# **ELLIGSEN ROAD NORTH URBAN RESERVE AREA**

Total Acres	633	Parcel Acres	588
Gross Vacant Buildable Acres	427	Net Vacant Buildable Acres	324

# **General Description (see attached map)**

The Elligsen Road North Urban Reserve Area is a somewhat rectangular shaped area on the north side of Wilsonville that lies north of SW Elligsen Road, west of SW 65<sup>th</sup> Ave and south of SW Frobase Road and totals 633 acres. The UGB forms the western and southern boundaries with urban reserve land to the east and north. Interstate 5 borders a portion of the western edge of the reserve area. A tributary to Boeckman Creek flows south from the middle of the reserve area and then along SW Elligsen Road before crossing underneath to the farmland to the south. The reserve area contains a series of moderately steep hills with some slopes greater than 10% through the middle of the area. Access is provided by SW Elligsen Road, SW 65<sup>th</sup> Ave and SW Frobase Road.

#### Parcelization, Building Values, Development Pattern (see attached aerial photo)

This reserve area contains 56 parcels that range in size from ¾ of an acre to 95 acres in size. Thirtyfour of the parcels are five acres or less and 47 are less than ten acres. Five of the largest parcels, all greater than 40 acres total 326 acres or 55% of the parcel acreage. Rural residences are focused on SW 65<sup>th</sup> Ave with the remainder of the area in agricultural use or forested parcels. Thirty-six of the 56 parcels have improvements, with a median value of \$412,620, excluding public buildings. Six improvements are valued greater than \$500,000; with two valued over \$2 million. Most of the high value homes are located along SW 65<sup>th</sup> Ave. There are two water reservoirs located at the high point of the reserve area, one for the City of Wilsonville and one for the City of Tualatin. The Pleasant Ridge RV Park is located in the southwest corner of the reserve area and the Meridian United Church of Christ Cemetery is located along SW 65<sup>th</sup> Ave.

# **GOAL 14 LOCATIONAL FACTORS**

#### Efficient accommodation of identified land needs

There is a significant amount of land in the middle and southern portions of the reserve area that contains slopes greater than 10%. There is a 100 acre section of the area adjacent to SW Frobase Road that is generally flat that could be used for employment purposes, however access to I-5 is not ideal. Given the concentration of high-value homes along SW 65<sup>th</sup> Ave residential use may be a more appropriate use. This area is able to accommodate both residential and a limited amount of employment land need.

# Orderly and economic provision of public facilities and services

#### **Sanitary Sewer Services**

# Capacity of existing facilities to serve areas already inside the UGB

The wastewater treatment plant was upgraded in 2014 which increased capacity from 2.5 MGD to 4.0 MGD resulting in excess capacity. The City has a 20-year program in place to replace aging concrete pipe. There is capacity to serve areas already in the UGB.

# Capacity of existing facilities to serve areas proposed for addition to the UGB

The wastewater treatment plant can serve a population of 35,000 people. The plant currently serves 24,000 people. The development of the Frog Pond area will use some of the additional capacity, but will not likely trigger any treatment plant upgrades. The City is planning to expand the treatment plant in 2030, however future industrial development in the Basalt and Coffee Creek areas could require capacity upgrades sooner depending on the timing of the industrial development. The City did not provide information on the capacity of the existing trunk line proposed to serve the reserve area; therefore, it is unknown how much additional capacity is available.

#### Impacts to existing facilities that serve nearby areas already inside the UGB

Based on conceptual level sewer sizing analysis, approximately 4.4 cfs will be added to the existing system. Conceptual sewer layouts indicate that additional flows will utilize the existing gravity trunk line ranging in size from 10-inch (at the upstream connection at Elligsen Road) to 30-inch (at the treatment plant). The capacity of the existing line is not available at this time, and therefore, the extent of required improvements to the existing trunk line and the associated costs are unknown.

#### Sanitary Sewer Piping Costs

Sanitary sewer piping costs	Cost (in millions)
Less than 12" pipe (gravity)	\$0.94
12 – 18" pipe (gravity)	\$4.40
Force main	\$0.16
Pump station	\$0.50
Total	\$6.00

#### Water Distribution Services

#### Capacity of existing facilities to serve areas already inside the UGB

Wilsonville owns and maintains the Willamette River Water Treatment Plant, which is capable of processing 15 MGD. A planned improvement will bring the treatment plant capacity to 20 MGD in order to serve the existing UGB through the year 2036. Current storage capacity is at 11 MG and the City has funded a project to provide additional storage to serve proposed development within the

existing UGB. At present, existing pump stations and pipe networks are adequate to serve the area within the existing UGB.

# Capacity of existing facilities to serve areas proposed for addition to the UGB

The City has ample water rights for the long term, so water supply is not an issue. The expected additional 10 MG expansion of the treatment plant in 2035 should provide capacity for the reserve area. Existing storage tanks do not have capacity to serve development outside of the existing UGB.

#### Impacts to existing facilities that serve nearby areas already inside the UGB

The City feels confident that it will have water capacity and storage to serve the reserve area. Numerous connection points exist at the edge of the reserve area and are assumed to be of adequate size. Transmission lines within the reserve area are expected to be built as development occurs.

#### Water Costs

Water piping/storage/pumping costs	Cost (in millions)
12" and smaller	\$5.08
18" and larger	\$5.76
Storage/pumping	\$4.27
Total	\$15.11

#### **Storm Sewer Services**

#### Capacity of existing facilities to serve areas already inside the UGB

There is no indication of capacity issues with existing stormwater facilities that serve the land inside the UGB.

#### Capacity of existing facilities to serve areas proposed for addition to the UGB

Stormwater will be conveyed, treated, and disposed of within the reserve area therefore, it is not anticipated that existing facilities would be utilized.

#### Impacts to existing facilities that serve nearby areas already inside the UGB

Stormwater conveyance, treatment, and discharge are anticipated to occur within the reserve area; therefore no impacts to existing facilities are anticipated.

Storm sewer conveyance and water quality/detention costs for roadways

Conveyance & water quality/detention costs	Cost (in millions)
Conveyance	\$7.54
Water quality/detention	\$6.86
Total	\$14.4

# **Transportation Services**

# Capacity of existing facilities to serve areas already inside the UGB

**Roadway:** All roadways in Wilsonville have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak. I-5 south of SW Wilsonville Road to across the Willamette River is classified as a high injury corridor for automobiles and SW Parkway Ave from Printer Parkway to SW Town Center Loop E is classified as a high injury corridor for pedestrians.

**Transit:** South Metro Area Regional Transit (SMART) provides full transit services to the City of Wilsonville through seven bus lines, Dial-a-Ride and medical transport services. The vast majority of the city's developed areas are within ¼-mile of a transit stop. TriMet's Westside Express Service (WES) Commuter Rail originates its route in Wilsonville, servicing four other stations on its way to Beaverton.

**Bike:** Wilsonville has a well defined bike network of dedicated bike lanes (19 miles) and established bikeways (4.5 miles) that connects neighborhoods, schools, parks, community centers, business districts and natural resource areas.

**Pedestrian:** Wilsonville has a fairly well defined pedestrian network in its residential neighborhoods with less pedestrian amenities in the industrial and employment areas. Interstate 5 provides a barrier for east-west pedestrian connections.

#### Capacity of existing facilities to serve areas proposed for addition to the UGB

**Roadway:** All roadways that serve the urban reserve area have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak.

**Transit:** Currently there is no regular SMART service to the reserve area. The closest bus routes are adjacent to the area on SW Canyon Creek Road and SW Elligsen Road (routes 6 & 2X).

**Bike:** A small portion of a dedicated bike lane on SW Elligsen Road is adjacent to the reserve area. Dedicated bike lanes are also found on SW Canyon Creek Road and SW Parkway Center Drive on the south side of SW Elligsen Road.

**Pedestrian:** A small portion of SW Elligsen Road adjacent to the reserve area has sidewalks on both sides of the street. The remaining portion of the road has no sidewalks. Sidewalks are also found on SW Canyon Creek Road and SW Parkway Center Drive on the south side of SW Elligsen Road that extend south to commercial and employment areas of the city.

# Impacts to existing facilities that serve nearby areas already inside the UGB

**Roadway:** SW Elligsen Road would see additional traffic, most of which may funnel to I-5 or continue west to the employment areas. SW Stafford Road would also be expected to see additional traffic flow south towards the Town Center area.

Transit: Existing SMART routes 6 and 2X may see additional ridership, see transit analysis below.

**Bike:** Bike facility improvements on SW Elligsen Road as part of the improvement of the road to urban standards will provide appropriate bike access to the facilities on SW Canyon Creek Road and SW Parkway Center Drive which would see additional use as they connect to commercial and employment areas of the city.

**Pedestrian:** Pedestrian facility improvements on SW Elligsen Road as part of the improvement of the road to urban standards will provide appropriate pedestrian access to the facilities on SW Canyon Creek Road and SW Parkway Center Drive which may see additional use as they connect to commercial and employment areas of the city.

# Need for new transportation facilities and costs (see attached transportation map)

The portions of SW Elligsen Road and SW 65<sup>th</sup> Ave that border the reserve area will need to be improved to urban arterial standards. Both roads are considered to be a 1/2 street improvement as the Elligsen Road South urban reserve and the land inside the UGB would be responsible for half of the improvements on SW Elligsen Road and the Norwood urban reserve would be responsible for half of the improvements on SW 65<sup>th</sup> Ave. A new arterial extends from SW Elligsen Road to connect with SW Day Road. SW Frobase Road would be improved to urban collector standards and three new collectors will provide access to the remainder of the reserve area.

Facility Class		
Arterials	Туре	Cost (in millions)
	Existing/Improved ½	\$42.08
	New	\$34.51
Collectors	Туре	Cost (in millions)
	Existing/Improved ½	\$9.59
	New	\$64.24
Total		\$150.42

# Provision of public transit service

South Metro Area Regional Transit (SMART) evaluated the reserve area for providing transit service. SMART could provide services to the reserve area although actual service depends on the level of development in the expansion area and in the corridors leading to the reserve area, however there is no guarantee of service. Service could be provided weekdays at 30 minute headways with one additional bus at a capital cost of \$650,000 (recurs every 14-15 years). Bus capital costs reflect electric vehicle costs as SMART plans to provide services with a zero emission

fleet. Annual service cost is \$79,000 and grows 3% per year. The Elligsen North reserve area is within the TriMet service boundary and SMART would need to negotiate with TriMet to provide bus service to the area.

Prior to land being included in the UGB a more detailed concept plan, consistent with the requirements of Metro's Urban Growth Management Functional Plan Title 11, is required. It is expected that the concept plan process will develop more refined public facility and service needs and cost estimates for the reserve area or portion thereof.

#### Comparative environmental, energy, economic and social consequences (ESEE analysis)

#### Environmental

A 3,400 foot segment of a tributary to Boeckman Creek flows south through the middle of the reserve area. The majority of the stream has been manipulated to flow along agriculture fields and then along SW Elligsen Road before crossing under the road to the south. Riparian habitat has been identified along the stream corridor along with some upland habitat in the steeper sloped sections of the reserve area. A 15,000 square foot wetland identified on the National Wetland Inventory (NWI) is located in the northeastern portion of the reserve area and a man-made pond presumably used for irrigation purposes is located on farm land in the center of the area. Given the increased protection levels for streams, wetlands, and habitat areas within the UGB, urbanization could occur with minimal to moderate impacts to the stream tributary, depending on east-west road connections. Overall urbanization of the area could occur with low impacts to the natural resources.

#### Energy, Economic & Social

It is expected that urbanization of the reserve area will result in new housing replacing the existing rural residences in most instances. There is a considerable amount of land that could be developed to urban densities which may contribute to social impacts in terms of loss of sense of place and rural lifestyle for the existing residents. However, as noted previously, there are numerous highvalued homes along SW 65<sup>th</sup> Ave that results in the potential for a slow redevelopment process in the eastern portion of the area, reducing the social impacts on those existing residents in terms of loss of sense of place and rural lifestyle. The additional traffic generated through urbanization of the area will mostly funnel on to SW Stafford Road and SW Elligsen Road which could provide negative energy impacts as these roads provide access to I-5 and I-205. However SW Norwood Road is a short distance to the north and provides an alternative east-west connection across I-5 which could reduce the energy impacts. Adjacent to the south is the Argyle Square Shopping Center and a large employment cluster, providing close shopping and employment opportunities for future residents thereby reducing VMT. The loss of the economic impact from the agricultural uses in this area would not be significant and the potential economic impact of future residential development should outweigh this loss. Overall this reserve area has medium economic, social and energy consequences from urbanization.

# Compatibility of proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB (see attached resource land map)

Exclusive Farm Use (EFU) zoned land borders the reserve area on the south and partially to the north. The 90 acre block of farm land to the north is completely in agricultural production, mostly in field crops and a Christmas tree farm. SW Frobase Road provides a buffer for the reserve area, although the road itself would not make the two uses compatible and issues related to safety, liability and vandalism and complaints due to noise, odor, dust and the use of pesticides and fertilizer could still occur. In addition, the improvement of SW Frobase Road to urban standards includes its own set of compatibility issues related to street light illumination, weeds and pedestrian movements that can reduce compatibility between the two uses, some of which may be addressed through road design. Urbanization would increase traffic on SW Frobase Road and SW 65<sup>th</sup> Ave which could impact the movement of both farm equipment and goods. The proposed urban uses are not compatible with the nearby agricultural activities occurring on the farm land to the north.

The EFU land to the south is being actively farmed with field crops and includes one residence not associated with agricultural activities. SW Elligsen Road provides a buffer for the reserve area, although the road itself would not make the two uses compatible and issues related to safety, liability and vandalism and complaints due to noise, odor, dust and the use of pesticides and fertilizer could still occur. In addition, the improvement of SW Elligsen Road to urban standards includes its own set of compatibility issues related to street light illumination, weeds and pedestrian movements that can reduce compatibility between the two uses, some of which may be addressed through road design. Urbanization would increase traffic on SW Elligsen Road which could impact the movement of both farm equipment and goods. The proposed urban uses are not compatible with the nearby agricultural activities occurring on the small portion of farm land to the north.

Overall, the proposed urban uses would not be compatible with nearby agricultural and forest activities occurring on farm and forest land outside the UGB to the north and the south and mitigation will be required on the urban side.



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Metro

Preliminary Urban Growth Boundary Alternatives Analysis Elligsen Road North



SW FROBASE RD



SW EASIGATE DR

SW HOMESTEADER RD Data Resource Center Metro

SW KNOLLWOOD CT

SW ELLIGSEN RD

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