

PLANNING COMMISSION STAFF REPORT

TO: *Planning Commission*

FROM: *Daniel Riordan, Senior Planner,
Jon Holan, Community Development Director*

MEETING DATE: *May 15, 2017*

PROJECT TEAM: *Jon Holan Community Development Director, Rob Foster, Public Works Director; Richard Blackmun, Special Projects Engineer; Dan Riordan, Senior Planner*

SUBJECT TITLE: *Recommendation to City Council to Approve the Westside Refinement Plan and Accompanying Implementation Measures (File No. 311-17-000013-PLNG)*

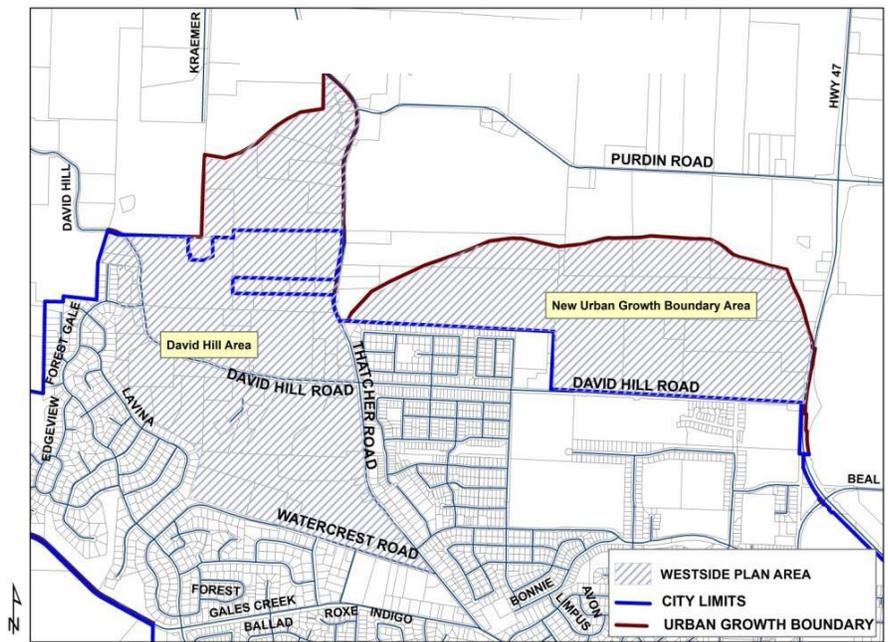
ACTION REQUESTED: **Motion** **Informational**

X all that apply

ISSUE STATEMENT: Over the past two years, City staff and a consultant team have been working with potentially affected property owners and residents toward completion of the Westside Refinement Plan (Attachment A). This report summarizes the culmination of this effort. If adopted, the Westside Refinement Plan will provide a policy framework to guide and get ahead of subdivision

activity in two largely undeveloped areas in the urban growth boundary described below. Three meetings have been scheduled with the Commission to consider the Westside Plan. This includes May 15th for a staff presentation and acceptance of written public comments and May 30th and June 5th for further public hearing and discussion.

The first area addressed by the Refinement Plan is located north of Watercrest Road and west of Thatcher Road. This area has been in the



urban growth boundary since 1983 but lacks the infrastructure necessary to serve development. This area is referred to as the “David Hill Area”. The second area was recently added to the urban growth boundary by the Oregon Legislature in 2014 as part of the urban and rural reserves “grand bargain”. This area is generally located north of David Hill Road between Thatcher Road and Highway 47. This area has been referred to as the “Purdin Road” area or new urban growth boundary area. Together, the David Hill and Purdin Road areas make up what is referred to as the “Westside” planning area.

BACKGROUND: The Westside Refinement Plan contains a recommended policy framework to guide future development in the two largely undeveloped areas within the urban growth boundary described above. The need for a Westside Refinement Plan increased in importance from:

- Absorption of vacant land in the urban growth boundary near infrastructure;
- Metro adoption of the Regional Transportation Functional Plan requiring local adoption of a conceptual backbone street system to serve future development. The conceptual street system must be incorporated into the local transportation system plan; and
- Amendment to the urban growth boundary by the Oregon Legislature to include the area north of David Hill Road between Highway 47 and Thatcher Road. The City must adopt Comprehensive Plan designations for this area to comply with Metro Urban Growth Management Functional Plan and intent of the Urban Planning Area Agreement between the City and Washington County. Since the City is closest municipality to the new urban growth boundary area the City has planning responsibility.

Given the limited resources available to the City to complete an endeavor as comprehensive as the Westside Refinement Plan the City applied for a Metro planning grant. The grant provided resources to retain a consultant team with expertise in conducting the technical analyses necessary to support recommendations for land use and infrastructure. The consultant team assessed transportation needs, environmental constraints including slope and soil instabilities, water system deficiencies and needed sanitary and storm sewer improvements. The consultants’ analysis and findings are contained in the following documents attached as appendices to the Refinement Plan:

- Westside Transportation Baseline Report, January 2015, prepared by SCJ Alliance
- Westside Natural Resources Overview, January 2015, prepared by SCJ Alliance
- Westside Infrastructure Overview, December 2014, prepared by SCJ Alliance
- Geological and Geotechnical Assessment Report, Westside Planning Project, February 2015, prepared by PBS Engineering + Environmental
- Revised Final Westside Water, Sewer, and Stormwater Infrastructure Report, June 24, 2016, prepared by SCJ Alliance
- Revised 2035 PM Peak Hour Traffic Operations Analysis of Revised Land Use Alternative, March 8, 2017, prepared by SCJ Alliance
- Infrastructure Funding Approach Report, December 2016, prepared by FCS Group.

ADOPTION PROCESS AND PLANNING CONTEXT

Staff is requesting the Planning Commission review the Westside Refinement Plan and accompanying implementation actions, consider public comment and recommend a plan for

approval by the City Council. Adoption of the Westside Refinement Plan and accompanying implementation measures are classified as a legislative (Type IV) land use action (Forest Grove Development Code §10.1.700 et. seq.) Legislative land use decisions require Planning Commission review and recommendation to City Council to approve the required adopting ordinances.

Initial implementation actions proposed by staff include:

- Amendments to the Forest Grove Comprehensive Plan Map to implement the land use concept contained in the Plan especially the area added to the urban growth boundary. The specific amendments are described elsewhere in this report.
- Amendments to the Zoning Map to address findings contained in the technical analysis especially related to slope and soil instabilities. The specific amendments are described elsewhere in this report.
- Amendments to the Development Code text to address findings contained in the technical analysis related to slope. The specific amendments are described elsewhere in this report.
- Amendment to the Forest Grove Transportation System Plan to adopt a conceptual backbone street system for the Westside area as described in this report and attachments.

Legislative land use actions require the Planning Commission approve findings responding to review criteria and supporting the Planning Commission's recommendations. The findings must identify the criteria and standards considered relevant to the decisions, the facts relied upon and reasons indicating how the facts support the decision. Draft findings are attached to this report for your review. The applicable review criteria include:

- Comprehensive Plan Amendments: Amendments to the Comprehensive Plan Map are reviewed based on consistency with the goals and policies contained in the Comprehensive Plan text, statewide land use planning goals, Metro Regional Framework Plan, and Metro Urban Growth Management Functional Plan.
- Zoning Amendments: Zoning Map amendments are reviewed based on the criteria contained in Development Code §10.2.770. This includes:
 - The zone change is consistent with the Comprehensive Plan Map.
 - The zone change is consistent with the relevant goals and policies of the Comprehensive Plan.
 - The site is suitable for the proposed zone.
 - The zone change is consistent with the adopted Transportation System Plan.
 - Public facilities and services for water supply, sanitary waste disposal, storm water disposal, and police and fire protection are capable of supporting the uses allowed by the zone.
 - The establishment of the zone district is not subject to the meeting of conditions.
- Development Code Text Amendments: Amendments to the text of the Development Code are considered based on the following criteria contained in Development Code §10.2.630)
 - The text amendment is consistent with the relevant goals and policies of the Forest Grove Comprehensive Plan;
 - The text amendment is consistent with the relevant state and regional planning goals, programs and rules.

- Transportation System Plan Amendments: Amendments to the Transportation System Plan are evaluated based on the following criteria:
 - Compliance with the Oregon Transportation Planning Rule (OAR 660-12-060)
 - Metro Regional Transportation Functional Plan

Demonstration of how the Westside Refinement Plan and accompanying implementation actions comply with the applicable review criteria is addressed in detail in the attached findings document. The findings document also provides the factual basis supporting the recommendations contained in the plan and proposed implementation actions. If the Planning Commission chooses to alter the recommendations in the draft plan and implementation measures summarized in this report the Commission should revise the findings document to include facts supporting the Commission's change.

In addition to the initial implementation actions, the Westside Refinement Plan also includes recommendations for post adoption actions. These actions include amending various infrastructure facility plans including the City's Water System Master Plan, Sanitary Sewer Master Plan, Stormwater and Drainage Master Plan and establishing infrastructure financing tools. Recommendations pertaining to these actions will be taken as the City's Engineering Division updates the various facility master plans beginning in 2018 and ending in 2020.

COMMUNITY INVOLVEMENT

Preparation of the Westside Refinement Plan included opportunities for community involvement. Opportunities for community involvement included stakeholder interviews, three community meetings (April 2015, May 2015 and March 2017) and work sessions with the Planning Commission (October 2014, July 2015, May 2016 and February 2107). Stakeholder interviews included property owners, residents, a realtor, Planning Commission member, Parks and Recreation Commission member, Forest Grove School District representative and a business owner. In addition, opportunities for formal public input are provided during the public hearing process leading to plan adoption.

The draft plan was changed based on the comments received from the community. This included changing the land use concept to provide a greater emphasis on single family residential development and opportunities for retail commercial in the new urban growth boundary area, identifying options for funding needed infrastructure based on equity considering costs and area benefitted, and including policies for addressing potential view impacts resulting from development on David Hill.

PROPOSAL OVERVIEW

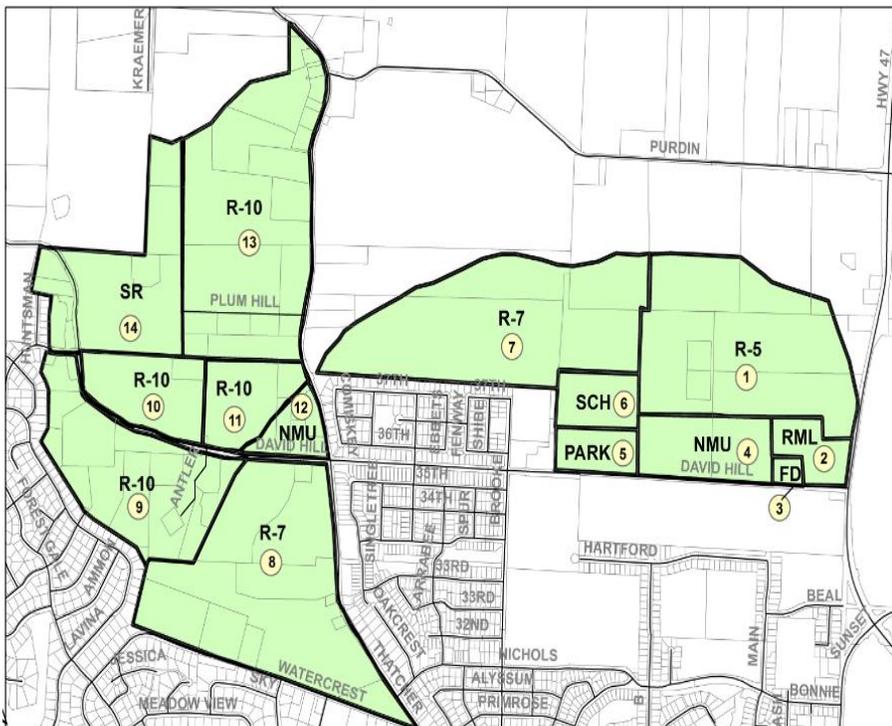
If adopted, the Westside Refinement Plan and proposed implementation actions will establish a land use concept for the Westside Refinement Plan. This includes establishing Comprehensive Plan Map designations for the area north of David Hill Road between Highway 47 and Thatcher Road added to the urban growth boundary in 2014. Assignment of Comprehensive Plan designations to the new urban growth boundary area is necessary to comply with the Metro Urban Growth Management Functional Plan. The land use concept is generally described below. Additional detail

about the land use concept is contained in Chapter 4 of the Westside Refinement Plan (Attachment A).

Adoption of the Plan and proposed implementation actions will also establish a conceptual “backbone” collector street network in the Transportation System Plan. Adoption of the conceptual street network will ensure compliance with the Metro Regional Transportation Functional Plan and will provide the policy basis for requiring dedication of needed land for transportation improvements and construction of needed roadways to serve development. The collector street system is generally described in the section below.

Land Use Concept

The land use concept for the Westside area is based on several objectives including responding to property owner desires for use of their property, expanding the housing supply and promoting complete neighborhoods with a mix of land uses. The final draft land use concept is shown below. The numbers on the map within the yellow circles relate to the table showing estimated dwelling yield on page 6.



The land use designations shown on the map include:

- SR (Suburban Residential) 1.0 dwellings per net acre.
- R-10 (Single Family Residential) 4.35 dwellings per net acre.
- R-7 (Single Family Residential) 6.22 dwellings per net acre.
- R-5 (Single Family Residential) 8.71 dwellings per net acre.
- NMU (Neighborhood Mixed Use) Commercial and Residential 12 dwellings per net acre.
- RML (Residential Multifamily Low) 12 dwellings per net acre.

- SCH (School), Park and FD (Fire Department).

The land use concept was developed with public input provided during stakeholder interviews and during two planning charrettes held in April and May 2015 and a community open house in May 2017. Additional input was provided during Planning work session held in July 2015 and May 2016.

The Planning Commission discussed identifying an area as Neighborhood Mixed Use (NMU) north of David Hill Road in the new urban growth boundary area. This area is approximately 24.6 acres.

The Neighborhood Mixed Use zone allows for residential, commercial and office uses approved as a planned development. Non-residential uses must be located in a “village center” not exceeding three acres in area. Staff is seeking clarification from the Planning Commission on the following considerations:

- Should commercial be required in the NMU area? Presently, the NMU areas provide the opportunity for commercial uses if a “village center” is proposed. Under this approach land use decisions are left to market demands.
- Should there be a minimum and maximum square footage for commercial uses in the NMU area and if so, what is the appropriate range? Two of three mixed-use areas currently established in the City do not establish a minimum amount of commercial development. The mixed use area near Sunset Drive establishes a minimum amount of commercial development in a village center (15,000 square feet) and a maximum (150,000 square feet).

The initial direction for the mixed use area across from Thatcher Park was to not require commercial development. This was not addressed for the NMU area north of David Hill Road near Main Street.

The planning area includes approximately 592 gross acres of which approximately 374 acres (63%) is considered developable. The estimated dwelling yield based on the land use concept above is 1,950 dwellings. The table below provides additional detail about development potential.

Analysis Zone	Area	Gross Area (ac.)	Developable Area (ac.)	Net Area (ac.)	Slope Deduction	Current Dwelling Yield	New Dwelling Yield
1	Purdin (R-5)	86.18	71.60	57.28	0%	2	498
2	Purdin (RML)	10.82	10.82	8.66	0%	0	103
3	Fire Station (FD)	2.40	2.40	2.40	0%	0	0
4	Purdin (Mixed-Use/Commercial)	24.63	24.63	19.73(1)	0%	0	140
5	Purdin (Park)	6.00	6.00	6.00	0%	0	0
6	Purdin (School)	10.00	10.00	10.00	0%	0	0
7	Purdin (R-7)	98.62	87.02	69.62	0%	3	433
	Subtotal - Purdin	238.65	212.47	173.69		5	1,174
8	Watercrest (R-7)	99.75	70.63(2)	56.50	10%	221	316
9	South of David Hill (R-10)	57.38	12.99	10.39	20%	36	36
10	North of David Hill - West (R-10)	24.30	17.73	14.18	15%	52	52
11	North of David Hill - East (R-10)	21.42	15.06	12.05	15%	44	44
12	North David Hill (MU-Com)	8.50	3.60	2.90	0%	12	4
13	Thatcher (R-10)	98.66	95.81	76.65	10%	300	300
14	David Hill Suburban Residential (SR)	43.12	35.62	28.50	15%	24	24
	Subtotal – David Hill	353.13	251.44	201.17		689	776
	Grand Total	591.78	463.91	374.86		694	1,950

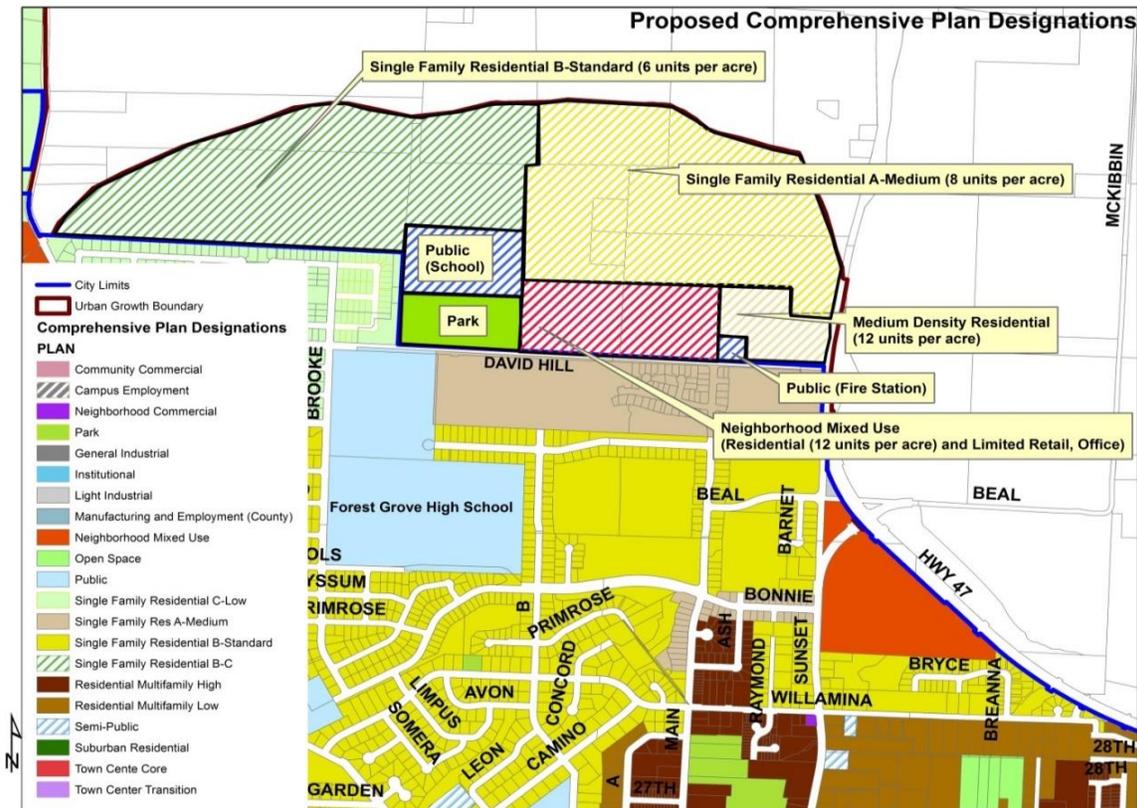
The next two sections of this report describe the implementation actions necessary to establish the land use concept. Actions include amending the Comprehensive Plan Map and zoning map.

Proposed Comprehensive Plan Amendments

The following amendments to the Forest Grove Comprehensive Plan Map are proposed for the Westside planning areas consistent with the land use concept described in Chapter 4 and described below.

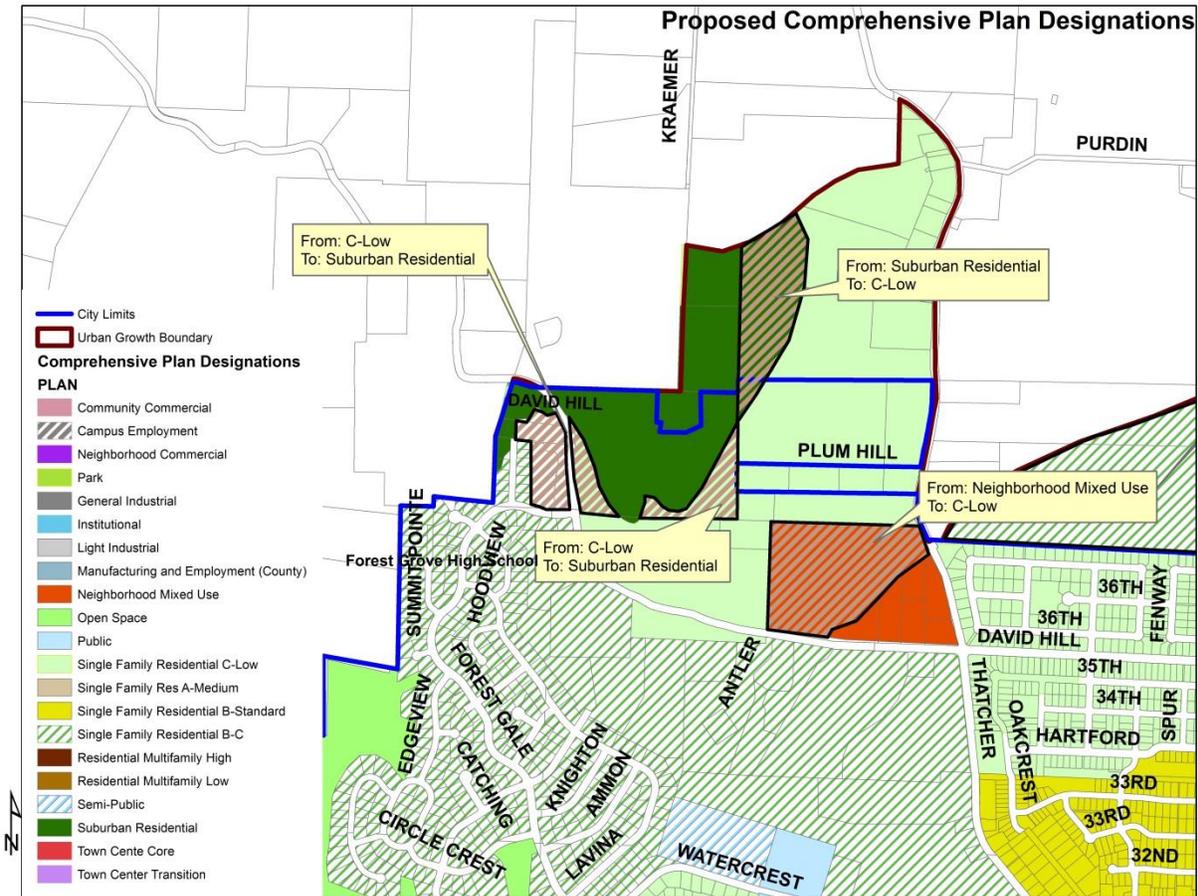
**Comprehensive Plan Map Amendments
New Urban Growth Boundary Area**

From	To	Gross Acres
Future Development-20 acre min.	A-Medium (8.95 dwellings/net acre)	86.18
Future Development-20 acre min.	B-Standard (6.22 dwellings per net acre)	98.62
Future Development-20 acre min.	Medium Density Residential (12 dwellings per net acre)	10.82
Future Development-20 acre min.	Neighborhood Mixed Use (12 dwellings per net acre)	24.63
Future Development-20 acre min.	Public (School)	10.00
Future Development-20 acre min.	Public (Fire Station)	2.40
Future Development-20 acre min.	Park	6.00



Comprehensive Plan Amendments David Hill Area Urban Growth Area

From	To	Gross Acres
Neighborhood Mixed Use	C-Low (4.35 dwellings per net acre)	20.67
B-Standard	C-Low (4.35 dwellings per net acre)	12.50
C-Low	Suburban Residential (1.0 dwellings per net acre)	14.1

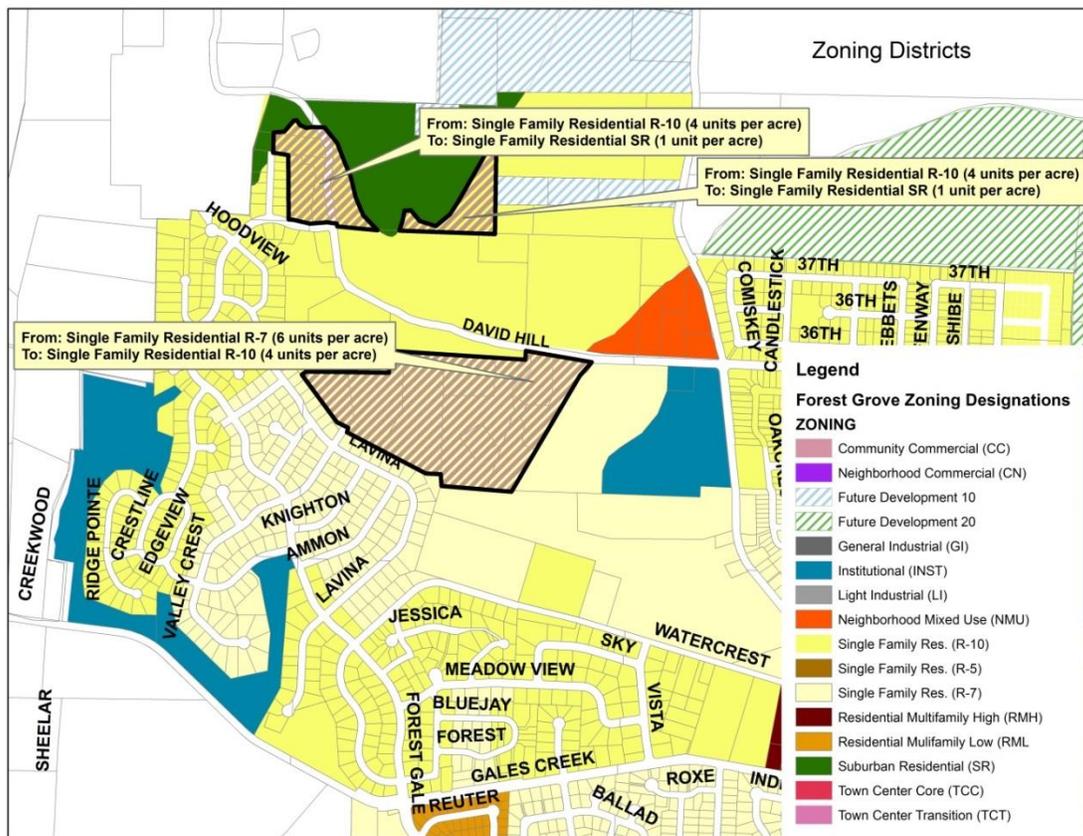


Proposed Zoning Map Amendments

The following zoning map amendments are proposed for the David Hill urban growth area consistent with the land use concept described in Chapter 4.

From	To	Gross Acres
R-7 (6.22 dwellings per net acre)	R-10 (4.35 dwellings per net acre)	36.96
R-10 (4.35 dwellings per net acre)	SR (1.0 dwelling per net acre)	7.13

Since land within the new urban growth boundary area is not in the city limits no zoning map amendments are proposed for this area. The new urban growth boundary area will be rezoned with a City g designation concurrent with annexation actions. The timing of annexation is at the discretion of individual property owners with approval by the City Council. Land in the new urban growth boundary area will be rezoned consistent with the adopted Comprehensive Plan designations described above.

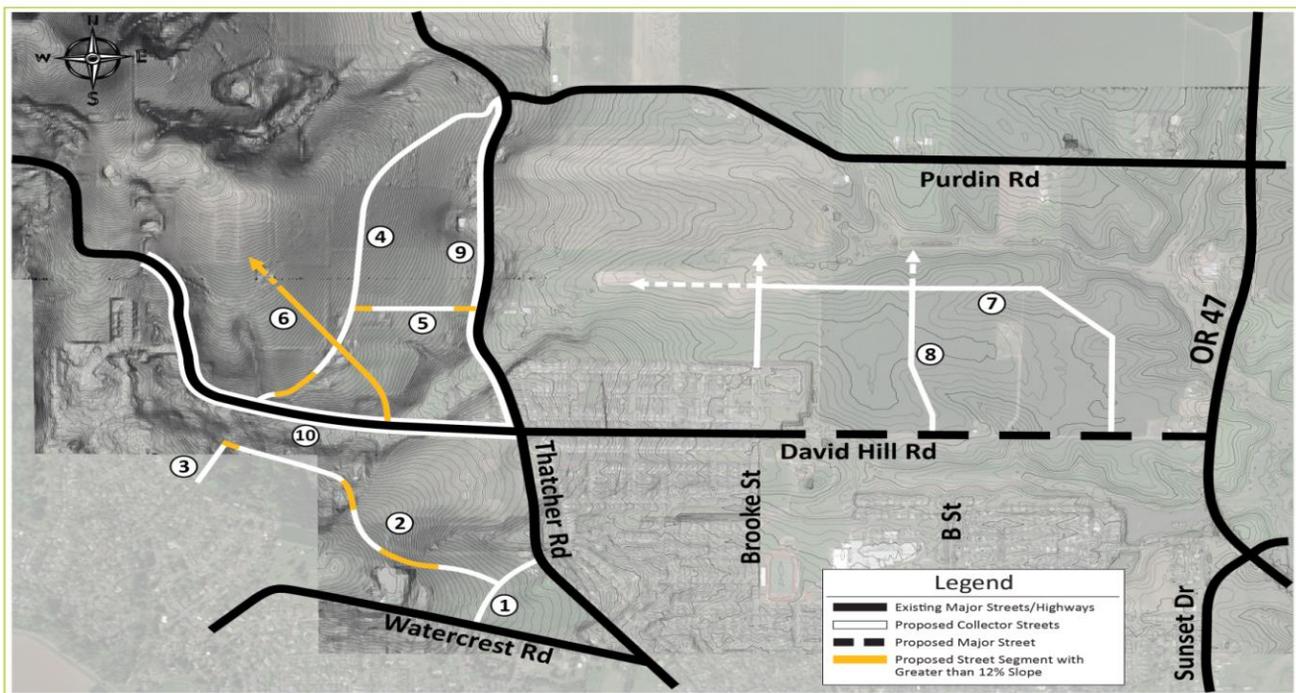


Transportation System

Land use and transportation are inherently linked and should not be considered in isolation. Land use designations mean little if property is inaccessible due to lack of streets or if insufficient roadway capacity exists. Roads currently serving the Westside planning area include David Hill Road, Watercrest Road, Thatcher Road, and Highway 47. To some extent Purdin Road also serves the Westside planning area by providing a connection to the north Hillsboro employment from the northern portion of the David Hill area. The existing roadway network is shown on the map below.

The map also shows proposed conceptual collector street corridors to serve future development. The conceptual street network complies with the Metro Regional Transportation Functional Plan requirement for a system of collector streets placed ½ mile apart unless topography or other factors preclude such placement.

The highlighted street segments on the map are those that exceed 12% slope. Current development standards limit street grade to 12%. An amendment to the Development Code is proposed to allow grades up to 15% for a distance of up to 250 feet unless a longer distance is approved by the City Engineer.



Proposed Street System

Westside Planning Project
Forest Grove, OR

The total estimated cost for the streets identified below is approximately \$37.7 million. This includes adding capacity to the roundabouts on Highway 47 at David Hill Road and Purdin Road. Adding capacity is necessary due to expected traffic impacts from development in the area north of David Hill Road between Highway 47 and Thatcher Road. This is discussed further below. It is expected impacts will occur toward the end of the 20-year planning period depending on the annual number of building permits issued.

No.	Road Name	Project Limits	Description	Estimated Cost
1	Road 1 (Vista Drive Extension)	Watercrest Road to Thatcher Road	Construct new north-south 1,050 foot urban collector street	\$1,000,300
2	Road 2	From Vista Drive	Construct new east-west	\$4,246,000

		Extension west 3,200 feet	urban collector street	
3	Road 3 (Valley Crest Extension)	From terminus of Valley Crest Way north to Road 2	Construct new 600-foot urban collector street	\$787,200
4	Road 4	David Hill Road north to Purdin Road	Construct new 4,700 foot urban collector street	\$6,409,200
5	Road 5 (Plum Hill Improvement)	Existing Plum Hill Lane (privately-owned) to Road 4	Improve Plum Hill Lane to urban collector standards	\$1,212,200
6	Road 6	David Hill Road to urban growth boundary	Construct new 2,300 foot urban collector street	\$2,391,000
7	Road 7 (Brooke Street Extension)	Brooke Street to David Hill Road	Construct new 5,500 foot urban collector street	\$4,766,200
8	Road 8 (B Street Extension)	David Hill Road to Brooke Street	Construct new 1,750 foot urban collector street	\$1,583,700
9	Road 9 (Thatcher Improvement)	David Hill Road to Purdin Road	Full improvements to Council Creek crossing (short-term)	\$1,454,000
9	Road 9 (Thatcher Improvement)	David Hill Road to Purdin Road	Half street reconstruction between David Hill Road to Purdin Road excluding Council Creek crossing (long-term)	\$2,437,500
10	Road 10 (David Hill Improvement)	Thatcher Road to urban growth boundary	Full street reconstruction for 5,100 feet to urban collector street standards	\$3,943,500
11	Improvement to David Hill Road/Highway 47 roundabout	David Hill Road/Highway 47 intersection	Addition of 2 nd circulating lane to provide separate lanes for northbound left turn and northbound through traffic and separate lane for southbound right-turn	\$2,500,000
12	Improvement to Purdin Road/Verboort Road/Highway 47 roundabout	Purdin Road/Verboort Road/Highway 47 intersection	Addition of northbound right-turn slip lane on the south leg of the roundabout and southbound right turn slip lane on the south leg of the roundabout to the overall roundabout intersection.	\$4,000,000
			<i>TOTAL ESTIMATED COST</i>	<i>\$37,730,800</i>

The consultant recommended funding approach for transportation improvements described in the December 2016 Funding Approach report relies primarily on using the current Transportation Development Tax (TDT) revenue, establishing a supplemental transportation system development charge (STSDC), and using outside funding sources. Identified potential outside funding sources

could include the Washington County Major Street Transportation Improvement Program (MSTIP), Metro regional flexible funds for transportation, state funding through the State Transportation Improvement Program (STIP), establishment of a local improvement district or reimbursement district. A local improvement district requires City Council adopt an ordinance establishing a fee assessed against property benefitting from a new infrastructure improvement such as a street. The assessment could be based on the cost of the improvement and the lineal distance of property frontage or the land area benefitted. In contrast, a reimbursement district relies on a property owner or developer paying for a needed improvement upfront. As other benefitting properties develop the benefitting properties reimburse a proportionate share of the cost to the entity that paid for the improvement upfront.

Staff believes the following projects are potentially suitable for outside funding:

- Highway 47/David Hill Road Roundabout;
- Highway 47/Purdin Road Roundabout;
- Thatcher Road between David Hill Road and Purdin Road; and
- Possibly, David Hill Road west of Thatcher Road to the urban growth boundary.

The Highway 47 roundabouts are suitable for outside funding because the facility is owned by ODOT and provides benefit to the City and Washington County road systems. Thatcher Road is suitable for outside funding because it is a Washington County facility linking David Hill Road and Purdin Road. Washington County has expressed interest in transferring jurisdiction to the City. Before the City would accept jurisdiction of Thatcher Road would have to be improved to urban standards. David Hill Road west of Thatcher Road is potentially suitable for outside funding due to complexity of improving this stretch of David Hill Road due to topography and environmental constraints including the stream located to the south of roadway.

Supplemental Transportation System Development Charge Discussion

The project team explored several options for funding the identified backbone/collector street network necessary to serve future development. Unlike other developable areas in City's planning area, the Westside area is devoid of any internal street system. Considering the topography of David Hill the collector street network presents engineering challenges which adds to project costs.

Although the new urban growth boundary area does not have the topographic considerations David Hill does there are challenges. The primary challenge is the traffic capacity of the two roundabouts on Highway 47 at David Hill Road and Purdin/Verboort Road. When the Forest Grove Transportation System Plan was adopted in 2014 it was not envisioned the area would be added to the urban growth boundary by the Legislature. The area was identified as urban reserve and was anticipated to remain agricultural during the twenty year period covered by the Transportation System Plan. As such, traffic volumes contained in the TSP reflect this expectation that the recently added to the urban growth boundary would generate little additional traffic. Since the area is now in the urban growth boundary and the City must assign urban Comprehensive Plan designations to the area traffic impacts must also be considered. Addressing traffic impacts associated with Comprehensive Plan amendments is a requirement of the Oregon Transportation Rule (OAR 660-012-0060). Traffic associated with development in the new urban growth boundary area will significantly impact the roundabouts and degrade operations below acceptable levels as explained

below. As such, the costs for improving the roundabouts to ensure acceptable operations must be considered as part of the adopting the Westside Refinement Plan. This includes identifying a potential source, such as a supplemental transportation system development charge, to fund the needed improvements. This is explored further below.

Adding a supplemental transportation system development charge to the current countywide Transportation Development Tax is one way to address transportation project costs. The amount of any supplemental transportation system development charge requires further evaluation based on a determination of total project costs, area of benefit, and estimated per unit charge. It is suggested that the funding strategy be evaluated further and include additional discussion with property owner and develop input prior to refinement and implementation. To guide this discussion and further evaluation several options for a supplemental transportation system development charge are identified below.

The current (FY 2016-2017) transportation system development tax (TDT) is \$8,278 for single family detached homes and \$5,425 for apartment units. The blended rate based on the estimated number of single family detached and attached units from the land use concept for the Westside area is \$7,914 per unit. Based on dwelling unit yield of 1,950 units in the Westside area the total TDT revenue would amount to approximately \$15.4 million. Since total estimated transportation costs for the collector street system identified above is approximately \$37.7 million there is a revenue shortfall of about \$22.3 million. Policy options for addressing this shortfall are described below.

Transportation Funding Policy Option 1:
(Area Wide TDT with All Projects Funded with TDT Revenue)

One policy option is to establish a supplemental TDT for the entire Westside Planning area. That is one rate for the entire area. Under this approach, a TDT amounting to \$11,435 would be necessary to fill the funding gap for transportation projects in the Westside plan area. Adding the supplemental charge to the current TDT the total transportation fee would be \$19,349 based on the blended rate.

This approach creates some equity issues since traffic impacts are not spread evenly throughout the planning area. For instance, development in the new urban growth boundary area north of David Hill Road requires improvement of the two Highway 47 roundabouts over time. In the David Hill area west of Thatcher Road improvement to David Hill Road and Thatcher Road is necessary as well as construction of a north-south collector street west of Thatcher Road. None of the improvements provide benefit to the new urban growth boundary area.

Transportation Funding Policy Option 2:
(Area Wide TDT with Some Projects Funded by Outside Sources):

The second policy option assumes that improvements to the Highway 47 roundabouts, David Hill Road west of Thatcher Road and Thatcher Road north of David Hill Road are all funded by outside sources. This reduces the total cost of TDT funded projects by approximately \$15.3 million. If this approach is taken the supplemental TDT would be approximately \$3,571 per dwelling unit. The total combined TDT would be \$11,485. This amount is \$7,864 less than Option 1.

Transportation Funding Policy Option 3:
(TDT Revenues and Project Costs Allocated by Subarea):

Policy option 3 looks at dividing transportation revenues and costs by project subarea. One project subarea is David Hill north of Watercrest and west of Thatcher Road. The other project subarea is the new urban growth boundary area north of David Hill Road between Highway 47 and Thatcher Road. This is explored further below.

Option 3A. David Hill Subarea: If 100% of TDT revenue generated in the David Hill Area is used to fund improvements west of Thatcher Road the supplemental system development charge would be approximately \$22,860 for a total fee of \$30,775. This fee could be prohibitive with result potentially being little development in the David Hill subarea. To mitigate some projects could be funded with outside sources. For example, if the Thatcher Road improvements are funded by an outside source the supplemental charge would be \$11,459 and the total fee would be \$19,374.

Option 3B. New Urban Growth Boundary Area: If 100% of the TDT revenue generated in the new urban growth boundary area is used to fund improvements in the new urban growth boundary area the supplemental charge would be approximately \$3,883. The total fee would be approximately \$11,797. If the Hwy 47 roundabout improvements were funded through an outside source there wouldn't be a need for a supplemental TDT. This is because TDT revenue based on development in the new urban growth boundary area would exceed the cost of transportation costs in the new urban growth boundary area by approximately \$2.9 million.

The table below summarizes the identified policy options for consideration by the Planning Commission.

Transportation Development Tax Summary Table

Policy Option	Description	Current TDT Blended Rate	Supplemental TDT Required	Total TDT
1	Area Wide TDT – All Projects Funded With TDT	\$7,914	\$11,435	\$19,349
2	Area Wide TDT – Some Projects Funded with Outside Sources	\$7,914	\$3,571	\$11,485
3A	David Hill Subarea TDT	\$7,914	\$22,860	\$30,775
	David Hill Subarea TDT – Thatcher Road Funded by Outside Source	\$7,914	\$11,459	\$19,374
3B	New Urban Growth Boundary Subarea TDT	\$7,914	\$3,883	\$11,797

One last thought on the policy of establishing a supplemental transportation system development charge. Washington County established supplemental transportation system development charges for the Bonnyslope and North Bethany areas. Due to concerns raised by homebuilders over the amount of the supplemental charge needed; the County adopted a policy to limit the supplemental charge to 96% of the current Transportation Development Tax. If this same policy applied to the Westside planning area the supplemental charge would be limited to \$7,839. This amount is based applying the 96% factor to the blended TDT rate of \$7,914. Under this approach only policy option 2 is viable since the amounts are lower than an added \$7,839. Therefore, a supplemental transportation system development charge for the entire planning area appears the most feasible approach to explore further.

Traffic Operations Analysis

Level of service, delay and volume-to-capacity are used as measures of how well the transportation system functions. The City's adopted minimum level of service standard for the transportation system is LOS (D). This is on a scale of LOS A through LOS F with LOA A being the best situation with little delay. Washington County defines acceptable performance in urban areas as volume-to-capacity ratio of 0.99 with LOS (E) or better. ODOT defines a maximum volume-to-capacity ratio for Highway 47 as being 0.99.

The table below shows estimated Year 2035 PM Peak Hour intersection operations based on the Westside Plan land use concept. The table indicates that operation of the Highway 47 intersections will exceed the ODOT operational standard of a volume-to-capacity ratio of 0.99. Therefore, improvements to the intersections will be required to bring the intersections into acceptable operation and to meet the Oregon Transportation Rule.

Table 3. 2035 PM Peak Hour Intersection Operations with Westside Revised Land Use Scenario

No.	Intersection	Mobility Standard	Level of Service ¹	Average Delay (Sec)*	Volume / Capacity
<i>Unsignalized Intersections</i>					
1	Thatcher Road/Watercrest Road	LOS E/0.99	A/C	21.8 ²	0.15 ²
2	Gales Creek Road/Thatcher Road	LOS E/0.99	A/B	10.8 ²	0.21 ²
5	Highway 47/Martin Road	V/C=0.99	A/F	>200²	>2.00²
<i>Roundabouts</i>					
3	Highway 47/Verboort & Purdin	V/C=0.99	F	87.4^{2,3}	1.34^{2,3}
7	Highway 47/David Hill Road	V/C=0.99	F	91.4^{2,3}	1.33^{2,3}
<i>Signalized Intersections</i>					
4	Highway 47/Sunset Drive	V/C=0.99	C	33.4	0.60
6	Pacific Avenue/Quince Street	V/C=0.99	E	65.5	0.99

* Minor street average delay reported for unsignalized intersections

1 For unsignalized intersections the first value is the free movement; second value is the worst stopped movement. At signalized locations the value is for the entire intersection.

2 Worst stopped movement.

3 Pending single lane roundabout intersection improvements are assumed here.

Improvements at the David Hill/Highway 47 intersection and Purdin Road/Verboort Road/Highway 47 intersection are addressed below. The Martin Road/Highway 47 intersection is included a future study area and will be addressed independently of the Westside planning process.

The table below provides a comparison of Year 2035 PM Peak Hour traffic operations with and without improvements at key highway intersections. As the table indicates improving the capacity of the Highway 47 roundabouts by adding an additional lane brings these intersections into acceptable operation. As explained below the Oregon Department of Transportation supports the identified improvements. ODOT also requests the City adopt the improvements into the financially constrained project lists contained in the Forest Grove Transportation System Plan and Regional Transportation Plan. This approach and staff concerns are explained below.

Table 4. Comparison of 2035 PM Peak Hour Traffic Operations with and without Mitigation at Key Highway 47 Intersections

No.	Intersection	Mobility Standard	Level of Service ¹	Average Delay (Sec)*	Volume / Capacity
Analysis Based on TSP Traffic Volumes					
<u>Without Roundabout (Unsignalized)</u>					
3	Highway 47/Verboort & Purdin	V/C=0.99	A/F	>200 ²	>2.00 ^{2,3}
7	Highway 47/David Hill Road	V/C=0.99	-/F	>200 ²	1.54 ^{2,4}
<u>With Proposed Roundabout</u>					
3	Highway 47/Verboort & Purdin	V/C=0.99	C	27.5	1.06
7	Highway 47/David Hill Road	V/C=0.99	A	7.8	0.81
<u>With Mitigated Roundabout</u>					
3	Highway 47/Verboort & Purdin	V/C=0.99	A	9.3 ⁶	0.89 ⁶
Analysis Based on Westside Traffic Volumes					
<u>With Proposed Roundabout</u>					
3	Highway 47/Verboort & Purdin	V/C=0.99	F	87.4 ⁵	1.34 ⁵
7	Highway 47/David Hill Road	V/C=0.99	F	91.4 ⁵	1.33 ⁵
<u>With Mitigated Roundabout</u>					
3	Highway 47/Verboort & Purdin	V/C=0.99	B	12.4 ⁷	0.92 ⁷
7	Highway 47/David Hill Road	V/C=0.99	B	14.6 ⁸	0.95 ⁸

- * Minor street average delay reported for unsignalized intersections
- 1 For unsignalized intersections the first value is the free movement; second value is the worst stopped movement. At signalized locations the value is for the entire intersection.
- 2 Worst stopped movement.
- 3 Development of local street connections in Forest Grove may divert added WB traffic to this location requiring improvements. This analysis assumes existing lane configuration and traffic control. Subsequent to TSP preparation, improvement of the intersection as a single lane roundabout was undertaken.
- 4 Assumes stop control for side street traffic. Subsequent to TSP preparation, improvement of the intersection as a single lane roundabout was undertaken.
- 5 Pending single lane roundabout intersection improvements are assumed here.
- 6 Mitigation is addition of NB right-turn slip lane
- 7 Mitigation is addition of SB right-turn slip lane
- 8 Mitigation is addition of 2nd circulating lane to provide separate lanes for NB left-turn and NB through, as well as separate lane for SB right-turn.

Oregon Department of Transportation Recommendation

The Oregon Department of Transportation (ODOT) provided a letter to the City with recommendations for ensuring expected traffic impacts to Highway 47 are addressed. The City's transportation consultant prepared a traffic analysis in March 2017 and identified improvements to the two roundabouts on Highway 47 address traffic impacts. The ODOT letter states because the improvements are not included in the City's Transportation System Plan or the Regional Transportation Plan's financially constrained project list they cannot be assumed to be constructed for the purposes of complying with the Oregon Transportation Planning Rule (OAR 660-012-0060). The letter goes on to state to ensure there will not be a significant effect on the state highway facilities ODOT recommends the following condition of approval:

"Until such time the mitigations listed below have been adopted into the city's Transportation System Plan and the Regional Transportation Plan's Financially Constrained projects lists, no approvals of habitable development structures shall be permitted by the city in the area added to the urban growth boundary in 2014 north of David Hill Road between Highway 47 and Thatcher Road.

1. OR 47/David Hill Road Intersection – Add an additional second circulating land to provide separation for northbound left turning and through traffic as well as a separate lane for southbound turns.

2. OR 47/Purdin Rd/Verboort Rd Intersection – Add a northbound right turn slip lane on the south leg of the roundabout and a southbound right turn slip lane on the south leg of the roundabout to the overall roundabout intersection.

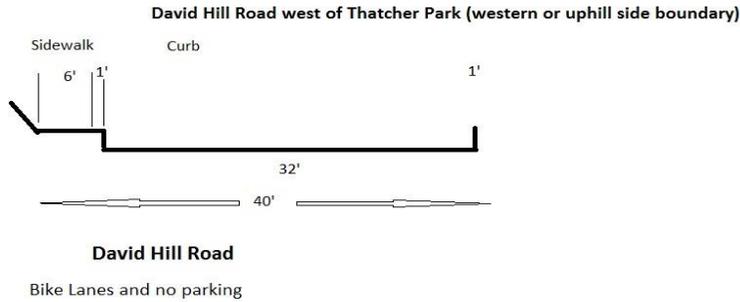
The improvements identified above will be further evaluated with other potential alternatives once capacity improvements are required.”

The City notified ODOT of concerns over the condition the improvement projects be added to the Regional Transportation System Plan Financially Constrained projects list. The reason for this is the City does not have control over adding projects to the Regional Transportation Plan. The process for adding projects to the Regional Transportation Plan requires nomination by the City, review and concurrence by the Washington County Coordinating Committee on Transportation, and approval by Metro (Joint Policy Advisory Committee on Transportation and Metro Council). Therefore, the City cannot guarantee the projects will be included on the Regional Transportation Plan’s Financially Constrained Projects list. If unsuccessful, this limitation creates a de facto moratorium. Discussions between staff and ODOT will continue to address this concern.

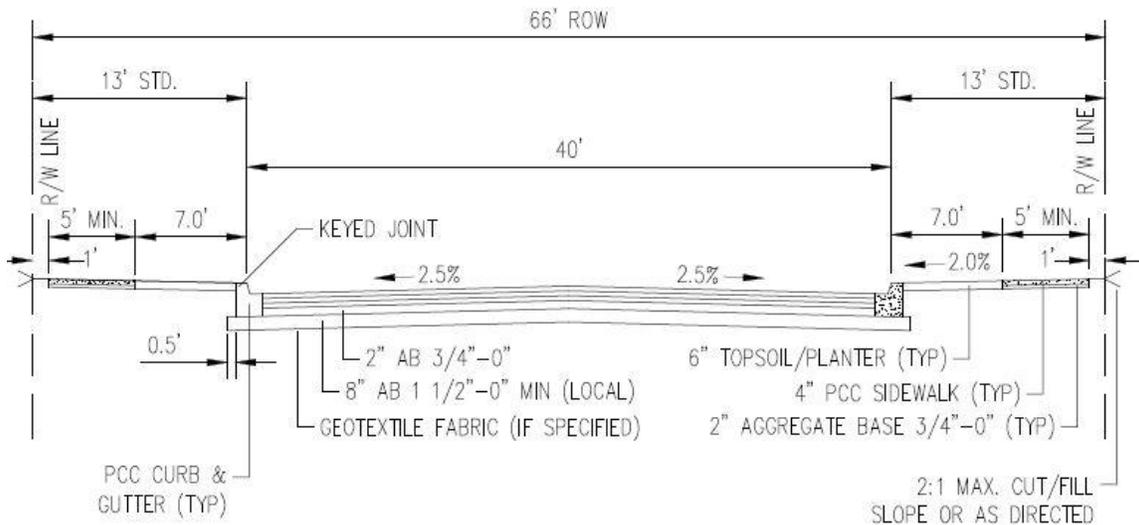
In addition the traffic impacts are due to traffic generation from new development in the new urban growth boundary area. Impacts from the David Hill area have already been accounted for and assumed in the roundabout designs for Highway 47. Thus, any limitations should apply to the new urban growth boundary area only.

David Hill Road Cross-Section

Given the steep topography along the David Hill corridor west of Thatcher Road and presence of a stream and historic landslide area a reduced collector street cross-section is proposed. The cross-section would include a 40 foot right-of-way and 32 feet of pavement. A sidewalk and bike lane would be provided on one side of the street and on-street parking would be prohibited. In contrast, the standard collector street cross-section is 66 feet of right-of-way and 40 feet of pavement with sidewalks and bike lanes on both sides for the street.



The standard collector roadway section is shown below. The cross-section shows sidewalks and a planter area on both sides of the street within a 66 foot right-of-way.

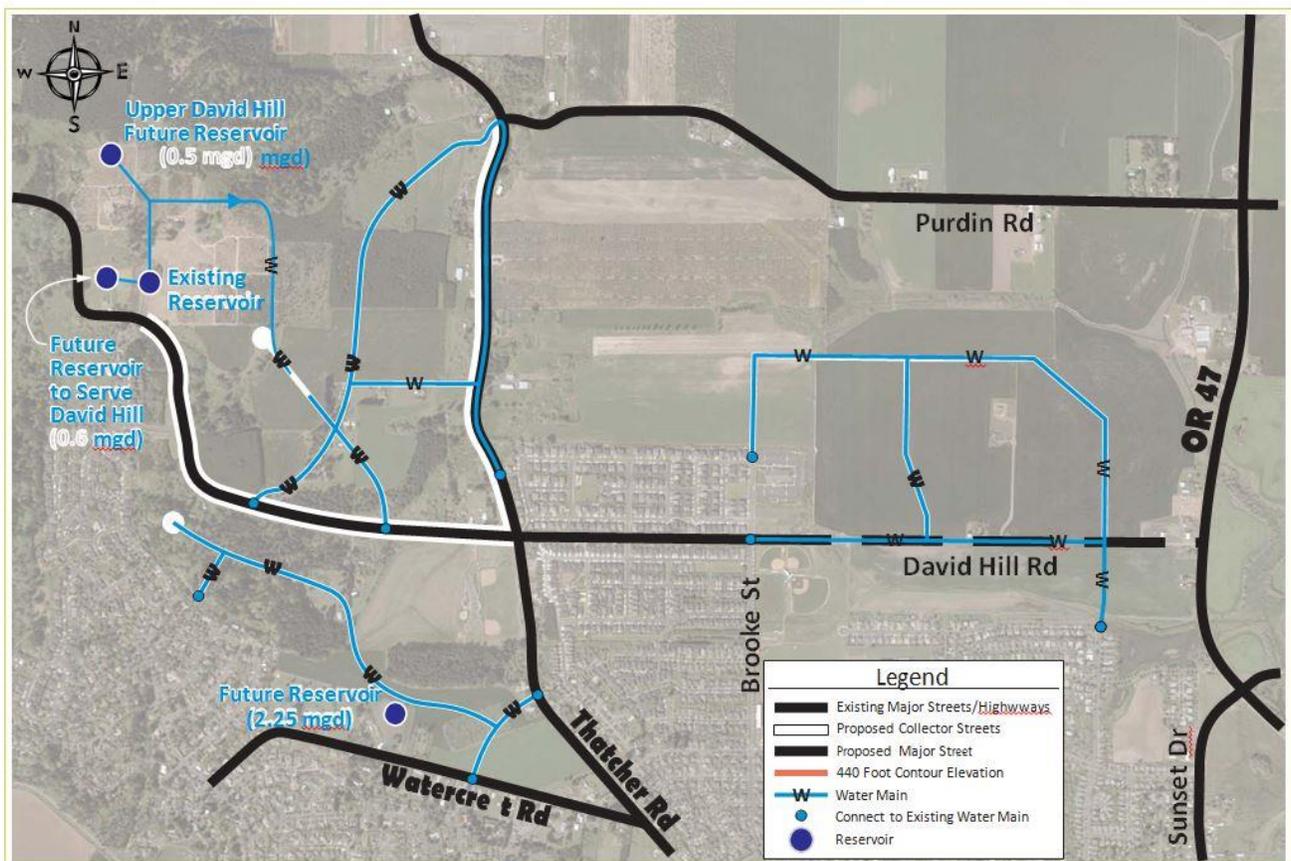


Water System

The ability to provide water at adequate pressure to certain areas of the Westside Planning area is a constraint on development. The map below shows the conceptual water storage and distribution system needed to serve development in the Westside planning area and water system deficiencies. The conceptual system includes a 2.25 million gallon reservoir located near or adjacent to 5.0

million gallon reservoir at the water treatment plant on Watercrest Road. This reservoir will provide service to areas from elevations between 250 feet and 440 feet. The conceptual system also includes a new 500,000 gallon reservoir to serve the highest elevations between 440 feet and 615 feet. This reservoir would be located further up David Hill Road from the existing David Hill Reservoir. In addition, two 300,000 gallon reservoirs located near the existing David Hill reservoir are also shown on the concept map below. These reservoirs will provide service to areas located in the intermediate pressure zone between 250 feet and 440 feet. These improvements are based on the currently adopted Water Master Plan. An update to the Master Plan will occur in 2019 and a new reservoir approach will be considered. Reservoir needs could be consolidated to reduce costs.

The Westside Refinement Plan identifies needed improvements to the water storage and distribution system to serve development in the planning area will be incorporated into the Water System Plan when updated in 2018. The Funding Approach Report (December 2016) indicates that approximately 76% of SDC revenue generated by development will be needed to construct the full project list identified below. Incorporating the Westside project into Water Master Plan update provides an opportunity to address funding needs in a comprehensive way factoring in broader city-wide system requirements. It is suggested that the funding strategy be evaluated further and include additional discussion with property owner and develop input prior to refinement and implementation.



Water Utilities

Westside Planning Project
Forest Grove, OR

The estimated total cost for the identified water system is approximately \$17.5 million. Of this amount, approximately \$8.5 million is attributable to needs in the Westside planning area.

No.	Description	Linear Feet	Total Estimated Cost	Estimated Cost Attributable to Westside Planning Area	Area of Benefit
1	Road 1 water main	1,050	\$63,000	\$63,000	David Hill
2	Road 2 water main	3,200	\$192,000	\$192,000	David Hill
3	Road 3 water main	600	\$36,000	\$36,000	David Hill
4	Road 4 water main	4,700	\$282,000	\$282,000	David Hill
5	Road 5 water main	1,250	\$75,000	\$75,000	David Hill
6	Road 6 water main	2,300	\$138,000	\$138,000	David Hill
7	Road 7 water main	5,500	\$330,000	\$330,000	Purdin Road
8	Road 8 water main	1,750	\$105,000	\$105,000	Purdin Road
9	Road 9 water main	3,500	\$525,000	\$525,000	David Hill
10	One 0.5 MG reservoir (1)	EA.	\$4,182,500	\$875,000	David Hill
11	Two 0.3 MG reservoir	EA.	\$2,910,448	\$1,950,000	Entire Area
12	One 2.25 MG reservoir near Watercrest	EA.	\$2,956,522	\$680,000	Entire Area
	Contingencies and Engineering		\$5,709,728	\$3,282,000	Entire Area
	<i>TOTAL</i>		<i>\$17,505,198</i>	<i>\$8,533,000</i>	

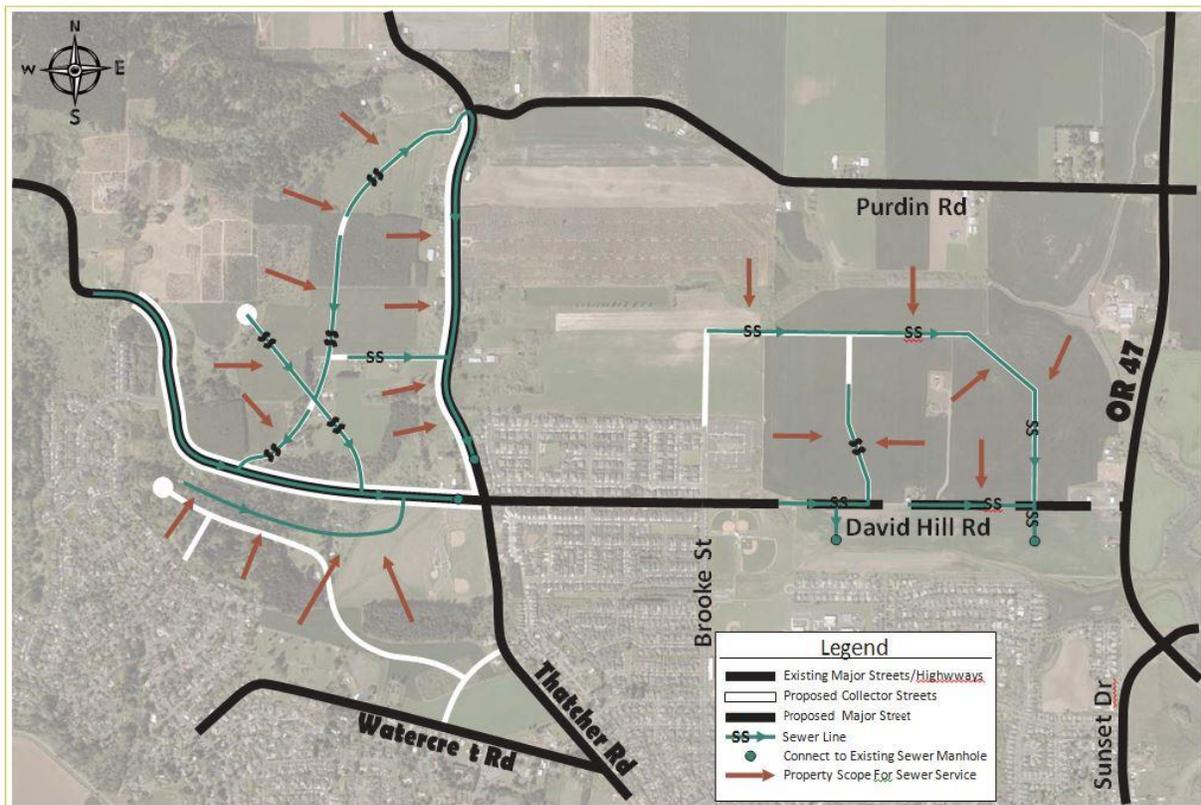
A water system development charge is collected at time of building permit issuance for water system improvements. The current water SDC is \$5,478. FCS Group calculated the level of funding required from the private sector to cover 100% of water system project costs. This analysis is provided in the Funding Approach Report (December 2016), Outside funding is required for the City to construct the full water system project list unless the City devotes at 76% of water SDC revenues from the Westside planning area for project capital costs. The consultant recommended funding strategy for water relies on using at least 76% of water SDC revenues meet capital improvement obligations in the planning area. The consultant further recommends the City consider issuing revenue bonds backed by water rates to a new General Obligation bond to pay for any necessary short-term water capital improvements. It is recommended that this strategy be further evaluated by the City and additional opportunities for public input be provided prior to its refinement and implementation.

Sanitary Sewer

The map below shows sanitary sewer mains that will be constructed with the collector street network. The sewer system shown below provides backbone network that individual development will tie into. The estimated cost for the identified sanitary sewer improvements is approximately \$3.6 million. A possible short-term need includes extending the sanitary sewer line that terminates near Thatcher Park westward. This extension is estimated to cost approximately \$1.1 million and may be too high for any one developer to afford on their own. Funding sources including a local

improvement district, reimbursement district or outside source may be required for this improvement.

The sanitary sewer system improvements identified improvements will be incorporated into the next update of the Sanitary Sewer Master Plan expected in 2019-2020.



Sewer Utilities

Westside Planning Project
Forest Grove, OR

No.	Segment	Estimated Cost
1	Road 1, 2, 3 Sewer Line	\$225,000
4	Road 4 Sewer Line	\$300,000
5	Road 5 Sewer Line	\$82,500
6	Road 6 Sewer Line	\$165,000
7	Road 7 Sewer Line (10")	\$405,000
8	Road 8 Sewer Line (10")	\$255,000
9	Road 9 Sewer Line	\$262,500
10	Road 10 Sewer Line (700 LF 12")	\$382,500
	Contingencies and Engineering	\$1,558,100
	<i>Totals</i>	<i>\$3,635,600</i>

A sanitary sewer system development charge is collected at time of building permit issuance to pay for certain sanitary sewer improvements including increasing capacity. The current sanitary sewer SDC is \$5,300 per dwelling unit. This amount will generate approximately \$10.3 million based on the number of dwelling units estimated for the Westside planning area land use concept. The majority (96%) of this revenue is transferred to Clean Water Service for regional sanitary sewer needs including collection and treatment. The City's share of 4% amounts to about \$413,400 for local sanitary sewer system needs. Given, the cost of the project list above, another funding source is necessary.

The recommended funding approach for sanitary sewers relies primarily on developer dedication of sewer lines below 12 inches in diameter and on allocation of existing sewer system development charge revenues collected in the Westside planning area for Westside planning area sanitary sewer needs. The project consultant evaluated different funding scenarios using distributions based on allocating 100% of the SDC revenue collected in the Westside planning area for projects in the Westside area. The consultant also looked at distributions based on the percentage of population (18%) expected in the Westside area compared to the City as a whole. A midrange distribution using 40% of SDC revenues was also evaluated. Findings from the consultant's analysis are shown below and contained in Appendix I (Funding Approach Report) to the Westside Refinement Plan.

Sewer Funding Strategy Analysis			
	18% of Existing SDC Dedicated to Westside Planning Area	40% of Existing SDC Dedicated to Westside Planning Area	100% of Existing SDC Dedicated to Westside Planning Area
Total Costs	\$3,635,600	\$3,635,600	\$3,635,600
SDC Revenue Based on Current Fee	\$10,886,200	\$10,886,200	\$10,886,200
Less: CWS Revenue Share	\$10,450,752	\$10,450,752	\$10,450,752
City SDC Revenue Share	\$435,448	\$435,448	\$435,448
Less Net City SDC Revenue	<u>-\$78,381</u>	<u>-\$174,179</u>	<u>-\$435,448</u>
Remaining Funding Gap	\$3,557,219	\$3,461,421	\$3,200,152

Source: FCS GROUP.

After identifying the remaining costs, the table below shows the fee amount the City should consider to fully fund remaining costs. Each funding source shown below will address the full deficiency. Because the City can require developers to build all projects on the list, 'developer dedications' are shown for the remaining project costs as the primary funding option.

Sewer Funding Options			
	18% of Existing SDC Dedicated to Westside Planning Area	40% of Existing SDC Dedicated to Westside Planning Area	100% of Existing SDC Dedicated to Westside Planning Area
Costs			
Remaining Costs	\$3,557,219	\$3,461,421	\$3,200,152
New Fee to Recover Remaining Costs in Full			
Developer Dedications	\$3,557,219	\$3,461,421	\$3,200,152
New SDC (per unit)	\$1,732	\$1,685	\$1,558
Utility Fee (fixed charge per month)	\$14.43	\$14.04	\$12.98
Local Option Levy (per \$1,000 AV)*	\$0.87	\$0.85	\$0.79
Local Option annual cost/\$300k home	\$262	\$255	\$236
Local Improvement District**	\$4,800,262	\$4,670,987	\$4,318,420

* assumes special levy applied to Westside Plan District over 10 years.

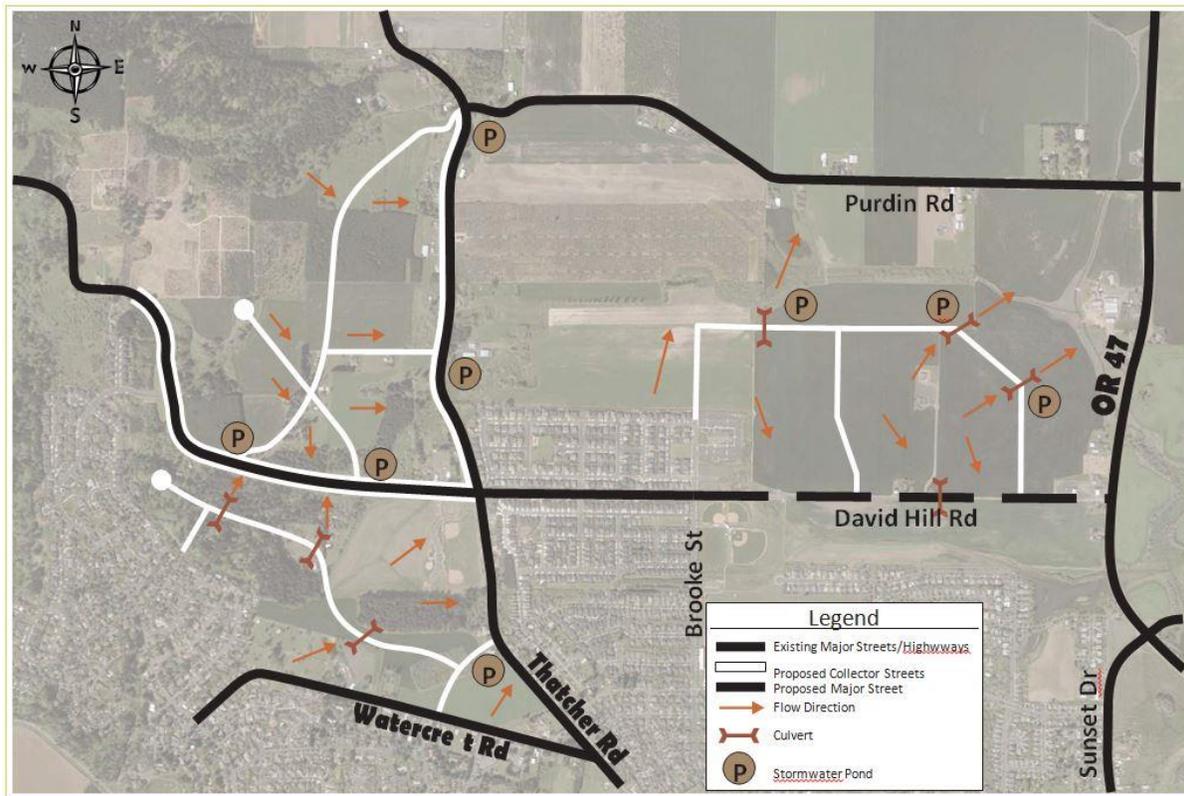
** assumes LID payments are financed at 6.5% over 10 years.

Source: FCS GROUP.

Further discussion with Clean Water Services is required to implement an approach such as those described above. It is suggested that the funding strategy be evaluated further and include additional discussion with property owner and develop input prior to refinement and implementation.

Storm Sewer and Drainage

The map below shows the proposed storm water management system needed for the collector street system. The proposed system is based on the use of ponds to treat storm water. The arrows indicate the direction of water flow. The analysis of storm water system needs is based on the lineal footage of the road layout. At this time, the local streets that support development have not been included in the analysis since local roads will be based on specific development proposals. Runoff from property adjacent to the public street system is also not included. The identified storm sewer projects identified on the map below will be incorporated in the next update to the Storm Drainage Master Plan.



Stormwater Utilities

Westside Planning Project
Forest Grove, OR

The table below shows estimated costs for the stormwater/drainage improvements needed for the collector road system.

No.	Segment	Estimated Cost
1	Road 1, 2,3 Storm Pond	\$75,000
2	Road 4 Storm Pond	\$75,000
3	Road 5 and 9 Storm Pond	\$100,000
4	Road 6 and 10 Storm Pond	\$150,000
5	Road 7 Storm Pond	\$200,000
6	Road 8 Storm Pond	\$50,000
7	Road 1, 2 3 Stormwater	\$35,000
8	Road 4 Stormwater Treatment	\$35,000
9	Road 5 and 9 Stormwater	\$70,000
10	Road 6 and 10 Stormwater	\$70,000
11	Road 7 Stormwater Treatment	\$20,000
12	Road 8 Stormwater Treatment	\$20,000
	Contingencies and Engineering	\$675,000
	<i>Totals</i>	<i>\$1,575,000</i>

The estimated cost for the identified storm water management system is approximately \$1.6 million. Because the current storm water system development charge is \$510 per dwelling existing revenue does very little to cover required capital costs leaving a funding gap. The table below shows the funding gap estimated by the project consultant.

Stormwater Funding Strategy Analysis			
	18% of Existing SDC Dedicated to Westside Planning Area	40% of Existing SDC Dedicated to Westside Planning Area	100% of Existing SDC Dedicated to Westside Planning Area
Total Costs	\$1,575,000	\$1,575,000	\$1,575,000
SDC Revenue Based on Current Fee	\$1,047,540	\$1,047,540	\$1,047,540
Less SDC Revenue Share	\$188,557	\$419,016	\$1,047,540
Remaining Funding Gap	\$1,386,443	\$1,155,984	\$527,460

Source: FCS GROUP.

After identifying remaining project costs, the table below shows possible methods that could fully fund the revenue shortfall for storm sewer projects tied to the collector road system.

Stormwater Funding Options***			
	18% of Existing SDC Dedicated to Westside Planning	40% of Existing SDC Dedicated to Westside Planning	100% of Existing SDC Dedicated to Westside Planning
Costs			
Remaining Costs	\$1,386,443	\$1,155,984	\$527,460
New Fees to Recover Remaining Costs in Full			
New SDC (per unit)	\$675	\$563	\$257
Utility Fee (fixed charge per month)	\$5.62	\$4.69	\$2.14
Local Option Levy (per \$1,000 AV)*	\$0.34	\$0.28	\$0.13
Local Option annual cost/\$300k home	\$102	\$85	\$39
Local Improvement District**	\$1,870,925	\$1,559,934	\$711,777

* assumes special levy applied to Westside Plan District over 10 years.

** assumes LID payments are financed at 6.5% over 10 years.

*** City Staff, compiled by FCS Group.

Source: FCS GROUP.

The consultant recommended funding approach relies upon the existing system development charge and includes a supplemental storm water rate surcharge of approximately \$7 per month for households within the Westside Planning area. The consultant's analysis suggests the rate surcharge could be phased in over a period of five years and indexed with inflation. If the rate surcharge is insufficient consideration could be given to using local improvement and reimbursement districts for a share of funding costs. Further discussion of this approach is needed through the Stormwater and Drainage Master Plan update scheduled to be completed by 2020.

Proposed Development Code Amendments

Amendments to the Forest Grove Development Code are proposed to implement portions of the Westside Refinement Plan. The proposed amendments include requiring geotechnical and engineering studies for land with slopes greater than 10% (Code Section 10.8.310 – Hazard Areas). The current requirement is 20%.

Another amendment is allowing grades of up to 15% for collector streets for distances no greater than 250 feet (Code Section 10.8.610(M) –Grades and Curves). The current maximum is 12%. This will allow for less environmental disturbance for road construction and less cost.

IMPLEMENTATION ACTIONS

Carrying out the policy framework contained in the Westside Refinement Plan requires the following Planning Commission actions:

- Recommendation to City Council to adopt an ordinance adopting the Westside Refinement Plan;
- Recommendation to City Council to adopt an ordinance amending the Comprehensive Plan Map to reflect the land use concept contained in the Refinement Plan;
- Recommendation to City Council to amend the zoning map for the areas in the city limits north of David Hill Road and west of Thatcher Road consistent with the land use concept contained in the Westside Refinement Plan;
- Recommendation to City Council to amend the text of the Development Code;
- Recommendation to City Council to amend the Transportation System Plan to establish the conceptual collector street system identified in the Westside Refinement Plan.

The Westside Refinement Plan includes goals, policy recommendations, and actions for carrying-out the plan. The goals, policies and actions address land use, public facilities, natural resources, natural hazards, transportation and funding needed infrastructure to support the land use concept. In general the goals, policies and actions speak to:

- Physical limitations of the land in the Westside area such as slope and soil stability;
- Promoting a mix of land uses in the area;
- Promoting efficient and cost-effective land development;
- Promoting an orderly transition from rural land to urban land use;
- Encouraging a variety of housing types;
- Addressing potential visual impacts due to development;
- Identifying a context sensitive street network addressing the characteristics of the Westside planning area; and
- Addressing funding for infrastructure improvements.

- Addressing local and regional street network capacity constraints anticipated from development.
- Minimizing development impacts on natural resources

The proposed goals, policies and actions contained in the Westside Refinement Plan are described below. Policies for funding needed infrastructure are based on development paying for needed improvements. The City will seek outside funding for infrastructure needs as appropriate especially for transportation improvements. In addition, the City will work with Clean Water Services to discuss the potential of using some of the regional sanitary sewer system development charge for projects in the Westside planning area.

Land Use

Goal 1.1: Establish land use designations for the Westside planning area based on the physical limitations of the land.

Policy 1.1.1: Land use designations for the Westside planning area should be based on identified environmental constraints including steep slopes and mapped landslide areas.

Action 1.1.1: Amend the Forest Grove Comprehensive Plan Map and Official Zoning map to implement the preferred land use concept for the Westside Planning area which takes into account physical limitations of the land.

Policy 1.2.1: The physical limitations of the land should be the basis for determining the density, location and type of development in the Westside planning area.

Action 1.2.1: Amend the Forest Grove Development Code to ensure the physical limitations of the land in the Westside planning area are considered during the development review process.

Policy 1.3.1: A mapped landslide area is identified in the area south of David Hill Road between Forest Drive and Antler Lane. Development within the mapped landslide area should be avoided.

Action 1.3.1: Amend the Development Code to allow for the transfer of density from environmentally constrained areas to unconstrained locations with the approval of the Planning Commission.

Policy 1.4.1: A geological and engineering assessment for development north of David Hill Road and west of Thatcher Road shall be required to ensure suitability of proposed development from an engineering perspective.

Action 1.4.1: Amend the Forest Grove Development Code to require submittal of a geological and engineering assessment prepared by a certified engineering geologist for any development site with an average cross-slope of 10% or more or areas likely to have adverse soils. The results of the geological assessment should provide the

basis for appropriate mitigation measures needed to address geological and soil constraints.

Goal 1.2: Establish land use designations for the Westside planning area that provides opportunities for a variety of land uses including residential, commercial, educational and recreational.

Policy 1.2.1: Land use designations adopted for the Westside planning area should provide opportunities for a variety of land uses including residential, commercial, educational and recreational.

Action 1.2.1: Amend the Forest Grove Comprehensive Plan Map and Zoning map to implement the preferred land use concept for the Westside planning area which provides opportunities for a variety of land uses.

Goal 2.1: Promote efficient and cost-effective land development in the Westside planning area.

Policy 2.1.1: Establish land use designations and development densities for the Westside planning area taking into account the cost of providing and funding urban services including future repair and replacement costs.

Action 2.1.1: Amend the Forest Grove Development Code planned and subdivision regulations as appropriate to encourage clustering development to minimize infrastructure cost.

Policy 2.1.2: Encourage the efficient use of developable land through techniques such as clustering housing and providing a variety of housing types within neighborhoods including cottage housing, accessory dwelling units and attached housing on corner lots.

Action 2.1.2: Amend the Forest Grove Development Code planned development and subdivision regulations as appropriate to promote the efficient use of developable land through techniques such as clustering housing, cottage housing, accessory dwellings and attached housing on corner lots in subdivisions.

Goal 2.2: Promote an orderly transition from rural to urban land use within the urban growth boundary.

Policy 2.2.1: Establish land use designations in the Westside planning area to promote an orderly transition from rural to urban land use within the urban growth boundary.

Action 2.2.1: Amend the Forest Grove Comprehensive Plan Map and Official Zoning map to implement the preferred land use concept for the Westside planning area.

Goal 3.1: Promote complete neighborhoods where a variety of land uses and activities are located in proximity with residential areas.

Policy 3.1.1: Identify locations on the Forest Grove Comprehensive Plan Map and Official zoning map for non-residential land uses including retail, office, park land, an elementary school, and a fire station.

Action 3.1.1: Amend the Forest Grove Comprehensive Plan Map and Official Zoning to implement the preferred land use concept for the Westside planning area.

Goal 4.1: Encourage a variety of housing types throughout the Westside Planning area.

Policy 4.1.1: Establish development regulations for planned developments to encourage a variety of housing types within individual developments.

Action 4.1.1: Amend the Forest Grove Development Code to encourage a variety of housing types within individual developments.

Goal 5.1: Provide opportunity for affordable housing types in the Westside planning area.

Policy 5.1.1: Establish development regulations to provide incentives for housing types affordable to households and families earning 80% or less of the Forest Grove area median income as defined by the U.S. Department of Housing and Urban Development.

Action 5.1.1: Amend the Forest Grove Development Code to provide incentives for housing affordable to households earning 80% or less of the Forest Grove area median income as defined by the U.S. Department of Housing and Urban Development.

Goal 6.1: Ensure land development on David Hill considers the visual impacts of development from lower elevation view corridors especially the Town Center.

Policy 6.1.1: Minimize visual impacts of development on David Hill as viewed from lower elevation view corridors especially the Town Center.

Action 6.1.1: Amend the Forest Grove Development Code to require a visual impact assessment and mitigation measure for development proposals west of Thatcher Road.

Public Facilities

Goal 7.1: Ensure that adequate public utilities needed to serve development in the Westside Planning area are provided in an equitable and cost-effective manner.

Policy 7.1.1: The physical limitations of the land should be a basis for determining the location of utility connections so as to provide utilities in a cost effective manner and to minimize development impacts.

Action 7.1.1: Amend the Forest Grove Development Code and Public Works Design Standards to ensure that the physical limitations of the land serve as a basis for determining the location of utility connections to reduce the costs and development impacts.

Policy 7.2.1: Undertake studies and update the City's infrastructure facility plans to incorporate recommendations from the Westside Refinement Plan.

Action 7.2.1: Undertake a siting study to identify possible locations for future water reservoir(s) needed to serve development in the planning area.

Action: 7.2.2: Amend the Forest Grove Water System Plan to include the water system recommendations contained in the Westside Refinement Plan.

Action 7.2.3: Amend the Forest Grove Storm Drainage Master Plan should be updated to incorporate recommendations of the Westside Refinement Plan.

Action 7.2.4: Amend the Forest Grove Sanitary Sewer Master Plan should be incorporated to incorporate the recommendations of the Westside Refinement Plan.

Policy 7.3.1: Low impact design techniques for storm water drainage north of David Hill Road and west of Thatcher Road should be avoided due to poor soil infiltration characteristics in the planning area.

Action 7.3.1: Amend the Forest Grove Development and Public Works Design Standards to restrict the use of low impact design techniques for storm water drainage north of David Hill Road and west of Thatcher Road due to poor soil infiltration characteristics.

Policy 7.4.1: Opportunities for needed public facilities including an elementary school and neighborhood park consistent with the Parks and Recreation Master Plan shall be provided in the Westside planning area.

Action 7.4.1: Recreation needs anticipated from development in the Westside planning area should be included in the Forest Grove Parks, Recreation and Open Space Master Plan and locations of public park land shall be identified on the Forest Grove Comprehensive Plan Map.

Transportation

Goal 8.1: Establish a context sensitive street network addressing the characteristics of the Westside planning area.

Policy 8.1.1: Required cut and fill for streets should be minimized to reduce cost and environmental impacts.

Action 8.1.1: Amend the Forest Grove Development Code to allow for collector street segments exceeding 12% slope to minimize required cut and fill and environmental impacts.

Action 8.1.2: Amend the Forest Grove Transportation System Plan and Development Code to reduce the minimum right-of-way and street cross-section requirements in areas with environmental constraints.

Policy 8.2.1: Local streets serving individual homes should follow slope contours to minimize necessary cut and fill and avoid street segments exceeding 12% slope.

Action 8.2.1: Amend the Forest Grove Development Code

Goal 8.2: Establish a transportation system that meets regional transportation planning requirements for transportation facility type and function.

Policy 8.2.1: The collector street network serving the David Hill planning area should strive to meet the Metro Regional Transportation Functional Plan requirements for collector road spacing.

Action 8.2.1: Amend the Forest Grove Transportation System Plan to identify the preferred collector street network for the Westside planning area.

Goal 8.3: Seek funding for needed transportation related improvements necessary to serve development and the wider transportation needs of the City.

Policy 8.3.1: The City should explore the jurisdictional transfer of Thatcher Road to the City and potential funding for improvement to urban standards through the Washington County Major Streets Transportation Improvement Program and regional transportation funding programs.

Action 8.3.1: Initiate discussions with Washington County for jurisdictional transfer of Thatcher Road from Gales Creek Road to Purdin Road.

Action 8.3.2: Pursue funding for improvement of Thatcher Road to City standards through County and regional transportation funding programs such as the Washington

County Major Street Transportation Improvement Program and Metro Regional Flexible Funds program.

Goal 8.4: Address local and regional street network capacity constraints anticipated from development.

Policy 8.4.1: Address identified capacity constraints at Highway 47 intersections due to anticipated development in the Westside Planning area.

Action 8.4.1: when updated to address amendments the Regional Transportation Plan, amend the Forest Grove Transportation System Plan to include mitigation measures necessary to address capacity constraints at the David Hill Road/Hwy. 47 and Purdin Road/Hwy. 47 intersections due to development in the Westside planning area.

Natural Resources

Goal 9.1: Minimize development impacts on natural resources.

Policy 9.1.1: Strive to preserve tree stands over one acre to the maximum extent possible.

Action 9.1.1: A tree inventory and tree protection management plan should be prepared by a certified arborist prior to development activity.

Action 9.1.2: The tree protection management strategy should be reviewed by the Community Forestry Commission for recommendations as part of the development review process.

Policy 9.3.1: Priority should be given to clustering development to accommodate needed housing while preserving large blocks of forest land.

Action 9.3.1: Amend the Forest Grove Development to provide incentives for clustering development to avoid impacts on natural resources including forested land.

Natural Hazards

Goal 10.1: All development shall demonstrate suitability relative to the natural hazard limitations of the Westside planning area.

Policy 10.1: Applications for development north of David Hill Road and west of Thatcher Road shall include data verifying locations of potential slope and soil instabilities prior to development.

Action 10.1.1: Development regulations shall require field verification of areas with potential slope and soil instabilities prior to development in order to assess potential impacts of development and risk to the site and other properties. The field verification

shall be the basis for determining appropriate mitigation measures including avoidance of the area.

Policy 10.2: Applications for development in the Westside planning area shall include a liquefaction analysis for areas susceptible to liquefaction during an earthquake event. Techniques to mitigate potential impacts shall be recommended by the Geotechnical Engineer of Record.

Action 10.2.1: Amend the Forest Grove Development Code to require a liquefaction analysis based on the relevant Oregon Structural Specialty Code prior to development in areas susceptible to liquefaction during an earthquake event.

Funding Approach

Goal 11.1: Establish an equitable funding approach for needed infrastructure serving the Westside planning area.

Policy 11.1: Funding for needed infrastructure in the Westside Planning area may require a variety of funding sources including system development charges, local improvement districts, reimbursement districts, utility fees, or other funding approaches authorized by state law.

Action 11.1.1: Work with affected property owners to implement a fair and equitable funding approach for needed infrastructure.

Policy 11.2: The funding approach for needed infrastructure in the Westside planning area shall consider equity including a fair distribution of cost among property owners, developers, future Westside area residents and existing City residents.

Action 11.2.1: Work with affected property owners to implement a fair and equitable funding approach for needed infrastructure.

Policy 11.3: The funding approach for needed infrastructure in the Westside planning area shall consider timing and reliability of revenue in relationship to the planned schedule of capital expenditures.

Action 11.3.1: Amend City codes as necessary to implement a funding approach for needed infrastructure in the Westside planning area taking into account timing and reliability of revenue.

Policy 11.4: Seek outside funding for these road improvements: Thatcher Road north of David Hill Road, David Hill Road west of Thatcher Road, new collector road connecting David Hill Road with Purdin Road, Highway 47/David Hill Road roundabout improvement, Highway 47/Purdin Road/Verboort Road improvement.

Action 11.4.1: Add the transportation improvements identified above to the Forest Grove Transportation System Plan and Washington County Transportation Development Tax projects list.

Action 11.4.2: Seek adding the projects identified above to the Regional Transportation System Plan projects list.

Action 11.4.3: Apply for funding of road improvements through the Washington County Major Street Transportation Improvement Program (MSTIP), Metro Regional Flexible Funds Program, and State Transportation Improvement Program.

Policy 11.5: Work with Clean Water Services to use a share of sanitary sewer system development charge revenue to fund sewer lines in the Westside planning area.

Action 11.5.1: Initiate discussions with Clean Water Services to use a portion of sanitary sewer system development charge revenue for regional needs to fund sanitary sewer fund improvements in the Westside Planning Area.

Policy 11.6: Establish system development charges for needed infrastructure improvements in the Westside planning area as part of updates to the City's facility master plans beginning in 2018.

Action 11.6.1: Incorporate system development charge funding needs when facilities master plans are updated including the Transportation System Plan, Sanitary Sewer Master Plan, Water Master Plan and Storm Water and Drainage Master Plan.

Policy 11.7: Pursue a storm water rate surcharge to fund needed storm water facility improvements in the Westside planning area.

Action 11.7.1: Draft a resolution for City Council approval to establish a storm water rate surcharge if needed to fund storm water facility improvements in the Westside planning area.

FINDINGS (Attachment B)

Detailed findings of fact supporting the recommendation to adopt the Westside Refinement Plan and accompanying implementation measures are provided in Attachment B.

PUBLIC NOTICE (Attachment C)

State mandated Measure 56 notice was mailed to potentially affected property owners on April 25, 2017. Notice was also sent to property owners within 300 feet of the Westside planning area consistent with Development Code §10.1.610(C). In addition, notice of the Planning Commission's public hearing was published in the *News-Times* on May 10, 2017 consistent with Development Code §10.1.710 and §10.1.720.

OVERVIEW OF COMMENTS RECEIVED (Attachment D)

Matt Dale (Forest Gale Heights Neighborhood) Mr. Dale contacted staff by voicemail and E-mail to express significant concern about the notice mailed prior to the Planning Commission public hearings. Mr. Dale's concerns included the legal wording and lack of detail. The notice conformed to requirements of Measure 56 which requires certain wording the notice. The notice also conformed to the requirements of the Development Code for notices including identifying the applicable review criteria. In response, staff concurred with Mr. Dale's concern and provided a second notice with more information about the proposal.

In addition, to Mr. Dale's concern about the notice he expressed concern about the potential impact development may have on views from his property and potential impact to a large wooded area nearby. Mr. Dale provided the attached photo showing the view. Staff explained to Mr. Dale the developable area near his home has been in the urban growth boundary since 1983 and was zoned Single Family Residential R-7 (approximately 6 units per acre) when annexed in 2007. The property was annexed during the voluntary annexation process initiated by the City. Staff also explained the largely wooded area is zoned Single Family Residential R-10 (approximately 4 units per acre).

Regarding potential view impacts the Westside Refinement Plan includes goals and policies to reduce potential view impacts. This includes:

- Goal 6.1: Ensure land development on David Hill considers the visual impacts of development from lower elevation view corridors especially the Town Center.
 - Action 6.1.1: Amend the Forest Grove Development Code to require a visual impact assessment and mitigation measures for development proposals west of Thatcher Road.

In addition to the goal and policy above, the Westside Plan also includes a policy to encourage the clustering of housing. Clustering of housing could serve to reduce impacts of development on sensitive natural areas included wooded tracts.

Mary Van Vliet (Quail Run Estates) Ms. Van Vliet contacted staff by E-mail to state her desire that the opportunities for shopping be provided in the area. The land use concept and zoning recommendations for the Westside Area identifies areas for non-residential land uses intended to complement the area. This includes the Neighborhood Mixed Use area north of Thatcher Park and the proposed Neighborhood Mixed Use area north of David Hill Road near B Street and Main Street.

Kelly Peterson (Falcon Ridge Neighborhood) Ms. Peterson inquired as to how development on David Hill might affect views from the Falcon Ridge Neighborhood. Staff responded that although potential view impacts will not be known until development is proposed and reviewed; the Westside Refinement Plan includes goals and policies to reduce potential view impacts. This includes:

- Goal 6.1: Ensure land development on David Hill considers the visual impacts of development from lower elevation view corridors especially the Town Center.
 - Action 6.1.1: Amend the Forest Grove Development Code to require a visual impact assessment and mitigation measures for development proposals west of Thatcher Road.

RECOMMENDATIONS: Staff recommends the Planning Commission:

- 1) Take public comments on the proposed Westside Refinement Plan and accompanying implementation measures;
- 2) Adopt a motion recommending City Council, adopt by ordinance, the Westside Refinement Plan and accompanying implementation measures; and
- 3) Adopt a motion approving the findings and facts relied upon supporting the Planning Commission's decision.

ATTACHMENTS:

- A. Westside Refinement Plan and Appendices
- B. Findings and Facts Relied Upon
- C. Public Notices
- D. Public Comments Received