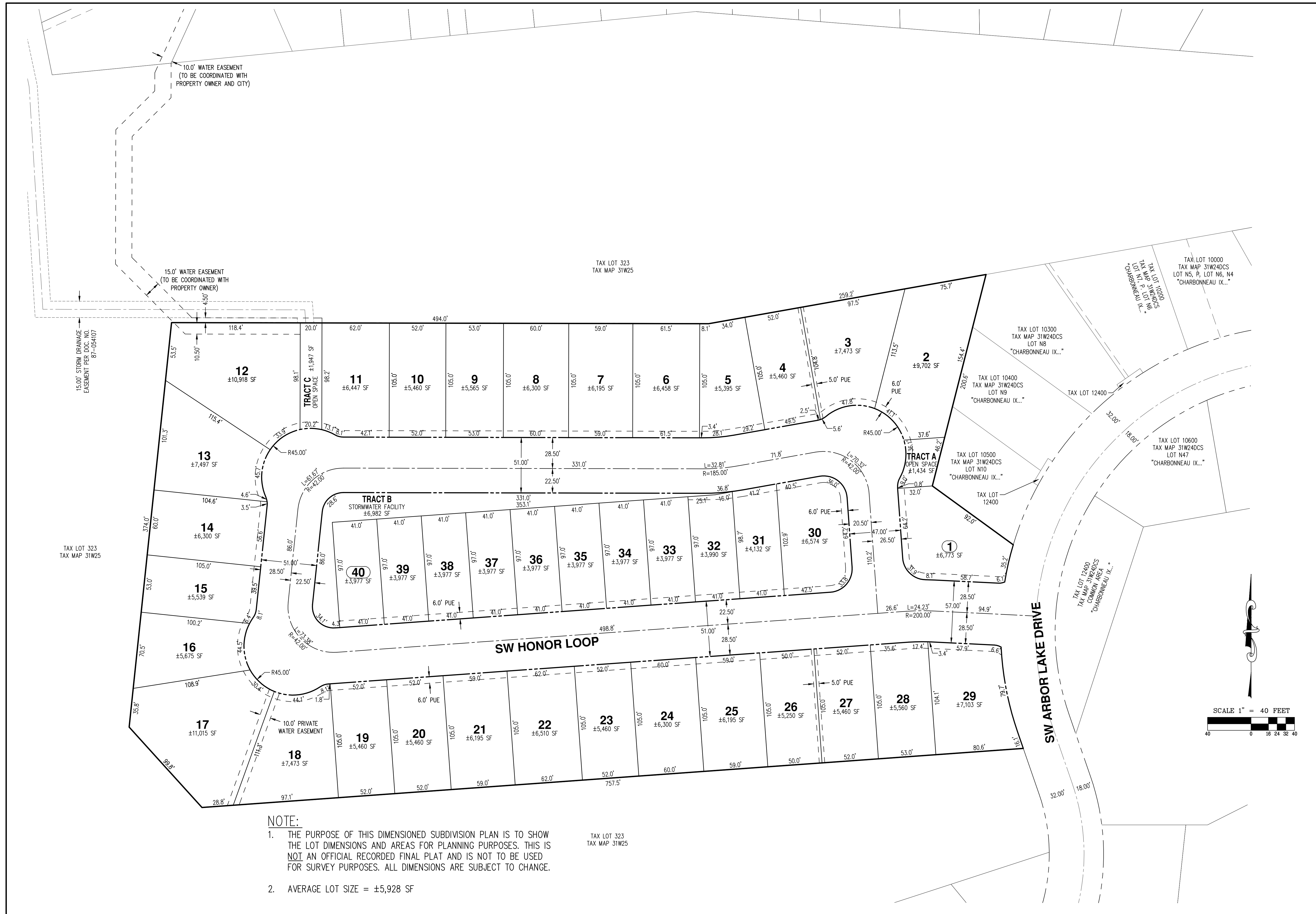
TREE TABLE:

TREE NO.	TYPE	DBH(IN.)				
10072	CONIFEROUS	23	11547	DECIDUOUS	18	20648
10073	CONIFEROUS	23	20455	CONIFEROUS	34	20659
10073	CONIFEROUS	31	20476	CONIFEROUS	30	20670
10212	CONIFEROUS	6	20481	CONIFEROUS	27	20680
10220	CONIFEROUS	18	20482	CONIFEROUS	31	20681
10221	CONIFEROUS	16	20489	CONIFEROUS	19	20683
10245	CONIFEROUS	6	20499	CONIFEROUS	25	20693
10257	CONIFEROUS	25	20500	CONIFEROUS	33	20695
10504	CONIFEROUS	10	20501	CONIFEROUS	28	20731
10536	CONIFEROUS	14	20509	CONIFEROUS	29	20733
10613	CONIFEROUS	8	20510	CONIFEROUS	39	20735
10628	CONIFEROUS	10	20518	CONIFEROUS	35	20737
10638	CONIFEROUS	14	20521	CONIFEROUS	37	20738
10644	CONIFEROUS	14	20537	CONIFEROUS	38	20739
10712	CONIFEROUS	35	20545	CONIFEROUS	32	20742
10947	CONIFEROUS	32	20548	CONIFEROUS	27	20743
10948	CONIFEROUS	36	20551	CONIFEROUS	53	20744
10949	CONIFEROUS	24	20552	CONIFEROUS	40	20745
10950	CONIFEROUS	36	20557	CONIFEROUS	21	20747
10951	CONIFEROUS	18	20561	CONIFEROUS	22	20748
10952	CONIFEROUS	36	20573	CONIFEROUS	22	20750
10953	CONIFEROUS	36	20576	CONIFEROUS	16	20753
10954	CONIFEROUS	40	20583	CONIFEROUS	35	20756
11195	CONIFEROUS	17	20590	CONIFEROUS	31	20758
11196	CONIFEROUS	26	20591	CONIFEROUS	20	20760
11218	CONIFEROUS	13	20605	CONIFEROUS	23	20763
11288	CONIFEROUS	14	20620	CONIFEROUS	37	20767
11336	CONIFEROUS	10	20636	CONIFEROUS	39	20776
11369	CONIFEROUS	22	20641	CONIFEROUS	31	20780
11546	CONIFEROUS	21	20644	CONIFEROUS	34	



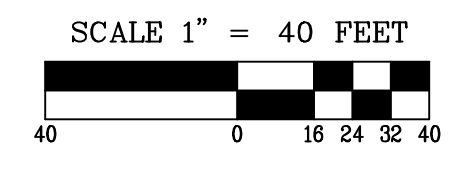
CURVE TABLE

CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	282.00'	35°31'40"	174.86'	S1°18'37"E 172.07'



NOTE:

1. THE PURPOSE OF THIS DIMENSIONED SUBDIVISION PLAN IS TO SHOW THE LOT DIMENSIONS AND AREAS FOR PLANNING PURPOSES. THIS IS NOT AN OFFICIAL RECORDED FINAL PLAT AND IS NOT TO BE USED FOR SURVEY PURPOSES. ALL DIMENSIONS ARE SUBJECT TO CHANGE.
2. AVERAGE LOT SIZE = ±5,928 SF



TREE NO.	TYPE	DBH(IN.)	REMOVE/PRESERVE	TREE NO.	TYPE	DBH(IN.)	REMOVE/PRESERVE	TREE NO.	TYPE	DBH(IN.)	REMOVE/PRESERVE
10072	CONIFEROUS	23	PRESERVE	11547	DECIDUOUS	18	PRESERVE	20644	CONIFEROUS	34	PRESERVE
10073	DECIDUOUS	31	PRESERVE	20455	CONIFEROUS	34	PRESERVE	20648	CONIFEROUS	24	PRESERVE
10212	DECIDUOUS	6	PRESERVE	20476	DECIDUOUS	20	PRESERVE	20659	CONIFEROUS	24	PRESERVE
10220	DECIDUOUS	18	PRESERVE	20481	CONIFEROUS	37	REMOVE	20670	CONIFEROUS	33	PRESERVE
10221	DECIDUOUS	16	PRESERVE	20482	CONIFEROUS	31	REMOVE	20680	DECIDUOUS	35	PRESERVE
10245	DECIDUOUS	6	PRESERVE	20489	CONIFEROUS	19	PRESERVE	20681	DECIDUOUS	13	PRESERVE
10257	CONIFEROUS	25	PRESERVE	20499	DECIDUOUS	25	PRESERVE	20683	DECIDUOUS	19	PRESERVE
10504	DECIDUOUS	10	PRESERVE	20500	DECIDUOUS	33	REMOVE	20693	DECIDUOUS	34	PRESERVE
10536	DECIDUOUS	14	PRESERVE	20501	DECIDUOUS	28	REMOVE	20695	CONIFEROUS	22	PRESERVE
10613	DECIDUOUS	8	PRESERVE	20509	DECIDUOUS	29	REMOVE	20731	DECIDUOUS	26	PRESERVE
10628	DECIDUOUS	10	PRESERVE	20510	CONIFEROUS	39	REMOVE	20733	CONIFEROUS	12	PRESERVE
10638	DECIDUOUS	14	PRESERVE	20518	CONIFEROUS	35	REMOVE	20735	CONIFEROUS	11	PRESERVE
10644	DECIDUOUS	14	PRESERVE	20521	CONIFEROUS	37	REMOVE	20737	CONIFEROUS	35	PRESERVE
10712	CONIFEROUS	35	REMOVE	20537	CONIFEROUS	38	REMOVE	20738	DECIDUOUS	33	PRESERVE
10947	DECIDUOUS	32	PRESERVE	20545	DECIDUOUS	32	PRESERVE	20739	DECIDUOUS	19	PRESERVE
10948	DECIDUOUS	36	PRESERVE	20548	DECIDUOUS	27	REMOVE	20742	CONIFEROUS	27	PRESERVE
10949	DECIDUOUS	24	PRESERVE	20551	CONIFEROUS	53	PRESERVE	20743	DECIDUOUS	21	PRESERVE
10950	CONIFEROUS	36	PRESERVE	20552	CONIFEROUS	40	PRESERVE	20744	DECIDUOUS	12	PRESERVE
10951	DECIDUOUS	18	PRESERVE	20557	DECIDUOUS	21	REMOVE	20745	CONIFEROUS	8	PRESERVE
10952	CONIFEROUS	36	PRESERVE	20561	DECIDUOUS	22	PRESERVE	20747	CONIFEROUS	46	PRESERVE
10953	CONIFEROUS	36	PRESERVE	20573	DECIDUOUS	22	REMOVE	20748	CONIFEROUS	48	PRESERVE
10954	CONIFEROUS	40	PRESERVE	20576	DECIDUOUS	16	REMOVE	20750	DECIDUOUS	25	PRESERVE
11195	DECIDUOUS	17	PRESERVE	20583	CONIFEROUS	35	PRESERVE	20753	DECIDUOUS	10	PRESERVE
11196	CONIFEROUS	26	PRESERVE	20590	CONIFEROUS	31	PRESERVE	20756	DECIDUOUS	34	PRESERVE
11218	DECIDUOUS	13	PRESERVE	20591	DECIDUOUS	20	PRESERVE	20758	CONIFEROUS	57	PRESERVE
11288	DECIDUOUS	14	PRESERVE	20605	CONIFEROUS	23	PRESERVE	20760	CONIFEROUS	13	PRESERVE
11336	DECIDUOUS	10	PRESERVE	20620	DECIDUOUS	37	PRESERVE	20763	DECIDUOUS	23	PRESERVE
11369	DECIDUOUS	22	PRESERVE	20636	CONIFEROUS	39	PRESERVE	20767	DECIDUOUS	17	PRESERVE
11546	DECIDUOUS	21	PRESERVE	20641	CONIFEROUS	31	REMOVE	20776	DECIDUOUS	26	PRESERVE
								20780	CONIFEROUS	27	REMOVE

LEGEND

EXISTING GROUND CONTOUR (1 FT) ————

EXISTING GROUND CONTOUR (5 FT) ————

FINISHED GRADE CONTOUR (1 FT) ————

FINISHED GRADE CONTOUR (5 FT) ————

SEDIMENT FENCE/TREE PROTECTION FENCE (TO BE INSTALLED PRIOR TO GRADING) — x — x —

INLET PROTECTION (TYP) □

CONCRETE WASHOUT AREA □

DRAINAGE FLOW DIRECTION →

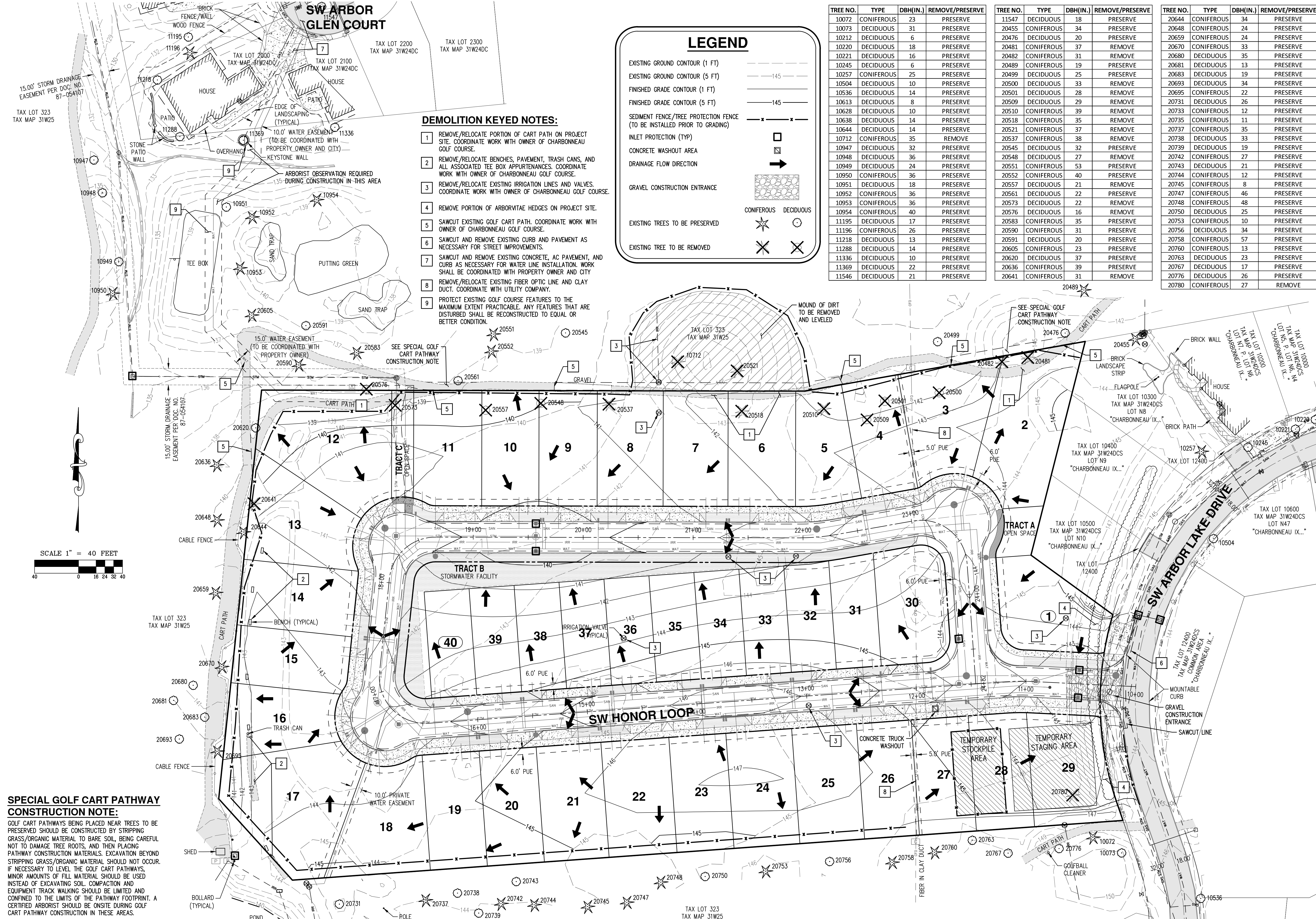
GRAVEL CONSTRUCTION ENTRANCE [Pattern]

EXISTING TREES TO BE PRESERVED * ○

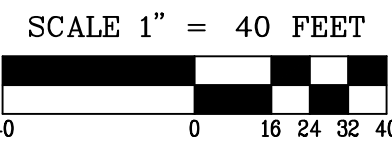
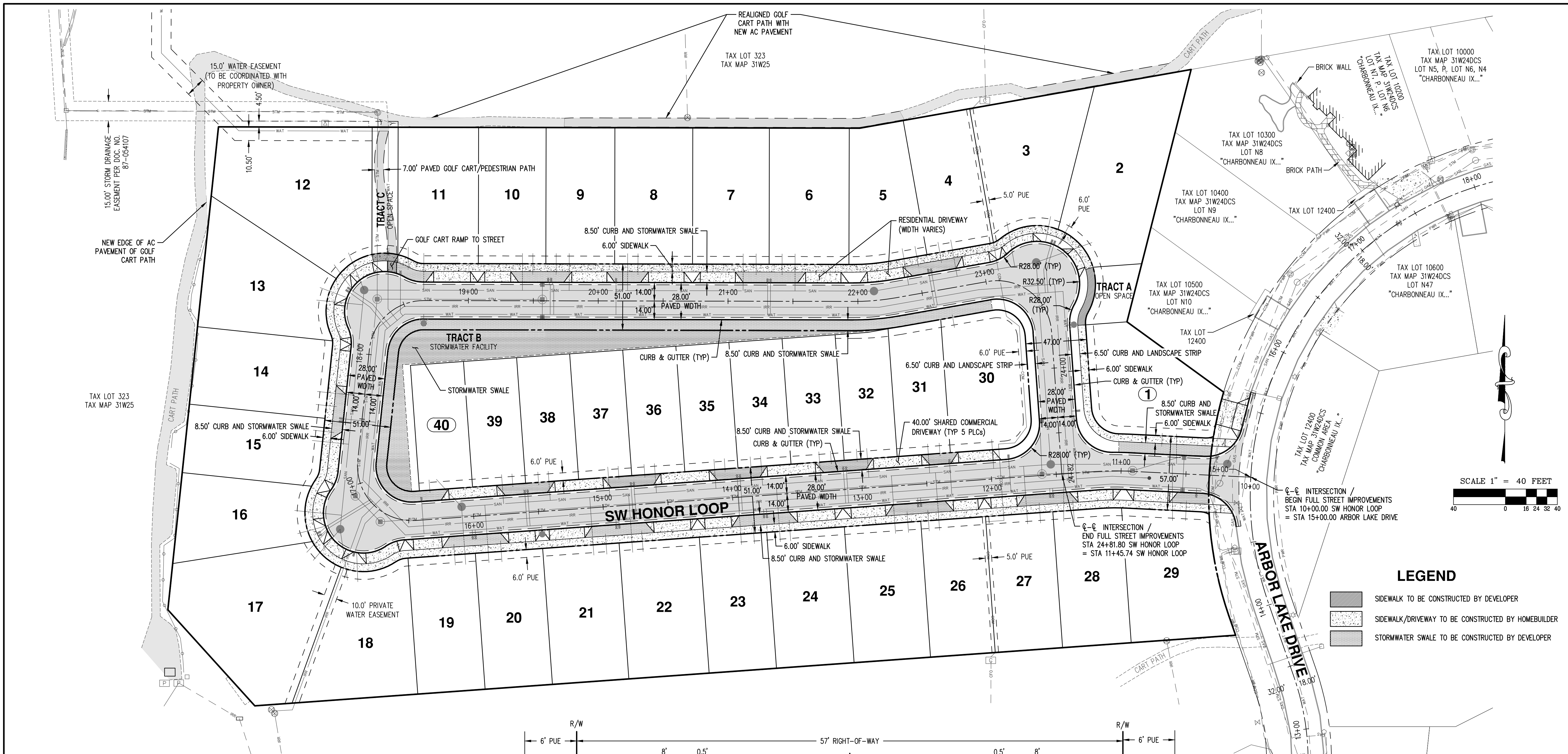
EXISTING TREE TO BE REMOVED ✕ ✕

CONIFEROUS DECIDUOUS

- ### DEMOLITION KEYED NOTES:
- REMOVE/RELOCATE PORTION OF CART PATH ON PROJECT SITE. COORDINATE WORK WITH OWNER OF CHARBONNEAU GOLF COURSE.
 - REMOVE/RELOCATE BENCHES, PAVEMENT, TRASH CANS, AND ALL ASSOCIATED TEE BOX APPURTENANCES. COORDINATE WORK WITH OWNER OF CHARBONNEAU GOLF COURSE.
 - REMOVE/RELOCATE EXISTING IRRIGATION LINES AND VALVES. COORDINATE WORK WITH OWNER OF CHARBONNEAU GOLF COURSE.
 - REMOVE PORTION OF ARBORVITAE HEDGES ON PROJECT SITE.
 - SAWCUT EXISTING GOLF CART PATH. COORDINATE WORK WITH OWNER OF CHARBONNEAU GOLF COURSE.
 - SAWCUT AND REMOVE EXISTING CURB AND PAVEMENT AS NECESSARY FOR STREET IMPROVEMENTS.
 - SAWCUT AND REMOVE EXISTING CONCRETE, AC PAVEMENT, AND CURB AS NECESSARY FOR WATER LINE INSTALLATION. WORK SHALL BE COORDINATED WITH PROPERTY OWNER AND CITY.
 - REMOVE/RELOCATE EXISTING FIBER OPTIC LINE AND CLAY DUCT. COORDINATE WITH UTILITY COMPANY.
 - PROTECT EXISTING GOLF COURSE FEATURES TO THE MAXIMUM EXTENT PRACTICABLE. ANY FEATURES THAT ARE DISTURBED SHALL BE RECONSTRUCTED TO EQUAL OR BETTER CONDITION.

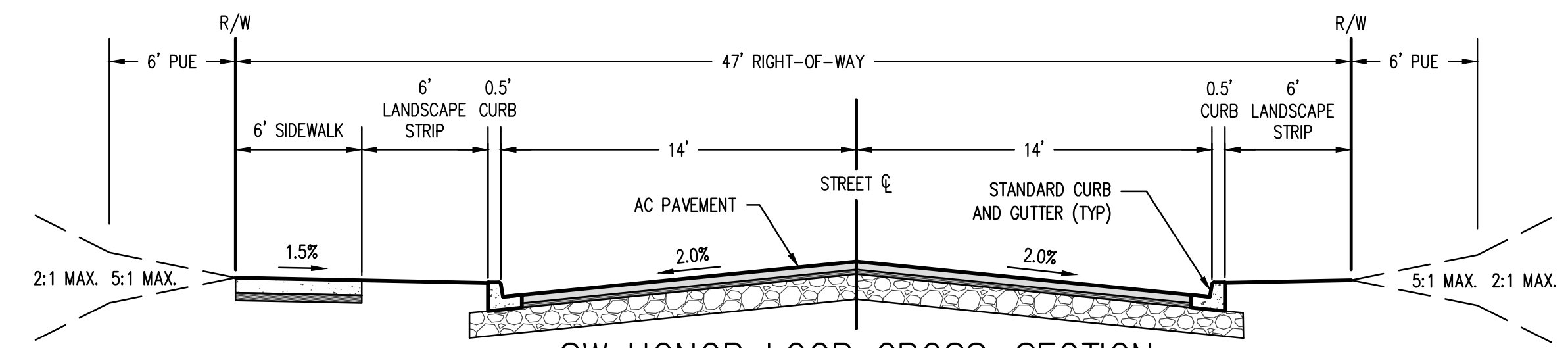
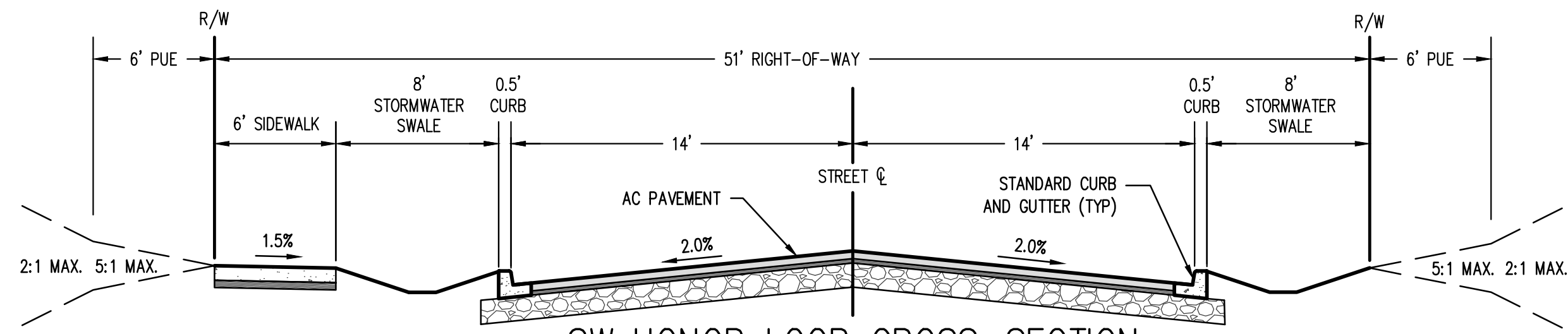
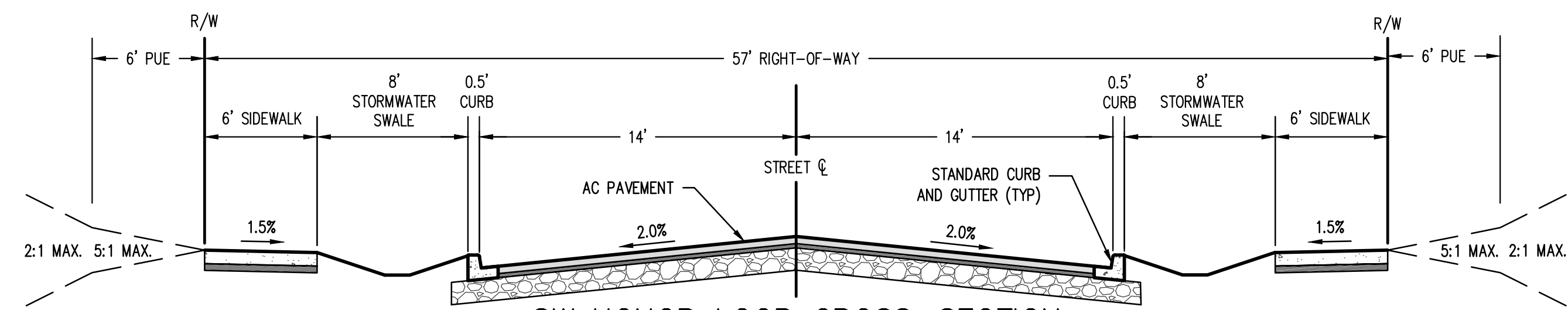


SPECIAL GOLF CART PATHWAY CONSTRUCTION NOTE:
 GOLF CART PATHWAYS BEING PLACED NEAR TREES TO BE PRESERVED SHOULD BE CONSTRUCTED BY STRIPPING GRASS/ORGANIC MATERIAL TO BARE SOIL, BEING CAREFUL NOT TO DAMAGE TREE ROOTS, AND THEN PLACING PATHWAY CONSTRUCTION MATERIALS. EXCAVATION BEYOND STRIPPING GRASS/ORGANIC MATERIAL SHOULD NOT OCCUR. IF NECESSARY TO LEVEL THE GOLF CART PATHWAYS, MINOR AMOUNTS OF FILL MATERIAL SHOULD BE USED INSTEAD OF EXCAVATING SOIL. COMPACTION AND EQUIPMENT TRACK WALKING SHOULD BE LIMITED AND CONFINED TO THE LIMITS OF THE PATHWAY FOOTPRINT. A CERTIFIED ARBORIST SHOULD BE ONSITE DURING GOLF CART PATHWAY CONSTRUCTION IN THESE AREAS.



LEGEND

- SIDEWALK TO BE CONSTRUCTED BY DEVELOPER
- SIDEWALK/DRIVEWAY TO BE CONSTRUCTED BY HOMEOWNER
- STORMWATER SWALE TO BE CONSTRUCTED BY DEVELOPER





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ENGINEERING - SURVEYING - NATURAL RESOURCES
 FORESTRY - PLANNING - LANDSCAPE ARCHITECTURE

CHARBONNEAU RANGE

WILSONVILLE OREGON

CLACKAMAS COUNTY ASSESSOR'S MAP 3 1W 25

TAX LOT 325

PRELIMINARY STREET PROFILES

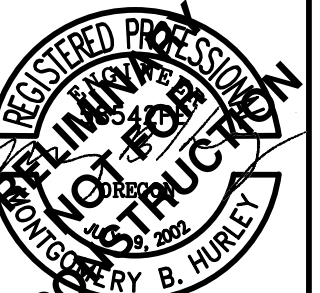
DESIGNED BY: RSW

DRAWN BY: JDR/JRN

CHECKED BY: MBH

SCALE: AS NOTED

DATE: 09/02/2016



REVISIONS

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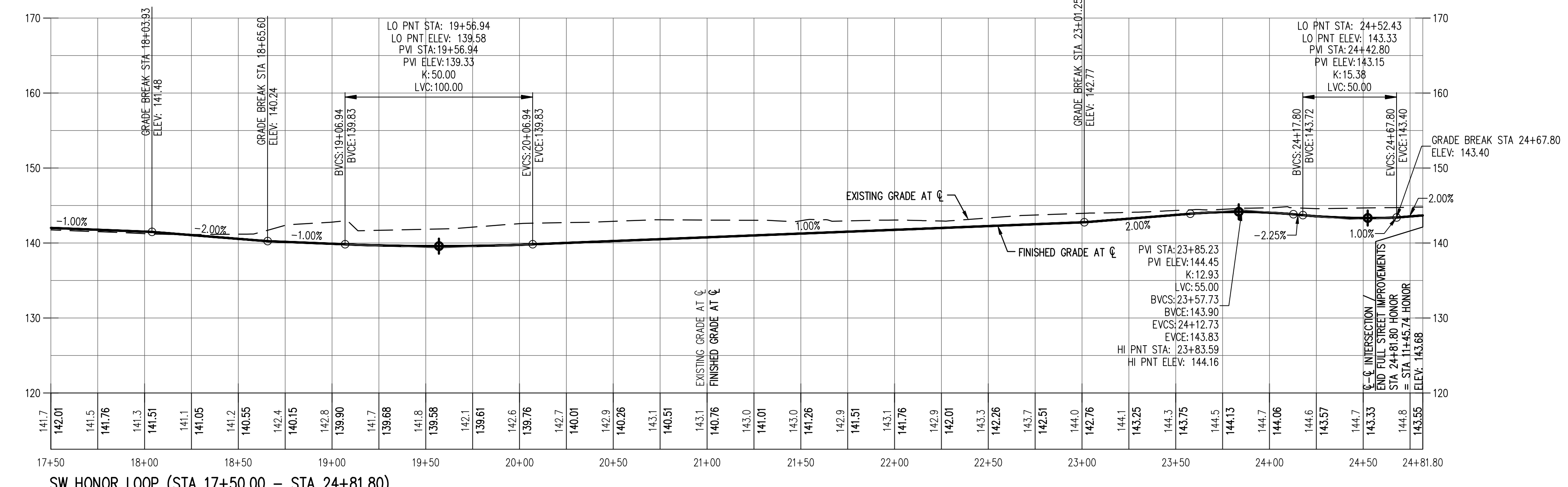
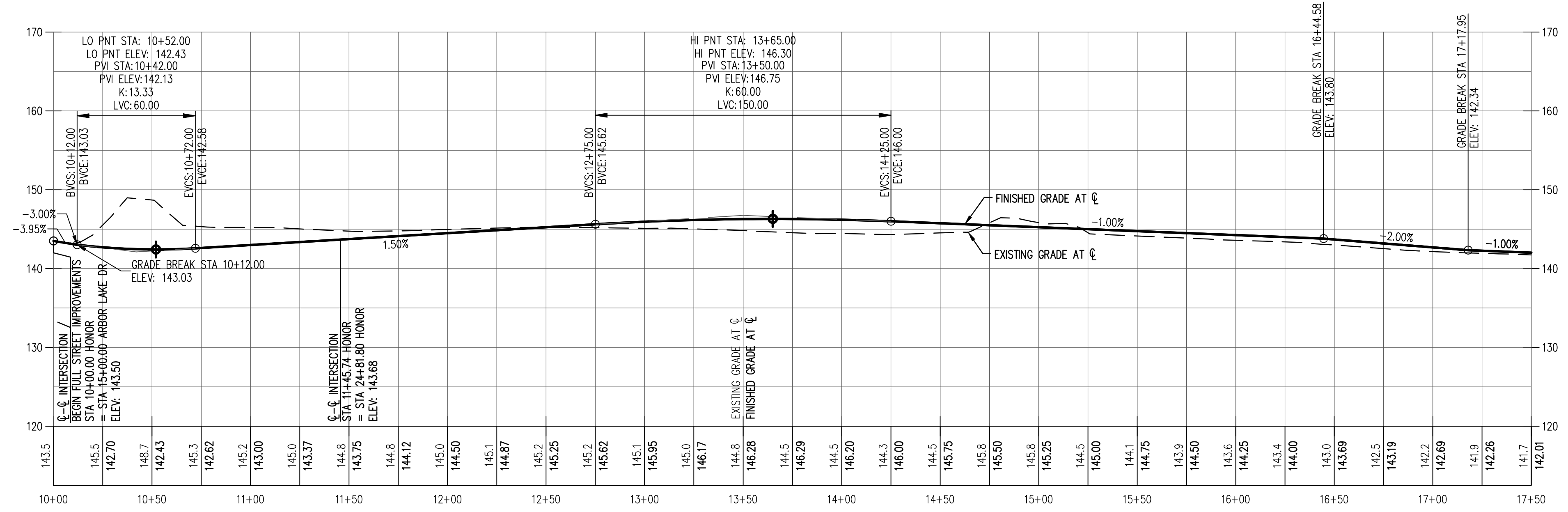
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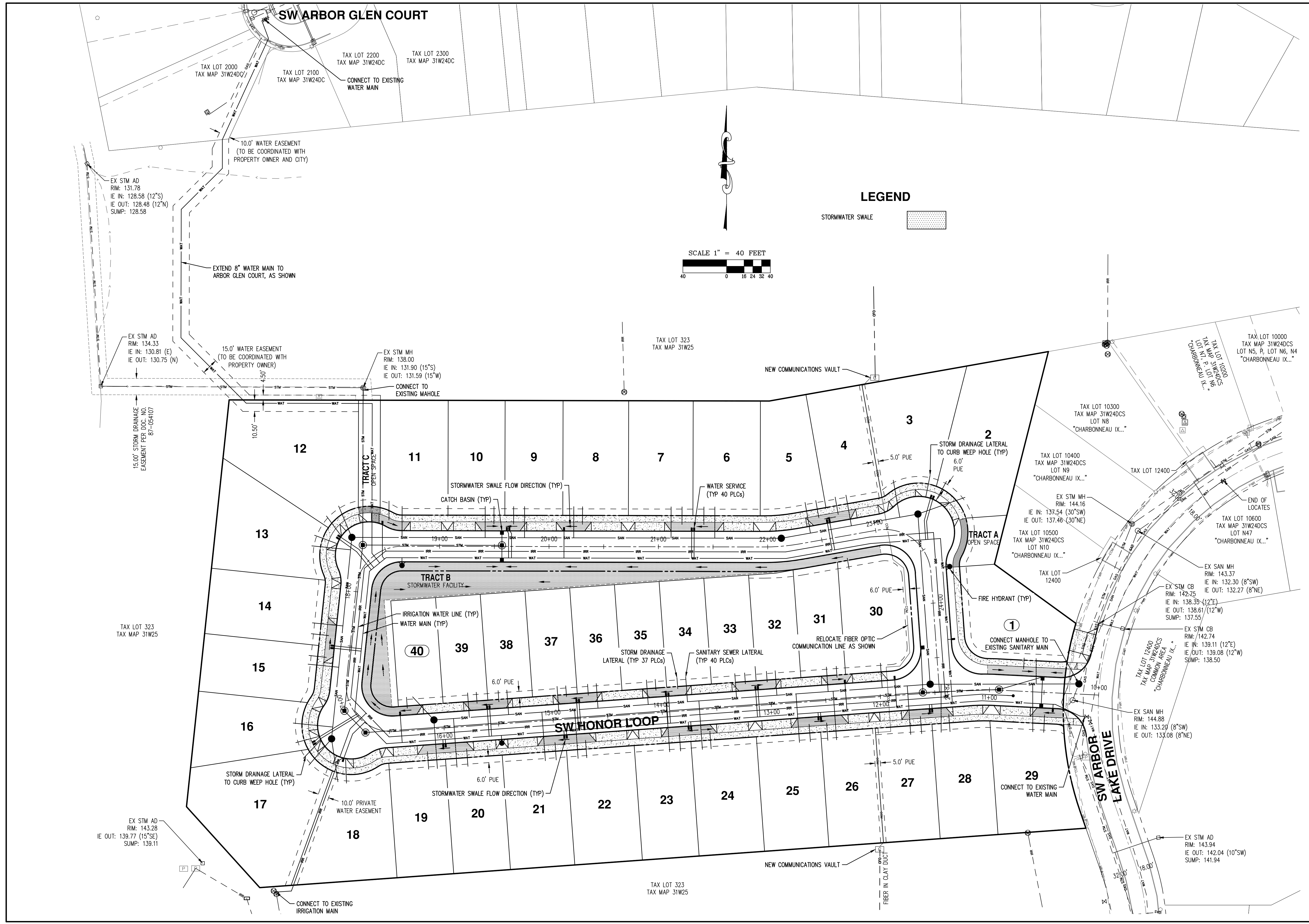
JOB NUMBER

4898

SHEET

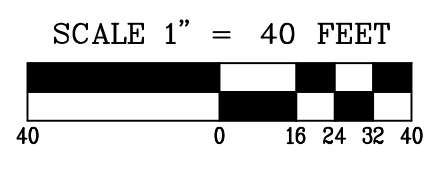
P1-05

AKS DRAWING FILE: 4898 PROFILE.DWG | LAYOUT: P1-05



LEGEND

STORMWATER SWALE [Symbol]



AKS DRAWING FILE: 4898-UTILITY.DWG | LAYOUT: P1-06

CHARBONNEAU RANGE

WILSONVILLE OREGON
 CLACKAMAS COUNTY ASSESSOR'S MAP 3 1W 25

**PRELIMINARY
 SUBDIVISION PLAN WITH
 AERIAL PHOTOGRAPH**

DESIGNED BY: RSW
 DRAWN BY: JDR/JRN
 CHECKED BY: MBH
 SCALE: AS NOTED
 DATE: 09/02/2016

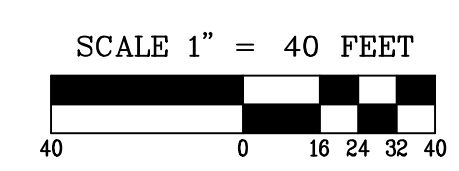


REVISIONS

JOB NUMBER
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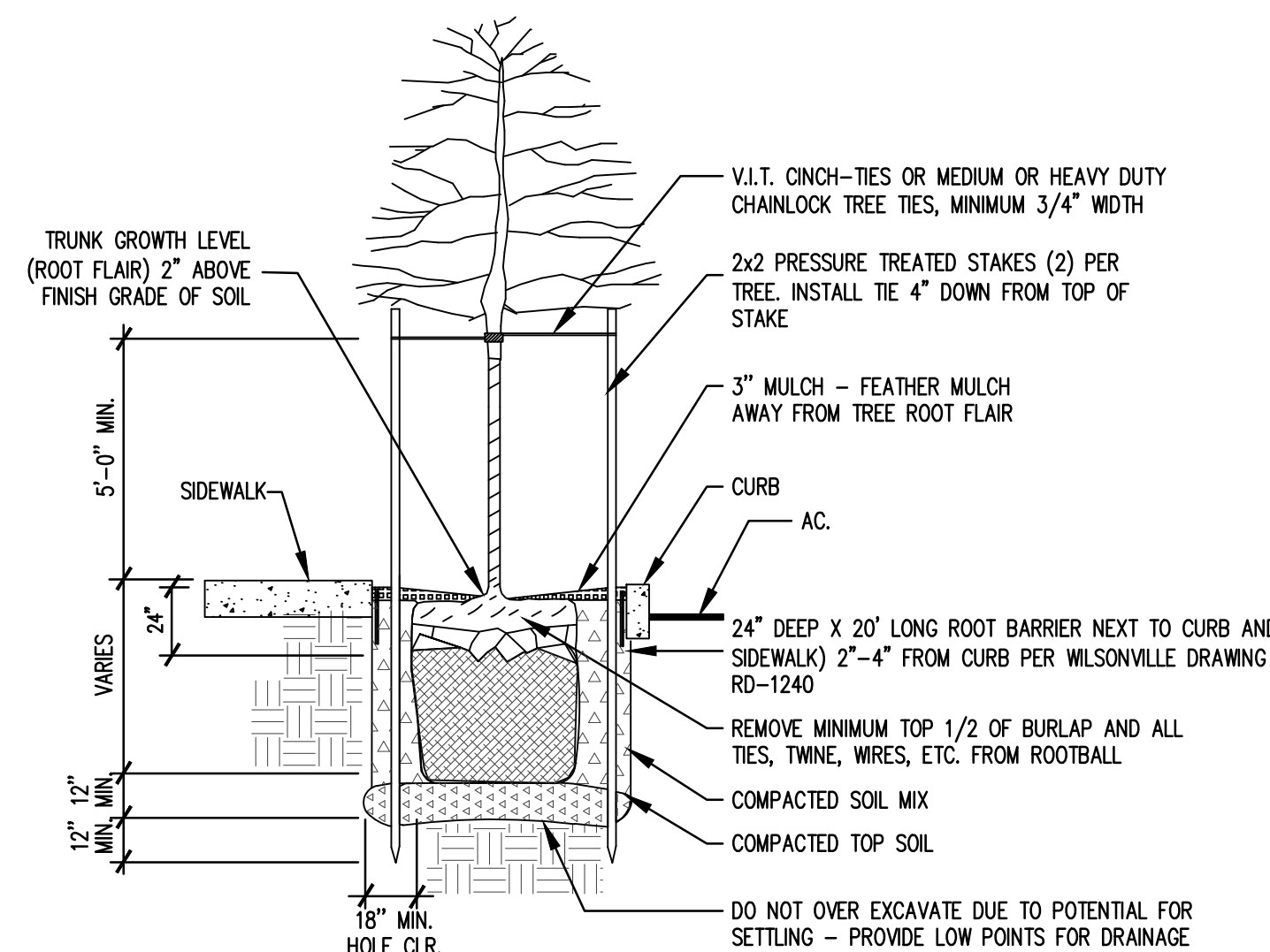




PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONTAINER	SPACING
	4	CHAMAECYPARIS NOOTKATENSIS 'PENDULA'	WEeping NOOTKA FALSE CYPRESS	7'-8' HT. B&B	AS SHOWN
STREET TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONTAINER	SPACING
	57	FRAXINUS PENNSYLVANICA 'MARSHALL'S SEEDLESS'	MARSHALL'S SEEDLESS GREEN ASH	2" CAL. B&B	AS SHOWN
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONTAINER	SPACING
	4	ARBUTUS UNEDO 'COMPACTA'	DWARF STRAWBERRY TREE	5 GAL. CONT.	60" o.c.
	13	AZALEA 'CUNNINGHAM'S BLUSH'	CUNNINGHAM'S BLUSH AZALEA	3 GAL. CONT./18" HT. MIN.	48" o.c.
	85	MAHONIA AQUIFOLIUM 'COMPACTA'	COMPACT OREGON GRAPE	3 GAL. CONT.	36" o.c.
	3	RIBES SANGUINEUM	RED FLOWERING CURRANT	5 GAL. CONT.	48" o.c.
	69	VIBURNUM DAVIDII	DAVID VIBURNUM	3 GAL. CONT./18" HT. MIN.	48" o.c.
ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONTAINER	SPACING
	7	MISCANTHUS SINENSIS 'MORNING LIGHT'	MORNING LIGHT MISCANTHUS GRASS	2 GAL. CONT.	60" o.c.
GROUND COVERS	DESCRIPTION				
	LAWN (SEED OR SOD)				
	RIVER COBBLE: 3"-6" DIA., NATURAL GRAYS AND TANS, ROUNDED RIVER ROCK				

- STORMWATER AREA**
- INFILTRATION SWALE PLANTINGS
- TYPICAL INFILTRATION SWALE PLANTING PALETTE:
- MOISTURE ZONE 'A' (BOTTOM OF SWALE)
 JUNCUS PATENS 'ELK BLUE'/ELK BLUE SPREADING RUSH, 6" PLUGS, 12" O.C.
 SCIRPUS MICROCARPUS/SMALL-FRUITED BULRUSH, 6" PLUGS, 12" O.C.
 JUNCUS ENSIFOLIUS/DAGGER-LEAF RUSH, 6" PLUGS, 12" O.C.
- MOISTURE ZONE 'B' (DRIER TRANSITIONAL AREA)
 CORNUS SERICEA 'KELSEY'/KELSEY DOGWOOD, 2-GAL. CONTAINERS, 30" O.C.
 FRAGARIA CHILOENSIS/COASTAL STRAWBERRY, 6" SP CONTAINERS, 18" O.C.
 MAHONIA AQUIFOLIUM 'COMPACTA'/COMPACT OREGON GRAPE, 2-GAL. CONTAINERS 36" O.C.
- GENERAL NOTES:**
- LANDSCAPE PLAN, PLANTINGS, DETAILS, AND FEATURES ARE CONCEPTUAL AND SUBJECT TO CHANGE. BUILDING FOOTPRINTS AND LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE.
 - ALL PLANT MATERIAL AND INSTALLATION SHALL CONFORM TO APPLICABLE CITY OF WILSONVILLE STANDARDS AND TO AMERICAN NURSERY STANDARDS ASN 1260.1.
 - STREET TREES SHALL BE FIELD ADJUSTED AS REQUIRED TO AVOID CONFLICTS WITH UTILITIES, LIGHT POLES, WATER METERS, ETC. THE FOLLOWING DISTANCES SHALL BE MAINTAINED PER SECTION 4.176, FIGURE 29: 10' FROM FIRE HYDRANTS, 15' FROM STORM SEWER INLETS, 10' FROM DRIVEWAYS, STREET LIGHTS, AND SIGNS, 5' FROM UNDERGROUND UTILITY BRANCHES, AND 30' FROM INTERSECTIONS. FINAL QUANTITY AND LOCATION OF STREET TREES MAY VARY, DEPENDING ON FINAL SITE LAYOUT.
 - RIGID STYLE ROOT BARRIERS, SUCH AS DEEP ROOT UB 24-2 OR SIMILAR, A MINIMUM OF 24" DEEP X 20" LONG, SHALL BE USED ON ALL STREET TREES CLOSER THAN 4' O.C. TO ANY HARD PAVING (SIDEWALKS, CURBS, ETC.). CENTER ROOT BARRIER ON TREE TRUNKS. ROOT BARRIER SHALL RUN IMMEDIATELY ADJACENT TO PAVING.
 - CONTRACTOR SHALL INSTALL ALL PLANT MATERIAL IN A SOUND-WORKMAN LIKE MANNER PER CURRENT INDUSTRY STANDARDS SUCH AS THOSE ADOPTED BY THE OREGON LANDSCAPE CONTRACTORS BOARD (OLCB). DOUBLE STAKE ALL NEW TREES FOR ROOT ESTABLISHMENT.
 - ALL PLANTING BED AREAS OUTSIDE OF THE INFILTRATION SWALES SHALL HAVE A 3" DEEP LAYER OF DARK HEMLOCK OR FIR BARK MULCH, MEDIUM GRIND OR SHREDED.
 - IRRIGATION: A PERMANENT, IN-GROUND IRRIGATION SYSTEM IS INTENDED TO BE USED FOR ALL NEW PLANTING AREAS. IRRIGATION SYSTEM SHALL BE ZONED BY WATER USAGE (LAWN AREAS SHALL BE ZONED SEPARATELY FROM PLANTING BEDS) TO INCREASE SYSTEM EFFICIENCY, AND SHALL BE 'DESIGN-BUILD' BY A QUALIFIED LANDSCAPE CONTRACTOR LICENSED TO PROVIDE IRRIGATION PLANS. CONTRACTOR SHALL PROVIDE IRRIGATION PLANS TO THE CITY AND LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
 - NATIVE TOPSOIL ON SITE SHALL BE STOCKPILED AND REUSED TO THE GREATEST EXTENT PRACTICABLE. MINIMUM TOPSOIL DEPTH OF NEW PLANTING AREAS SHALL BE 12" DEEP UNLESS OTHERWISE SPECIFIED. IF STOCKPILED SOIL IS USED, CONTRACTOR SHALL INTEGRATE (TILL) 2" OF CLEAN 100% VEGETATIVE DERIVED COMPOST INTO NEW PLANTING AREAS IN COMPLIANCE WITH SECTION 4.176.06(A)(5). SOIL SHALL BE SMOOTHED AND FREE OF DEBRIS, WOODY MATERIAL, ROCK, CLAY LUMPS, SOD, AND HIGH-LOW SPOTS PRIOR TO INSTALLATION OF PLANT MATERIAL.
 - MAINTENANCE OF ALL NEW LANDSCAPE AREAS SHALL BE THE ON-GOING RESPONSIBILITY OF THE PROPERTY OWNER, INCLUDING WEEDING, WATERING, PRUNING, AND DEAD PLANT REPLACEMENT IN KIND.



- 1 TYPICAL STREET TREE PLANTING DETAIL**
- NOTES:**
- DRIVE STAKES OUTSIDE OF ROOTBALL PARALLEL TO STREET AND SIDEWALK SO THEY DO NOT IMPEDE THE FLOW OF VEHICULAR OR PEDESTRIAN TRAFFIC.
 - SET TREE 2" ABOVE FINISH GRADE TO ALLOW FOR SETTLING OF SOIL.
 - PROVIDE A 20" LONG ROOT BARRIER NEXT TO SIDEWALK AND CURB. CENTER BARRIER ON TREE TRUNK.
 - SOIL MIX FOR TREE PLANTING TO BE 1/3 ORGANIC MATERIALS, 1/3 TOPSOIL, AND 1/3 SANDY LOAM.
 - STREET TREES SHALL BE LIMBED UP A MINIMUM OF 15' (OR PER AASHTO STANDARDS, WHICHEVER IS GREATER) FROM THE STREET AND 8" MINIMUM FROM THE SIDEWALK. REFER TO CITY OF WILSONVILLE PUBLIC WORKS STANDARD DRAWING RD-1240 STREET TREE LOCATION AND CLEARANCES DETAIL.

DEVELOPMENT REVIEW BOARD MEETING

MONDAY, NOVEMBER 14, 2016

6:30 PM

- IX. Board Member Communications:**
 - A. Agenda Results from the September 26, 2016 DRB Panel B meeting**

City of Wilsonville

Development Review Board Panel B Meeting Meeting Results

DATE: SEPTEMBER 26, 2016	
LOCATION: 29799 SW TOWN CENTER LOOP EAST, WILSONVILLE, OR	
TIME START: 6:30 P.M.	TIME END: 7:28 P.M.

ATTENDANCE LOG

BOARD MEMBERS	STAFF
Shawn O'Neil	Daniel Pauly
Richard Martens	Barbara Jacobson
Samy Nada	Mike Ward
City Council Liaison: Julie Fitzgerald	

AGENDA RESULTS

AGENDA	ACTIONS
CITIZENS' INPUT	None.
CONSENT AGENDA	
A. Approval of August 22, 2016 Minutes	A. Postponed due to lack of a quorum.
PUBLIC HEARING	
A. Resolution No. 333. Villebois Phase 11 Central – Berkshire No. 2: Stacy Connery, AICP, Pacific Community Design, Inc. – Representative for RCS–Villebois Development, LLC – Applicant/Owner. The applicant is requesting approval of a Zone Map Amendment from Public Facility (PF) Zone to Village (V) Zone, Specific Area Plan – Central Refinements, Preliminary Development Plan, Final Development Plan, Tentative Subdivision Plat and Type 'C' Tree Plan for the development of detached row houses and associated improvements in Villebois SAP Central, Phase 11. The subject property is located on Tax Lot 3300 of Section 15AC, Township 3 South, Range 1 West, Willamette Meridian, City Of Wilsonville, Clackamas County, Oregon. Staff: Daniel Pauly. Case Files: DB16-0031 Zone Map Amendment DB16-0032 SAP Central Refinements DB16-0033 Preliminary Development Plan DB16-0034 Final Development Plan DB16-0035 Tentative Subdivision Plat DB16-0036 Type C Tree Plan	A. Unanimously approved Resolution No. 333 as presented.
BOARD MEMBER COMUNICATIONS	None.
A. Results of the September 12, 2016 DRB Panel A meeting	
STAFF COMMUNICATIONS	Staff updated the Board on recent projects.