City of Portland – Multnomah County

Area 93 (Bonny Slope West): Existing Conditions, Opportunities and Constraints Report

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I. PROJECT PURPOSE

The purpose of this report is to provide an overview of the existing conditions, opportunities and constraints within a 160-acre site known as Area 93, Bonny Slope West. Area 93 is generally bounded by NW Thompson Road to the south, NW Laidlaw Road to the north and east, and NW 125th Avenue to the west (see Figures 1 and 2). It is located in unincorporated Multnomah County, bordering unincorporated Washington County to the west and south.

The review of existing conditions focuses on natural features, parks and open space, and infrastructure[1]. The report provides a preliminary buildable lands and market analysis, and an economic perspective on the likely and possible development/ redevelopment of the area.

The City of Portland, through an interagency agreement with Multnomah County, will undertake a planning process to develop a concept for the eventual urbanization of the area. The concept planning process is expected to be completed in 2010. This report is part of the first phase of the concept planning process.

BACKGROUND

In 2002, Metro expanded the Urban Growth Boundary (UGB) to include Area 93. This site is zoned Rural Residential (RR) by Multnomah County. Currently, the study area is partly developed with rural residences on forested parcels with some open grassland. There is no agricultural activity occurring in the study area.

Under current state law and Portland's Comprehensive Plan policies, Portland can neither annex nor provide services to Area 93 because the area is not contiguous with Portland's existing city limits or current Urban Service Boundary (USB). The County, through a series of agreements, transitioned urban services to its cities and thus does not have the capacity to provide services or administer urban planning and zoning designations.

While the City of Portland cannot currently provide services to Area 93, it has a critical interest in ensuring that future urbanization of the area complements the surrounding transportation network and development pattern. The City also has an interest in assuring that the area is designed to respect natural features and functions and conserve wildlife habitat and corridors that link Forest Park and other significant natural areas to the west, north, and south. The City has a further interest because Metro will propose additional areas for both urban and rural reserve designation in 2009 and final urban expansion designations in 2010. Lands surrounding Area 93, primarily to the north and east, are potential candidates for either designation.

[1] Transportation is not part of the scope of this study; the City and County plan to address this element separately.

ORGANIZATION

This report is organized into the following sections:

- Summary of Finding;
- Existing Conditions, Opportunities and Constraints;
- Buildable Land and Market Analysis;
- Summary and Conclusions; and
- Next Steps.

II. SUMMARY OF FINDINGS

This report provides analysis regarding the future for Area 93. The trends and comparative advantages/disadvantages suggest, but do not dictate, future possibilities. Public policy can and will play a significant role in influencing what happens in Area 93, particularly as the City of Portland and Multnomah County move forward with concept planning. Following are suggested actions that public agencies can take to set the stage for future concept planning.

Address governance and service provision.

Although Area 93 is within unincorporated Multnomah County, it directly abuts Washington County. Area 93 is also physically closer to suburban service districts, such as Clean Water Services and the Tualatin Valley Water District, than it is to the City of Portland Urban Service Boundary. This inconsistency between jurisdictional boundaries and service boundaries presents a challenge, but is not unheard of in the Portland region. Public agencies will need to determine which service providers are most appropriate for Area 93, given the steps necessary to extend service boundaries, the costs of extending infrastructure, and the intergovernmental/service agreements that will be necessary.

Examine infrastructure options

The lack of infrastructure is a disadvantage to Area 93. Public agencies will want to consider the feasibility and cost of providing urban levels of infrastructure to Area 93, particularly in the context of likely uses and achievable densities. While evaluating options, consideration should be given to emerging sustainable design practices that could be used to significantly reduce traditional infrastructure needs for services such as stormwater and energy, as well as sewer and solid waste.

Evaluate potential zoning regulations and resource protections

This report suggests that Area 93 is more likely to attract new residential uses than commercial and industrial uses. Given that assumption, future discussions about housing type and density should be evaluated in the context of natural resource protection, services, and infrastructure costs. That is, given the quantity and availability of land, what are realistically achievable densities and will those densities justify desired resource protections and the cost of providing urban services?

Set realistic goals and timelines.

High property values (especially improvement values) tend to limit short-term redevelopment opportunities. This is an important factor for public agencies to consider in the context of phasing of development and timing of infrastructure improvements. That is, in the short and mid term, public investment in infrastructure may be leveraged most effectively within opportunity areas that are vacant and/or have lower improvement values relative to the rest of the study area, as these areas are more likely to support redevelopment in the short and mid term.

III. EXISTING CONDITIONS, OPPORTUNITIES & CONSTRAINTS

The following section uses existing information derived from a variety of data sources to assess the existing natural features, parks and open space, and infrastructure improvements in and around the study area. The subsequent Buildable Lands and Market Analysis section of this report will review the implications of these features for future growth of the area. Methods used for this assessment are summarized in Appendix A.

NATURAL FEATURES

Area 93 sits on the northeastern flank of the Tualatin River basin, on the gentle, southwest sloping foothills of the Tualatin Mountains (West Hills). A southern fork of Bronson Creek flows west through the area, before joining Beaverton Creek, Rock Creek, and the Tualatin River. Located only two-thirds of a mile from the ridgeline along Skyline Boulevard, several headwater tributaries feed Bronson Creek within or just upstream of the study area. Steep ravines bordering Bronson Creek and these tributaries are covered in a mixed conifer-hardwood forest. Above the ravines, grasslands and scattered forest patches are interspersed with rural-residential land uses.

Available data on natural features has improved significantly in recent months. New information on topography, slopes and stream channels was recently generated from Light Detection and Ranging (LiDAR[2]) imagery. In addition, the City recently completed new vegetation mapping of the area and this data is incorporated into this report. The following review of natural features draws on this existing information combined with field observations within the study area. Natural features are reviewed from the ground up, beginning with soils and followed by topography, water features, fish and wildlife habitat, and vegetation.

Soils

The study area is comprised of several different soil types, all categorized as silt loams.[3] Cascade silt loam is the dominant soil covering approximately 84 percent of the study area. Other soils found in Area 93 are comprised of:

[2] **LiDAR** is an optical remote sensing technology that measures properties of scattered light to find range and/or other information of a distant target.

[3] Silt loam soils are comprised of material that contains 50% or more silt and 12 to 27% clay, or 50 to 80% silt and less than 12% clay.

- Helvetia silt loam;
- Cornelius silt loam; and
- Cornelius and Kinton silt loams.

These soil types are mapped in Figure 3. Table 1 below summarizes the composition and characteristics of the soils present in the study area as documented in the Natural Resources Conservation Service (NRCS) Soil Survey (1991).

Table 1
Characteristics of Soils in Area 93

Name	Drainage Class	Hydro Group	Hydric	Hydric Inclusions	Acres
Cascade silt loam, 3 to 7 percent slopes	Somewhat poorly drained	C	No	No	1.07
Cascade silt loam, 3 to 8 percent slopes	Somewhat poorly drained	C	No	No	23.53
Cascade silt loam, 8 to 15 percent slopes	Somewhat poorly drained	C	No	No	48.70
Cascade silt loam, 15 to 30 percent slopes	Somewhat poorly drained	C	No	No	18.88
Cascade silt loam, 30 to 60 percent slopes	Somewhat poorly drained	C	No	No	41.43
Helvetia silt loam, 3 to 8 percent slopes	Moderately well drained	C	No	Yes	10.03
Cornelius silt loam, 3 to 8 percent slopes	Moderately well drained	C	No	Yes	10.44
Cornelius silt loam, 8 to 15 percent slopes	Moderately well drained	C	No	Yes	2.99
Source: NRCS (1991)					

As shown in Table 1, all of the soils located in Area 93 fall into hydrologic soil group C. These soils generally have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine structure (NRCS 1986). These soil conditions present potential constraints to future development, and may influence strategies for sustainable stormwater treatments, as will be discussed later in this report.

Table 1 provides information on whether specific soils are hydric or have hydric soil inclusions. Hydric soils are soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in their upper part. These soils are indicators of the potential presence of wetlands, as will be discussed in the Water Features section, below.

Topography and Slopes

Area 93 is comprised of two basic landforms: the gentle to moderately-sloping west flank of the Tualatin Hills, and the steeper ravines cut by Bronson Creek and its tributaries, including "Ward Creek" in the northern part of the study area. The Bronson Creek ravine follows Old Laidlaw Road right-of-way east to west across the central portion of the study area (see Figure 4).

Based on GIS data extracted from the City of Portland's LiDAR data[4], ground elevations within the area range from 584 feet (NGVD) in the northeast corner to 312 feet to the west where Bronson Creek leaves the site. This represents a net elevation change of 272 feet across the study area.

In keeping with Metro, County and City policy, steep slopes were defined for the purpose of this study as slopes greater than or equal to 25 percent. As noted above, these steep slopes are primarily located along the stream corridors within the study area. Approximately 32.17 acres, or 20 percent of the study area is comprised of steep slopes.[5]

Water Features

Water features addressed in this section include streams, floodplains, and wetlands. Available groundwater data is also summarized.

Streams and Riparian Corridors

Area 93 is situated high in the northeastern portion of the Tualatin River basin[6]. The study area is bisected by the south fork of Bronson Creek, a second-order, perennial stream fed by headwater tributaries draining the slopes to the east (see Figure 5). This stream cuts a meandering, 3,500-foot course through the central portion of the study area. For most of this length, the stream has a fairly gentle, 2 to 3 percent gradient. As it nears the west end of the study area, the stream gradient increases to as much as 10 percent.

The main tributary to Bronson Creek is known by local residents as "Ward Creek." This tributary flows west from the northeast corner of the study area, passing under Laidlaw Road (at its junction with the Old Laidlaw Road right-of-way) and joining Bronson Creek near the western boundary of the study area.

Based on limited, largely off-site observations, Bronson Creek is in good condition. The stream was flowing clear after a day of precipitation. The stream channel and banks are intact with no observed evidence of excessive erosion or downcutting. Several reaches of the stream contain a broad channel-meander zone with meandering or braided channels extending to the edges of the ravine side slopes. The ravine is well-vegetated with a native, mixed forest community. Incursions of invasive species such as Himalayan blackberry and English ivy are fairly common, particularly near residences and at forest edges. In certain areas, residents have built structures, retaining walls, or drainage systems within the stream corridors. Generally, however, these activities are believed to be limited in scope and impact.

The well-functioning condition of the stream can be explained, in part, by the study area's location high in the watershed and by the largely natural condition of the watershed above the site to the north and east. Notably, there are no road crossings of

[4] Data derived from 2-foot contours.

[5] In order to obtain the best available steep slope data, raster data was queried for slopes of 25% or greater and converted to vector shapefiles.

[6] Bronson Creek joins Beaverton Creek south of Highway 26, and Beaverton Creek joins Rock Creek before discharging into the Tualatin River.

Bronson Creek other than the Laidlaw Road crossing at the eastern boundary of the study area. From this point, the stream flows freely through the study area for nearly a mile before entering a culvert below NW Saltzman Road. The only other noted road crossing in the study area is the crossing of Ward Creek at Laidlaw Road. The healthy condition of Bronson Creek and its tributaries is an important factor to be considered in future planning for the area.

While the upper reaches of Bronson Creek appear in good condition, it should be noted that its downstream reaches (mile 0 to 6.5) are listed by the Oregon Department of Environmental Quality (DEQ) as water quality limited.

In the southwest corner of the study area, south of Thompson Road, a small tributary of Willow Creek appears on the stream layer (map) provided by the City of Portland. The project team did not have access to this property and was not able to verify whether a stream or stream channel exists. LiDAR-generated topographic data does not indicate a channel in this area, but some surface water flow (ephemeral or otherwise) is possible.

A discussion of fish use of Bronson Creek is provided in the Fish and Wildlife Habitat section, below.

Wetlands

No wetlands are documented within the study area in the data reviewed for this project, including data from the City of Portland, Multnomah County, Metro, and the U.S. Fish and Wildlife's *National Wetland Inventory*. The closest wetlands, identified on the National Wetland Inventory maps, are located to the west of the study area in the general vicinity of Bronson and Willow Creeks.

During the September field visits for this project, the project team identified one wetland within the study area using an off-site determination methodology (see Appendix A, Methods). The wetland is located along Ward Creek, on the upstream side of the Laidlaw Road crossing (see Figure 5). This is a palustrine, forested wetland dominated by Pacific willow, with a dense emergent layer characterized by water parsley and bulrush. Western red cedar is common along the streambanks and wetland perimeter. Though soils could not be sampled (and hydric soils are not mapped at this location), there is clear evidence of wetland hydrology (surface soil saturation and ponding) in addition to a plant community dominated by hydrophytes. The wetland is estimated to be 8,473 square feet in area. It's hydrogeomorphic (HGM) classification is Riverine Impounding, which reflects the partial impoundment created by the Laidlaw Road embankment and the stream culvert.

Based on observations from a single property along Bronson Creek where access was granted, there is evidence of potential seeps and seep wetlands. The extent of such features within the study area is not known but they are recognized as important environmental features by both the City and County.

Floodplains

No floodplains are mapped by the Federal Emergency Management Agency (FEMA) within the study area. The closest 100-year floodplain is located along Bronson Creek

west of NW Saltzman Road, approximately 1,000 feet downstream of the study area. This section of stream is at the confluence of the north and south forks of Bronson Creek. Here, the stream gradient drops significantly, from as high as 10 percent (south fork) to as low as 1 percent.

Locally, the low terraces at the base of the Bronson Creek ravine are likely to experience periodic flooding during winter storm events. These small flood fringes help to store and slowly release storm flows, reducing flood hazards to downstream neighborhoods.

Groundwater

Much of the silt loam soils in the study area have a characteristic fragipan[7] layer at a depth of 20 to 40 inches. This layer creates a perched water table from December through April. The depth of the seasonally perched water table varies by soil type, from as shallow as 18 inches up to 6 feet. These conditions create potential limitations for future development.

Limited data was available on groundwater levels within the area. Well logs in the area suggest a fairly wide range of static groundwater levels, from as shallow as 10 feet to more than 200 feet in depth. This range does appear to reflect the time of year that measurements were taken (i.e., with shallower readings in the wet winter months), because some of the shallowest readings occurred in July. The project team also reviewed one local geotechnical report, but it contained little data on groundwater. Static groundwater levels in November, 2006 were reported between 11 and 18 feet in depth, decreasing as they approached Bronson Creek.

Fish and Wildlife Habitat

Within the study area, neither Bronson Creek nor its tributaries are listed as fish-bearing streams by the Oregon Department of Fish and Wildlife and Department of Forestry. The fish-bearing status of these streams is reported as "unknown." Bronson Creek becomes fish bearing approximately 1,300 feet downstream from the study area, at the confluence of its north and south forks. Other data sources (e.g., Streamnet) report coho salmon and winter steelhead (Upper Willamette River ESU[8]) using the lower reaches of Bronson Creek (south of NW Cornell Road) for rearing and migration.

Despite the apparent lack of fish (or lack of fish data) in the area, longtime residents within Area 93 report seeing and catching trout in years past. During field visits in the area, Bronson Creek appeared to have adequate stream flows and suitable gradients to support fish. Additionally, there appeared to be few obstructions to fish movement.

[7] A fragipan is a compacted subsurface soil layer that restricts water flow and root penetration.

[8] ESU is an evolutionarily significant unit, a distinct population segment of a (in this case) fish species.

Wildlife habitat information in the area includes the broad inventory of riparian and upland habitats prepared by Metro as part of Title 13 (Nature in Neighborhoods).[9] A large corridor along Bronson Creek is classified as Riparian Wildlife Habitat Class I (high value) and designated as a high habitat conservation area (HCA) under Title 13 (see Figure 9). This riparian habitat accounts for 38.06 acres of the total study area. Additionally, 2.05 acres are classified as Riparian Wildlife Habitat Class II (moderate value) and 2.48 acres as Class III. Upland habitats are also identified, though Metro chose not to apply conservation requirements to these areas. Upland Wildlife Habitat Class A comprises 62.22 acres of the study area, with 4.86 acres designated as Class B. Impact areas are designated around the habitat areas and account for 10 percent of the study area. Table 2 summarizes the Title 13 habitat designations.

Table 2
Metro Title 13 – Habitats by Class and Value

Class	Acres
Riparian Wildlife Habitat Class I (High Value)	38.06
Riparian Wildlife Habitat Class II (Moderate Value)	2.05
Riparian Wildlife Habitat Class III	2.48
Upland Wildlife Habitat Class A	62.22
Upland Wildlife Habitat Class B	4.86
Impact Area	16.00
Total Inventory	***125.65***
Total Area with High and Moderate Value	***40.11***
Source: Metro Title 13 (2006)	

Based on a short field visit to the site, it is expected that a wide range of birds, mammals, reptiles, amphibians, and insects use the site for nesting, forage, and shelter. In addition, the area provides suitable habitat for several sensitive species. During the field visit, one state-listed sensitive species – a pileated woodpecker – was observed foraging along the Bronson Creek corridor. Further documentation of habitat conditions, wildlife use, and potential sensitive species presence would be useful for future planning efforts, particularly if greater access can be obtained to private property.

Area 93 riparian and upland habitats are well-connected to larger habitat patches located north and east of the site. These forested riparian and upland areas provide connections to Forest Park. To the west and south of the site, in the developed parts of Washington County, habitats become more fragmented. In these areas, the main corridors are linear features along Bronson Creek and to a lesser extent Willow Creek.

Vegetation

The City of Portland recently updated its vegetative cover data for Area 93 using 2007 aerial photography. Based on the 6-inch aerial, the City classified vegetative cover in Area 93 into natural/semi-natural (forest, herbaceous, shrubland or

[9] Title 13 was created to implement Oregon Statewide Planning Goal 5 (natural resources, scenic and historic areas and open spaces) and Goal 6 (air, water and land resources quality).

woodland) or cultivated (woodland or herbaceous). Figure 6 shows the distribution of vegetative cover types within the study area.

As shown in Table 3, the large majority of vegetative cover in the study area is classified as natural/semi-natural. According to the City's inventory, the predominant vegetative cover in the study area is natural/semi-natural forest (78.54 acres), which accounts for nearly half of the study area. Natural/semi-natural herbaceous cover accounts for approximately 22.16 acres and natural/semi-natural woodland covers approximately 8.05 acres.

Table 3
Type of Vegetative Cover in Area 93

Cover Type	Acres
Natural/Semi-natural	
Forest	78.54
Herbaceous	22.16
Shrubland	4.27
Woodland	8.05
Cultivated	
Woodland	0.33
Herbaceous	16.10
Total	129.45
Source: City of Portland (2008)	

The amount of cultivated vegetative cover is low, with cultivated woodland accounting for 0.33 acres and cultivated herbaceous cover accounting for 16.10 acres for a total of 16.43 acres of cultivated land. Combined, the amount of estimated cultivated vegetative cover accounts for less than 10 percent of the total study area. Approximately 30 acres of the study area are excluded from the study area due to existing development.

The project team documented characteristic vegetation on a field visit through the study area in September, 2008. Two sites were accessed for this purpose: one to the west (a private site) and one to the east (a public right-of-way). As indicated in the City data above, the predominant cover type in the area is forest. Characteristic vegetation observed in upland areas and on the upper ravine slopes is a mixed conifer/hardwood forest dominated by bigleaf maple and Douglas fir. Along the stream corridors and lowlands, western red cedar, red alder and Oregon ash are common. Dominant shrub species include Himalayan blackberry (in open areas and forest clearings) and salmonberry (along stream corridors). Among shrub species noted was western wahoo, a plant once believed to be locally rare. The herbaceous layer is dominated by sword fern. English ivy, an invasive non-native, is common near residential uses and poses a threat to forest health: it has climbed into the tree canopy and has suppressed the native herbaceous layer as well. Despite the presence of invasives like ivy and Robert's geranium in some locations, the herbaceous layer remains fairly diverse, with more than 25 native species noted. A list of plant species observed during the field visit is contained in Appendix B.

Natural Feature Opportunities

Many of the opportunities related to natural features are reviewed in the context of parks and open space, sustainability and stormwater discussed in the following sections of this report.

Overall, the natural features of the study area, particularly the rolling topography and scenic streams are desirable amenities for those seeking a more rustic environment amidst an urban setting. The healthy stream corridors and strong habitat connections to surrounding open space lands are uncommon attributes whose conservation presents a unique opportunity. Cool, clear, free-flowing streams are a rare urban amenity. The braided stream channels, modest flood terraces and wetlands provide an opportunity to naturally dissipate and desynchronize flood waters. Natural slope protection is provided by the native forest that covers many of the steep slopes in the area, anchoring the soils with its root system and intercepting rainwater before soils become saturated and susceptible to landslide.

The forest also provides opportunities related to sustainability and energy conservation. It absorbs greenhouse gasses, moderates local climate extremes, offers shelter from cold winter winds and shade on hot summer days. The forest's ability to intercept rainwater (through root uptake and evapo-transpiration) poses a rarely tapped opportunity to reduce stormwater infrastructure costs and implement a sustainable development approach for the area.

As described in later sections of this report, natural features can also pose constraints to development, primarily by limiting the location of development and supporting infrastructure.

PARKS AND OPEN SPACE

The discussion of existing conditions, opportunities and constraints now turns to parks and open space. A larger look at the context of parks and open spaces is key to this discussion, since no parks or public open spaces currently exist within Area 93.

Parks, Trails and Open Space Corridors

Area 93 is located between Portland's Forest Park and open spaces in the Tualatin Valley, both major open space networks in the Portland Metropolitan Area. Portland Parks and Recreation manages Forest Park and Tualatin Hills Parks and Recreation District manages the open spaces in the Tualatin Valley. These open space systems include a string of parks along Rock Creek and Bronson Creek, two important natural resources in the area. In addition, on it's Regional Trails map (RLIS data), Metro has outlined additional future trails to link existing parks and to improve public access between parks, natural areas and neighborhoods (see Figure 7).

Rock Creek Trail Corridor and Greenway

Along Rock Creek and its upper tributaries, a collection of parks creates a strong east-west network of open spaces near Area 93. The Rock Creek Trail

Corridor begins near Area 93 at Kaiser Woods Park and follows a 2-mile line of open spaces (see Figure 7).

From the Rock Creek Country Club, the Rock Creek Greenway follows Rock Creek south in a recreation corridor that intersects Hwy. 26 and NW Cornell Road. Metro is working to finalize the upper segments of this greenway, linking more than 10.7 miles of bike and pedestrian trails.

Bronson Creek Greenway

An additional string of parks follows Bronson Creek. Metro has identified this corridor as a proposed greenway, starting from the confluence with Beaverton Creek, east across the ridge of the Tualatin Mountains to Forest Park. Once complete, this greenway will provide the first link between the Tualatin Valley and the many miles of soft trails in Forest Park.

Rights-of-Way

Rock Creek Powerline Trail Corridor

The Rock Creek Powerline Trail Corridor links Kaiser Woods Park and Springfield Meadows Park. This right-of-way contributes to the east-west green space corridor.

Beaverton Powerline Trail Corridor

An electric powerline trail corridor owned by PGE and BPA, this north-south trail route will connect the Tualatin River near the Tualatin Wildlife Refuge north to Forest Park. Only two of the proposed 16 miles of trail have been built. Currently, the trail segment near Bronson Creek is established, providing a short connection near Area 93.

Figure 7 illustrates these two powerline corridors.

Nearby Parks

Currently, there are no dedicated parks within the study area. Parks directly surrounding Area 93 include NE Neighborhood Park, Bannister Creek Park and Bonny Slope Park, managed by Tualatin Parks and Recreation. The characteristics of these parks are summarized in Table 4, and Figure 7 shows their location.

Table 4
Parks located near Area 93

Name	Size	Distance from study area	Features
NE Neighborhood Park	4.31 acres	500 feet	Fir trees
Bannister Creek Park	14 acres (approx.)	1,500 feet	Wood chip path, small playground facilities, natural area including stream
Bonny Slope Park	2.65 acres	2,000 feet	ADA Accessible Trail, 1 baseball field, 1 soccer field, 1 softball field, 4 basketball hoops, picnic tables, playground and restrooms

Schools

School facilities generally include playgrounds and playfields and provide open space and recreation for neighbors.

There are currently four public and two private elementary schools located in close proximity to the area. Bonny Slope, Findley and Jacob Wismer Elementary Schools are associated with the Beaverton School District while Forest Park is a part of Portland Public Schools. Beaverton School District is currently engaged in a Strategic Planning Process that will help shape the District's mission, vision and priorities for the next five years.

Bonny Slope Elementary School opened in the fall of 2008 and is located less than 0.5 miles from the site. It serves students in Kindergarten through 5th grades. Bonny Slope currently serves 438 students and has an enrollment capacity for 600 (i.e., while projecting 473 students for September 2009). Bonny Slope students feed into Cedar Park Middle School and Sunset High School. Area 93 is currently included in the Bonny Slope attendance area. The school sits on a 9.77-acre campus and is exploring a partnership with Tualatin Hills Parks and Recreation District to expand useable park acreage in the area[10].

Findley Elementary School sits approximately 0.25 miles from the site and serves students in Kindergarten through 5th grades. Area 93 previously belonged to the Findley attendance area. 2008 school enrollment is 825 students with capacity for 855. Findley Elementary students typically matriculate to Stoller Middle School and then to Sunset or Westview High Schools. Findley has a 9.51-acre campus[11].

Jacob Wismer Elementary School is located less than one mile from Area 93 and is not currently a part of the Area 93 attendance area. Jacob Wismer serves 824 students in Kindergarten through 5th grades and has an 8.4-acre campus. The school's capacity is 749 students; however, when Springville Elementary opens in Fall 2009, this will provide additional capacity at Jacob Wismer[12].

Nearby, the private Goddard School serves 82 preschoolers and is located in the adjacent development, less than 0.25 miles from the site.

The Montessori School of Beaverton is another private elementary school serving the area. It has been open since 1999, serves 188 students, and is located less than 0.25 miles from Area 93.

Forest Park Elementary School serves 510 students in Kindergarten through 5th grades and sits on a 6.6-acre campus. The school is located one mile from Area 93 and is part of the Portland Public School district. The school has permanent capacity for 247 students. Students at Forest Park Elementary feed into West Sylvan Middle School and Lincoln High School. According to a 2008 Educational Adequacy and

[10] Phone conversation with Jennifer Garland, District Demographer, Beaverton School District, December 2, 2008.
[11] J. Garland, Beaverton School District.
[12] J. Garland, Beaverton School District.

Facility Assessment, Forest Park lacks dedicated Kindergarten level playground and equipment[13].

Findley Elementary School and The Goddard School are adjacent to the study area and have pedestrian and bike access to Area 93. For the other schools, bike and pedestrian access from the study area is difficult because of narrow roads and a lack of sidewalks.

Regional Open Space Connection Opportunities

Surrounding park and open space networks provide excellent recreation opportunities with potential connections to Area 93. The Bronson Creek Greenway, with its potential to connect to Forest Park, creates a vital link between the park and Tualatin River Valley. This connection would link Area 93 residents to 40 miles of public trails, including Washington Park, Hoyt Arboretum and downtown Portland.

Steep slopes along Bronson Creek pose a potential constraint to a trail connection between Area 93 and the Bronson Creek Greenway.

Local Park and Open Space Opportunities

Bronson Creek / Ward Creek

The Bronson and Ward Creek corridors can form a strong basis for an open space and wildlife corridor through the site. The south fork of Bronson Creek would be an attractive amenity for neighbors and has the potential to complete another portion of the open space corridor between Bronson/Rock Creek systems and Forest Park. Ward Creek could also help to reinforce and contribute to the open space network.

A pedestrian trail could be constructed along Bronson Creek, with links to adjacent residential areas. One challenge to implementing such a trail would be finding a suitable path that avoids steep slopes while maintaining a reasonable set back from the stream. The Old Laidlaw Road right-of-way on the north side of Bronson Creek is 60 feet wide and could potentially serve this purpose. However, as illustrated in Figure 4, this mostly unimproved right-of-way crosses the steep Bronson Creek ravine slopes and finding a suitable path located entirely within the right-of-way may be a challenge.

While Metro has identified a greenway trail connection to Forest Park along the mainstem of Bronson Creek northwest of Area 93, the south fork of Bronson Creek could potentially also provide a trail link to Forest Park with better access for area residents.

Upland Areas

Upland areas are suitable for development as active or passive recreation sites and for neighborhood and community parks. Typically the sizes of these parks are between one and ten acres. The moderate slopes in the uplands are generally easy to develop

[13] Portland Public Schools, accessed online: http://www.pps.k12.or.us/schools-c/profiles/?id=152.

for parks and can accommodate a variety of park features. Sites with clear connections to the stream corridor would be most desirable for park development. Upland areas present few constraints to park development.

Wetlands

Wetlands can be a visual amenity and are a key component to stormwater management. The small wetland along Ward Creek could potentially be utilized as an open space feature. Setbacks would be required to protect the wetland.

General Character Cues

The general character of Area 93 can provide cues to development. Open space can borrow from the historic small farm character of the study area and include features that tie the site to historic roots. Small orchards, community gardens, or even chickens could assist in visually tying future development to it's rural past and in building community within the neighborhood.

INFRASTRUCTURE

There is very limited infrastructure within the Area 93, with the exception of streets. Public infrastructure will be an important consideration as the City and County begin planning for future growth, and this is particularly true for Area 93 as is discussed below. This section summarizes the existing conditions, opportunities and constraints related to infrastructure in the area.

Overview

Area 93 is located adjacent to, but not within, the sewer service district of Clean Water Services (CWS). Currently, individual wastewater removal is accommodated by private septic systems for each parcel. The CWS infrastructure is adjacent to the area, however the area would have to be annexed and accepted by the CWS district for service.

Water service and infrastructure is available to the south and west of the area. However, the infrastructure adjacent to the area, and most readily available, is owned and operated by Tualatin Valley Water District (TVWD). The area is currently not within the TVWD boundaries. Annexation of the area into the TVWD boundary would require inter-governmental agency agreements between Multnomah County, City of Portland Water Bureau, and TVWD. While Multnomah County does not provide urban services, the City of Portland is also a potential future service provider.

Stormwater

Other than culverts under roadways and driveways, it does not appear that there is much in the way of manmade storm drain facilities in the area. The main drainage conveyance facilities in the area are natural drainageways. On private land, stormwater is generally managed on-site through infiltration or retention with restricted release to drainageways.

It is expected that whichever jurisdiction or agency Area 93 would develop under, undeveloped green buffers along the stream corridors will be required in general accordance with Metro's Title 3 and 13 requirements. In addition, as the area is developed to urban densities, there may be opportunity to remove existing culverts,

with a smart development plan. One option for protecting the stream corridor could be to plan for the eventual abandonment of Old Laidlaw Road right of way, or conversion to a pedestrian trail as discussed in the Parks and Open Space section. This could allow for a better stream buffer and reduce conflicts between the transportation system and natural drainageway.

Sanitary Sewer

Existing sanitary facilities in the area are generally septic fields serving individual homes. While there are some public sanitary facilities near the westerly border of area[14], there does not appear to be any extension of public sanitary facilities inside the Area 93 boundary.

The CWS, a Washington County agency, is a sanitary sewer provider with public sanitary sewer facilities adjacent to Area 93. As Area 93 drains towards Washington County, it is likely most efficient to have CWS serve Area 93 for sanitary sewer, in terms of energy consumption (no pumping would be required) and cost (no pumping station would need to be constructed). As CWS is a Washington County agency, it is presumed that an intergovernmental agreement would be required to allow this agency to serve a Multnomah County area.

Since there is no sewer line in NW Skyline Boulevard, a more detailed study of sewer service options would be required to determine how the City of Portland could serve the area. The two most likely conventional scenarios would be either a series of pump stations, or construction of a new treatment plant in the Bonny Slope area. On-site treatment may also be possible through innovative alternative treatment approaches such as recycling of water and production of compost and bio-energy.

Domestic Water

There are no public water facilities within Area 93. Based on Oregon Water Resources Department well logs, existing domestic water is generally provided by onsite wells serving residences.

The Tualatin Valley Water District (TVWD) serves developed areas to the west and south of Area 93, areas that are within Washington County. Expansion of the TVWD water system would presumably most easily serve Area 93, although the highest portions of Area 93 may not be able to be served without another reservoir or booster pump station. The Portland Water Bureau (PWB) may also be able to serve the area, but extension and expansion of the PWB's system would be necessary. To create a looped system from existing PWB facilities would likely require an extension of a water main along Laidlaw Road and a second connection probably coming from the Skyline Road area.

If Area 93 develops under the City of Portland, another option may be to have an intergovernmental agreement between PWB and TVWD where TVWD provides the water to PWB. In this case the water users would be billed by PWB, but would receive TVWD water.

[14] Sewers in this area are 8 inch lines; west of the study area on Laidlaw is a 12-inch line.

Streets

Transportation is not a part of the scope of this study. As a result, the City and County plan to address this element separately. However, some readily available general information is discussed in this section.

Laidlaw Road is the main street connection serving the area presently. Thompson Road crosses the SW corner of Area 93 and parallels its southern boundary, with some dead end streets serving areas within Area 93. To travel from the northerly portion to the southerly portion of Area 93, which is bisected by Bronson Creek, one would need to travel one of the following routes: either go west on Laidlaw Road to Saltzman Road, then south to Thompson Road and then east back towards Area 93, a travel distance of approximately a mile and a half; or go east on Laidlaw Road to its intersection with Thompson Road and then west on Thompson for a travel distance of about two miles. Multnomah County maintains Laidlaw and that Thompson is predominantly in Washington County (and maintained by them). Other dedicated rights-of-ways within the plan area are predominantly local access roads and that are not publically maintained.

Both Laidlaw and Thompson Roads are classified as collector streets[15] and provide a Level of Service of B[16] (Multnomah County 1998). According to the Transportation System Plan (TSP) conducted in 1998, this classification will be adequate over the next twenty years. In the *Alternatives Analysis Study* conducted by Metro in 2002, Metro found that "urbanization of the area would result in a significant increase in traffic on NW Laidlaw Road and NW Old Laidlaw Road, with most of the traffic continuing on to NW Thompson Road directly or by NW Saltzman Road" (Metro 2002). Metro also noted that the increase in traffic would not impede the normal movement of farm equipment or affect the transport of agricultural goods and that because urbanization of the area would not bring new development near any active farming areas there would not be an impact on the value of adjacent agricultural land.

Local streets will fill out the area as it is developed based upon future zoning. However, some thought should be given for a collector or higher classification street for a north-south connection between Thompson Road and Laidlaw Road to provide for better connectivity. From a topography standpoint, a connection nearer the western boundary of Area 93 may allow for flatter street grades, though it will likely require a bridge over the tributary of Bronson Creek (a bridge will always be desirable from an environmental standpoint whenever a crossing is necessary). Another possible north-south connection between Laidlaw and Thompson could roughly follow the alignment of Marcotte Road in the southeast corner of Area 93. One north-south street connection should adequately serve Area 93 for motor vehicles, but consideration should be given for additional pedestrian/bicycle crossings over Bronson Creek that bisects Area 93. Laidlaw and Thompson Roads once upgraded to urban standards should serve Area 93 adequately as the main east-west streets.

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[15] Collector streets distribute traffic between local streets and the arterial network and are not intended to serve trips with an origin or destination outside the county.

[16] LOS is a measurement of congestion or delay at an intersection. LOS is graded on a scale of A through F, with A representing uninterrupted traffic flow and F representing breakdown conditions.

Police, Fire and Emergency Service

Area 93 is located within the Tualatin Valley Fire and Rescue (TVFR) service area.[17] The closest fire station to Area 93 is Station 68 located at 3260 NW 147th Place, Portland (east of Bethany near West Union/Kaiser Road), [18] approximately two miles southeast of the subject area. The next closest station in the TVFR service area is Station 64, located at 3355 NW 185th, Portland, 97229 (north of Sunset Hwy near Tanasbourne), approximately 4.5 miles southeast of Area 93.

Although Area 93 is located within the TVFR service area, it is in close proximity to the Portland Fire and Rescue (PF&R) service area.[19] The closest PF&R station is Station 27, located at 3130 NW Skyline Boulevard Portland, approximately 2.7 miles from the subject area. Station 27 is comprised of one engine and one brush unit. On-duty personnel include one officer, one firefighter/paramedic and two firefighters. Station 27 generally serves the neighborhoods of Forest Park and Forest Heights and works closely with TVFR personnel.

As with most fire departments, TVFR has Mutual Aid and Closest Forces agreements with neighboring fire departments, namely PF&R. This is intended to reduce duplication of services, improve response to the community and lower the cost of providing fire protection. If an emergency is reported in a section of Area 93 where Portland Station # 27 is closer or if TVFR # 68 is committed to another call, Engine 27 may take the call.[20] Conversely, TVFR Engine 68 may respond into Portland proper if Engine 27 is committed to a call or if they happen to be closer to the address where the emergency occurs.

Law enforcement and public safety services are provided by the Multnomah County Sheriff's Office (MCSO). The Sheriff's Office has 26 deputies assigned to patrol in five districts. Area 93 is served by the Sauvies Island – District 10 Uniform Patrol car. District 10 covers approximately 67 square miles in Western Multnomah County.[21] This district is staffed with one deputy 24 hours per day. Mutual Aid agreements exist with neighboring agencies to include both the Washington County Sheriff's Office and the Portland Police Bureau. Both agencies routinely provide cover officers on calls for service for which officer safety dictates a multi-officer response.[22]Occasionally, Oregon State Police troopers respond to calls for assistance when proximity to the call allows.

Other Services

Northwest Natural provides gas service to Area 93. A primary 6-inch diameter distribution main runs along NW Laidlaw Road. This gas main would serve as a primary source of natural gas from the north. At the Southwest corner of Area 93, on

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17 Multnomah County Elections Division, Fire Districts in Multnomah County, http://www.co.multnomah.or.us/dbcs/elections/election_information/precincts_fire_districts.pdf

18 Tualatin Valley Fire & Rescue, Fire Stations, http://www.tvfr.com/aboutus/os/fstations.aspx

19 Portland Fire and Rescue, accessed online, http://www.portlandonline.com/FIRE/index.cfm?c=26322&a=56350

20 Phone and email correspondence with Drew DeBois, Tualatin Valley Fire & Rescue, November 26, 2008.

21 Multnomah County Sheriff's Office. Sheriff Patrol Districts, Multnomah County, Oregon , August 2006, http://www.mcso.us/public/images/MCSO_Districts_0806.pdf

22 Phone conversation with Lieutenant Gates on November 20, 2008.

NW Thompson Rd, there is a 4-inch diameter distribution main, which ties into a 2 inch line along Thompson Road. There are also gas mains routed throughout the subdivision in Washington County just west of Area 93 that could be extended to the east. NW Natural does not anticipate any issues with the supply of natural gas; however, with new development they may need to enlarge the distribution mains in some areas[23].

Electrical service to Area 93 is provided by the Portland Gas and Electric Company (PGE) from feeder lines along Thompson Road and Laidlaw Road[24]. PGE has enough electric capacity to serve the area; however, additional infrastructure and electrical equipment would need to be installed to support new development[25].

Infrastructure Opportunities and Constraints

Water and sanitary sewer facilities are immediately adjacent to the west and south of Area 93. If it is decided that Tualatin Valley Water District and Clean Water Services will be able to serve Area 93, it would be relatively easy for extensions of service lines into the area.

The most significant infrastructure constraints are that Area 93 is not currently within a water or sanitary sewer district and the water and sewer districts that could most easily serve Area 93 are primarily Washington County service providers. Transportation infrastructure is also a constraint.

Additional opportunities and constraints related to infrastructure are discussed in the following section.

SUSTAINABLE DEVELOPMENT CONSIDERATIONS

To ensure that future urbanization of the area is designed to respect the area's terrain and watershed functions, and conserve wildlife habitat and corridors linking Forest Park with nearby natural areas, sustainable design elements should be considered. Examples of these elements may include green stormwater treatments, solar energy, and district energy. Another element that may help to minimize the impact of development could include cluster development.

Stormwater

With the development of roads, buildings, parking lots and other impervious surfaces, on-site stormwater management becomes an important tool in mitigating the affects of runoff, erosion and flooding. A sustainable approach to stormwater management is to mimic the natural conditions of the site. If naturally the area does not infiltrate well, as is generally true for Area 93, the main stormwater goals are to slow water and contain and capture water in such a way that evapo-transpiration can occur more quickly. Trees – both existing and newly planted – are important to

[23] Email correspondence with Ryan Van Gordon, West Metro Engineer, NW Natural, December 11, 2008.

[24] Phone conversation with Bob Marreel, PGE, December 17, 2008.

[25] Correspondence with Ori L., Service Coordinator, PGE, December 8, 2008.

achieving these goals: the more rainwater the trees can uptake and evapo-transpire, the less infiltration will be needed.

Opportunities for sustainable stormwater management at Area 93 begin with efficient site design. Development designed to minimize impervious surfaces will automatically assist in reducing the issues associated with stormwater runoff. Clustering development, reducing the width of streets and total number of parking spaces and integrating natural or pervious areas into pavement areas is the first goal in managing stormwater. Green streets can reduce stormwater runoff by reducing impervious surfaces, increasing vegetative cover, reducing street size, and incorporating pervious materials when feasible.

Additionally, stormwater swales, curb extensions and rain gardens can all be employed in Area 93 to slow and contain stormwater. When these strategies are integrated into street, parking lot and building from the beginning of design, they are typically most effective. For example, in an area close to a stream, stormwater systems could include a series of small stormwater facilities directly associated with development and roads. These stormwater swales can be designed to protect the stream, treat stormwater and act as an open space amenity. This open space system could be directly connected to Bronson Creek.

Green roofs and stormwater planters can also be utilized in Area 93 to reduce stormwater runoff. These strategies do not attempt to mimic natural conditions because they are contained on the bottom by a membrane. Green roofs and stormwater planters collect and contain runoff and assist in the goal of clean stormwater. Sustainable stormwater practices such as these can be used throughout the study area, and may help address some of the soil infiltration constraints discussed earlier in this report.

Infrastructure

Well-planned infrastructure that minimizes the amount of utility lines and streets needed to serve a community saves on resources required to construct and maintain those facilities. Normal development patterns usually create a mosaic development pattern that does not lend itself to sustainable practices. Development of a master plan can be a more efficient way to establish primary corridors for street, sanitary sewer, water and storm drainage facilities.

Similarly, an integrated and coordinated plan for which service providers will serve Area 93 will help to make Area 93 more sustainable. Building a sanitary pump station to pump sanitary sewer flows from Area 93 back to the City of Portland's sanitary sewer facilities is not as efficient or as sustainable as allowing the area to drain into Clean Water Services sanitary system. Similarly it may be more efficient for the Tualatin Valley Water District to provide water to the area from their adjacent water mains, than for the Portland Water Bureau to serve it with their system.

There are now a few pipe products entering the market place using recycled materials. If allowed for use, these products can help to meet sustainable goals. Consideration may also be given to designing road and infrastructure systems for a 50 year life span rather than the typical 20 year life span that normal design practices call for. Again, it is important to have a coordinated utility master plan that

anticipates what the utility needs will be for 50 years so that road utility cuts and other encroachments into the road system can be minimized, allowing for a longer life span.

Consideration should also be given to an intermodal transportation network that provides residents or employees in a developed Area 93 connections to bus and light rail and provides opportunities for them to bike or walk for connections to other modes of transportation.

Built Form

There are a variety of other strategies that can help to reduce energy needs and costs. For example, cluster development generally reduces the length of roads and infrastructure and creates a more compact and efficient development form. Also, buildings in such developments are typically more energy and water efficient as well. Typically, clustering of development results in larger areas of common shared open space and preserved natural features. It can help to maintain the rural character of the area, reducing the environmental impacts of development. As noted above, another advantage is the lower costs associated with infrastructure development. These reduced costs can help to pay for various amenities such as trails and open space improvements. Cluster development can be an effective way to conserve resources and preserve the area's natural features while still achieving urban densities.

Solar Energy

Set on the west slope of the Tualatin Mountains, Area 93 generally has a southwest to west aspect that offers a favorable orientation for solar energy gain. Despite the Portland region's cloudy winters, solar energy has proven to be a viable option for both hot water and photovoltaics (electricity).[26]

Building orientation and direct, uninterrupted sun exposure are crucial for the proper function of photovoltaic systems and solar water heaters. As discussed earlier, Area 93 has a substantial cover of trees, both deciduous and evergreen. Many of these trees grow along the central Bronson Creek ravine corridor. No significant shading or loss of solar access is anticipated from this corridor, in part due to the steep, south-facing slopes rising north of this stream.

For upland areas, building site layout can be planned to integrate tree groves while maximizing southern orientation and minimizing shade on buildings. The potential impact of shading can be calculated by mapping shadow patterns at key times of the year and times of day. The southwest sloping upland areas located north of Bronson Creek are one of the areas exhibiting a high potential for solar energy collection within Area 93.

[26] Solar energy can reduce dependence on fossil fuel and decrease energy costs for water heating and electricity. Solar energy tax credits and incentives can help defray some of the initial costs of solar systems.

District Energy

District energy can be an effective way of providing heating and cooling to residences and buildings. District energy systems generally seek to create neighborhood-scale service areas that can be interconnected and share equipment for producing thermal energy for space heating or cooling, and for domestic hot water needs. District energy systems offer potential for significant benefits in terms of energy efficiency and improved technology choices, and could insulate building owners and occupants from long-term price increases or regulations related to fossil fuel energy.

There are several technical and economical factors that should be considered when evaluating the feasibility of implementing such a system. Two of these factors – ground conditions and existing infrastructure – are not a major concern in Area 93. Soils in Area 93 are silt loams and bedrock is relatively deep. In addition, the area is also largely free from any buried infrastructure (with the exception of a few culverts. These conditions mean that there are few expected subsurface obstacles to district piping. Cost associated with pipe installation would be lower than in urban areas, though local topographic conditions in Area 93 could add to those costs.

District energy systems depend on sufficient energy demand within a defined service area, with the practical ability to interconnect multiple buildings through a thermal network, or grid. Given sufficient energy demand, investments in energy technologies could be considered that are not feasible at an individual building scale, whether for technical or financial reasons. Size, density and energy demand are other important factors: areas that are too large may not be cost-effective to serve, while areas that are too small may not achieve the benefits needed to make it worthwhile. Based on preliminary findings related to potential development areas addressed in the following section of this report, the scale of these areas appears to pose few constraints to implementation of district energy systems.

IV. BUILDABLE LANDS & MARKET ANALYSIS

This section reviews the potential constraints to future development, provides a preliminary assessment of the nature and extent of buildable lands in the area[27] and then discusses what kind of development market conditions are likely to bring about.

CONSTRAINED LAND

As stated in Oregon Administrative Rule (OAR) 660-008-0005(2), "*Buildable Land* means residentially designated land within the Metro urban growth boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available and necessary for residential uses. Publicly owned land is generally not considered available for residential uses. Land is generally considered "suitable and available" unless it: (a) Is severely constrained by natural hazards as determined under Statewide Planning Goal 7; (b) Is subject to natural resource protection

[27] Near the completion of this report, a minor Urban Growth Boundary Adjustment was made. State ID - 1N1W22 00900 is now a part of Area 93. This lot was not part of the study area for this report. Please refer to Appendix C for more information on the addition.

measures determined under statewide Planning Goals 5 or 15; (c) Has slopes of 25 percent or greater; (d) Is within the 100-year flood plain; or (e) Cannot be provided with public facilities."

The first step in conducting a preliminary buildable lands analysis for the study area was to remove constrained land. Constrained land generally falls into three categories: environmentally constrained land, regulatory constrained land, and developed land.

Environmental Constraints

The first part of the analysis was to look at environmentally constrained areas, which generally include land that is located in a wetland, 100-year floodplain or on steep slopes of 25 percent or greater. As discussed previously, one wetland was identified during field visits for this study. As discussed in Section II (Overview of Existing Conditions), there are no 100-year floodplains within the study area boundary. Steep slopes of 25 percent or greater comprise 32.17 acres within the study area.

Local Regulatory Constraints

The second part of this analysis was to account for the regulatory constraints of Title 3 of Metro's Urban Growth Management Functional Plan, which establishes standards that limit development to protect wetlands and waterways. Title 3 addresses two statewide planning goals: Goal 6 (Air, Water and Land Resources Quality) and Goal 7 (Areas Subject to Natural Hazards). To date, no Title 3 areas have been mapped in the study area. In order to account for future Title 3 constraints, it's boundary was estimated following Metro guidelines. A minimum 50-foot buffer was created around streams in the study area, and expanded up to 200 feet in areas containing steep slopes.[28] Area calculation showed that Title 3 area comprises a total of 18.37 acres.

Existing Development Constraints

The last step was to account for land which has already been developed. According to the vacant land GIS data provided by Metro (2007), developed area accounts for 38.51 acres.[29]

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[28] No information was available on the extent of intermittent streams in the area; all streams were treated equally for the purpose of providing a general estimate of Title 3 constraints.

[29] "Metro defines both fully and partially vacant parcels. Fully vacant parcels have no improvement value or building. Partially vacant parcels, by contrast, may have a developed portion, but must have a vacant portion that is at least ½ acre.

The definition of partially vacant parcels reflects the possibility that a property owner may choose to partition the vacant area from the parent parcel at some time in the future. Other studies have confirmed this pattern. It is additionally recognized, however, that larger parcels with higher value homes may not be as likely to partition their vacant areas. To address this, a building value threshold for partially vacant parcels where the improved value of a partially vacant parcel is above a specific dollar amount, the vacant land within that parcel is removed from the vacant land inventory. No dwelling unit capacity is estimated for that area.

A building value threshold of $250,000 for partially vacant parcels is used. This means that vacant areas on partially vacant parcels that have an improvement value at or above $250,000 are removed from the vacant lands inventory, and assumed to have no additional capacity for residential development" (Metro 2002).

Net Buildable Land

Existing constraints in the study area often overlap. For example, it is common to have a lot which is constrained by both steep slopes and Title 3 within the same area. To ensure that the total area of constraints was looked at collectively, these areas were unified in GIS, to create one layer of constrained land, and joined with the tax lot layer to determine the total area of constrained and developable land for each tax lot. When the three constraints discussed above are combined, the resulting total is 70.29 acres of constrained land.

Table 5
Summary of Development Constraints

Development Constraint	Acres
Steep Slopes (25% or Greater)	32.17
Title 3 (Stream & Wetland Protection)	18.37
Developed Land	38.51
Sum of Constrained Land	89.05
Total Constrained Land[1]	***70.29***

[1] Total area of constraints without overlapping areas.
Source: City of Portland, Metro

Additional Regulatory Considerations

The study area has two other local and regional regulatory factors which should be taken into consideration: the County's SEC-S overlay zone and Metro Title 13.

SEC-S Overlay Zone

The County's SEC-S overlay zone[30] covers 41.31 acres of riparian corridor extending 300 feet from the centerline on both sides of Bronson Creek. A large portion of the overlay zone overlaps constraints discussed in the previous section. The additional, non-overlapping SEC-constrained land accounts for a total of 15.39 acres.

Metro Title 13

Metro Title 13 is designed to protect important habitat and covers approximately 40.11 acres of the study area. Similarly to the SEC lands, a large portion of the Title 13 habitat conservation areas overlaps constraints discussed in the previous section. The additional, non-overlapping Title 13 constraints total 12.41 acres.

SEC-S and Title 13 Constraints

The SEC overlay and Title 13 also have some overlap with each other. Of the 81.43-acre combined total, 30.9 acres are overlapping, leaving a total constrained area of

[30] MCC Section 33.4575. This overlay was adopted to implement statewide planning Goal 5 for a rural area and may be modified as the area is planned for urban uses.

50.53 acres. Of this area, 31.18 acres have already been accounted for in the inventory of existing constraints (i.e., steep slopes, Title 3 and developed land). Therefore, as shown in Table 6 and on Figure 9, the total additional area that would be constrained by the SEC-S overlay zone and Title 13 would be 19.35 acres.

Table 6
Total Additional Constraints

Development Constraint	Acres
SEC-S constraints	41.31
Title 13 constraints	40.11
Non-overlapping SEC/Title 13 land	50.53
Overlap with other constrained lands	31.18
Additional New Constrained Area	***19.35***
Source: Multnomah County and Metro	

MARKET ANALYSIS & POTENTIAL DEVELOPMENT

Approach to market analysis

While local governments and service districts cannot control the short-term real estate market, their actions can influence the market: policy decisions about land use regulation (zoning and development code) and infrastructure development (location, capacity, and funding) shape future development types and can sometimes influence expectations about pricing for land in the market.

This analysis focuses on the long-term real estate market in Area 93. The assessment of available demographic information and growth projections for the area suggests that the character of today's real estate market within Area 93 is not a likely predictor of market demand in the 20 to 30-year planning horizon that the Concept Plan will eventually consider. In a longer planning horizon, physical and regulatory characteristics are what will give Area 93 a *comparative advantage* over other areas, or an edge in the market for a particular development type. Comparative advantage analysis methodologies provide a systematic approach to asking and answering the question, "what do other areas have to offer and how do these compare with Area 93?" Each area has different combinations of advantages and disadvantages that affect development potential: land, location, natural resources, infrastructure, and public services. While all areas have these factors to some degree, the mix and condition of these factors varies greatly.[31]

Potential advantages (such as location and amenities) and potential disadvantages (such as lack of infrastructure) not only exert a greater influence on long-term development opportunities in Area 93, but also represent variables that can be

[31] For the purpose of this memorandum, we define comparative areas in the metro region broadly to include areas that are: 1) on the urbanizable fringe; 2) have recently been included the Metro UGB; and 3) remain at pre-urbanized densities. While these areas differ in jurisdictional authority, location, type and scale of achievable development, they offer a useful general comparison.

addressed through public policy, and are thus key issues to address in this report. For these reasons, this analysis considers existing physical characteristics and infrastructure availability in Area 93 as critical influences on the long-term market and expected development types.

Role of geography in the development of Area 93

Geographical factors, including slopes, streams and historical transportation routes, have influenced the character of Area 93 over time and will continue to do so. While Area 93 is in unincorporated Multnomah County, the area is physically separated from the majority of Multnomah County's developed land by steep slopes, unincorporated lands, Forest Park, and Highway 26 as noted previously. Area 93 is connected to surrounding Washington County not only by transportation routes that have developed over time, but also by nearby suburban development, improved roads, and urban services. The people who eventually live in Area 93 will probably be more connected (physically, culturally, and perhaps economically) to adjacent development in Washington County (and the expected redevelopment in the North Bethany area) than to the City of Portland.

Factors that Influence Development

There are several specific factors that affect potential development of Area 93, including population growth, employment growth, and income. This analysis also addresses comparative advantages and disadvantages, as described above, including location, access, ownership patterns, land use, property values, services, infrastructure, and natural resources. Table 7 summarizes the comparative advantages and disadvantages described further in the next section.

Table 7. Comparative advantages and disadvantages, Area 93

Advantages	Disadvantages
Location. The study area is relatively close to major employment centers and commercial/ service destinations (downtown Portland, Highway 26 and 217 corridors).	**Lack of infrastructure.** The study area is not served by public water, sewer, or storm water facilities. Internal streets remain largely unimproved.
Access (for residential uses). The study area is relatively close to freeway access for residential commuters.	**Jurisdiction and service boundaries.** The study area is not adjacent to City of Portland service boundaries—and is actually closer to suburban service district boundaries.
Natural amenities and views. The area contains natural resources and views. Forest Park is nearby.	**Lack of assembled parcels**. Area 93 contains 52 individual owners and numerous small parcels. The largest assembled site is 11 acres.
Proximity to high value development. There are high-end subdivisions directly adjacent to the study area.	**Lack of vacant tax lots.** While there are a total of about 75 vacant buildable acres in Area 93, most of the buildable area is located within partially developed tax lots. Area 93 contains about 13 acres of fully vacant tax lots (9% of the tax lot area).

Sustainable design opportunity. For cutting-edge sustainable design of infrastructure and buildings. Energy, water and stormwater/wastewater systems, urban agriculture, limited car-dominant streets within the area.	**High property value.** Some parcels contain high-value improvements, making redevelopment less likely in certain areas (see Figure 10, Development Pattern and Improvement Values).
	Natural resource constraints. The area contains significant topography and natural resources, potentially increasing cost of infrastructure and development.
	Access (for commercial and employment uses). The area is relatively inconvenient for retail, office, or industrial uses.

Population

Population is a key indicator of growth in nearly ever sector of a community. When population increases, demand for housing, commercial development, and employment can all be expected to increase as well. Due to the location of Area 93, this analysis addresses population growth in both Multnomah and Washington Counties, as the study area is situated between both counties and is likely to experience population growth similar to both counties.

Table 8 provides an overview of population growth. Oregon has experienced a steady 1.2 percent average annual growth rate for the last 8 years. While Multnomah County has experienced a lower growth rate than the state as a whole (0.67 percent) Washington County has experienced a higher growth rate (1.94 percent). The steady growth in population forecasted through 2040 suggests that as the region grows in population, demand for housing, commercial development and employment will grow as well.

Table 8. Historical and population forecast, Oregon, Multnomah County, Washington County 2000-2040.

Year	Oregon	Multnomah County	Washington County
2000	3,436,750	662,400	449,250
2005	3,618,200	687,073	489,742
2010	3,843,900	711,909	542,678
2015	4,095,708	735,445	599,377
2020	4,359,258	756,390	660,367
2025	4,626,015	778,028	723,669
2030	4,891,225	800,565	788,162
2035	5,154,793	821,768	854,164
2040	5,425,408	842,009	920,852
Change 2000-2020			
Number	922,508	93,990	211,117
Percent	27%	14%	47%
AAGR	1.20%	0.67%	1.94%
Change 2020-2040			
Number	1,066,151	85,619	260,485
Percent	24%	11%	39%
AAGR	1.10%	0.54%	1.68%

Source: Office of Economic Analysis, 2007

Employment

Employment growth is highly correlated with population growth. Most places need employment opportunities for household wage earners to get significant population growth. Population growth creates demand for many types of goods and services that are locally produced, sold, and provided by government. Employment growth can also bring new products and services into the community and infuse additional wages and fuel business growth.

According to Table 9, Washington County has experienced greater employment growth than Multnomah County between 2001 and 2007. Multnomah County has grown at an average annual growth rate (AAGR) of 0.1 percent, while Washington County has grown at an AAGR of 1.6 percent.

Table 9. Historical employment, Washington and Multnomah Counties, 2001-2007.

Washington County					
			Change 2001-2007		
Sector	**2001**	**2007**	**Number**	**Percent**	**AAGR**
Construction	12,591	15,500	2,909	23%	3.5%
Wholesale	14,478	17,621	3,143	22%	3.3%
Health and Social Assistance	15,533	21,156	5,623	36%	5.3%
Accommodations and Food Services	14,237	17,133	2,896	20%	3.1%
Government	16,517	21,170	4,653	28%	4.2%
Total	**228,510**	**250,664**	**22,154**	**10%**	**1.6%**

Multnomah County					
			Change 2001-2007		
Sector	**2001**	**2007**	**Number**	**Percent**	**AAGR**
Construction	20,318	21,591	1,273	6%	1.0%
Manufacturing	43,628	37,510	-6,118	-14%	-2.5%
Education	7,451	9,302	1,851	25%	3.8%
Health and Social Assistance	43,994	48,251	4,257	10%	1.6%
Accommodations and Food Services	36,094	39,970	3,876	11%	1.7%
Government	64,014	67,868	3,854	6%	1.0%
Total	**444,396**	**447,894**	**3,498**	**1%**	**0.1%**

Source: Oregon Employment Department
Note: All other sectors not shown

These data suggest that population in Multnomah and Washington Counties is growing at a faster rate than employment, suggesting higher demand for residential lands than for employment lands.

Income

Median household incomes listed in Table 10 show that incomes in Washington County and Multnomah County have grown steadily and at similar rates since 2000. Incomes in Washington County are generally higher than Multnomah County, the Portland metropolitan statistical area, and the State of Oregon. It is likely that new residents moving to Washington County will have higher incomes relative to the Portland region, suggesting demand for higher priced housing relative to the region as a whole. The geographical relationship between Area 93 and Washington County, as discussed previously in this report, implies that future residents of Area 93 are likely to have incomes similar to those seen in Washington County.

Table 10. Median Household Income, U.S., Oregon, Multnomah County, Portland MSA

	2000	2007	Change	Percent
U.S.	$41,994	$50,740	$8,746	21%
Oregon	$40,916	$48,730	$7,814	19%
Multnomah County	$41,270	$48,883	$7,613	18%
Washington County	$52,122	$61,628	$9,506	18%
Portland MSA	$46,090	$55,387	$9,297	20%

Source: U.S. Census 2000, American Community Survey 2007
Note: Portland Metropolitan Statistical Area (MSA) includes: Portland, Vancouver, WA; Beaverton, Hillsboro, Clackamas County, Columbia County, Multnomah County, Washington County, Yamhill County, Clark County, WA; Skamania County, WA.

Location and access

Area 93 has several important locational advantages and disadvantages relative to other areas in the Metro region. These are described below:

Proximity to employment centers. Area 93 is situated between two of the largest employment centers in the State: downtown Portland and Washington County. The area is located within 10 miles of downtown Portland and approximately 4-10 miles from the Highway 26 employment corridor, giving Area 93 a slight advantage (in terms of commute distance) over other areas located close to one or no employment centers.

Proximity to services and commercial areas. Area 93 is located approximately 2 to 5 miles from local commercial services (Cedar Hills, North Bethany Village) and 8 to 10 miles from regional commercial destinations (Washington Square Mall, downtown Portland). Commercial uses and services are not within walking/biking distance of Area 93 and are unlikely to be developed in Area 93 at a significant scale, thus putting the study area at a disadvantage when compared to other areas in the region that are either 1) within walking/biking (or closer driving) distance to existing commercial uses or 2) large enough areas to support their own commercial centers.

Access. NW Thompson Road and NW Laidlaw Road form a north/south perimeter around the study area and provide direct vehicle access to properties within the study area. The area lacks north/south or other east/west connections through the site. There is limited circulation within the study area; NW 118th and NW 120th are

unimproved gravel rights-of-way that dead-end within the interior of the site. An existing subdivision directly adjacent to Area 93 includes two potential street connections where streets are stubbed at the study area's western boundary. Brimpton and Millford streets are also stubbed to the southwest boundary of the study area.

Access to and within the site presents a slight disadvantage to the study area with respect to potential employment and commercial uses. Employment uses rely on direct freeway access and commercial uses rely on access and the visibility that access provides. The study area is approximately five miles from the closest freeway access (Highway 26 & 217). The project team's experience suggests that five miles may be a relatively convenient commuting distance for residential users, but is not convenient for commercial, office, and industrial uses, which require direct or nearly direct freeway access.

Amenities, such as bicycle lanes and sidewalks, influence the future character of the area. NW Thompson Road and NW Laidlaw Road are not currently furnished with bicycle facilities or sidewalks.

Public transit access to Area 93 is currently limited. The nearest Trimet stop (bus # 89) is located 1.5 miles from the southwest corner of the study area at NW 143rd Avenue and Burton Street. Lack of convenient transit service gives the study area a slight disadvantage when compared to other areas that are closer to established transit connections. (Although bus transit routes are relatively flexible and could be modified to meet demand with significantly less capital investment than roads.)

Land ownership and parcel size

Land ownership patterns are a challenge to redevelopment when existing parcels are small and owned by many different owners. Any large-scale development will require assembly of smaller parcels into one larger site. When these parcels are owned by a variety of people who may or may not be willing to sell, land assembly can be an impediment.

There are approximately 145 tax lot acres in Area 93, made up of 69 tax lots and 52 separate owners. The average tax lot size in Area 93 is 2.1 acres. The largest tax lot is 7.8 acres and the smallest is 0.1 acre. As indicated by these data, many parcels in Area 93 are relatively small, narrow, or deep. This is obvious when looking at a parcel map, but when combined with ownership patterns, can complicate efforts to find an appropriate location for new development or redevelopment.

There is one significant area of assembled parcels in the study area, which represents a key redevelopment opportunity. The vacant 11-acre area held in single ownership is located along the western edge of Area 93, directly adjacent to an existing subdivision to the west. This site represents one obvious opportunity area because (1) it is held in common ownership; (2) it is vacant; (3) it abuts an already developed area; and (4) it is directly adjacent to existing public service connections and a likely street connection near NW 125th Avenue and Bayonne Street.

With the exception of the opportunity area described above, there are few other large tax lots or groups of tax lots held in common ownership. Land ownership and parcel

size represents a comparative disadvantage to other areas in the region that contain larger assembled lots.

Vacant Tax Lots[32]

As illustrated by Figure 10, Development Patterns and Improvement Values, the existing land use pattern in the area is characterized by a mix of vacant lots and single-family homes (both older homes and newer, custom homes). As indicated in Table 11, there are 69 tax lots comprising 145 tax lot acres in Area 93. There are approximately 25 acres of completely vacant tax lots, of which 12 acres are constrained by natural resources. This means that of the approximately 75 acres of buildable land in Area 93, only 13 of these acres are found within completely vacant tax lots.

Table 11. Vacant and developed tax lots, Area 93

	Tax Lots		Acres	
	Number	**Percent**	**Number**	**Percent**
Developed	55	80%	120	83%
Vacant	14	20%	25	17%
Total	**69**	**100%**	**145**	**100%**
Source: ECONorthwest, 2008				

Availability of vacant land is an important asset to a study area, because that area is more likely to attract new development than areas with less vacant land. The relative lack of completely vacant, buildable tax lots gives the study area a short-term comparative disadvantage over areas with larger amounts of vacant tax lots.[33]

Redevelopment potential of developed land

A property's improvement-to-land value ratio is one indicator of development potential, although it is by no means a perfect one. The other factors discussed in this report (such as land ownership, access, and infrastructure) can affect the redevelopment potential as much or more than the improvement-to-land value ratio. A ratio of 1:1 indicates that the improvement value of a property is equal to the land value. As the ratio nears zero (meaning the value of the improvement is less than the value of the land), the redevelopment potential increases. A ratio above 1:1 means the value of the improvement is greater than the value of the land, and redevelopment becomes less likely. Vacant land, as defined in the previous section, has an improvement-to-land value of zero, meaning it theoretically has the most potential for development.

Due to the high number of owners and small parcels in Area 93, it is helpful to analyze the improvement-to-land value ratios as a percentage of overall acreage. As a starting point, this report plots the distribution of improvement-to-land-value ratios

[32] "Vacant Tax Lots" as defined in this section are tax lots with improvement value of zero – i.e. with no existing development on any portion of the lot.

[33] In a long-term development scenario (20-30 years), larger (2+ acre) properties with existing homes could be subdivided and the remainder pieces assembled into opportunity sites. Lots with low improvement values can potentially be completely redeveloped.

for *developed* tax lots in the study area. Table 12 shows that over half of the developed tax lots (64 percent of the land area) in Area 93 have an improvement-to-land ratio greater than 1:1, meaning the value of the structure on the property is higher than the land itself.[34] Approximately 36 percent of the land area has an improvement-to-land value ratio of less than 1:1. This suggests that short-term redevelopment or infill opportunities exist on over a third of the tax lot acres in the study area.

Table 12. Improvement-to-land value ratios by tax lot and acreage, Area 93

Improvement/ Land Value Ratio	Number of tax lots	Acreage	Percent of total
0 to 0.49	8	16.6	14%
0.5 to .99	14	26.9	22%
1 to 2	23	47.0	39%
2 and above	10	29.9	25%
Total	**55**	**120.4**	**100%**
Source: ECONorthwest, 2008			

Another useful way to analyze redevelopment opportunities in the study area is to review the range of improvement values. Table 13 shows that approximately 30 percent of the land in the study area contains high-value improvements (relative to the rest of the study area). High-value improvements tend to limit short-term redevelopment opportunities. This is an important factor for public agencies to consider in the context of phasing of development and timing of infrastructure improvements.

Table 13. Improvement value range, Area 93

Building Value	Number of tax lots	Acreage	Percent of total
Less than $100,000	9	15.1	12%
$100,000 - $200,000	15	30.7	25%
$200,000 - $300,000	19	40.4	34%
$300,000 - $500,000	6	15.8	13%
$500,000 - $1,000,000	6	18.5	15%
Total	**55**	**120.4**	**100%**
Source: ECONorthwest, 2008			

This concept and opportunities related to redevelopment are further illustrated in Figure 11, Constrained Lands. As shown on Figure 11, there are four areas with both low improvement values and vacant, unconstrained portions of tax lots:

- The cluster of vacant, common ownership lots on the west side of Area 93, identified earlier in this report;
- Unconstrained, vacant areas interspersed with lower building values in the southwestern portion of Area 93;

[34] The City of Portland provided the land and improvement value data. The source is Multnomah County tax assessor (2008).

- Unconstrained, vacant areas interspersed with lower building values in the southeastern portion of Area 93; and
- Unconstrained, vacant areas interspersed with lower building values in the central and northern section of Area 93, north of the Old Laidlaw Road right-of-way.

Service provision, governance, and zoning

Area 93, while technically in Multnomah County, is physically connected to surrounding Washington County by its geography and existing transportation routes. The area is disconnected from the majority of Multnomah County's developed areas by the same geographic features and transportation routes.[35] This physical relationship also applies to existing service districts. Area 93 is approximately ½ of a mile west of the City of Portland's Urban Service Boundary (USB). The area is closer (and in some places directly adjacent) to suburban service districts, such as Clean Water Services and the Tualatin Valley Water District. This situation complicates service provision and governance of the area.

Zoning plays a key role in the development potential of an area. Area 93 has developed according to its historical zoning regulations (Rural Residential), which allows one single-family residence per legal lot of record. The minimum lot size for subdivisions is 5 acres. The existing zoning is intended to maintain the rural character of the area and it reflects the lack of urban services. It is assumed that future concept planning efforts will address zoning to accommodate anticipated growth.

Infrastructure

Urban density requires certain levels of infrastructure to support its growth; paved streets, sidewalks, water, sewer, and stormwater drainage. As discussed previously, Area 93 is not currently served by public water, sewer, or stormwater facilities. Existing properties use on-site septic systems and well water. With the exception of NW Thompson Road and NW Laidlaw Road, streets in Area 93 exist at varying levels of improvement (from unimproved rights-of-way to gravel streets). The lack of public infrastructure represents a significant comparative disadvantage for Area 93.

Topography and natural resources

As shown in Figure 9, Regulatory Setting, and detailed in the Constrained Lands section, of the 145 tax lot acres in Area 93, 70.3 acres are constrained by natural resources. Topography and natural resources present comparative advantages *and* disadvantages. Natural resources are often seen as an amenity for residential uses as discussed earlier while they are viewed as a constraint for commercial and industrial uses. To that end, topography and natural resources are not a clear advantage or disadvantage. Rather, their presence influences the mix of uses that are likely to be developed in the area.

Residential uses typically have fewer environmental impacts and offer design flexibility that commercial and industrial uses do not. Large building footprints and

[35] Thompson Road is the main transportation link to Portland.

impervious surfaces necessary for commercial and industrial uses can have greater adverse impacts on the water quality of streams. Moreover, industrial and commercial uses offer less design flexibility and incur greater costs to overcome challenges presented by topography and natural resource boundaries. While natural resources could be an impediment to future development of the site, they could also serve as a logical separation between different types of uses and densities.

Future Development Potential

Without public action, the character of Area 93 will likely continue in a similar manner as it has over the previous 20-year planning period. Development in the area is currently limited, first by the lack of public services and infrastructure, and second by accompanying zoning regulations that limit development to one single-family residence per legal lot. Future development under this scenario is likely to be fragmented, characterized by scattered and uncoordinated development of newly constructed, remodeled or replacement homes throughout the area.

Future development with no new action is likely to have a greater cumulative impact on existing natural resources in Area 93, as the area will not benefit from comprehensive resource protections often negotiated through a mix of zoning regulations and incentives (such as density bonuses in exchange for greater resource protection).

Overall, the comparative disadvantages represent significant factors that will slow the pace and scale of development and redevelopment. The disadvantages are strong enough to suggest that opportunities for development and redevelopment are limited in the short term, and will face significant challenges to becoming realistic possibilities in the long term without targeted public and private investments designed to encourage and support redevelopment and infill in Area 93. The conclusions section of this report suggests the areas where public investment will be most important to realizing the potential of the area.

Given the comparative advantages and disadvantages of Area 93, the following conclusions can be drawn about the type of development that is most appropriate for the future urbanization of the area:

Residential uses

Given the location, topography, natural resource constraints, and proximity to existing residential development, new residential development can be reasonably expected to occur in Area 93. The ultimate type and density will be influenced by the cost of infrastructure, metro density goals, resource protections, and zoning.

Employment/office and large-scale commercial uses

Industrial and office uses require flat, developable land, transportation access, and urban infrastructure. Given the existing topography and lack of direct freeway access (which is particularly important for freight and delivery vehicles), Area 93 is less likely to attract employment uses. Retail and service commercial uses require flat land (to a lesser extent than industrial), transportation access, visibility, and proximity to residential density. For similar reasons that employment uses are not

likely, large-scale commercial uses are also not likely to locate in Area 93. Small-scale or neighborhood commercial uses, such as a convenience store may be viable, depending on ultimate residential densities in the surrounding areas. The southwest corner of the study area (at NW Thompson Road and NW 125th Avenue) would be the most appropriate location for small-scale commercial uses, as it provides the most visibility, access, and proximity to residential density. [36]

V. SUMMARY AND CONCLUSION

This report provides analysis regarding the future for Area 93. The trends and comparative advantages/disadvantages suggest, but do not dictate, future possibilities. Public policy can and will play a significant role in influencing what happens in Area 93, particularly as the City of Portland and Multnomah County move forward with concept planning. Following are actions that public agencies can take to set the stage for future concept planning.

Address governance and service provision.

Although Area 93 is within unincorporated Multnomah County, it directly abuts Washington County. Area 93 is also physically closer to suburban service districts, such as Clean Water Services and the Tualatin Valley Water District, than it is to the City of Portland Urban Service Boundary. This inconsistency between jurisdictional boundaries and service boundaries presents a challenge. Unlike other Metro counties, Multnomah County relies exclusively upon its cities to provide urban levels of service. There are no cities adjoining the Area 93, so this will also be a challenge. Public agencies will need to determine which service providers are most appropriate for Area 93, given the steps necessary to extend service boundaries, the costs of extending infrastructure, and the intergovernmental/service agreements that will be necessary.

Examine infrastructure options.

The lack of infrastructure is a disadvantage to Area 93. Public agencies will want to consider the feasibility and cost of providing urban levels of infrastructure to Area 93, particularly in the context of likely uses and achievable densities. While evaluating options, consideration should be given to emerging sustainable design practices that could be used to significantly reduce traditional infrastructure needs for services such as stormwater and energy, as well as sewer and solid waste.

Evaluate potential zoning regulations and resource protections.

This report suggests that Area 93 is more likely to attract new residential uses than commercial and industrial uses. Given that assumption, future discussions about

[36] While higher residential densities will likely contribute to the viability of small-scale commercial uses, the other factors considered in this report will also contribute to (or limit) commercial development. While this analysis considers comparative advantages and disadvantages that affect long-term market demand, the ultimate viability of commercial uses will be affected by short-term market factors, such as the size and type of commercial use envisioned, the size of that use's market area and the population it draws from (e.g. ¼ mile or 2 miles etc), competition, parking needs, access, visibility, and site development constraints.

housing type and density should be evaluated in the context of natural resource protection, services, and infrastructure costs. That is, given the quantity and availability of land, what are realistically achievable densities and will those densities justify desired resource protections and the cost of providing urban services?

Set realistic goals and timelines.

High property values (especially improvement values) tend to limit short-term redevelopment opportunities. This is an important factor for public agencies to consider in the context of phasing of development and timing of infrastructure improvements. That is, in the short and mid term, public investment in infrastructure may be leveraged most effectively within opportunity areas that are vacant and/or have lower improvement values relative to the rest of the study area, as these areas are more likely to support redevelopment in the short and mid term.

Review opportunity areas.

There are four general areas that provide potential opportunity areas for infill and/or redevelopment – larger areas with vacant, unconstrained lands and lower improvement values. One area is a cluster of vacant tax lots with common ownership on the west side of Area 93. As discussed above and depicted in Figure 11, three additional areas are located in the southwestern, southeastern and north-central portions of the study area. These opportunity areas should be further evaluated in the concept planning process.

Due to existing land use patterns, physical characteristics, and land values, Area 93 is unlikely to become a mixed-use residential and commercial center during the 20 to 30-year planning period – even with the benefit of full urban services and improved streets. Public action in this case can best be focused on ensuring that 1) urban services and infrastructure are provided efficiently and economically; and 2) natural resources are adequately protected.

VI. NEXT STEPS

The second phase of this project is to prepare a conceptual plan for Area 93, suitable for adoption into the County Comprehensive Plan. This plan will include an urban growth diagram, corresponding written policies, and options for governance and future service delivery. Some components may vary depending upon the service option; however, in sum the plan will provide a uniform vision for how the area will urbanize, in accordance with: applicable Statewide Planning Goals, statutes, and administrative rules, as well as Metro's Urban Framework Plan and Urban Growth Management Plan; and Metro Title 11 criteria, including the assigned or expected residential neighborhood designation that requires average residential densities of at least 10 dwelling units per net developable residential acre.[37]

As part of the concept planning process, preliminary service options will be studied. These options may include annexation to Portland with city services, annexation to

[37] "Net developable acre" is calculated by subtracting fish and wildlife habitat and other important natural areas, as well as hazard-prone areas, from the total site area.

Portland with service by districts, or governance by the County with service by districts. Additionally, preliminary cost estimates will be prepared along with funding strategies and potential financing approaches.

APPENDIX A. METHODS

The review of existing conditions and assessment of development opportunities and constraints included review of background materials and field visits to Area 93. The project team followed four primary steps during this review:

- **Review of available information**.
  The project team reviewed and analyzed available data, documents and maps provided by the local, regional and state agencies. A selection of policy and planning documents was also reviewed, including Metro, Multnomah and Washington County, and City of Portland policies and plans. Other documents reviewed include environmental reports prepared for local landowners.

- **Field trips.**
  Field documentation of natural features and other elements of this project was limited in scope and generally consisted of visual observations from existing roads within the study area. Field trips to Area 93 were conducted by project team members on August 14, September 15 and September 22, 2008. The team collected information on existing land use patterns, natural features, utilities, open space, and other conditions that may affect future development of the area.

  As part of this work, off-site observations of wetlands were noted. Prior to the field visits, the team reviewed aerial photos and existing soil, topography, National Wetland Inventory, and local environmental report maps. In the field, visible wetland indicators (e.g., hydrophytic vegetation, hydrology, local topography) were documented from public rights-of way. Areas exhibiting wetland indicators such as saturated or inundated soils or dominant hydrophytic vegetation are noted in the natural features section of this report, and mapped in Figure 5.

  Access to private property was obtained near the lower end of Bronson Creek. This area allowed for limited sampling of streamside vegetation communities and observation of stream characteristics. These observations are summarized in the natural features section of this report.

- **Baseline forecast.**
  EcoNorthwest made a preliminary forecast of potential development in Area 93 based on historical population and employment growth trends, and available forecasts of population and employment in the Portland region.[38]

[38] Portland "region" is defined here in terms of the Portland Metropolitan Statistical Area (MSA), which includes: Portland, Vancouver, WA; Beaverton, Hillsboro, Clackamas County, Columbia County, Multnomah County, Washington County, Yamhill County, Clark County, WA; Skamania County, WA

- **Review and discussion.**
  Project staff met internally and with City/County staff to discuss existing data and draft findings. Public review of the draft report and maps began in late October. The team integrated comments from these meetings and reviews into the present report.

APPENDIX B. PLANT SPECIES OBSERVED IN AREA 93

(from field trip, September 22, 2008)

SCIENTIFIC NAME	COMMON NAME	Riparian Corridors	Upland Areas	Remarks
TREES				
Abies grandis	grand fir	X	X	
Acer macrophyllum	big-leaf maple	X	X	Dominant
Alnus rubra	red alder	X		Dominant in low-lying riparian areas
Crataegus douglasii var. douglasii	black hawthorn	X		Also found at wetland
Crataegus monogyna	European hawthorn**	X	X	
Fraxinus latifolia	Oregon ash	X		Lowlands and moist slopes
Ilex aquifolium	English holly**	X	X	
Populus trichocarpa	black cottonwood	X	X	
Prunus avium	sweet cherry**		X	
Prunus laurocerasus	English laurel**		X	
Prunus sp.	flowering plum*		X	Trace
Pseudotsuga menziesii	Douglas fir	X	X	Dominant in uplands
Salix lucida ssp. lasiandra	pacific willow	X		Dominant in wetland
Sequoia sempervirens	coast redwood	X	X	From planted parent
Thuja plicata	western red cedar	X	X	Dominant in riparian area
SHRUBS				
Acer	vine maple	X	X	
Amelanchier alnifolia	Saskatoon serviceberry	X	X	
Berberis nervosa	dull Oregon grape	X	X	
Corylus cornuta	beaked hazelnut		X	
Euonymus occidentalis	western wahoo	X		Near streams
Oemleria cerasiformis	osoberry	X	X	
Rubus discolor	Himalayan blackberry**	X	X	Dominant, clearings and woodlands
Rubus spectabilis	salmonberry	X		Dominant along streams
Rubus ursinus	trailing blackberry	X	X	
Symphoricarpos albus	snowberry	X	X	
Vaccinium parvifolium	red huckleberry	X	X	
HERBS				
Achlys triphylla	vanillaleaf	X		
Adenocaulon bicolor	pathfinder	X	X	
Adiantum aleuticum	northern maidenhair fern	X		Streamside
Aquilegia formosa	red columbine	X	X	

SCIENTIFIC NAME	COMMON NAME	Riparian Corridors	Upland Areas	Remarks
Athyrium filix-femina	lady fern	X		Streamside
Carex deweyana ssp. leptopoda	Dewey's sedge	X		
Carex hendersonii	Henderson's wood sedge	X		
Dicentra formosa	Pacific bleedingheart	X		
Disporum smithii	Large-flowered fairy-bell	X		
Epilobium angustifolium	fireweed		X	
*Equisetum arvense**	common horsetail*	X	X	
Fragaria vesca var. bracteata	wood strawberry	X	X	
Geranium robertianun	Robert's geranium**	X	X	
Geum macrophyllum	Oregon avens	X	X	
Hedera helix	English ivy**	X	X	Dominant, climbing in trees near residences
Hydrophyllum tenuipes	Pacific waterleaf	X	X	
Oenanthe sarmentosa	Pacific water-parsley	X		Wetland dominant, also in seeps
Polypodium glycyrrhiza	licorice fern	X	X	
Polystichum munitum	sword fern		X	Dominant
Pteridium aquilinum	bracken		X	
Rumex occidentalis	western dock		X	
Scirpus microcarpus	small-fruited bulrush	X		Wetland and seeps
Stachys cooleyae	Cooley's hedge-nettle	X	X	
Tellima grandiflora	fringecup	X	X	
Thalictrum occidentale	western meadowrue	X		
Trientalis latifolia	western starflower	X		
Trillium ovatum	western trillium	X	X	
Urtica dioica	stinging nettle	X	X	
Vancouveria hexandra	white inside-out flower	X	X	

* Non-native species ** Non-native and invasive species

APPENDIX C

BEFORE THE CHIEF OPERATING OFFICER

RELATING TO THE APPLICATION FOR A MINOR ADJUSTMENT TO THE URBAN GROWTH BOUNDARY AT 12301 NW LAIDLAW ROAD IN UNINCORPORATED MULTNOMAH COUNTY

Order No. 08-050

WHEREAS, Richard Reese, the owner of property at 12301 Laidlaw Road in unincorporated Multnomah County applied for a minor adjustment to the urban growth boundary (UGB) under Metro Code section 3.01.033; and

WHEREAS, the Chief Operating Officer determined that the application was complete and sent notification of the application to persons entitled to notice under the code; and

WHEREAS, the Chief Operating Officer evaluated the application for compliance with the criteria in Metro Code section 3.01.035 and determined that it complied with the criteria; now, therefore,

IT IS ORDERED THAT:

1. The Metro UGB is hereby amended to include land at 12301 Laidlaw Road in unincorporated Multnomah County, as shown in the Staff Report dated December 1, 2008, attached and incorporated into this Order as Exhibit A. This addition complies with Metro Code section 3.01.035 criteria for the reasons set forth in Exhibit A.

2. The land included in the UGB by this Order shall be designated Outer Neighborhood on the Metro 2040 Growth Concept Map and zoned by Multnomah County to allow residential development at a density consistent with the Outer Neighborhood designation.

ENTERED this 3rd day of December, 2008

Michael Jordan, Chief Operating Officer

Approved as to form:

Daniel B. Cooper, Metro Attorney

Exhibit A

STAFF REPORT

IN SUPPORT OF ORDER NO. 08-050, RELATING TO THE APPLICATION FOR A MINOR ADJUSTMENT TO THE URBAN GROWTH BOUNDARY AT 12301 NW LAIDLAW ROAD IN UNINCORPORATED MULTNOMAH COUNTY.

Date: December 1, 2008

Prepared by: Tim O'Brien
Principal Regional Planner

BACKGROUND

CASE: UGB Minor Adjustment 08-03

PETITIONER: Richard Reese
12301 NW Laidlaw Road
Portland, OR 97291

PROPOSAL: The petitioner requests a Minor Adjustment to the Urban Growth Boundary (UGB) to make the UGB coterminous with a property line. Currently the UGB bisects the property. The addition will result in 1.54 acres included in the UGB.

LOCATION: The site is located at 12301 NW Laidlaw Road. A map of the site can be seen in Attachment A.

ZONING: The property at 12301NW Laidlaw Road to be added to the UGB is zoned Commercial Forest Use 2 (CFU2) by Multnomah County.

Applicable Review Criteria

The criteria for a Minor Adjustment to the Urban Growth Boundary (UGB) are contained in Metro Code Section 3.01.035.

3.01.035 Criteria for Minor Adjustments
Petitions to add land to the UGB may be approved under the following conditions:

(a) The purpose of this section is to provide a mechanism to make small changes to the UGB in order to make it function more efficiently and effectively. It is not the purpose of this section to add land to the UGB to satisfy a need for housing or employment. This section establishes criteria that embody state law and Regional Framework Plan policies applicable to boundary adjustments.

(b) Metro may adjust the UGB under this section only for the following reasons: (1) to site roads and lines for public facilities and services; (2) to trade land outside the UGB for land inside the UGB, or (3) to make the UGB coterminous with nearby property lines or natural or built features.

For this application to amend the UGB to make the UGB coterminous with property lines, natural or built features, Metro Code Section 3.01.035(d) applies.

(d)To approve a minor adjustment to make the UGB coterminous with property lines, natural or built features, Metro shall find that:

(1) The adjustment will result in the addition of no more than two net acres to the UGB;

Petitioner:
The adjustment will add 1.54 acres to the UGB.

Staff Response:
Based on the petitioner's submittal and Metro GIS records staff agrees that the adjustment will result in the addition of less than two acres to the Urban Growth Boundary. Staff concludes that this criterion has been met.

(2) Urbanization of the land added by the adjustment would have no more adverse environmental, energy, economic or social consequences than urbanization of land within the existing UGB;

Petitioner:
The proposed added land is vacant and will be combined with a vacant parcel that is currently within Urban Growth Boundary and is currently zoned for rural residential use. The parcel that is currently inside the UGB is part of Metro's 2002 UGB Expansion Area 93. Adding this parcel to the UGB will allow for all of my land to be planned in accordance with Multnomah County's required Title 11 concept planning process for Area 93. Finally, there are no natural resources on the site. Thus, the added land will have no more adverse environmental, social, energy or economic consequences than urbanization of other land within the existing UGB.

Staff response:
Staff agrees with the reasons set forth by the petitioner that approval of the petition would have no more adverse environmental, social, energy or economic consequences than urbanization of land within the existing Urban Growth Boundary. Staff concludes this criterion has been met.

(3) Urbanization of the land added by the adjustment would have no more adverse effect upon agriculture or forestry than urbanization of land within the existing UGB;

Petitioner:
No commercial agriculture operations occur on this land or adjacent land. No forestry practices occur on this land. Minimal forestry activities have occurred on the northern portions of some of the larger adjacent parcels to the north. Addition of this small 1.54-acre parcel will not impact any future forestry practices on these parcels as the land directly adjacent to the subject parcel is in pasture. Thus, urbanization will result in no more adverse impacts on agricultural and forestry practices than urbanization of land within the existing UGB.

Staff response:
Staff agrees with the reason set forth by the petitioner that approval of the petition would have no greater adverse effect on agriculture or forestry than urbanization of land within the existing UGB. Multnomah County indicated they have no objection to the proposal. Staff concludes that this criterion has been met.

(4) The adjustment will help achieve the 2040 Growth Concept, and

Petitioner:
Including this parcel of land in the UGB will allow for all of the land under my ownership to be planned by Multnomah County's concept planning process. This will provide for a more efficient use of both parcels of land as future development occurs in Area 93, which is consistent with the 2040 Growth Concept

Staff response:
Staff agrees with the petitioner that the adjustment will help achieve the 2040 Growth Concept by providing for all of the petitioner's land to be included in the Title 11 concept planning process that is being undertaken by Multnomah County, resulting in a more efficient development pattern. Staff concludes this criterion has been met.

(5) The adjustment will not result in an island of urban land outside the UGB or an island of rural land inside the UGB.

Petitioner:
The UGB adjustment will not result in an island of urban land outside the UGB as the site directly abuts the UGB.

Staff response:
Staff agrees with the petitioner that this adjustment will not result in an island of urban land outside the UGB or an island of rural land inside the UGB. Staff concludes this criterion has been met.

ANALYSIS/INFORMATION

Known Opposition: There is no known opposition to this application. Multnomah County indicated they have no objection to the petition.

Legal Antecedents: Metro Code 3.01.035(d) allows, through an administrative process, adjustments to the UGB to make the UGB coterminous with property lines, natural or built features.

Anticipated Effects: This amendment will add 1.54 acres to the UGB and allow all of the applicants land to be included in the concept planning process for UGB expansion area 93 that has recently been initiated by Multnomah County.

Budget Impacts: As the applicant was required to file an application fee to cover all costs of processing this minor adjustment, there is no budget impact.

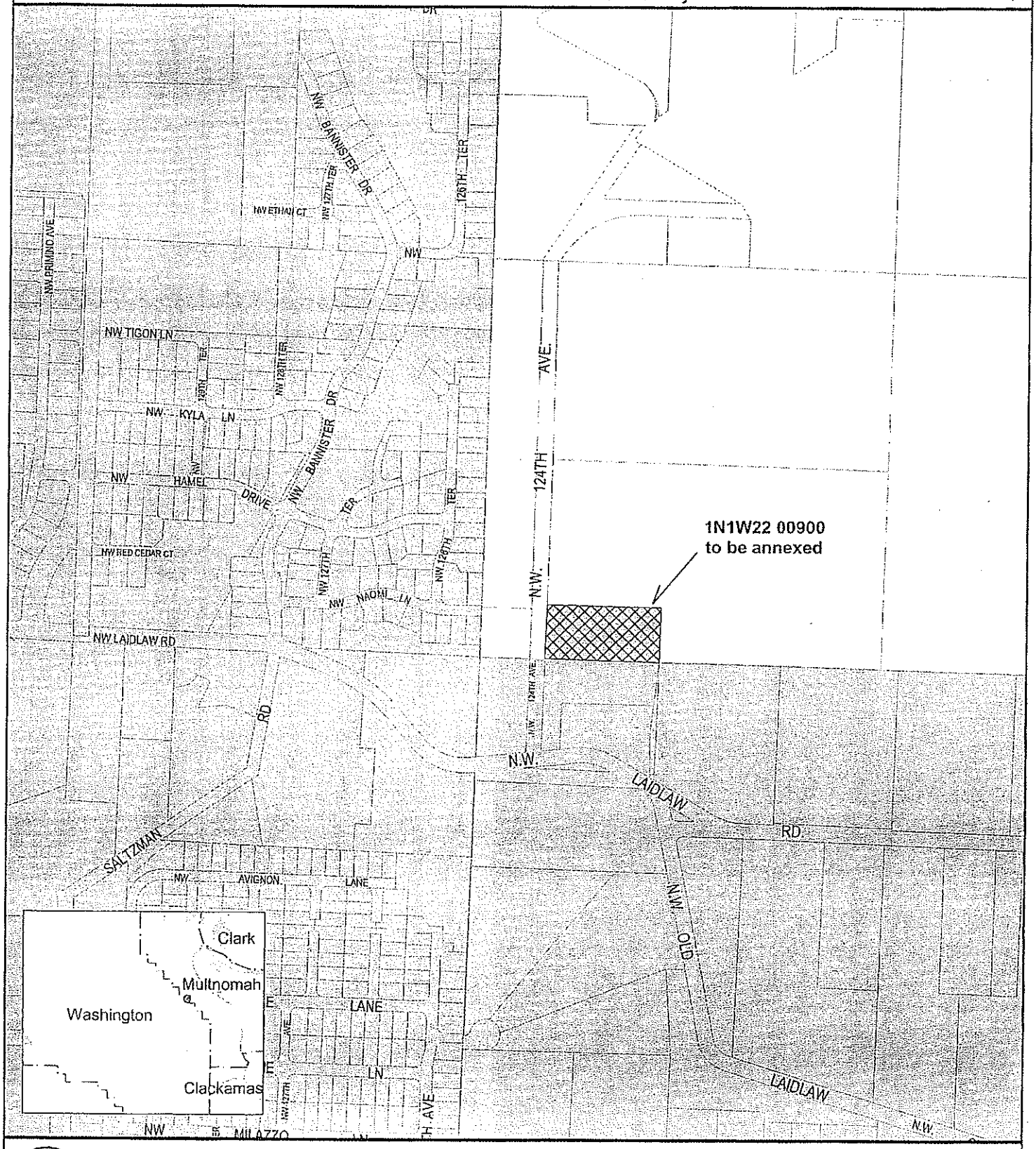
RECOMMENDED ACTION

Staff recommends that the Chief Operating Officer approve Order No. 08-050 for a Minor Adjustment to the Urban Growth Boundary.

ATTACHMENT A

UGB CASE: 08-03

1N1W22 | Annexation to Urban Growth Boundary | Multnomah County



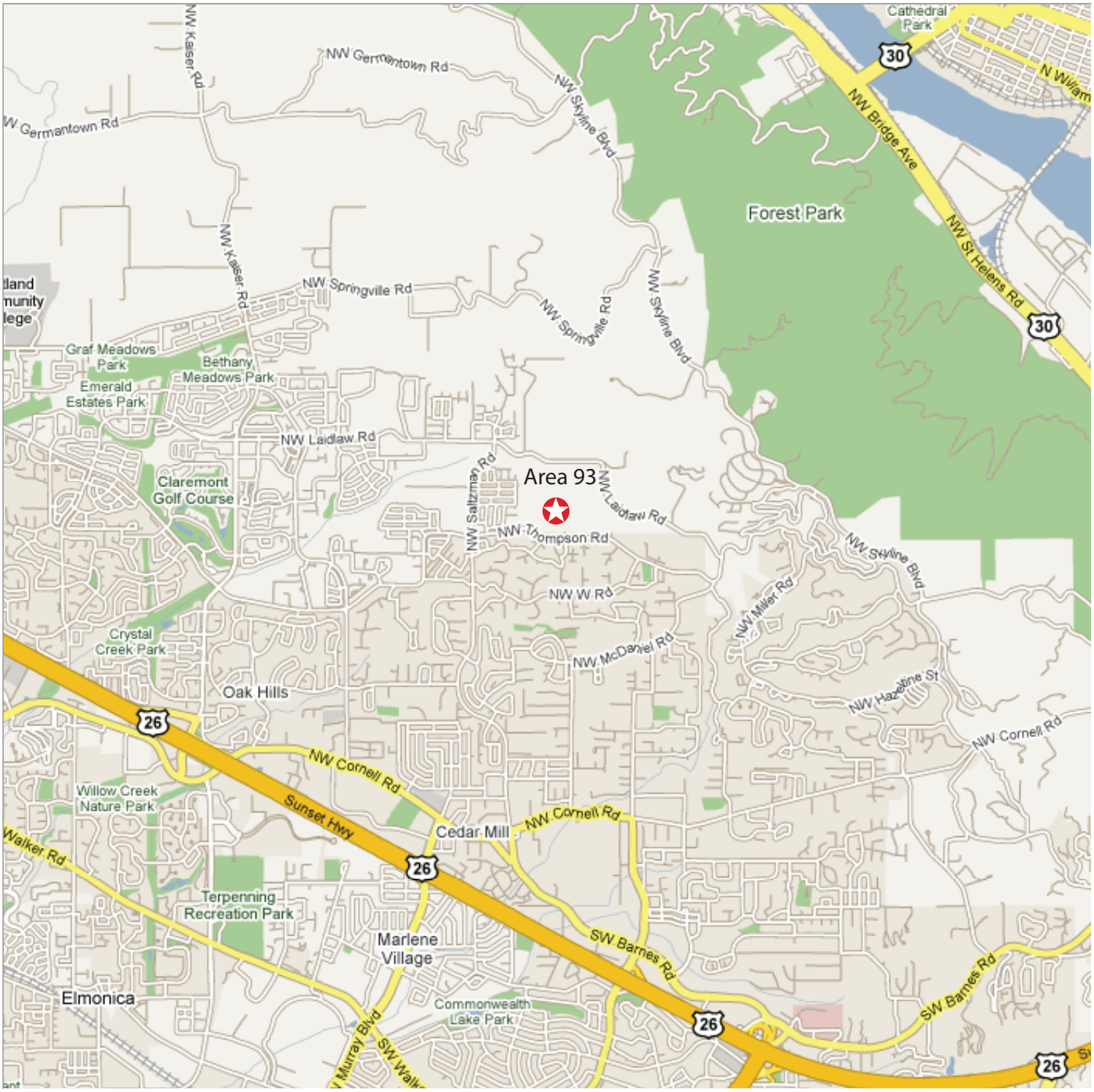
METRO
Data Resource Center
600 NE Grand Ave
Portland, OR 97232-2736
(503) 797-1742
http://www.metro-region.org/drc

Areas to be annexed

Urban Growth Boundary

MU0308

1:5,000



Source: Google Maps (October 2008)

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Community Resource Planning

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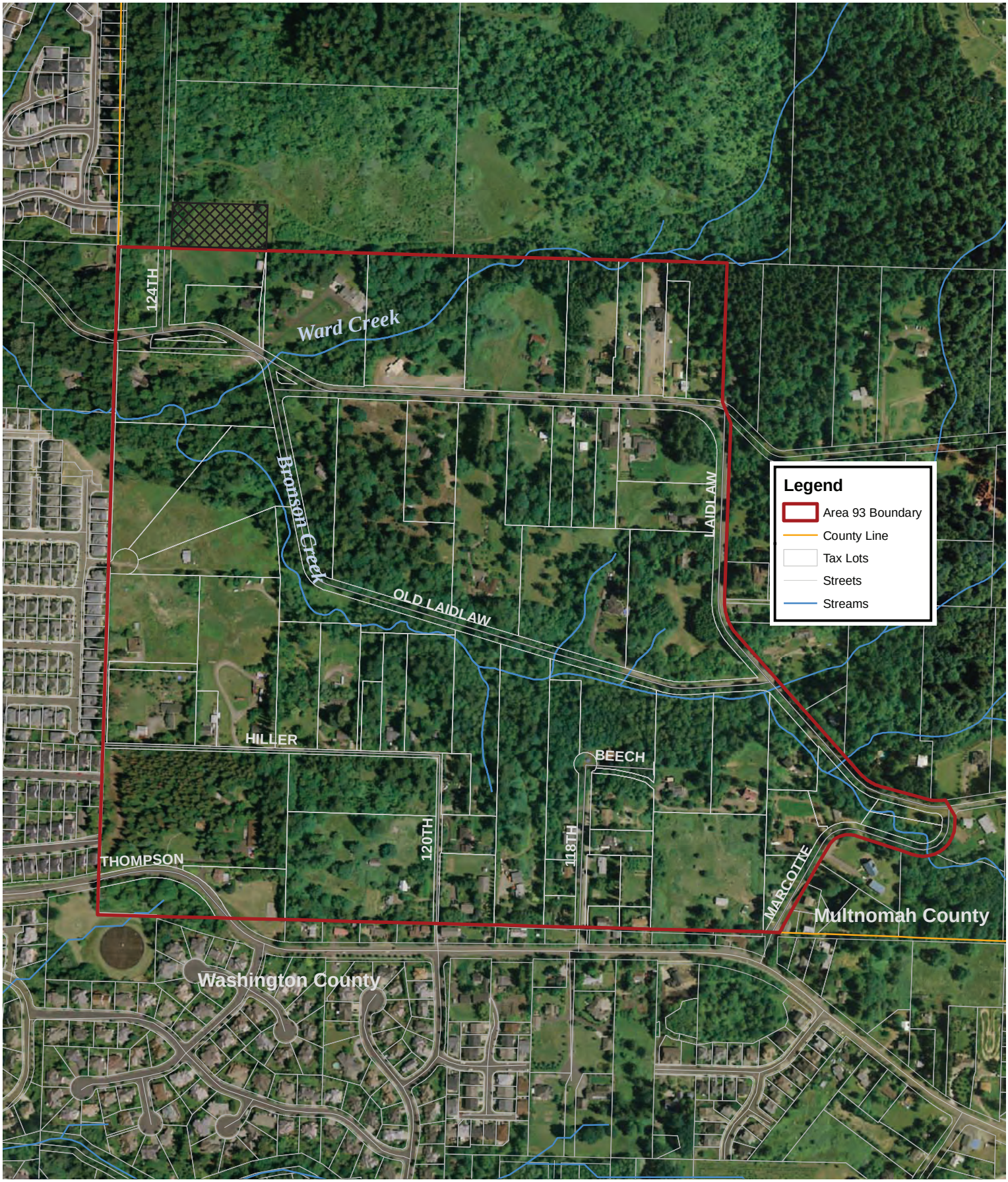
Figure 1
Vicinity Map



Source: RLIS (2006), City of Portland (2008)

0 250 500 Feet

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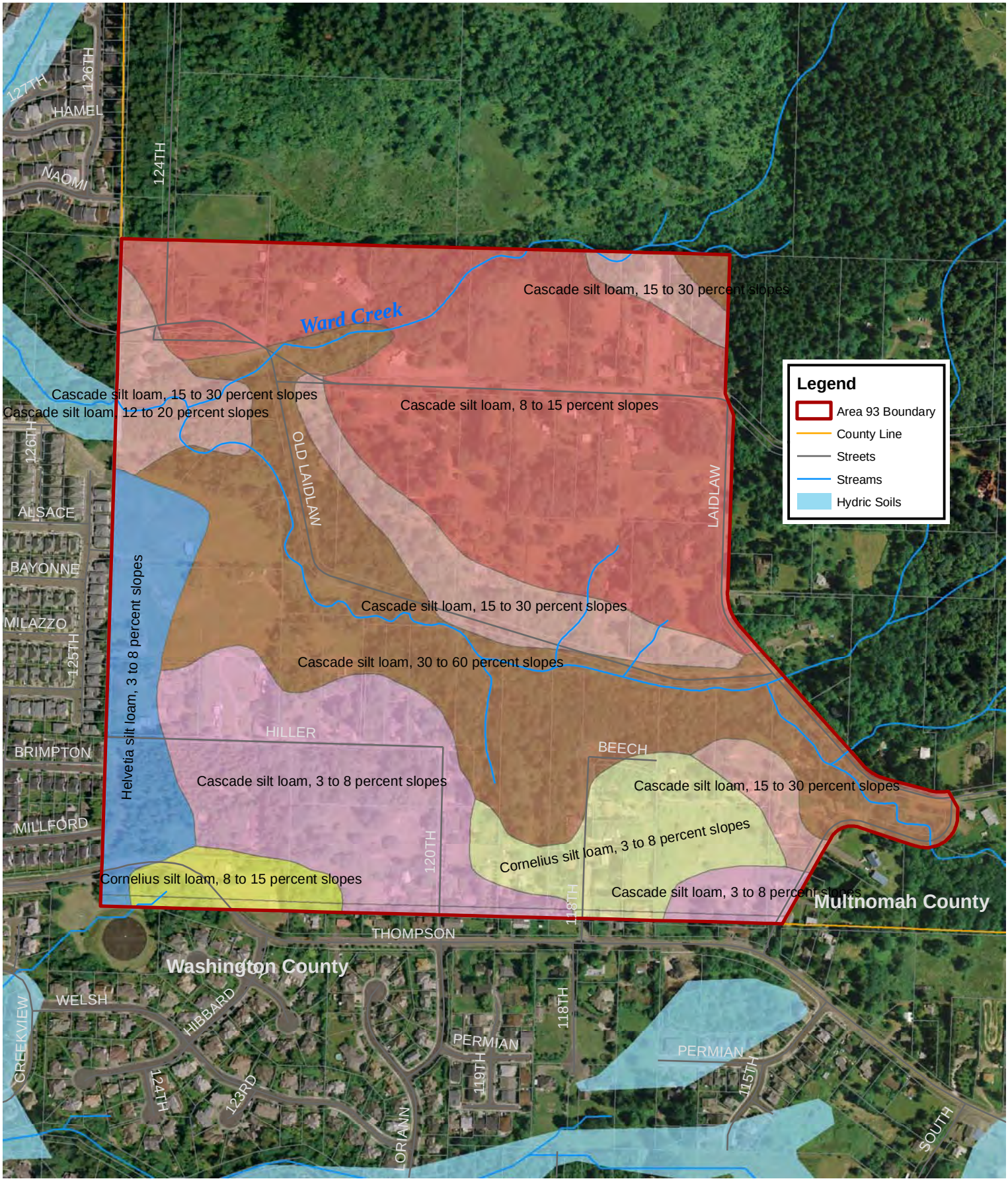
Property was brought into the UGB by Metro Order 08-050 after this report was substantially completed and is not considered in the analysis. Refer to Appendix C.

Figure 2
Base Map



NOTE: Helvetia and Cornelius silt loams contain small (2-3%) inclusions of Delena silt loam, a hydric soil.

Source: NRCS (1991)

0 250 500 Feet

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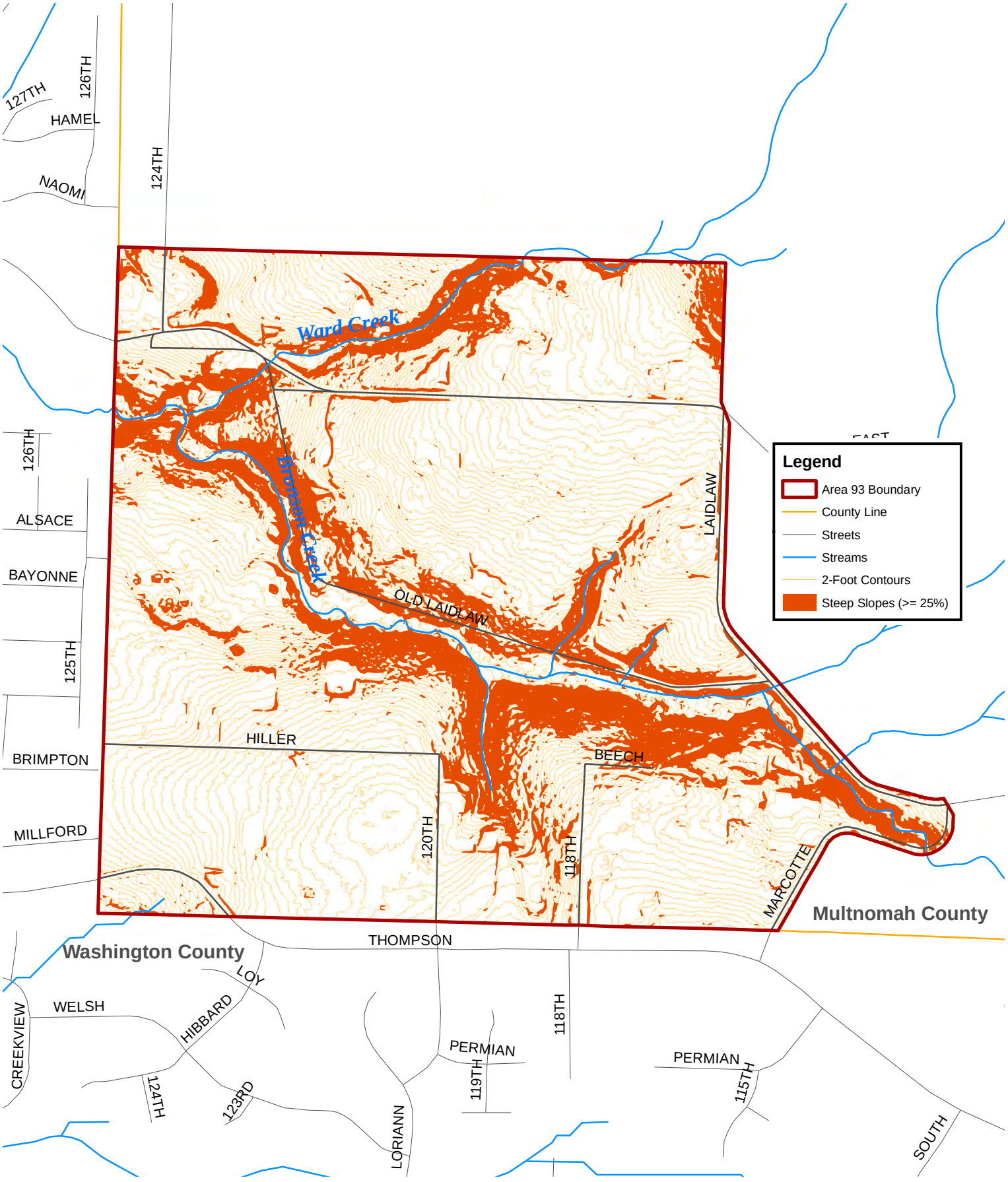
Figure 3
Soils



Source: City of Portland (2008), Contours and slopes derived from LIDAR data

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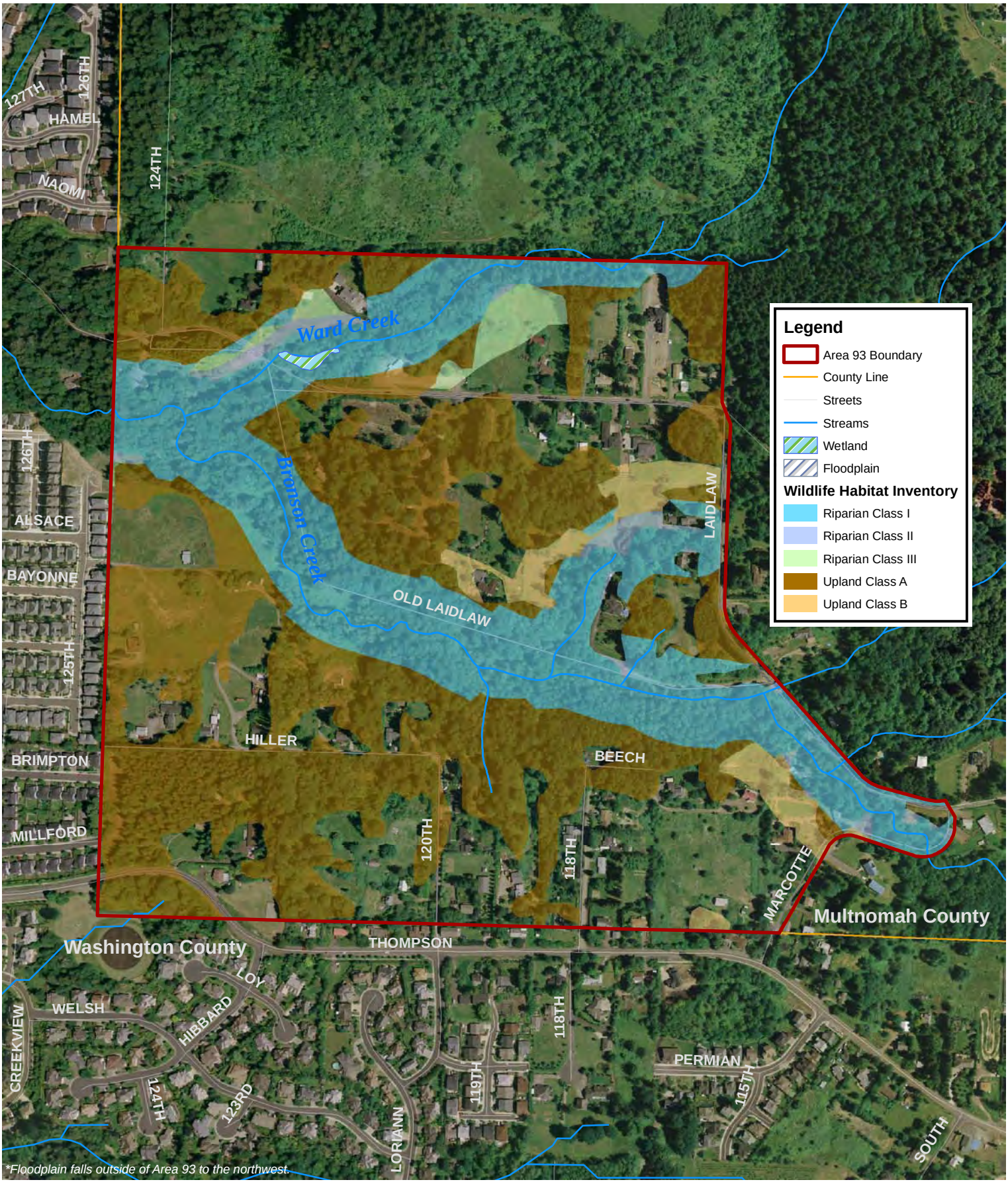
Figure 4
Topography and Steep Slopes



Source: City of Portland (2008), Habitat Inventory, Metro (2008),

0 250 500 Feet

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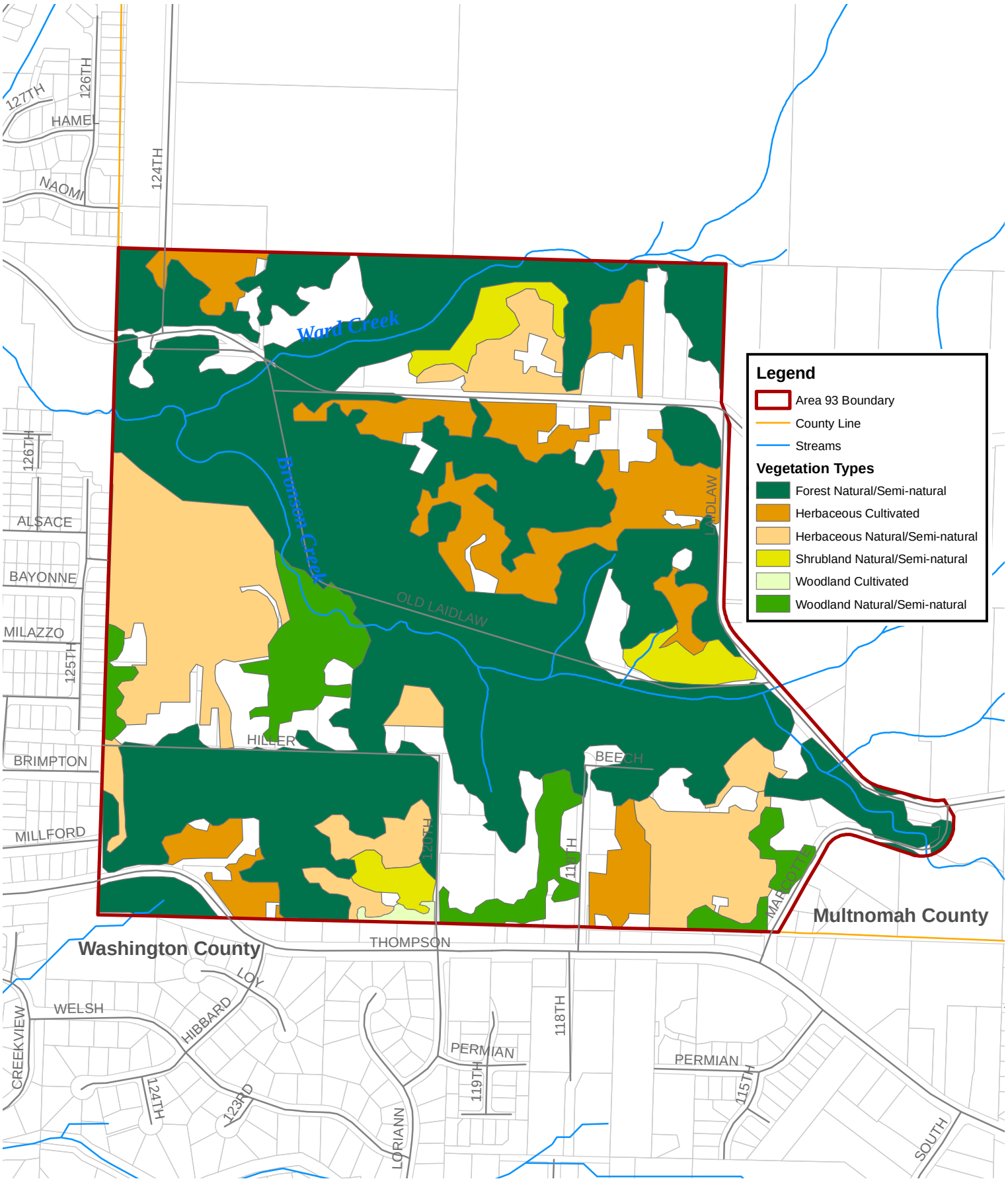
Figure 5
Water Features and
Wildlife Habitat Inventory



Source: City of Portland (2008)

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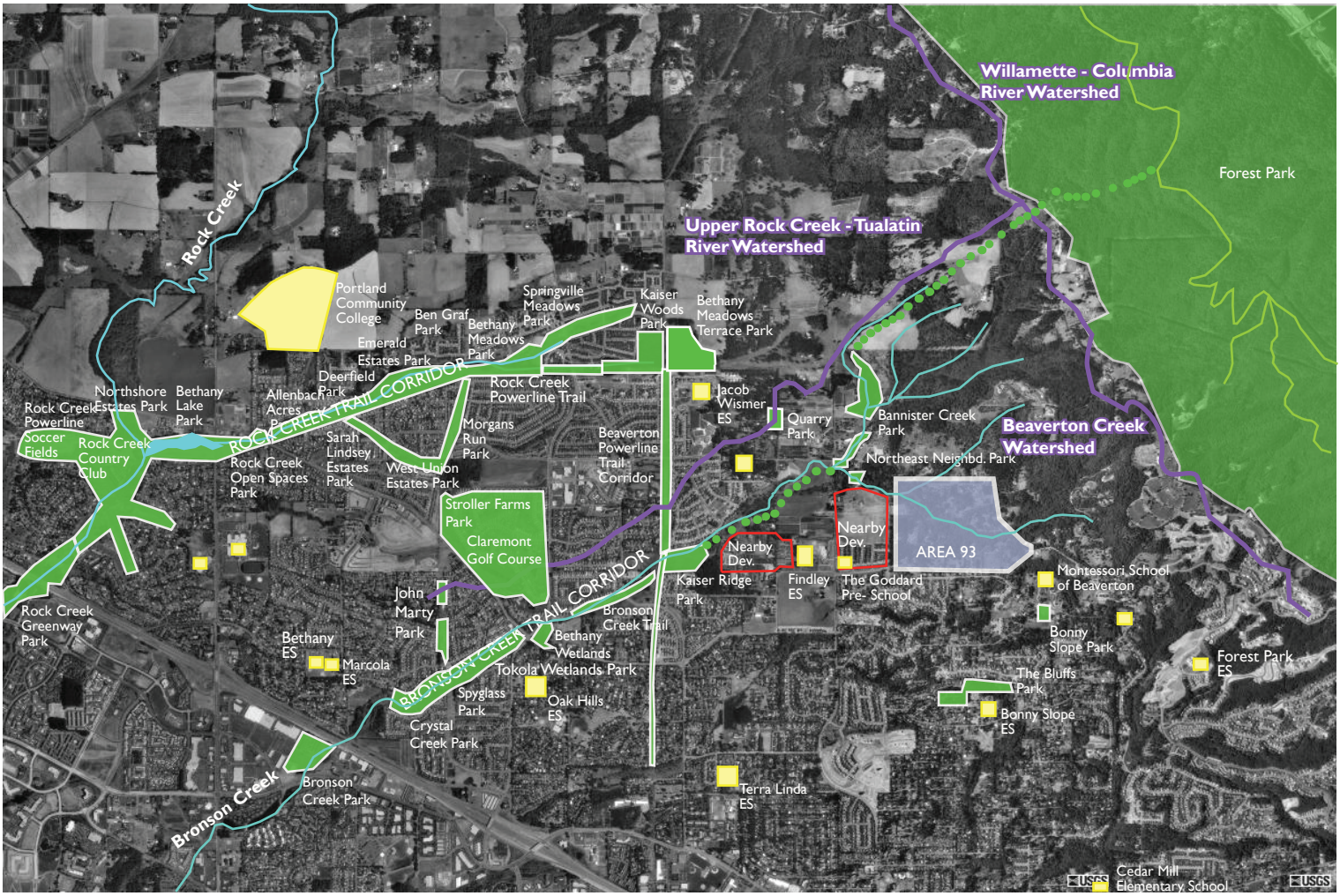
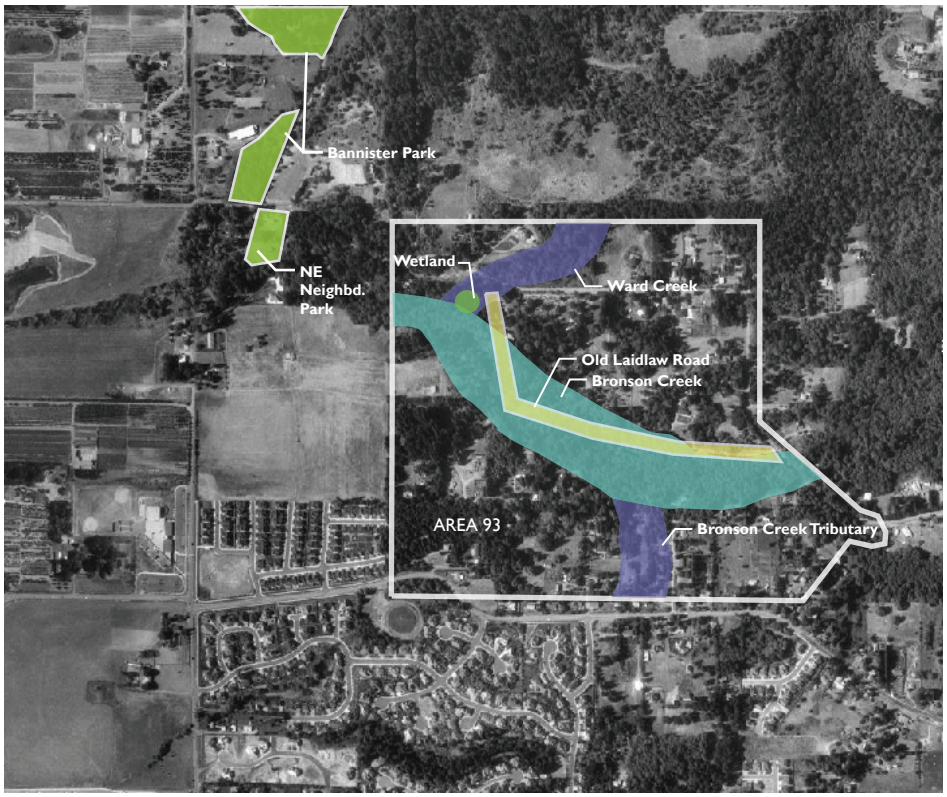
Figure 6
Vegetation





LEGEND

- Watershed Boundary
- Creek / River
- Trail
- Metro Proposed Greenway
- School
- Nearby Development
- Existing Park

Source: Nevue Ngan Associates (September 2008)

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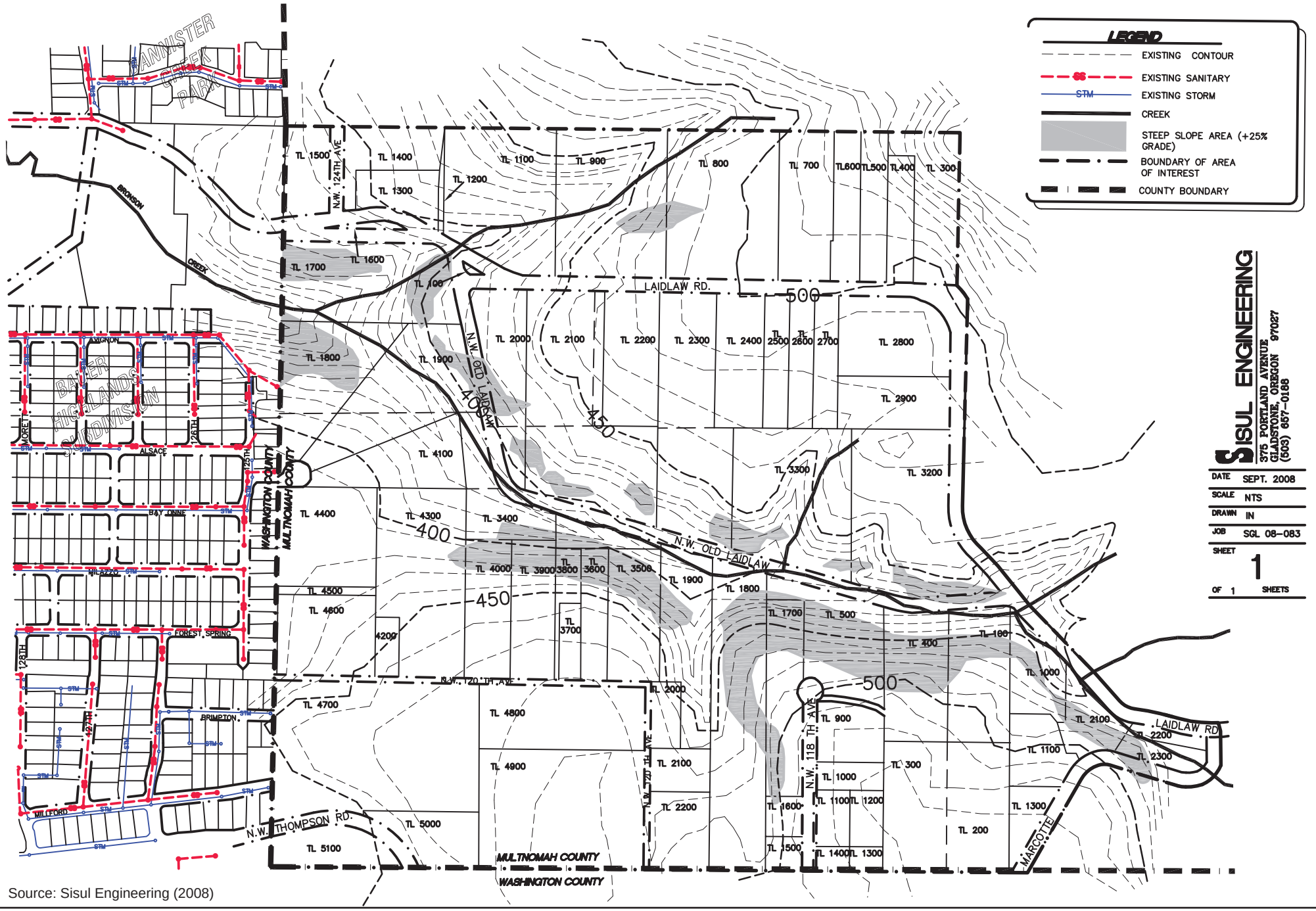
Figure 7
Parks and Open Space



Source: Sisul Engineering (2008)

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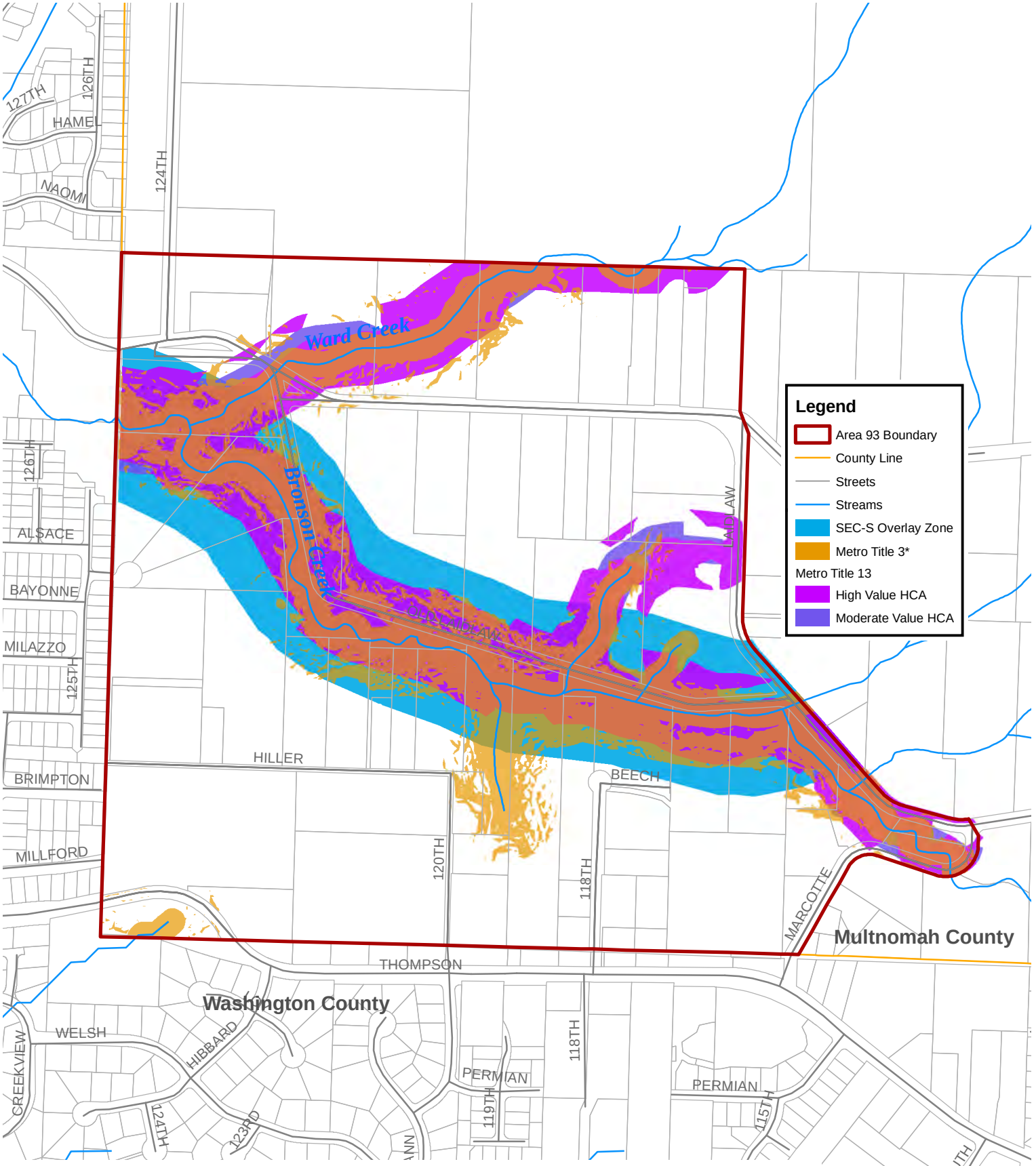
Figure 8
Existing Infrastructure



Metro did not map Area 93 for Title 3 streams and wetlands. The mapping shown is an approximation of the area that would be affected by Title 3

0 250 500 Feet

Source: City of Portland (2008), SEC-S Overlay, Multnomah County (2008), HCA, Metro (2006)

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Community Resource Planning

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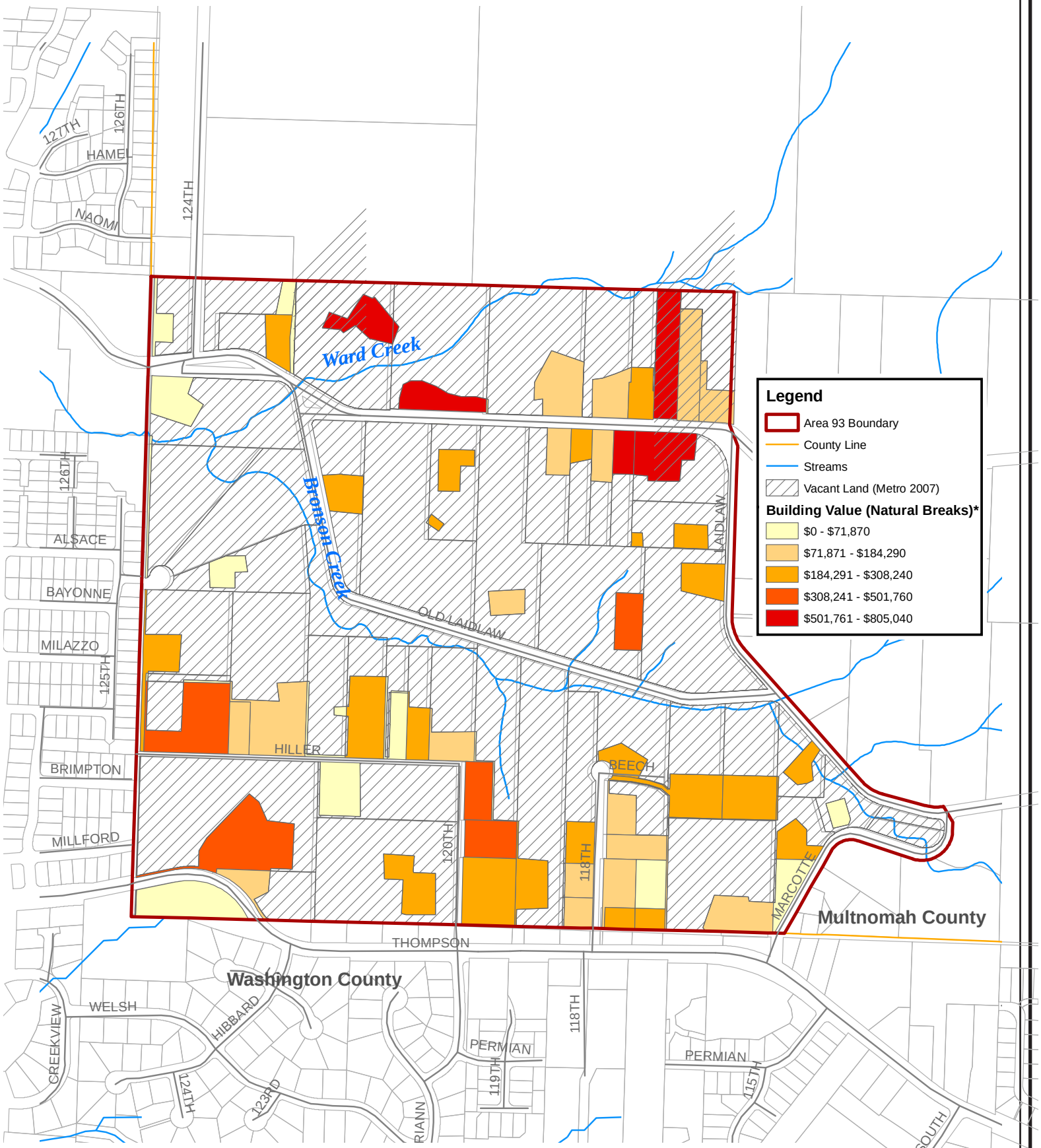
Figure 9
Regulatory Setting



*ArcMap identifies break points by picking the class breaks that best group similar values and maximize the differences between classes. The features are divided into classes whose boundaries are set where there are relatively big jumps in the data values.

Source: Metro (2007), Multnomah County (2007)

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Community Resource Planning

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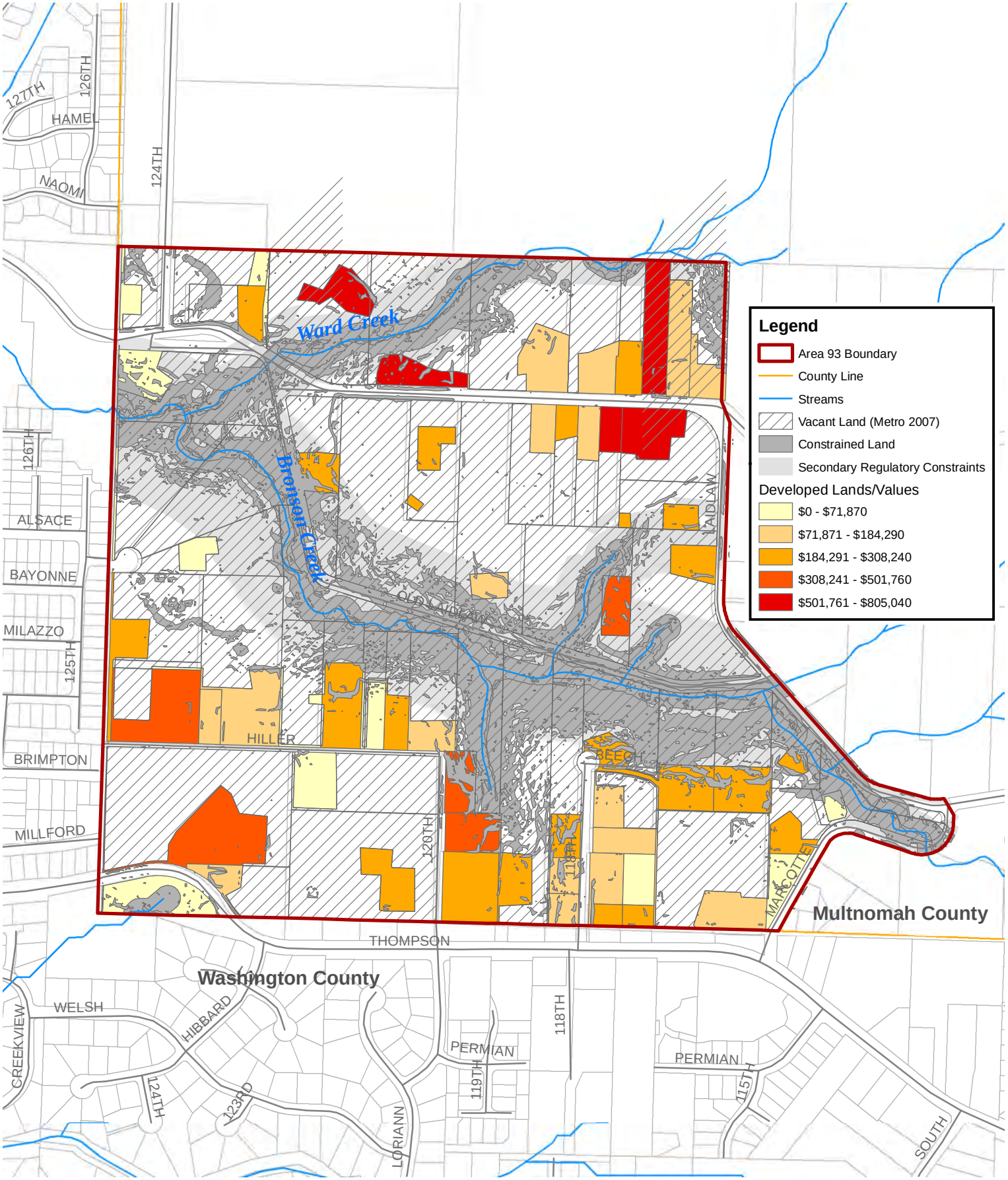
Figure 10
Development Patterns
and Improvement Values



Source: Metro (2007), Multnomah County (2007), City of Portland (2008

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Community Resource Planning

Figure 11
Development Constraints

Department of Community Services
MULTNOMAH COUNTY OREGON

Land Use and Transportation Program
1600 SE 190th Avenue
Portland, Oregon 97233-5910
PH. (503) 988-3043 Fax (503) 988-3389
www.co.multnomah.or.us/landuse

To: Planning Commission

From: Derrick Tokos, Principal Planner

Date: September 26, 2008

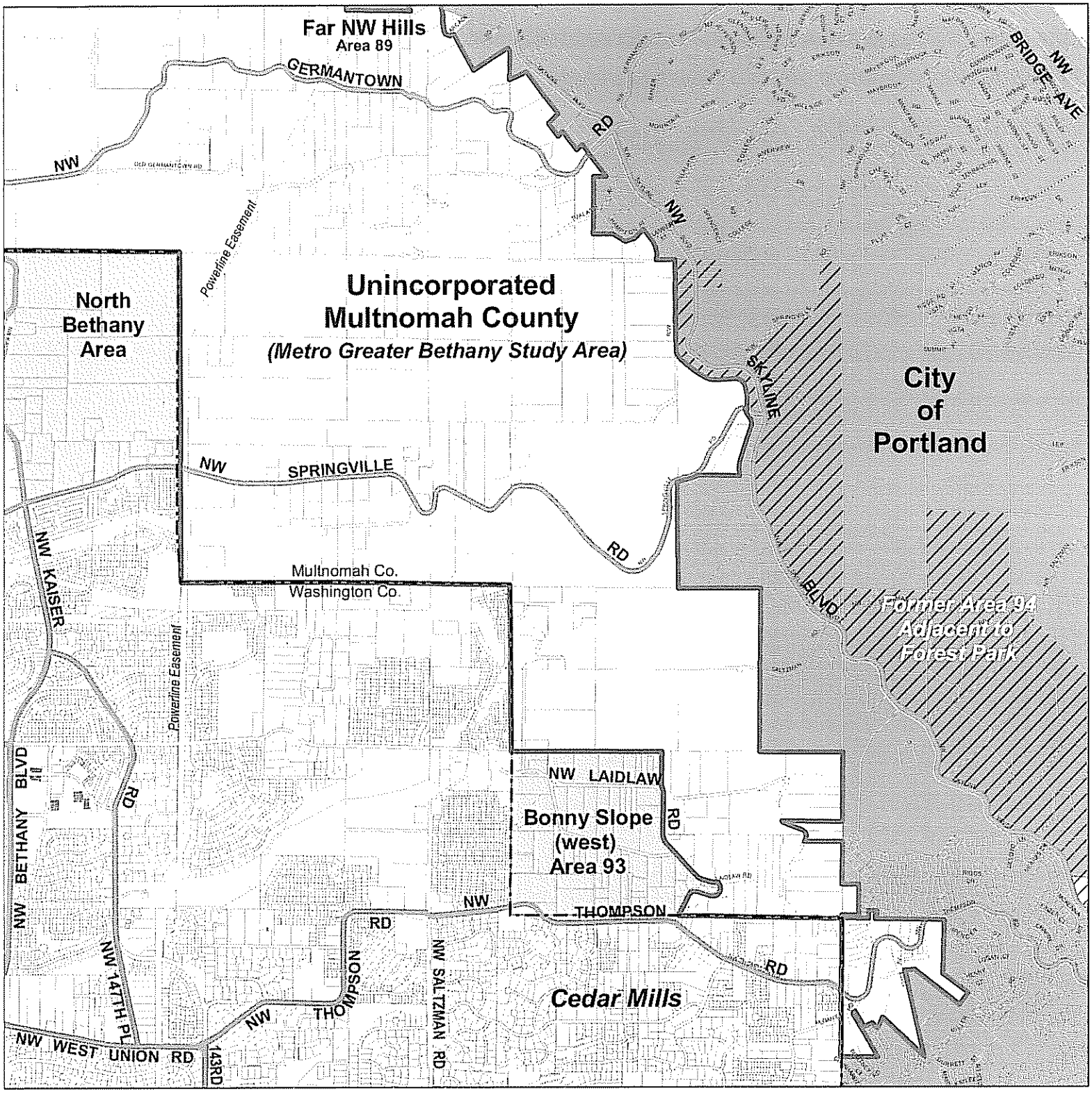
RE: Concept Planning Timeline for Bonny Slope West (formerly Area 93)

On April 25, 2008, staff briefed the Planning Commission on the County's effort to initiate Concept Planning for Area 93. At that time, we had just completed work on an Intergovernmental Agreement calling for the City of Portland to serve as the County's consultant in preparing the Plan. The agreement sets out a scope of work that will result in a uniform vision for how the area will urbanize in conformance with Title 11 requirements, including service options and steps that need to occur so development can proceed. The Board of Commissioners approved the agreement in May and the City of Portland followed suit in June.

This project is funded in large part by a $202,500 Construction Excise Tax grant that the County is receiving from Metro. A separate agreement was needed to secure the funds. It was completed in July and includes milestones, due dates, and reimbursement rates, the details of which are spelled out in an exhibit to the document which I have enclosed.

In August, the City of Portland contracted with Winterbrook Planning to prepare an existing conditions report and maps. That work is under way. City and County staff have also put together a detailed project timeline listing tasks, work product, key meetings, and hearing dates. The County Planning Commission will play a prominent role in vetting work by staff and consultants, in recommending a preferred urban growth concept to the Board of Commissioners, and in adopting Comprehensive Plan language to incorporate the preferred plan as County policy. At this briefing, City and County staff are prepared to walk through the various elements of the timeline, discuss milestones, and answer questions from the Commission members.

Enclosures: Map of Bonny Slope West (formerly Area 93)
Exhibit A of the CET Grant between Multnomah County and Metro
Detailed Project Timeline



Urban Growth Boundary Expansion Areas Vicinity Map

Legend

- County Boundary
- Urban Growth Boundary
- North Bethany, Bonny Slope (west), Far NW Hills
- Former Area 94
- Incorporated City of Portland

N

1:24,500

April 29, 2008

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Planning

All data compiled from source materials at different scales
For more detail, please refer to the source materials or
City of Portland, Bureau of Planning

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Exhibit A
CET Grant IGA
Between Metro and Multnomah County for Area 93 Concept Planning
Milestones, Due Dates, and Reimbursement Rates

Total Reimbursable Amount from CET funds for Title 11 Compliance:* **$202,500.00**

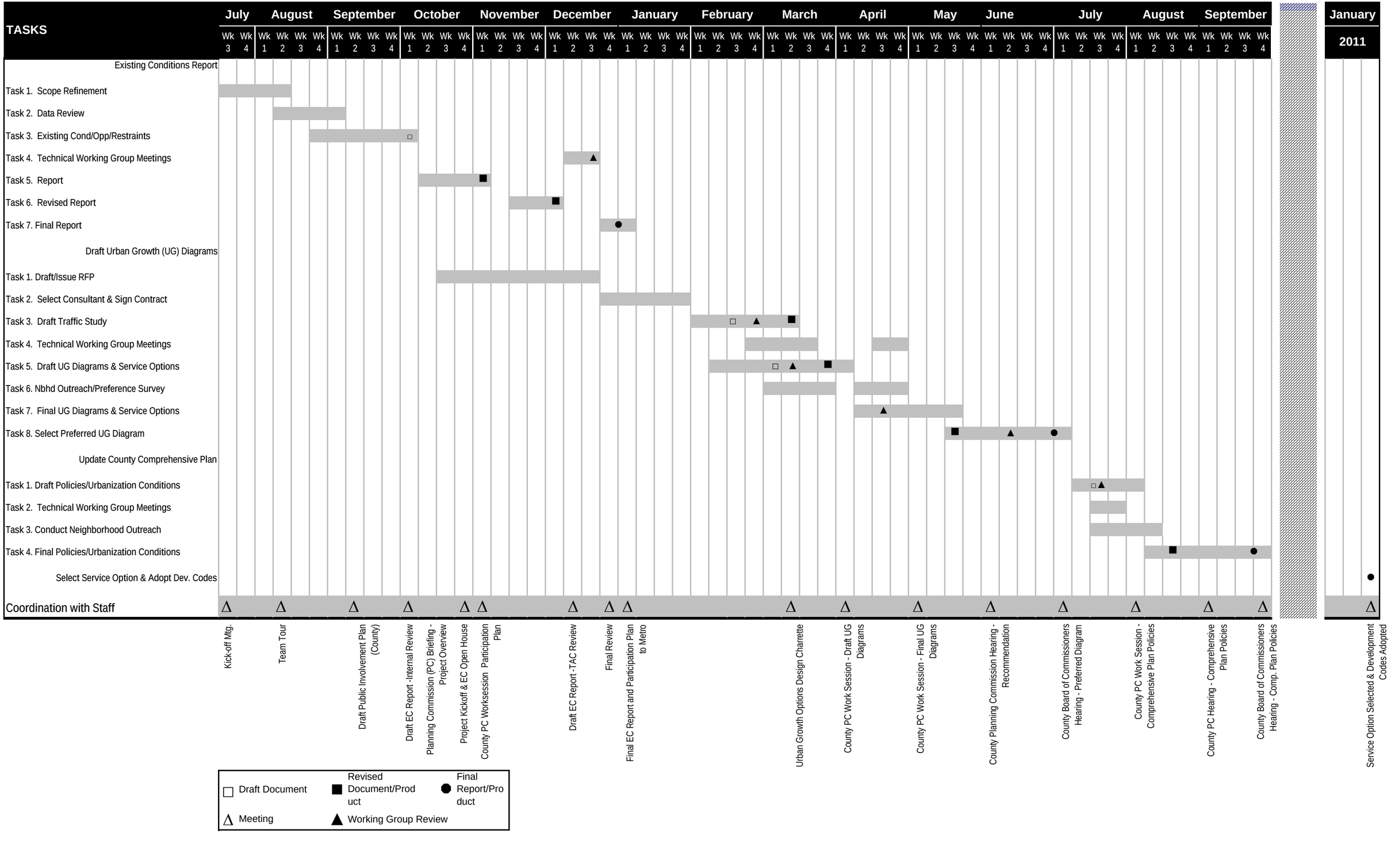
Milestone #:	Deliverable	Date Due**	Grant Payment
1.	Execution of CET Grant IGA	July 1, 2008	$ 50,625.00
2.	Existing conditions report and maps including an analysis of buildable lands based on mapping of natural areas, wetlands, floodplains, steep slopes, and hazard areas. Preparation of a Public Involvement Plan that includes outlining the membership, roles, responsibilities, and functions of an Advisory Committee(s) to assist and advise project staff.	January 1, 2009	$ 39,375.00
3.	Draft Urban Growth Diagrams illustrating alternatives for satisfying Title 11, including an assessment of infrastructure needs and preliminary service options.	April 1, 2009	$ 30,000.00
4.	The County's preferred Urban Growth Diagram, integrating and depicting at least those elements set forth in Title 11.	June 1, 2009	$ 29,625.00
5.	County adoption of Comprehensive Plan amendments addressing Title 11, the applicable conditions of addition in Metro ordinance for the new urban area, and applicable state laws and regulations. The amendments will outline preliminary public service options and conditions under which urbanization can occur.	October 1, 2009	$ 10,250.00
6.	A final service option, developed for Milestone #5, is selected, and Comprehensive Plan and ordinance language is adopted by the County or City of Portland to implement the Concept Plan	January 1, 2011***	$ 42,625.00
	TOTAL REIMBURSABLE AMOUNT*		**$202,500.00**

* The Total Reimbursable Amount is a maximum amount that will be reimbursed for Eligible Expenses required for Title 11 compliance as set forth in Metro Code Chapter 7.04 and Administrative Rules, subject to the terms and conditions of the attached CET Grant IGA.

** Due dates are intended by the parties to be hard estimates of expected milestone completion dates. If the County anticipates that a due date cannot be met due to circumstances beyond its control, it shall inform Metro in writing no later than ten (10) days prior to the due date set forth above and provide a revised estimated due date, and Metro and the County shall mutually agree upon a revision to the milestone due dates set forth in this Agreement. Metro shall forward the amounts set forth above within thirty days of receiving the County's documentation of the deliverable.

*** This date assumes that all identified public service options are available. If they are not all available, then the County may seek an extension pursuant to Metro Functional Plan code section 3.07.850.

BONNY SLOPE WEST PROJECT TIMELINE



Bonny Slope West (Area 93) Concept Plan
Public Involvement (PI) Plan
Revised 12-17-08

Purpose
This plan outlines public involvement goals and strategies during development of a concept plan for Bonny Slope West (Area 93).

Background
Area 93, also known as Bonny Slope West, has been designated by Metro as an urban expansion area within the Urban Growth Boundary (UGB) requiring a concept plan. The area includes roughly 160 acres in unincorporated Multnomah County, west of the City of Portland. It is bordered by rural, unincorporated Multnomah County on the north and east and by urban, unincorporated Washington County to the south and west.

The area is ½ mile west of Portland's urban services boundary (USB), which defines the area where the City plans or is currently able to provide urban services. Since it is not contiguous with Portland's city limits or the USB, Area 93 cannot be annexed by the City at this time.

The land use pattern within Area 93 is semi-rural, with approximately 40 residents living on mostly one to five acre parcels. Multnomah County is the area's designated service provider.

Multnomah County has contracted with the City of Portland Bureau of Planning to prepare a concept plan and service options for the area. This was done because the City may be a future service provider and has an interest in ensuring that the plan complements the surrounding development pattern and landscape. The current project will result in adoption of a plan by Multnomah County for the eventual urbanization of the area.

Public Involvement Goals
The goals of the public involvement program for this project are to:
- Inform stakeholders of the project and opportunities for public input that can help shape the project. This includes Area 93 property owners and residents, neighboring property owners, and public service providers.
- Create opportunities for public input on existing conditions, urbanization alternatives and future service delivery options that can inform decision-making.
- Manage expectations by being clear about what this phase of the planning process will and will not accomplish. The process will provide a road map for how the area will urbanize in the future. It will not result in the area being development ready. To get the area development ready, a service option will have to be selected and land use ordinance adopted. That will happen at a later date, once work on the regional evaluation of the UGB has concluded and we know whether or not Portland will be able to serve the area.

Assumptions
- The number of property owners in Area 93 is small (roughly 40). It would be difficult to form a balanced citizen advisory committee (CAC) for the project drawing only from Area 93.
- The project will create opportunities for Area 93 property owners and residents to provide meaningful input.
- Multnomah County's Planning Commission, made up of citizen volunteers, will be consulted before project milestones to provide input to staff, in place of an ad hoc CAC.

Project Schedule, Tasks and Milestones

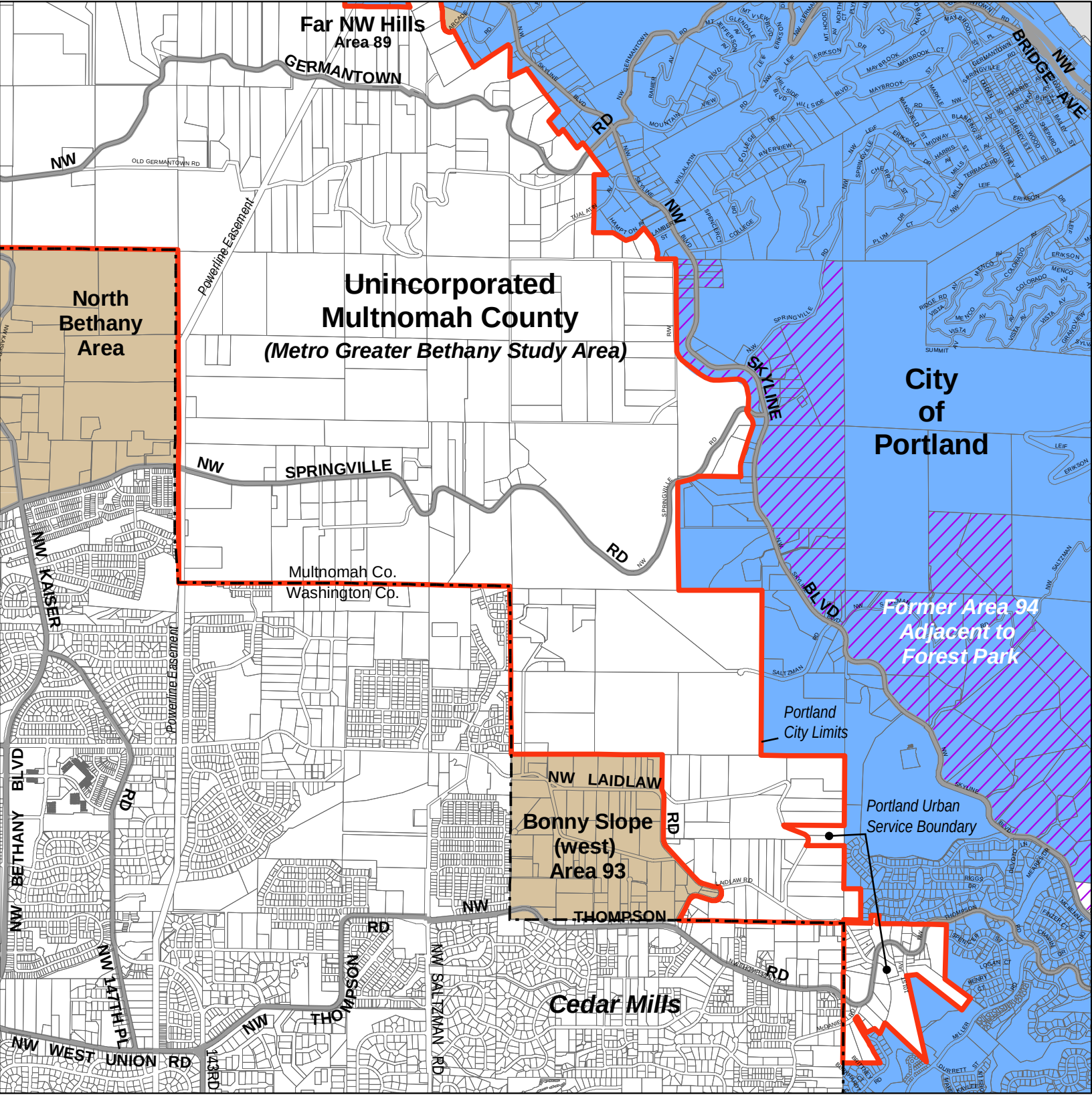
Project Milestone	Date	PI Task / Tool	Assigned to	Deadline
		Site tour for staff	Project Team	8/14/08
		Draft PI Plan	County (MP)	10/8/08
		Draft website (project map, background, document library, contact us/mailing list sign-up, links to project partner websites)	City (Gary)	10/16/08
		Launch project website	City (Gary)	10/17/08
		Develop stakeholder database	City (Brian)	10/10/08
		Create and maintain Excel spreadsheet of public comments received	County (DT & MP)	Ongoing
County Planning Commission (MCPC) project briefing	10/6/08		City/County (Brian & DT)	
		Send open house invite w/ project background, website URL	County (DT & MP)	10/17/08
		Create map showing impacted organizations (e.g. neighborhood associations, cities, counties, school districts, and service districts)	City (Gary)	10/27/08
		Open house to kick-off project and present draft EC maps (drop-in, board displays, flip charts, etc.)	Project Team	10/29/08, 6 – 9 pm
MCPC work session on public involvement plan and report on open house	11/3/08		City/County (Brian & DT)	
Project planning work; retain consultant, identify urban service delivery options coordinated with service agency technical advisory committee (TAC)	12/08 - 3/09		City Lead – Project Team	
		Send design charrette/open house invite (w/ project background, upcoming MCPC workshops, and date online survey will be available)	County (DT & MP)	2/23/09

Project Milestone	Date	PI Task / Tool	Assigned to	Deadline
		Attend neighborhood association meetings to present Final EC report and invite to design charrette	City Lead + Project Team	3/09
		Community design charrette/open house to inform preparation of UG diagrams	Project Team	3/11/09 tentative
		Post online preference survey of UG diagrams and service options	City (Gary)	3/27/09 MCPC packet mailed
MCPC work session on draft UG diagrams and service delivery options	4/6/09		Project Team	
		Attend additional neighborhood and service provider board mtgs on UG diagrams and options	City Lead + Project Team	4/6/09 – 5/1/09
		Close online survey and compile results for MCPC	City (Gary)	4/17/09
		Compile survey results for MCPC	City (Brian)	4/20/09 MCPC packet mailed 4/24/09
MCPC work session on final UG diagrams and service delivery options	5/4/09		Project Team	
		Brief stakeholders, Board and City policymakers on Final UG diagram and service options	City/County (Brian & DT)	5/09
		Post Final UG diagram and service options	City (Gary)	5/22/09
		Send public notice for PC and BOCC hearings w/ web URL	County (DT & MP)	5/22/09 MCPC packet mailed
MCPC hearing and recommendation on options	6/1/09		Project Team	
		Brief City Council on preferred UG diagram and service options	City Lead	6/09 BOCC packet sent 6/15/09
Board of County Commissioners (BCC) hearing on preferred UG diagram and service options	7/2/09		Project Team	
		Attend neighborhood association and service provider mtgs on comprehensive plan policies	County	7/09

Project Milestone	Date	PI Task / Tool	Assigned to	Deadline
		DLCD Notice of Proposed Amendment	County	7/31/09
MCPC work session on policy amendments to incorporate preferred UG diagram and service options into the County Comprehensive Plan	8/3/09			
		M56 Notice (first class) to all affected property owners and newspaper notice of hearing to Oregonian	County	8/21/09 MCPC packet mailed 9/4/09
MCPC recommend comprehensive plan policies	9/14/09			
		Newspaper notice of hearing to Oregonian	County	9/18/09 BOCC packet sent 9/14/09
BCC hearing, adopt comprehensive plan policies	10/1/09			
Related Milestone Final service option selected and Comprehensive Plan and zoning ordinance is adopted by the County or City of Portland to implement the concept plan	1/1/11	At a minimum, legislative process will include direct mail notice of hearings to affected property owners along with general newspaper notice	TBD	

Stakeholders

- Area 93 property owners and residents
- Land use attorney Diana Godwin (represents some Area 93 property owners)
- Adjacent Washington County citizen participation organizations (Cedar Hills/Cedar Mill, Sunset West/Rock Creek/Bethany
- Adjacent Multnomah County/City of Portland neighborhood associations: Forest Park Associations (both inside and outside the City), and Northwest Heights
- Multnomah County Planning Commission (input on PI plan and other project deliverables) (meet first Mondays, 6:30 pm)
- Public service agencies that could be impacted by service delivery options (Clean Water Services (water/sewer), Washington County (roads), Trimet, Tualatin Valley Fire and Rescue, Tualatin Hills Park and Recreation District, Beaverton Schools, Portland Schools, Portland Bureaus, Metro, and the Multnomah County Sheriff)
- City and County elected officials of jurisdictions impacted by service delivery options



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April 29, 2008

CITY OF PORTLAND, OREGON
BUREAU OF
Planning

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