# APPENDIX L: RESIDENTIAL CAPACITY CALCULATIONS





# RESIDENTIAL CAPACITY ESTIMATE

### **OVERVIEW**

This document summarizes the methodology and results of an estimate of residential capacity in the Frog Pond East and South Master Plan Area. This report addresses the following Metro requirement for the Master Plan (Metro Code 3.07.1120):

D. The county or city responsible for comprehensive planning of an area shall submit to Metro a determination of the residential capacity of any area zoned to allow dwelling units, using a method consistent with a Goal 14 analysis, within 30 days after adoption of new land use regulations for the area.

The remainder of this report is split into the following sections:

- 1. Buildable Lands Inventory
- 2. Residential Land Uses
- 3. Capacity Estimate

### **BUILDABLE LANDS INVENTORY**

The Buildable Lands Inventory (BLI) provides a high-level estimate of the buildable acreage in the Master Plan study area. This BLI is an update to the 2015 BLI prepared by the City of Wilsonville for the 2015 for the Frog Pond Area Plan.

**Vacant.** Tax lots with an improvement (building) value less than \$10,000 and at least 3,000 *unconstrained* square feet (i.e., the remaining area after the constraints were removed).

**Partially Vacant.** Tax lots with an improvement value greater than \$10,000 and at least a half-acre in size with an existing single-family home. A quarter-acre was removed from each partially vacant lot to account for the existing development.

**Developed.** Any remaining tax lots that were not identified as vacant or partially vacant.





Table 1. BLI - Development Status

Development Status	# of East Lots	# of South Lots	Total
Vacant	3	7	10
Partially Vacant	2	15	17
Developed	3	1	4
Total	8	23	31

Table 2. BLI - Buildable Area

	Acres
Total (Gross) Area*	254.9
Constrained Area	76.5
20% future ROW	39.9
Net Buildable Area	138.5

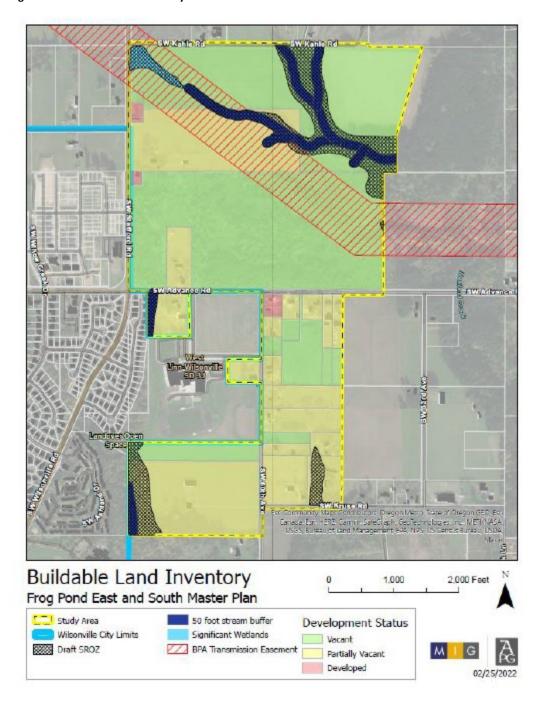
<sup>\*</sup>Total for all study area parcels. The total area (including existing roads) is 265 acres.

Table 3. BLI - Buildable Area by Neighborhood

	East		South		Entire Study Area	
Development Status	Total Acres	Net Buildable Acres	Total Acres	Net Buildable Acres	Total Acres	Net Buildable Acres
Vacant	138.5	75.4	18.2	14.1	156.6	89.5
Partially Vacant	31.7	12.0	64.3	37.1	96.1	49.0
Grand Total	170.2	87.4	82.5	51.1	252.7	138.5



Figure 1. Buildable Lands Inventory



# **RESIDENTIAL LAND USES**

The Frog Pond East and South Master Plan establishes three typologies of residential uses, as follows:

**Type 1.** Type 1 is the most compact and urban of the three forms.

• Buildings 2-4 stories tall close to the street



- Buildings are closely spaced from each other
- Townhouse, condo/apartment buildings, and similar are not limited in width allowing larger buildings that may even occupy an entire block face
- Lot area per building for detached homes will be small with less yard space than in Type 2 and Type 3
- Townhouses, closely spaced detached homes, and multi-family buildings are expected to be common housing choices provided; cottages or similar small-unit housing is also likely to be built

**Type 2.** Type 2 residential urban form is less compact than Type 1 but more compact than Type 3:

- Buildings are intended to be 2 stories, with 3 stories allowed under applicable State law for certain housing categories
- Moderate setbacks from the street
- Building separation is generally 10 feet
- Building width is moderately limited, to maintain a building bulk consistent among multi-family, middle housing, and single-family detached housing choices
- Detached home lot size is approximately double that of Type 1, allowing for larger home footprints and larger yards than Type 1
- Small to medium sized single-family detached homes and townhouses are expected to be common housing choices, with duplexes, triplexes, quadplexes, cottage clusters, and smaller multi-family buildings also likely to be built.

### Type 3.

Type 3 is the least compact residential urban form, characteristics include:

- Buildings primarily 1-2 stories in height, with 3 stories allowed for certain housing categories consistent with applicable State law
- Buildings are set back from the street
- Width of buildings is limited to create smaller buildings, which limits the number of units in multi-family or middle housing structures
- Building separation is generally more than 10 feet
- Lot size for detached single-family homes is generally 1.5 times that of Type 2 and 3 times that of Type 1, allowing for larger homes and yards
- Medium to large single-family detached homes along with smaller townhouse and duplex buildings are expected to be common housing choices; cottage clusters would be well-suited to this Type, and triplexes, quadplexes, and small multi-family buildings may also be built

Assumptions for the density and unit mix of these residential urban form types are shown in the table below.

Table 4. Gross and Net Density with Unit Mix Assumptions

Urban	Gross		Unit Mix			
Form Type	Density	Net Density	Multi-unit	Attached/Middle	Single Detached	
Type 1	20	25	50%	30%	20%	
Type 2	12	15	0%	50%	50%	
Type 3	5.6	7	0%	30%	70%	



## **CAPACITY ESTIMATE**

Figure 2 shows the proposed locations of residential land uses in the Frog Pond East and South neighborhoods. When overlaid onto the constraints identified in the Buildable Land Inventory, the capacity of these land uses is as follows:

**Table 5. Capacity Estimate for Residential Land** 

		Gross	Unit Mix			Total
Urban Form Type	Gross Density	Developable Acres	Multi- unit	Attached / Middle	Single Detached	
Type 1	20	19.5	195	117	78	390
Type 2	12	73.8	0	443	443	885
Type 3	5.6	55.7	0	94	218	312
Non-Residential	-	28.2	ı	ı	-	ı
_			195	635	739	1587
Total	-	177.2	(12%)	(41%)	(47%)	(100%)

Total gross density of residential land in the Frog Pond East and South neighborhoods is 10.7 units/acre, or 13.3 net units/acre assuming a 20% Right-Of-Way takeout.

For transportation planning purposes, an increased estimate of capacity was used in order to evaluate a more aggressive development scenario. This estimate used a factor of 1.134 to increase the number of units throughout the study area to reach a total of 1,800 units in Frog Pond East and South.



Figure 2. Street and Block Demonstration Plan with Land Uses

