



Planning Commission Public Hearing Legislative Amendments to the Forest Grove Transportation System Plan

Community Development Department, Planning Division

WORK SESSION HELD: July 18, 2022

HEARING DATE: August 8, 2022

FILE NUMBER: 311-22-000026-PLNG

APPLICABLE POLICIES:

- ☐ Oregon Statewide Land Use Planning Goal 9 (Economic Development)
- ☐ Oregon Statewide Land Use Planning Goal 12 (Transportation)
- ☐ Oregon Transportation Planning Rule (OAR Chapter 660, Division 12)
- ☐ Oregon Highway Plan Bypass Policies
- ☐ Metro Regional Framework Plan
- ☐ Metro Regional Transportation Functional Plan
- ☐ Forest Grove Comprehensive Plan Goals and Policies

CITY STAFF:

Daniel Riordan, Senior Planner
Bryan Pohl, Community Development Director
Greg Robertson, Public Works & Engineering Director

RECOMMENDATION: Staff recommends that the Planning Commission adopt a motion approving Planning Commission Findings and Decision Number 2022-07 (Attachment B), recommending City Council approval of proposed amendments to the Forest Grove Transportation System Plan affecting the pedestrian, bicycle, and street networks in the Highway 47/Oak Street area.

I. LIST OF ATTACHMENTS

The following attachments were received, marked, and entered into the record as evidence for this application at the time this staff report was written. The exhibits below contain the facts relied upon by staff in making a recommendation to the Planning Commission.

ATTACHMENT A: Application

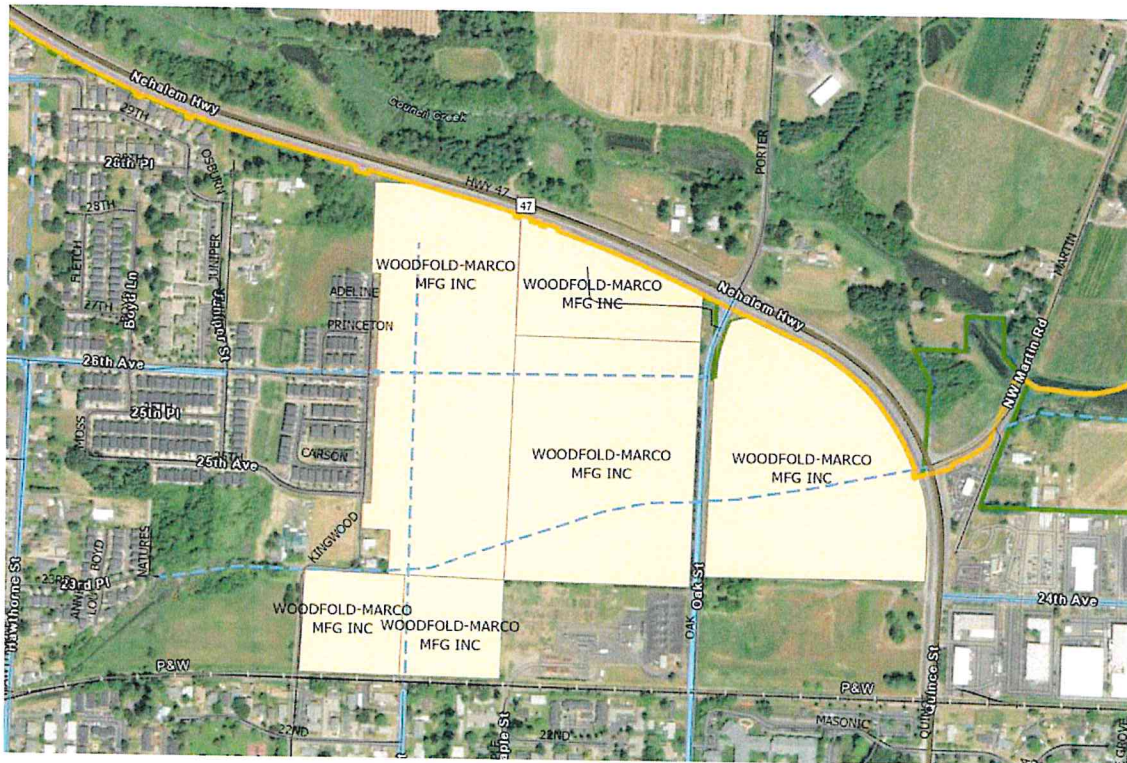
1. Narrative and Applicant's Responses to Decision Considerations
2. Preliminary Traffic Circulation Plan (Maps)
3. Alternative Realignment Concept Plan (Map)
4. Traffic Analysis Technical Memorandum
5. Fiscal and Economic Impact Analysis
6. Neighborhood Meeting Documentation
7. Pre-Application Conference Documentation
8. Scoping Memorandum Materials
9. Stakeholder Correspondence and Letters of Support

ATTACHMENT B: Draft Planning Commission Findings and Decision No. 2022-07

II. BACKGROUND

Woodfold-Marco, a local manufacturer of wood accordion doors, owns six parcels totaling approximately 70 gross acres of land in the Oak Street planning area in north-central Forest Grove. The Woodfold property, and the surrounding Oak Street planning area is zoned General Industrial and is largely undeveloped. There is a residence and various outbuildings located at the northern portion of the site adjacent to Oak Street. The map below shows the Woodfold property and the future street network adopted in the Forest Grove Transportation System Plan.

**Oak Street Area
Parcels Owned by Woodfold-Marco
Proposed Collector Street Extensions**



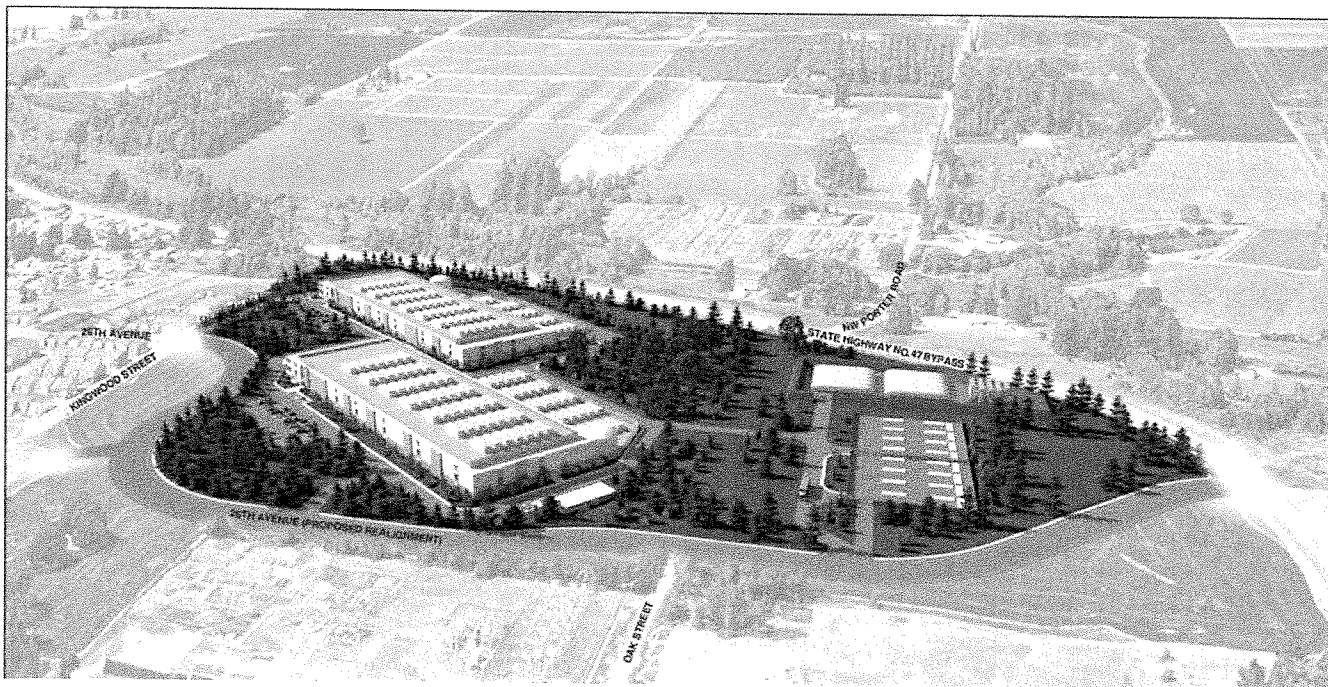
Woodfold has been holding the property in reserve for future development. Over the past decade Woodfold has expressed interest in a variety of development concepts for their property including mixed-use or industrial uses. At this time, Woodfold is interested in preserving their land for large lot industrial development. The proposed TSP amendment would allow for consolidating parcels with secure perimeter access. The TSP recognizes that specific conceptual roadway alignments will be refined based on further engineering and development review. The TSP is a high-level policy document and not intended for in-depth transportation analysis. Such analysis occurs as part of the development review process.

It should be noted, future development of property, including the Woodfold parcels will be reviewed through a separate Type II (Limited Land Use Review) process and not as part of the TSP amendment. Type II decisions are reviewed administratively by staff since these decisions do not require discretion. Public notice and opportunity for comment are provided to property owners and

residents within 300 feet of the development site. Type II decisions are appealable to the Planning Commission and City Council. City Council decisions are appealable to the Oregon Land Use Board of Appeals (LUBA).

The image below shows how the site could be developed for a large lot industrial user after the TSP is amended.

Development Concept



III. THE TSP AMENDMENT APPLICATION

On June 21, 2022, AKS Engineering and Forestry, on behalf of Rowan Digital Infrastructure and Woodfold, submitted an application to the City requesting amendments to the 2014 Forest Grove Transportation System Plan. (Attachments A through I). The property owned by Woodfold is bisected by several proposed collector streets including planned extensions of 26th Avenue, 23rd Avenue and Laurel Street. The proposed street connections are intended to serve the immediate Oak Street area as development occurs and improve traffic circulation in the north-central part of Forest Grove. The application was deemed complete by the City on July 8, 2022.

The Planning Commission should review the attachments to this report ahead of the public hearing on August 8th particularly Attachment A (Applicant's Narrative) and Attachment D (Transportation Technical Memorandum and Intersection Analysis). In addition, the Planning Commission should review Attachment F for insight into comments provided during the neighborhood meetings held by the applicant. Attachment F summarizes the comments and categorizes them by topic. Attachment I is a summary of the stakeholder outreach conducted by the applicant and includes letters of support from interested parties.

The map below shows the modifications to the future street network proposed by the applicant. Street connections to retain are shown by the dashed lines and those proposed for removal are indicated with the "x" notation. Changes to the street network proposed by the applicant include:

1. Realign the proposed portion of 26th Avenue between Kingwood Street and Oak Street to a new, consolidated connection at the planned fourth leg of the new roundabout at OR 47 and Martin Road.
2. Realign Laurel Street northeast to connect to the proposed 26th Avenue realignment. Remove the portion of Laurel Street extending north of 26th Avenue.
3. Remove the proposed portion of 23rd/24th Avenue between Laurel Street east to OR 47.
4. Remove the portion of Oak Street designated as a collector facility between OR 47 and the proposed 26th Avenue realignment. Oak Street in this area is a Washington County facility and is currently substandard. Oak Street is proposed to be redesignated from a collector street to a private, local road to be maintained in private ownership.
5. Realign the Council Creek Regional Trail to follow the proposed 26th Avenue realignment.
6. Realign the Tualatin Valley Scenic Bikeway to follow the proposed 26th Avenue realignment.

The proposed revisions would affect the future alignments of the Council Creek Regional Trail and Tualatin Valley Scenic Bikeway. Both corridors run along Oak Street to Highway 47. The Council Creek Regional Trail is intended to provide a pedestrian and bicycle connection to Hillsboro to the east and the Banks-Vernonia Trail to the north. The Tualatin Valley Scenic Bikeway is a 30-mile on-road bicycle route connecting Rood Bridge Park and the Banks Vernonia Trail through rural Washington County and Forest Grove. The route was designated by the Oregon Parks and Recreation Department in partnership with the Washington County Visitors Association. Alternate routes will have to be designated as part of the Transportation System Plan amendment process.

As noted above, the Planning Commission should make a recommendation on the proposed modifications to the transportation system plan based on how well the proposal addresses the City's goals and policies for the transportation system contained in the transportation system plan. The pertinent goals and policies are summarized below. The Commission is not obligated to weigh each goal or policy equally and may exercise discretion. Specific policy considerations are noted below. Planning Commissioner members should become familiar with the policy considerations before the August 8th public hearing.

Transportation System Plan Goals and Policies

Goal 1: Develop and maintain a balanced transportation system that provides travel choices and reduces the number of trips by single occupant vehicles.

Policy e. Encourage local employment and commercial opportunities to reduce the number of locally generated regional work and shopping trips.

Planning Consideration: Does the proposal support local employment opportunities? Consider this in the context of the zoning of the area (General Industrial) and type of development supported by the road network affecting the property. Generally, the General Industrial zone allows manufacturing, food processing, call centers, research and development activities, warehouses, wholesale operations, and information related uses.

Goal 2: Develop and maintain a transportation system that reduces the length of travel and limits congestion.

Policy a. Enhance street system connectivity wherever practical and feasible.

Policy b. Maintain traffic flow and mobility on arterial and collector roadways.

Planning Consideration: Does the proposal enhance street system connectivity and maintain traffic flow and mobility on arterial and collector roadways? Consider this in the context of how the proposal could impact Oregon Highway 47.

Goal 3: Develop and maintain a transportation system that is safe.

Policy a. Safe and secure pedestrian and bicycle ways shall be designed between parks and other activity centers.

Planning Consideration: Does the proposal support a safe and secure pedestrian and bicycle ways. Consider this in the context of the impacts to the Council Creek Regional Trail alignment and Tualatin Valley Scenic Bikeway corridor described in Section IV below including crossing Highway 47.

Goal 4: Design and construct transportation facilities in a manner that enhances the livability of Forest Grove.

Policy a. Maintain the livability of Forest Grove through proper location and design of transportation facilities.

Policy b. Increase the health and physical well-being of citizens by providing safe and convenient opportunities for walking and bicycling.

Policy c. Protect residential neighborhoods from excessive through traffic and travel speeds while providing reasonable access to and from residential areas.

Policy d. Provide a seamless and coordinated transportation system that is barrier-free, provides affordable and equitable access to travel choices, and serve the needs of all people and businesses, including people with low income, children, seniors and people with disabilities.

Planning Consideration: Does the proposal maintain the livability of Forest Grove, from the Planning Commission's perspective. Consider this in the context of the economic development potential of the property including employment opportunities.

Does the proposal increase the health and well-being of city residents by providing safe and convenient opportunities for walking and bicycling? Think of this in the context of the Council Creek Regional Trail and Tualatin Valley Scenic Bikeway alignments.

Planning Consideration: From the Planning Commission's perspective will the proposal have a positive, negative, or neutral impact on nearby residential neighborhoods in terms of through traffic and travel speeds? Does the proposal provide reasonable access to and from residential neighborhoods?

Planning Consideration: Does the proposal have a disproportionate impact on people with low incomes, children, seniors and persons with disabilities and if so, how?

Goal 5: Promote the development of Forest Grove, the state, and the national economy through the efficient movement of people, goods, services, and information in a safe manner.

Policy d. Provide transportation facilities that support land development that is consistent with the Comprehensive Plan.

Planning Consideration: Does the proposal provide a street network that supports land development consistent with the Comprehensive Plan? The affected area is designated as General Industrial on the Comprehensive Plan map. Generally, the General Industrial zone allows manufacturing, food processing, call centers, research and development activities, warehouses, wholesale operations, and information related uses. Does the proposal support such uses?

Goal 6: Establish and maintain a context sensitive set of transportation design and development regulations.

Policy a. Streets should be designed to support their intended users.

Policy d. Promote context-sensitive transportation facility design, which fits the physical context, responds to environmental resources, and maintain safety and mobility.

Planning Consideration: Does the proposal provide a street network that is designed to support users of the street system including autos, trucks, pedestrians and bicyclists?

Does the proposed street system fit the land use context of the area and does the proposed street system support safety and mobility (traffic circulation) through the area?

Goal 7: Provide a transportation system that meets present needs without compromising the ability of future generations to meet their needs.

Policy a. Encourage an energy efficient transportation system.

Policy b. Increase the use of walking and bicycling for all travel purposes.

Planning Consideration: Will the proposed street system support an energy efficient transportation system? Think of this in the context providing opportunities for modes of transportation other than automobiles, length of the street connections, and travel distances.

Goal 8: Provide transportation performance measures set and maintained by the City.

Policy a. A minimum intersection level of service standard shall be set for the City of Forest Grove. All public facilities under the city's jurisdiction shall be designed to meet this standard. (Note: the City's adopted level of service (LOS) standard is LOS D).

Planning Consideration: Will the proposed street network result in any intersections operating below acceptable service levels? This City's minimum acceptable service level is Level of Service D. The Oregon Department of Transportation's minimum acceptable level of service is a vehicle to highway intersection capacity (v/c) ratio of 0.99. The applicant provided an intersection operation analysis that is available for review at: <https://www.forestgrove-or.gov/planning/project/oak-street-area-transportation-system-plan-amendment>.

Goal 9: Develop a transportation system that is consistent with the City's Comprehensive Plan and adopted state and regional plans.

Policy a. Coordinate and cooperate with adjacent jurisdictions and other transportation agencies to develop transportation projects that benefit the City of Forest Grove and the region as a whole.

Policy b. Work collaboratively with other jurisdictions and agencies so the transportation system can function as one system.

Planning Consideration: Is the proposal consistent with the applicable land use policies contained in the Forest Grove Comprehensive Plan and transportation policies contained in the Metro Regional Transportation Framework Plan, Oregon Highway Plan and Oregon Transportation Planning Rule? These considerations are addressed in the applicant's narrative available for review at: <https://www.forestgrove-or.gov/planning/project/oak-street-area-transportation-system-plan-amendment>.

Goal 10: Efficiently use funding sources to implement transportation system improvement projects recommended in the TSP.

Policy a. Provide a cost-effective transportation system where the public, land use development and users pay their respective share of the system's costs proportional to their respective demands placed on the multimodal system.

Policy c. Ensure maintenance of the transportation system as a priority.

Planning Consideration: Will the proposed street network be cost-effective to construct and maintain? Think of this in the context of the number and length of street segments.

Forest Comprehensive Plan Land Use Goals

The Forest Grove Comprehensive Plan includes several goals and policies applicable to this proposal including goals and policies for land use:

Industrial and Employment Objective 3: Ensure the availability of at least one large industrial tract comprising at least 50 gross acres in land area.

Industrial and Employment Objective 9: Coordinate the designation of industrial and other land use activities in the Comprehensive Plan with the Transportation Element.

Industrial and Employment Objective 10: Access to industrial sites shall be from arterials or local industrial streets, oriented away from residential areas wherever feasible.

Metro Regional Transportation Functional Plan

The Metro Regional Transportation Functional Plan (RTFP) establishes requirements for amendments to local transportation system plans. In addition, the RTFP includes demand-to-capacity ratios that must be considered when amending transportation system plans. The mid-day, one-hour peak ratio is 0.90 and the standard PM 2-hour peak is 0.99. The applicant's traffic analysis provides more information demonstrating compliance with the RTFP.

Washington County Transportation System Plan

The City and County TSP's must be coordinated. If the City approves the proposed TSP amendment the Washington County TSP must be amended in the future. Washington County has been notified of the proposed amendment to facilitate coordination.

Oregon Statewide Land Use Planning Goal 9 (Economic Development)

Oregon Statewide Land Use Planning Goal 9 calls for diversification and improvement of the economy. It requires local inventories of commercial and industrial lands, projection of future needs for such lands, and plan and zone enough land to meet those needs.

Local plans should designate the type and level of public facilities and services appropriate to support the degree of economic development desired. The Transportation System Plan identifies the location of collector and arterial roadways, and in some cases local streets, needed to support planned land uses within the city including employment activities. Planned roadways should be located and sized appropriately to serve current and future adjacent land uses.

Oregon Transportation Planning Rule (Statewide Land Use Planning Goal 12)

The Oregon Transportation Rule (TPR) applies to transportation system plan amendments. The TPR implements Oregon Statewide Planning Goal 12 (Transportation) and provides a framework for coordination among state and local use and transportation plans and regulations.

Local transportation system plans are part of the local comprehensive plan. A determination must be made when a plan is amended as to whether the amendment will have a significant effect on an existing or planned transportation facility. A significant effect occurs when a plan amendment changes the functional classification of a street or generates level of traffic or access that is inconsistent with the street classification. The proposed Transportation System Plan amendments will not change the classification of any streets identified in the TSP.

This proposed Transportation System Plan amendments affect a state highway (OR 47) so a determination must be as to whether the amendments will have a significant effect on the state highway facility. Consideration must be given to whether the state facility will meet mobility standards after the change. The Oregon Department of Transportation adopted mobility standard for state highways is called a vehicle to capacity or v/c. The adopted minimum v/c standard is 0.99. A v/c ratio of 0.99 indicates operation is just below 100% capacity. If there is a significant effect due to the proposed amendments the situation must be remedied.

The applicant's narrative and accompanying transportation technical memorandum and intersection operations analysis goes into detail about possible impacts arising from the proposed Transportation System Plan amendments. The analysis indicates the proposed amendments will not have a significant effect on the state highway and will not degrade mobility.

Oregon Highway Access Management and Highway Mobility Policies

The Oak Street area is adjacent to the Oregon Highway 47 bypass. As such, the local street system in the area affects how the bypass functions. The Oregon Highway Plan states:

"Bypasses are highways designed to maintain or increase mobility for through traffic. Generally, they relocate the highway alignment around a downtown, an urban or metropolitan area or an existing highway to provide an alternate route for through traffic using that highway. Sometimes they also function as principal urban arterials. Bypasses require good system management to protect the significant public investment and achieve mobility and livability goals."

The Oregon Highway Plan bypass policy applies to all new bypasses, bypasses designated by the Oregon Transportation Commission, and the following existing bypasses: OR 47, Nehalem Highway (MP 88.69-90.63).

Oregon Highway Plan, Policy 1H addresses access management and connections. This policy states in part:

"Limit the number of public approaches based on the roads function and maintenance of the capacity for regional and statewide transportation circulation. In most cases, connections will be limited only to state highways but in certain cases connections may be to local arterials."

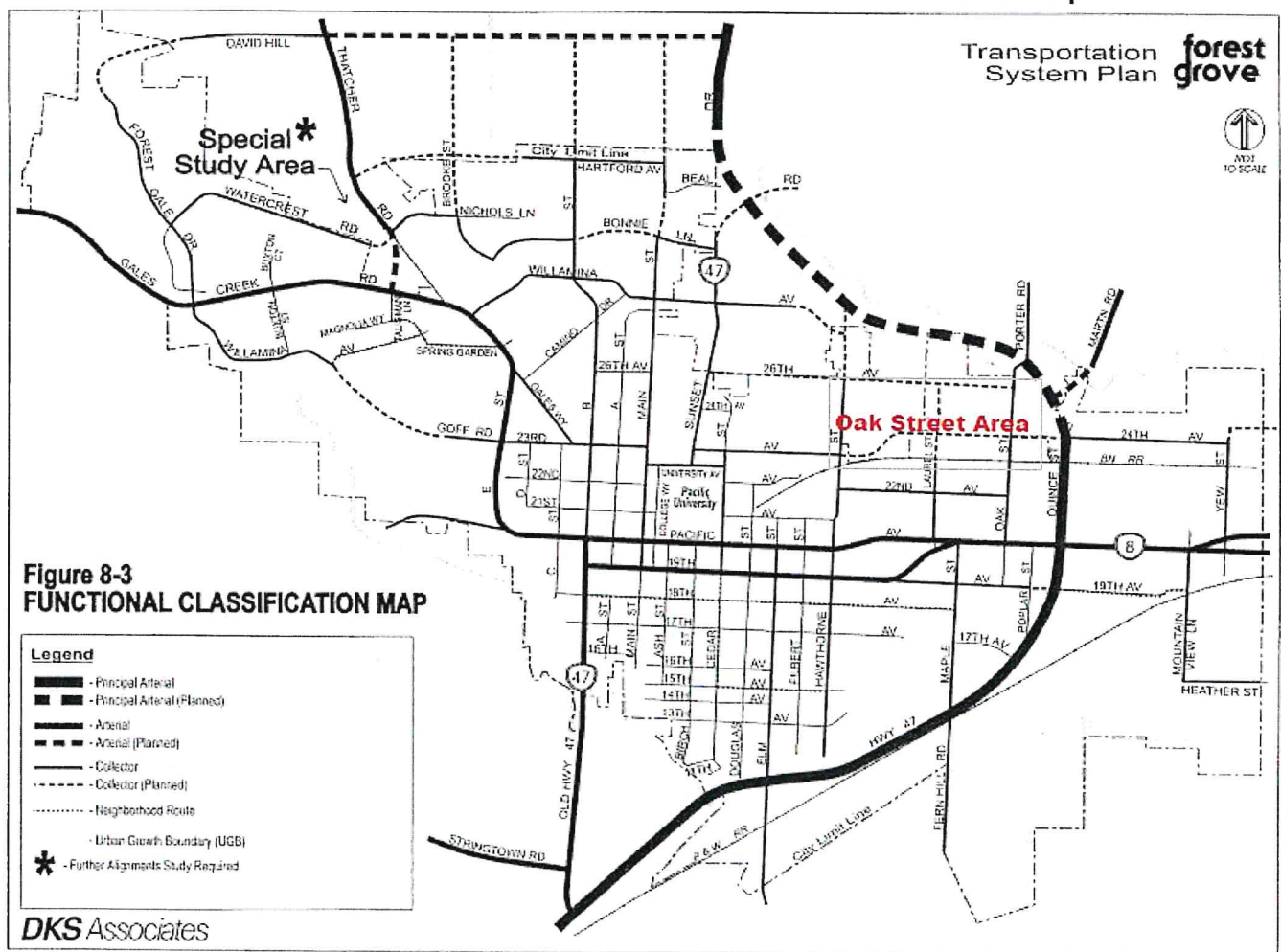
TSP amendments affecting Highway 47 should strive to limit the number of public approaches along the bypass. The applicant requests that Oak Street, north of the electrical substations, be re-designated to a local private street from its current collector designation. Restricting access at the current Oak Street and Highway 47 intersection and directing traffic to the Highway 47 and Martin Road roundabout appears consistent with the intent of Policy 1H above to limit the number of public approaches on the state highway system.

V. OAK STREET AREA PLANNING HISTORY

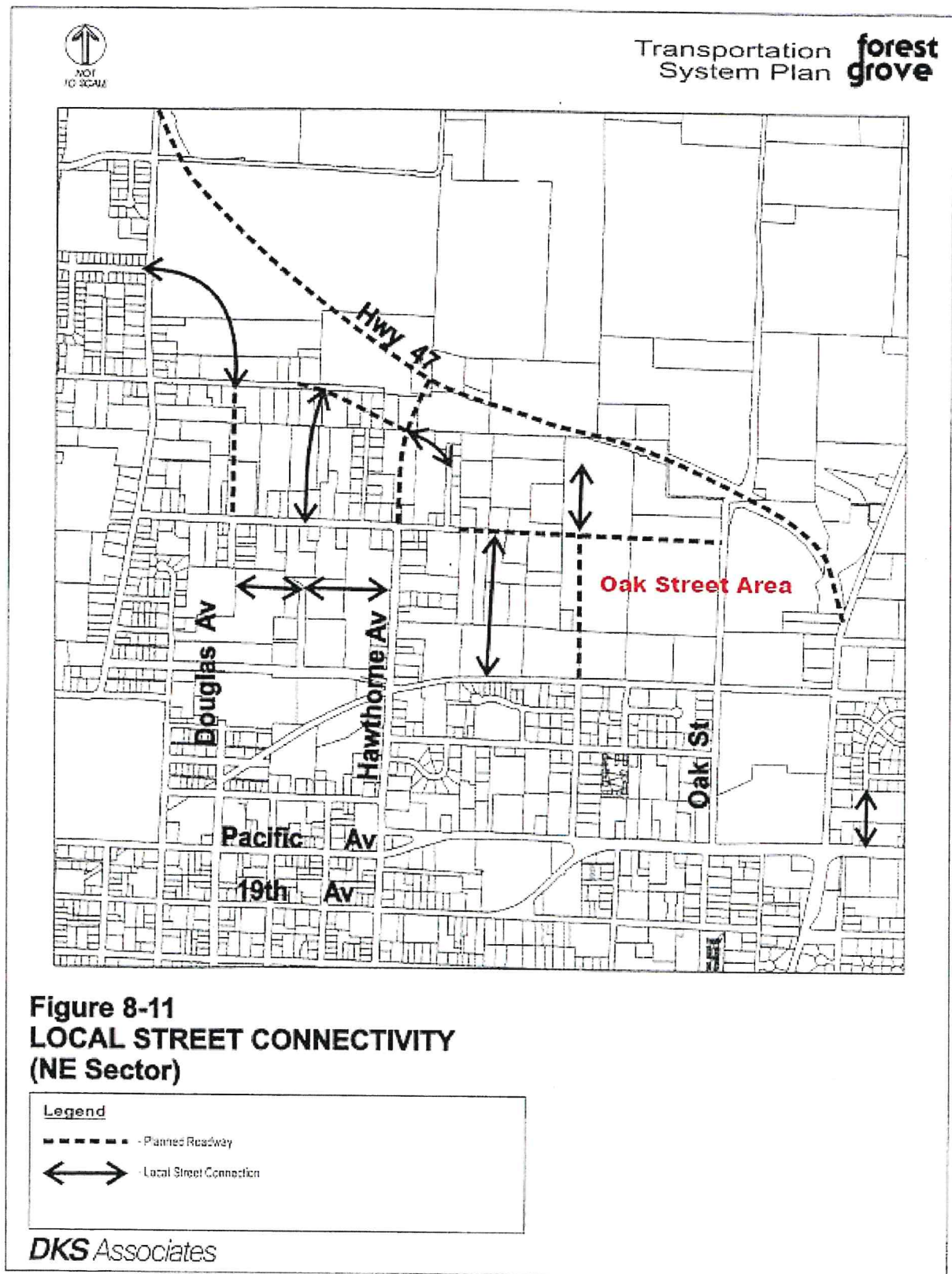
Considerable planning work has been done for the Oak Street area. This includes transportation and land use planning.

The lack of an adequate transportation network in the Oak Street area was addressed in the City's 1999 Transportation System Plan. As shown below, the 1999 road plan shows future extensions of several streets including 26th Avenue, Laurel Street and a new east/west collector street connecting 23rd Avenue to Highway 47 and 24th Avenue.

1999 Transportation System Plan Street Functional Classification Map



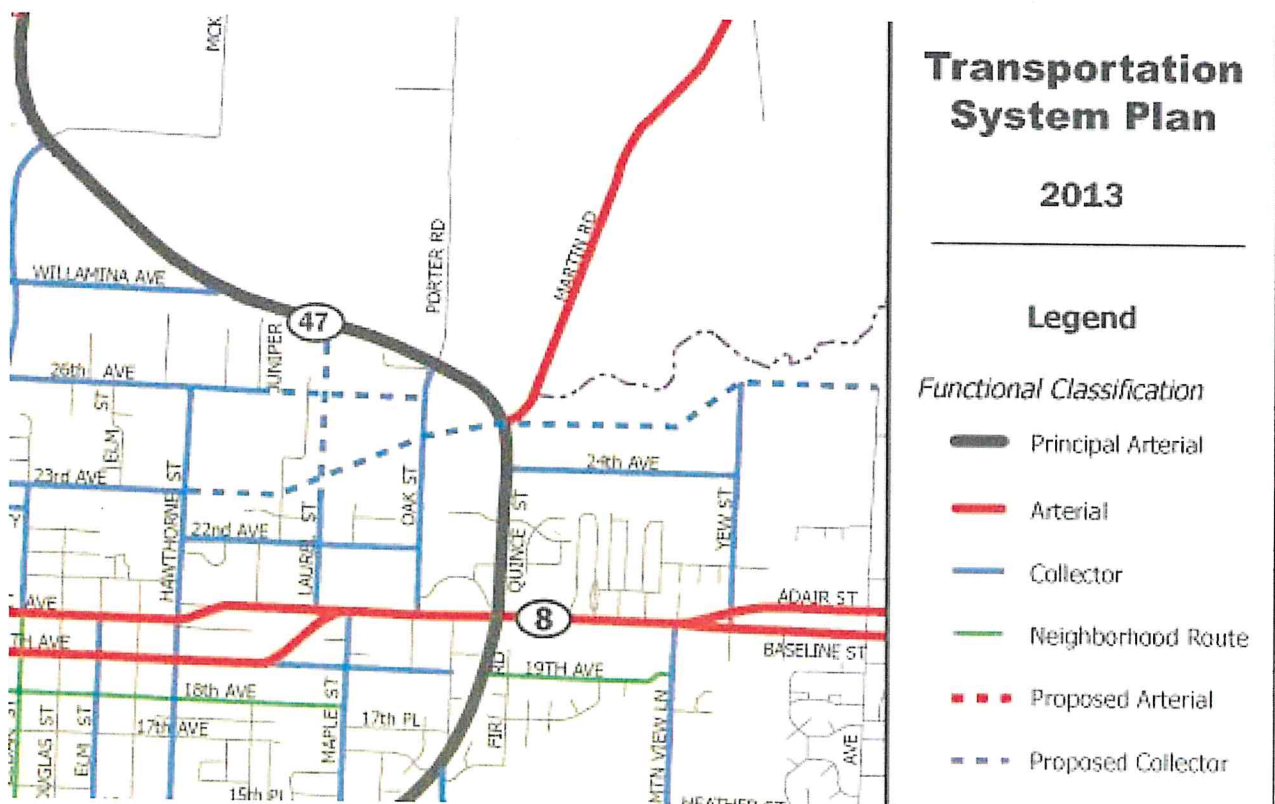
1999 Transportation System Plan Local Street Connectivity Map
Northeast Sector



The 2014 Transportation System Plan also includes these street extensions with a modification to the conceptual alignment for the 23rd Avenue extension. Rather than aligning the roadway with Highway 47 at 24th Avenue the roadway would connect intersect with Highway 47 at Martin Road and a future extension of Holladay Street east of Highway and north of 24th Avenue. Construction of a roundabout at Highway 47 and Martin Road is expected to begin soon.

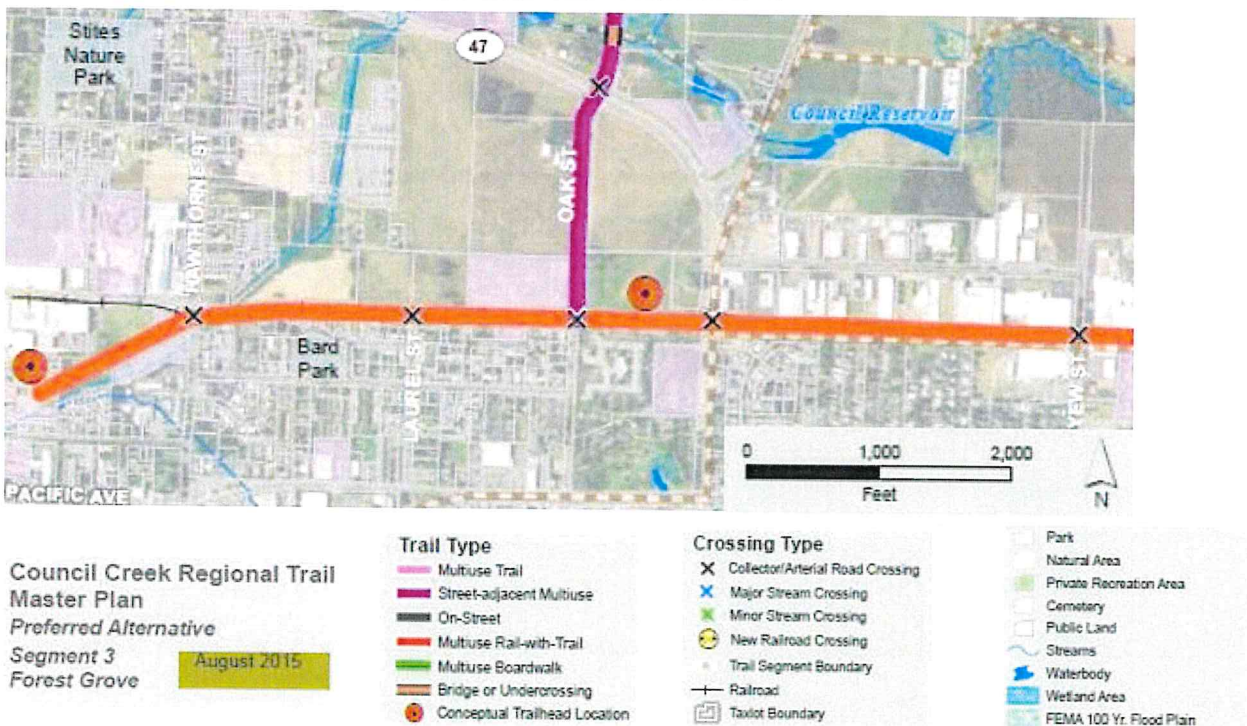
In addition, the collector street system shown above, the 1999 TSP also shows several local street connections in the Oak Street area. These local street connections are shown on the following map.

2013 Transportation System Plan Functional Classification Map



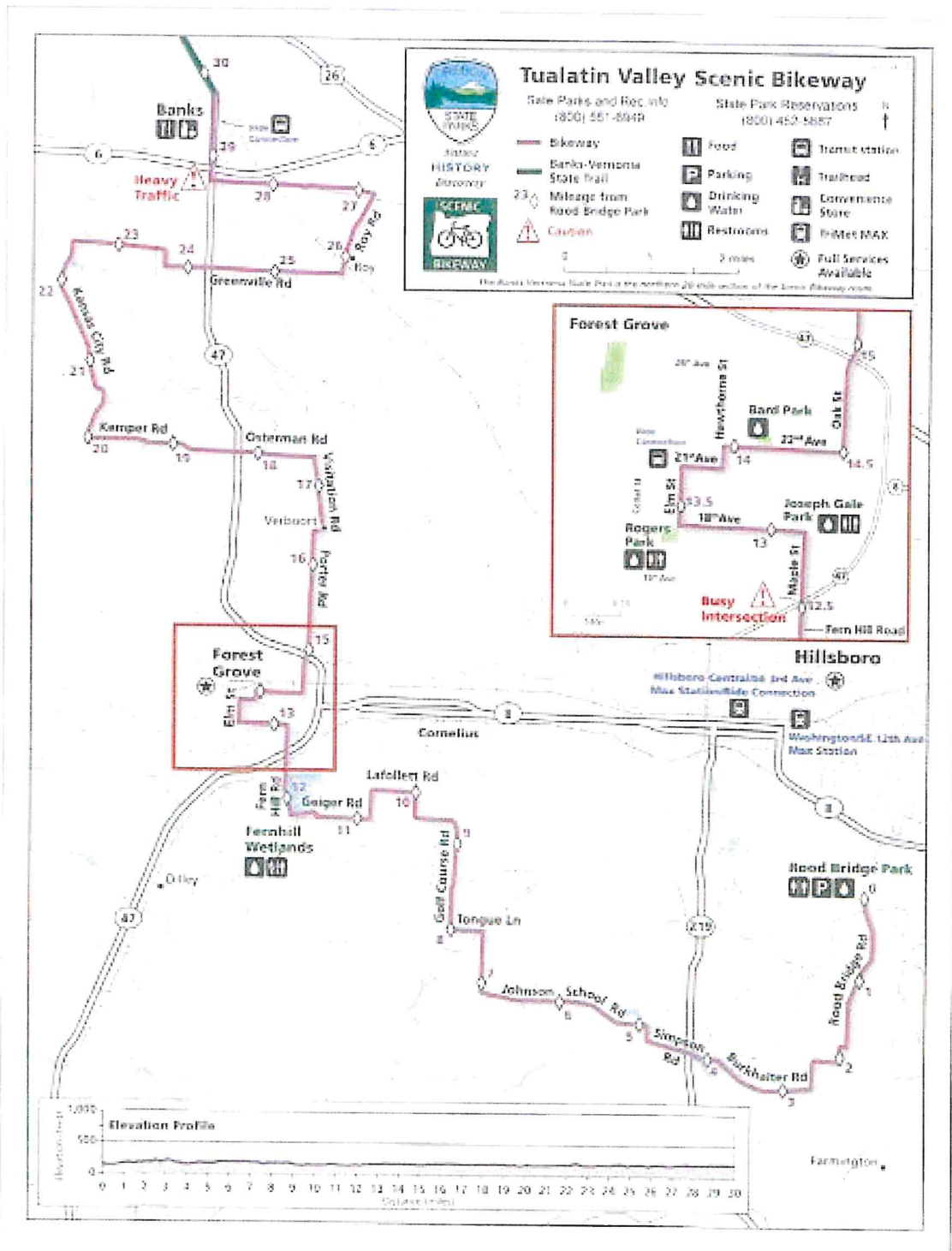
In 2016, the TSP was amended in to include the preferred alignment for the Council Creek Regional Trail through Forest Grove (Ordinance 2016-02). The preferred alignment is shown below. The current preferred alternative through Forest Grove follows the Oregon Department of Transportation/Portland and Western Railroad corridor and Oak Street. The Oak Street alignment is intended to provide a future connection to the Banks-Vernonia Trail.

Council Creek Regional Trail Alignment



In addition to the Council Creek Regional Trail, the Oak Street area includes a portion of the Tualatin Valley Scenic Bikeway corridor. The Tualatin Valley Scenic Bikeway is a 30-mile on-road bicycle route connecting Rood Bridge Park and the Banks Vernonia Trail through rural Washington County and Forest Grove. The route was designated by the Oregon Parks and Recreation Department in partnership with the Washington County Visitors Association.

Tualatin Valley Scenic Bikeway Map



Land use in the Oak Street area has been studied on several occasions. In 2010/2011 the area was looked at for high-density-mixed-use development to support high-capacity transit since the area is adjacent to the Portland and Western Railroad corridor. At the time Metro was evaluating corridors for future high-capacity transit in the region. The map below shows the land use and

transportation network for the transit-oriented development area. At the time Metro was preparing a high-capacity transit study and the railroad was identified as a potential high-capacity transit corridor. High-density-mixed-use areas tend to generate more transit ridership than industrial areas.

2010/2011 Transit-Oriented Development Plan Land Use Concept

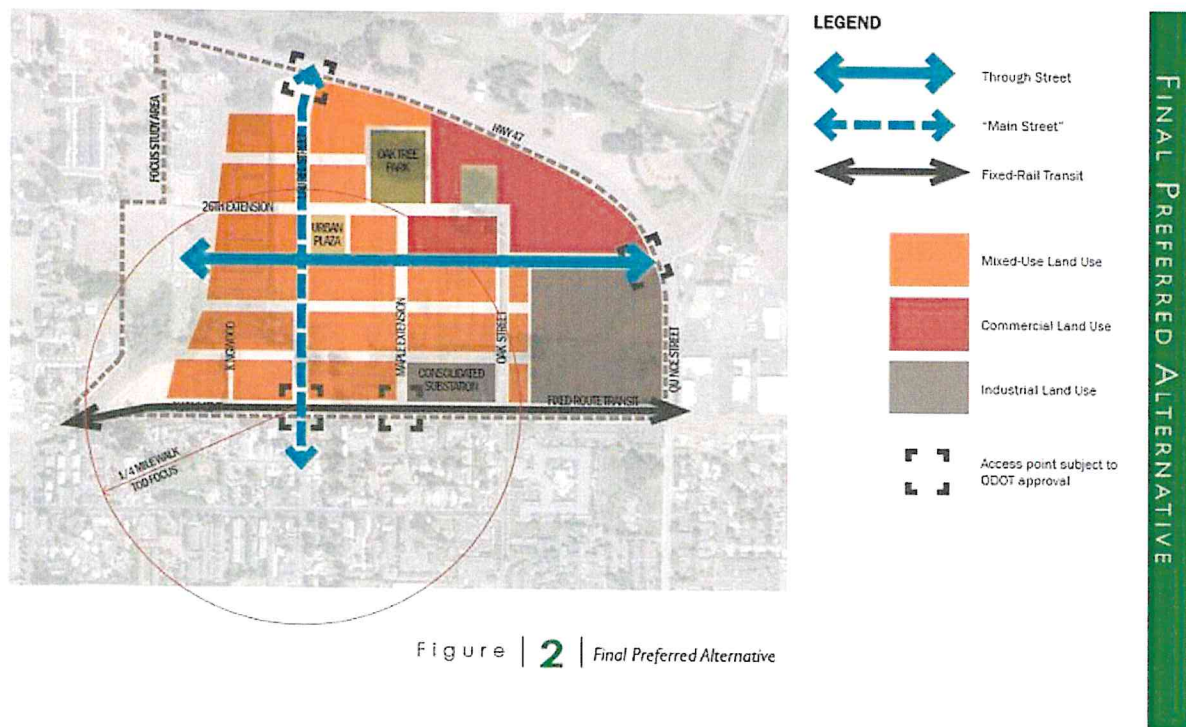


Figure | 2 | Final Preferred Alternative

While there was support for mixed use development in the Oak Street area the City Council decided not to change the zoning of the Oak Street area from General Industrial to residential/mixed use when the Forest Grove Comprehensive Plan was updated in 2014. As a result, the area retained the General Industrial zoning. It wasn't until the City's Economic Opportunities Analysis (EOA) was updated in 2019 that the land use for the Oak Street area was revisited. The EOA update indicated the City has an oversupply of land designated for industrial use for the twenty-year planning period covered by the EOA. This information spurred the Oak Street land use refinement planning process.

The Oak Street land use refinement planning process was nearing completion when the largest land owner in the Oak Street area (Woodfold) approached the City about possible interest in the site for large lot industrial development. As a result, the land use refinement planning process was put on hold pending further consideration of the industrial development. Subsequently the application for modification to the Transportation System Plan was filed for consideration by the Planning Commission and City Council.

A planned development called Kingwood Commons was recently approved in the Oak Street area. The planned transportation network in the area factored into the development approval decision as explained below.

The Kingwood Commons development is near Kingwood Street, west of the Oak Street Area adjacent to property owned by Woodfold-Marco. The project includes 20 attached homes, open space, parking and a water quality tract. The project is near the proposed extension of Laurel Street shown in the TSP.

Since the project is near the proposed extension of Laurel Street the developer was not required to extend Kingwood Street through the development site. Kingwood Street ends at a tract reserved for private access to several lots as shown on the plat map below. The area south of the access tract is reserved for open space. The decision was made with expectation that Laurel Street would be extended negating the need to extend Kingwood Street to the south.

Kingwood Commons Planned Development Area



II. FINDINGS AND PLANNING COMMISSION DECISION

The Planning Commission must adopt findings supporting a recommendation to City Council on the proposal (Attachment B). The findings address the applicable decision considerations including state, regional and local transportation and land use goals for the affected area.

Oak Street Area Transportation System Plan Amendment

Date: June 2022

Submitted to: City of Forest Grove
1924 Council Street
PO Box 326
Forest Grove, OR 97116

Applicant: Rowan Digital Infrastructure, PBLLC
David Shiflett
600 A Avenue
Lake Oswego, OR 97034

AKS Job Number: 8858-01



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

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Exhibits

Exhibit A: City Application Forms and Checklist

Exhibit B: Preliminary Plans

Exhibit D: Alternative Realignment Concept Plan

Exhibit D: Transportation Technical Memorandum [Kittelson & Associates, Inc.]

Exhibit E: Fiscal and Economic Impact Analysis [Johnson Economics]

Exhibit F: Neighborhood Meeting Documentation

Exhibit G: Pre-Application Conference Documentation

Exhibit H: Scoping Memorandum and Materials

Exhibit I: Stakeholder Correspondence

Exhibit J: Property Ownership Information

Oak Street Area Transportation System Plan Amendment

Submitted to:

City of Forest Grove
1924 Council Street
PO Box 326
Forest Grove, OR 97116

Applicant:

Rowan Digital Infrastructure, PBLLC
David Shiflett
600 A Avenue
Lake Oswego, OR 97034

Property Owner:

Woodfold-Marco MFG., Inc
1811 18th Avenue
Forest Grove, OR 97116

Applicant's Consultant:

AKS Engineering & Forestry, LLC
12965 SW Herman Road, Suite 100
Tualatin, OR 97062

Contacts: Mimi Doukas, AICP, RLA, and
Marie Holladay
Emails: mimid@aks-eng.com, and
holladaym@aks-eng.com
Phone: (503) 563-6151

**Applicant's Transportation
Engineering Consultant:**

Kittelson & Associates, Inc.
851 SW 6th Avenue, Suite 600
Portland, OR 97204

Contacts: Chris Brehmer, PE, and
Julia Kuhn, PE
Emails: cbrehmer@kittelson.com, and
jkuhn@kittelson.com
Phone: (503) 228-5230

**Applicant's Land Use
Economics Consultant:**

Johnson Economics
621 SW Alder Street
Portland, OR 97205

Contact: Brendan Buckley
Email: bwb@johnsoneconomics.com
Phone: (503) 295-7832



Applicant's Public Relations Consultant: Hubbell Communications
6605 S Macadam Avenue, Suite 200
Portland, OR 97239

Contact: Nathaniel Brown
Email: nathaniel@thinkhubbell.com
Phone: (971) 219-5561

Site Location: Oak Street and Oregon Route 47

Washington County Assessor's Map: 1N 3 32C, Tax Lots 400, 500, 600, 700, and 900
1N 3 31, Tax Lot 7800

Note: All properties under like ownership were included in the notification area for this application.

Zoning District: General Industrial (GI)

I. Executive Summary

This application proposes Forest Grove Transportation System Plan (TSP) amendments, submitted on behalf of Woodfold-Marco MFG., Inc. (Owner) and Rowan Digital Infrastructure, PCLLC (Applicant). The TSP amendments will realign the Oak Street Area's existing and proposed roadway network and multimodal connections to facilitate the consolidation of an expansive developable site. The subject area is designated as a large portion of General Industrial (GI) land on the City's Comprehensive Plan Map. Developing the site with a high-technology data center campus is in line with the Comprehensive Plan to meet projected industrial demand over the next twenty years. This project will promote high-investment industrial activity and is the culmination of months of planning and collaboration, working closely with the City of Forest Grove, Washington County, Oregon Department of Transportation (ODOT) and other public agency staff, as well as gleaning input from the surrounding community and stakeholders. The technical framework and policy analyses to support this application are included as the Transportation Technical Memorandum (Exhibit D) prepared by Kittelson & Associates, Inc. This action is submitted in compliance with the applicable review criteria, including the Oregon Statewide Planning Goals, the Metropolitan Regional Functional Transportation Plan (MRFTP), and the City of Forest Grove's Comprehensive Plan and Development Code, as detailed in the application materials.

The purpose of this TSP amendment application is to facilitate the potential development of a ±65-acre industrial site, comprised of four properties (Tax Lots 400, 500, 600, and 700 of Washington County Assessor's Map 1 N 3 32C). The subject site is substantial in size and is envisioned as an industrial data center campus with large buildings that require a consolidated area with secure perimeter access. Currently, the properties are bisected by Oak Street and two other conceptual future streets designated as Collector roadways in the Washington County and City of Forest Grove TSPs. The existing and conceptually planned streets make developing the full extent of the industrial site and the Oak Street Area a unique challenge.

The adopted TSP acknowledges that specific roadway alignments will be determined upon further engineering and development review for physical implementation of infrastructure improvements. The purpose of amending the Forest Grove TSP is to maximize the buildable area of the Oak Street Area by realigning the roadway network that currently interferes with consolidated site development. The changes proposed with this amendment application are associated with the City's TSP Table 1-2, Table 5-1, Table 6-2, Table 8-3, Table 10-3, Figure 5-3, Figure 6-7, Figure 6-8, Figure 8-1, and Figure 8-7, as well as the associated County maps. As shown on the Preliminary Plans (Exhibit B), this application involves alternative road network options which will provide regional connectivity as intended by the adopted TSP. The Proposed Roadway Plan (Exhibit B) is included for policy makers to review and determine compliance with the City's envisioned goals for traffic circulation, localized connectivity, and land use policy.

The requested amendments will also require updates to mapped multimodal facilities, including the alignment of the Council Creek Regional Trail and the Tualatin Valley Scenic Bikeway. These recreational facilities are incorporated in the adopted TSP references above and identified in the subject area. As such, this application involves coordination with associated agencies to accommodate feasible roadway realignment and provide safe systems for all users. As discussed throughout this written document and application materials, the new east-west Collector roadway serving the Oak Street Area will satisfy important connections for motorists, bicyclists, and pedestrians.

Application Description

This application involves a Type IV Legislative Comprehensive Plan Amendment for an amendment to the adopted TSP. This written narrative, together with the Preliminary Plans (Exhibit B), Transportation Technical Memorandum (Exhibit D), and other documentation, provide the necessary information for City staff to review and determine compliance with the applicable approval criteria of the Forest Grove Development Code (FGDC). The evidence supports the City's approval of the application.

This TSP amendment application does not facilitate physical alteration of the site, construction of structures, or other material improvements. Thus, the site's appearance will remain unchanged upon approval of this application. A subsequent Site Plan Review application will be submitted to determine compliance with future design features, including building improvements, stormwater maintenance, public services, landscaping, parking, etc. However, this application includes an overview of the ultimate envisioned use of the site (i.e. data center campus) in order to qualitatively review connectivity challenges in the adopted TSP, demonstrate the private needs of the Owner, and quantify the public benefits the project will provide. Therefore, the Conceptual Site Plan (Exhibit B) is abstract in nature, included to provide context, and is subject to change.

II. Background Information

Site Description/Setting

This application involves a TSP amendment to realign the TSP's planned future roadways that will provide regional connectivity to the area. This application affects multiple properties (i.e. Legislative review process) and is not considered to be site-specific (i.e. quasi-judicial review process). The affected region is referred to as the 'Oak Street Area,' as referenced on the Preliminary Plans (Exhibit B).

The subject site ('the property') is comprised of four properties (Tax Lots 400, 500, 600, and 700 of Washington County Assessor's Map 1 N 3 32C), located in the northeast corner of Forest Grove. The property is south and west of Nehalem Highway No. 102 (Oregon Route 47), east of Kingwood Street, and north of the railroad corridor. The Metropolitan Urban Growth Boundary (UGB) runs along Oregon Route 47 (OR 47) and the northern boundary of the site. The property is generally flat and consists of an agricultural field with trees, a residence, and various outbuildings located in the north portion of the site. The property is zoned General Industrial (GI) and is surrounded by a variety of land uses, detailed in the following table.

Table 1: Surrounding Land Descriptions

Area	Jurisdiction	Zoning	Land Uses
North	Washington County	Agriculture and Forest District (AF-20)	Agricultural and Rural Residential
South	City of Forest Grove	General Industrial (GI)	Industrial (i.e. City of Forest Grove Light & Power Substation, community garden, BPA Substation, Masonic Grand Lodge of Oregon, etc.)
East	City of Forest Grove	General Industrial (GI)	Industrial (i.e. vehicle dealership, warehousing, facilities, etc.)
West	City of Forest Grove	Residential Multi-Family High (RMH)	Urban Residential

Further, the property is north of and adjacent to the Bonneville Power Association (BPA) Substation and the Forest Grove Utility Substation, which currently provide electricity to the region. As such, this property has a significant advantage and capability to support a data center complex, as it is positioned to allow efficient interconnection with the power grid. The site is also constrained by BPA powerline easements (which run both northwest to southwest and southwest to northeast) across the site, restricting the placement of permanent structures in encumbered areas (without costly relocation of easements).

Existing Transportation Conditions

As mapped in the current TSP, the planned transportation network inhibits development of a large, fervent industrial user. The ±65-acre area is bisected by Oak Street, an existing roadway within City Limits and under the jurisdiction of Washington County (County Road No. 430). Oak Street is functionally classified as a Collector roadway in the adopted TSP but is not built to ultimate City standards. The existing conditions of Oak Street include ±60-foot right-of-way with varying ±20-30-foot paved width and ±2-foot gravel shoulders. Sidewalks, bike lanes, roadway striping, and other multimodal improvements are not present on the majority of Oak Street (aside from ±275 feet of painted striping south of the OR 47 intersection).

Land Use History

Although long designated for industrial use (since at least 1987), the property has remained in agricultural use with an existing home and associated outbuildings. Preceding this application, the subject site was preliminarily identified within a portion of the proposed ±99-acre Draft Oak Street Area Land Use Refinement Plan, a City-led sub-area planning project that began in 2011. The Draft Oak Street Area Refinement Plan has not been adopted by City Council, and envisions a transit-oriented, mixed-use development pattern.

As part of this effort, the 2011 Forest Grove Transit-Oriented Development Plan and Implementation Strategy (TODP) was prepared to assess the future transportation network of the Oak Street sub-area. The project resulted in a preferred land use concept, detailed in the TODP. However, when the Forest Grove Comprehensive Plan was updated in 2014, the Forest Grove City Council chose not to re-designate the area to transit-oriented development or alternative zoning, but rather continue to reserve the area for industrial development opportunities. Further, in 2015 the Washington County Industrial Site Assessment project evaluated county-wide large industrial properties, including the subject site. According to the assessment, the costs of site development require significant funding investments for water, sewer, and stormwater infrastructure—in large part because the site is located on the edge of the city. Another notable challenge is the proximity to the utility station and transmission easement encumbrances. These combined factors substantially limit the site's readiness and marketability for interested users who lack the scale of the current proposed industrial user.

Envisioned Use of the Property

With acceptance of this project, Forest Grove has the opportunity to emerge as a leader within the high-tech "Silicon Forest" of the greater Portland metropolitan area. The Silicon Forest is a fast-growing data center market characterized by major companies requiring locally available data storage. Forest Grove is a welcoming community with smart growth values, a ready workforce, and competitive utility rates, making this property an ideal location for a data center complex. Further, if the industrial project site is consolidated with a secure perimeter, a data center complex on this property has the capability to yield a total 150-megawatt load. Because this property is advantageously located just over a mile from a major

fiber backbone and nearby multiple subsea cable landings, the project will significantly improve the connection of the Silicon Forest to the global data market.

The subject site includes approximately 65 acres of industrial property and is the City's largest area of vacant employment land. The property has the unique potential to accommodate a large-scale industrial user that will provide diverse and substantial economic activity to the City. The Fiscal and Economic Impact Analysis (Exhibit E), prepared by Johnson Economics, provides a third-party analysis of the economic impacts of the desired land use (i.e. data center campus). The analysis within Exhibit E asserts the economic potential of a sustainable, green data center on this property is unlimited. According to the economic analysis, the build-out of the proposed data center campus would entail a very high level of investment in real property and equipment over the coming years. Johnson Economics elaborates that the projected range of positive economic and fiscal impacts on the communities of Forest Grove, Washington County, and the broader metropolitan area include new employment, payroll, construction and operation expenses, new tax revenue, system development charges, and indirect and induced economic activity.

The subject site has been within the UGB as a potential industrial site for many years and the proposed data center campus is a viable development. For a large industrial user, such as the proposed data center campus, to consider the Forest Grove community—these types of large industrial sites must be available to accommodate the user, or other locations will be sought. In this case, the planned Collector roadways adopted in the TSP bisect the Oak Street Area and inhibit development of the property. As such, the proposed TSP amendments will facilitate the site's ability to accommodate urban employment and utilize land more efficiently.

III. Summary of Conceptual Alternative Roadway Plans

Proposed Roadway Realignment Plan

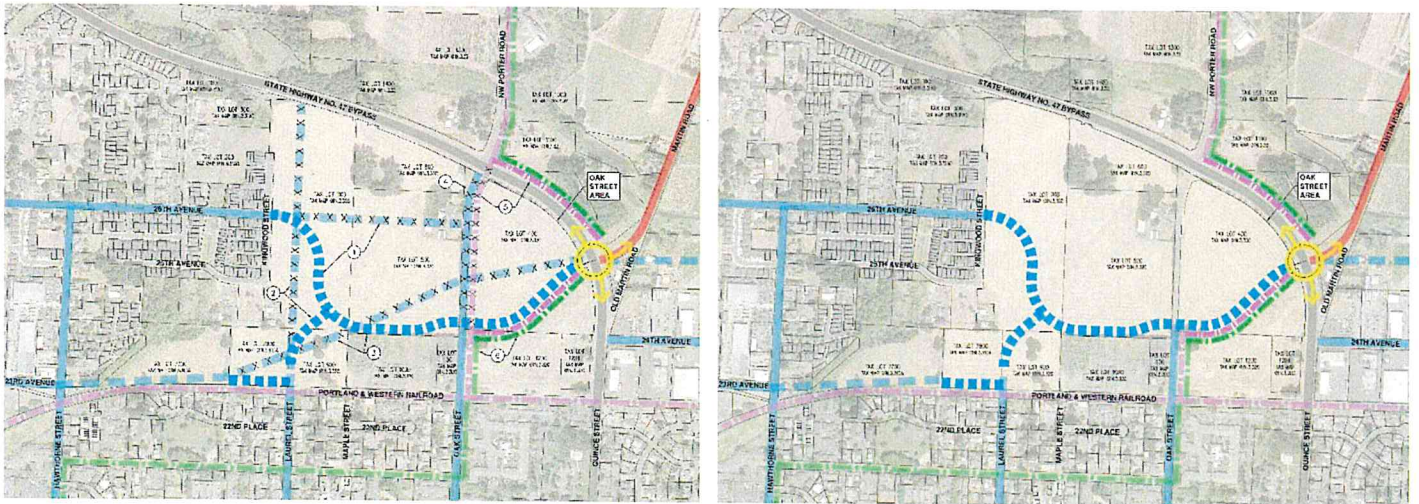
The proposed transportation network realignment for the Oak Street Area is shown on the Proposed Roadway Plan (Exhibit B). As illustrated in Figure 1 below, the Collector roadways planned for extension across the central portion of the site are shifted south along the perimeter of the site. This updated transportation design will minimize access points to OR 47 by moving trips from the intersections of Laurel Street/OR 47 and Oak Street/OR 47 to the new roundabout at Martin Road/OR 47. This revised design benefits the state highway by limiting access to controlled intersections. Pedestrians and bicyclists will benefit from replacement of the existing uncontrolled intersections with enhanced crossing controls at a new roundabout that will include raised crosswalks, sidewalks separated from vehicles, and greater visibility.

The design maintains local connectivity as intended by the adopted TSP. The realigned portion of 26th Avenue will continue to provide a direct route to OR 47 without excessive out of direction travel. The proposed realignment will provide a consolidated building area to facilitate the siting of the envisioned data center campus on the large-lot industrial property. The following elements correspond with the Proposed Roadway Plan (Exhibit B), illustrated as Figure 1, below:

1. Realign the proposed portion of 26th Avenue between Kingwood Street and Oak Street to a new, consolidated connection at the planned fourth leg of the new roundabout at OR 47 and Martin Road.

2. Realign Laurel Street northeast to connect to the proposed 26th Avenue realignment. Remove the portion of Laurel Street extending to OR 47.
3. Remove the proposed portion of 23rd/24th Avenue between Laurel Street east to OR 47.
4. Remove the portion of Oak Street designated as a Collector facility between OR 47 and the proposed 26th Avenue realignment.
5. Realign the Council Creek Regional Trail to follow the proposed 26th Avenue realignment.
6. Realign the Tualatin Valley Scenic Bikeway to follow the proposed 26th Avenue realignment.

Figure 1: Proposed Roadway Realignment



Alternative Roadway Realignment Concept Plan

An important element of the land use application process is to engage the neighborhood and public agencies for feedback. Through the initial public outreach process, the applicant engaged the Casey Meadow's Homeowners' Association to receive feedback on the TSP amendment application. These conversations led to an alternative design, the Alternative Realignment Concept Plan (Exhibit C).

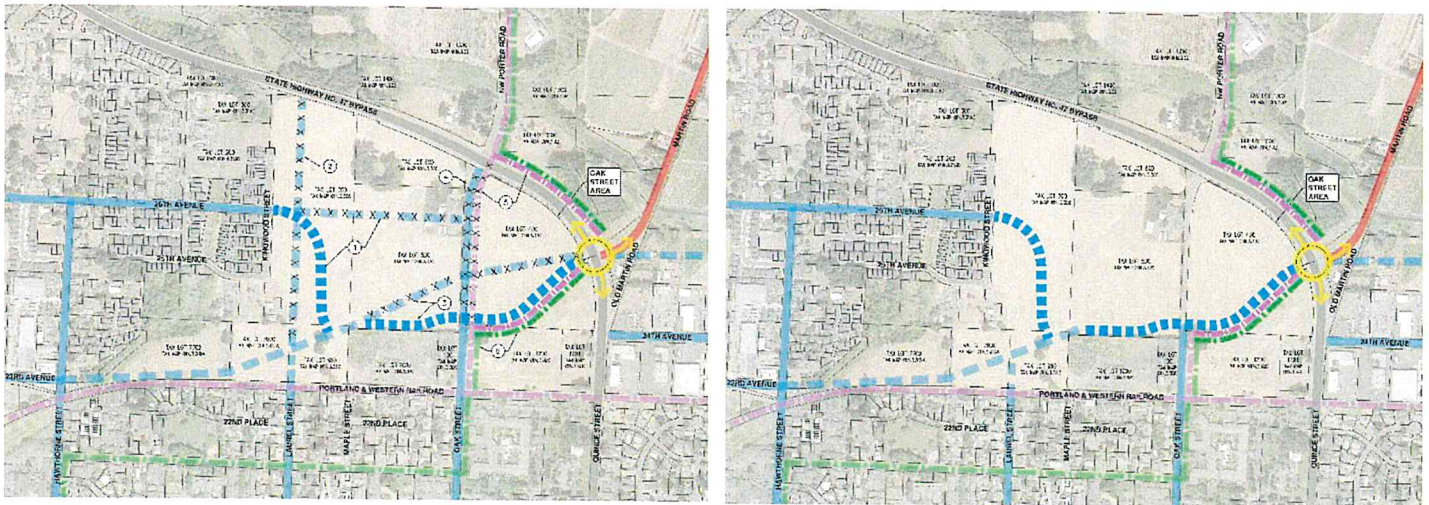
As illustrated in Figure 2, below, the main difference associated with the alternative concept is the interface of realigned 26th Avenue. As shown on the Alternative Realignment Concept Plan (Exhibit C), 26th Avenue connects to the future 23rd/24th Avenue alignment adopted in the TSP. This will create a stop-controlled intersection at 23rd/24th Avenue and 26th Avenue, instead of allowing east-west travelers uninterrupted through movement to the new roundabout. This design was preferred by the existing residential neighbors to the west because it discourages an 'expressway' or 'thoroughfare' with the additional intersection. The additional stop movement could potentially slow traffic movement by eliminating the long, curved stretch of 26th Avenue roadway.

The following elements correspond with the Alternative Realignment Concept Plan (Exhibit C), illustrated as Figure 2, below:

1. Realign the proposed portion of 26th Avenue to connect to the proposed 23rd/24th Avenue realignment.
2. Remove the portion of Laurel Street extending to OR 47.

3. Realign the proposed portion of 23rd/24th Avenue beginning west of Oak Street to the south, to maintain a new consolidated connection at the planned fourth leg of the new roundabout at OR 47 and Martin Road.
4. Remove the portion of Oak Street designated as a collector facility between OR 47 and the proposed 23rd/24th Avenue realignment.
5. Realign the Council Creek Regional Trail to follow the proposed 26th Avenue realignment.
6. Realign the Tualatin Valley Scenic Bikeway to follow the proposed 26th Avenue realignment.

Figure 2: Alternative Realignment Concept



Multimodal Facilities Assessment

Both realignment options demonstrated on the Preliminary Plans (Exhibit B) and the Alternative Realignment Concept Plan (Exhibit C) are included for policy makers to review and determine compliance with the City's envisioned goals for traffic circulation, localized connectivity, and land use policy. As discussed throughout this written document and application materials, the new east-west Collector roadway serving the Oak Street Area will satisfy important connections for motorists, bicyclists, and pedestrians. This application does not seek to alter the planned cross-section for Collector roadways, as identified in the TSP. As such, the proposed roadway realignments will incorporate alternative pedestrian, bicycle, and multiuse pathways currently mapped through the impacted area. These changes are associated with TSP Figures 3-4, 5-3, 6-7, and 6-8, explained in greater detail below. For supporting technical transportation analyses, please see Exhibit D.

Assessment of Pedestrian Plan

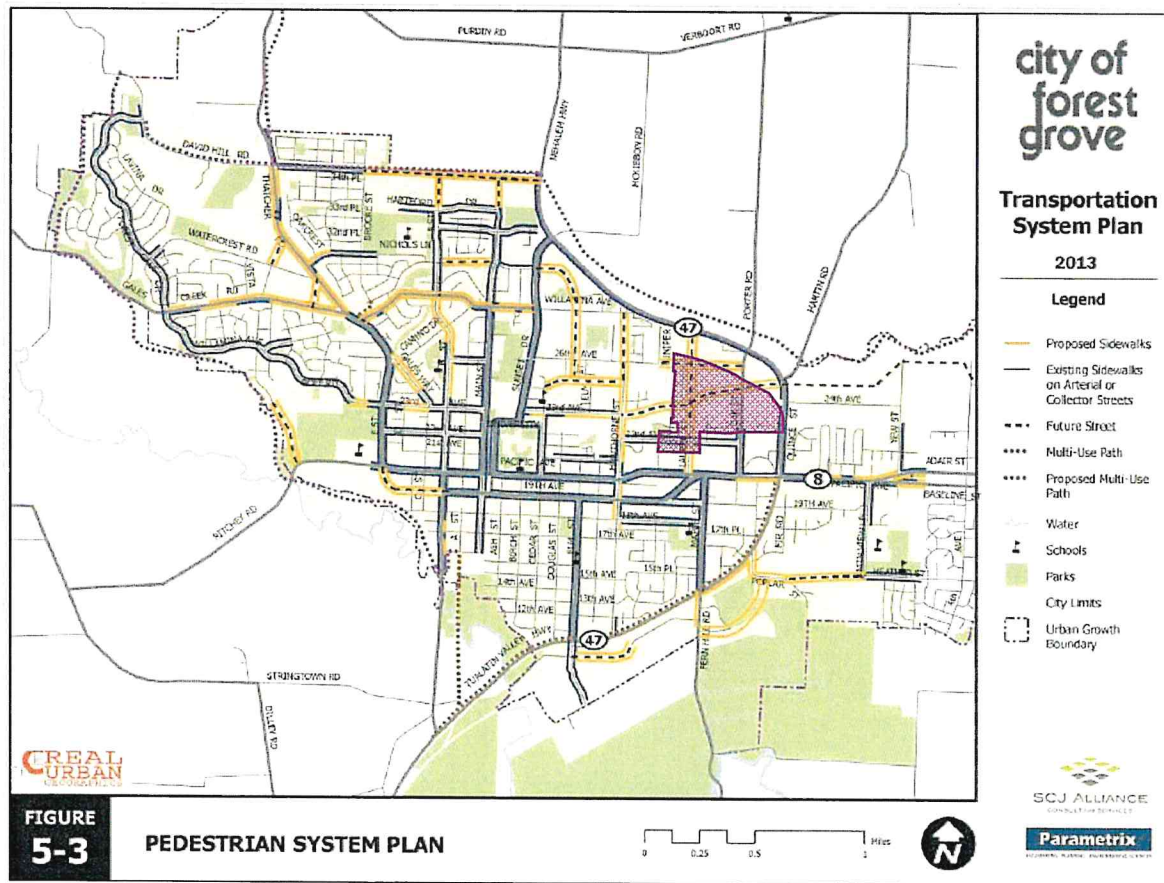
The proposed roadway realignment will provide sidewalks on both sides of all realigned roadways, as detailed in the cross section for Collector roadways. Figure 3, below, illustrates the future streets identified for extension across the Oak Street Area that are proposed to accommodate sidewalks. The realigned Collector roadways 23rd/24th Avenue and 26th Avenue shown on the Preliminary Plans (Exhibit B) are planned to include sidewalks at ultimate buildout. As described above and shown in Figure 3, Oak Street does not contain existing sidewalks. Moreover, the intersection of Oak Street and OR 47 does not contain an enhanced pedestrian crossing (e.g. stop light, cross walk, high visibility markings, etc.) to

facilitate a safe crossing for bicycles or pedestrians. Both proposed roadway realignment options shown on the Preliminary Plans (Exhibit B) and Alternative Realignment Concept Plan (Exhibit C) will improve pedestrian facilities with the provision of consolidated access to OR 47, without extensive out of direction travel for north-south users.

At the existing Oak Street intersection, side street traffic movements are stop controlled and users are obligated to select and cross the highway when there is an appropriate gap in highway traffic. By comparison, the new controlled roundabout crossing at OR 47 and Martin Road requires all motor vehicles to yield to pedestrians. Bicyclists will have the option to either walk their bikes along the planned 10-foot multiuse pathway and cross OR 47 at the roundabout pedestrian crossing (where all vehicles must yield) or ride with motorists through the planned 21-foot roundabout circulation aisle.

The Proposed Roadway Plans (Exhibit B) continue to support the planned industrial, employment, and residential uses in the local vicinity. As such, this TSP amendment application will provide a system of sidewalks that provide connections between adjacent land development, residential neighborhoods, and the highway. This application will not change the implementing standards for the design and construction of pedestrian facilities within the realigned streets.

Figure 3: Pedestrian System Plan [TSP Figure 5-3]



Council Creek Trail Alignment

The Council Creek Regional Trail Master Plan, a coordinated effort by Metro Regional Services (Metro) and local jurisdictions, was completed and published in August 2015. A few months later in March 2016, the City of Forest Grove approved Ordinance No. 2016-02, amending the TSP to reflect the preferred alignment of the Council Creek Regional Trail Master Plan through the City. As detailed on Figure 4, below, the portion of the trail impacted by this amendment is identified as a street-adjacent multiuse trail. As illustrated with purple linework on the Preliminary Plans (Exhibit B), the Council Creek Regional Trail is planned to be realigned along 26th Avenue through the Oak Street Area.

The Washington County TSP recognizes the regional trail alignment may change slightly through the implementation process. As shown in Figure 5, below, the entirety of the Oak Street Area is identified within the 'Regional Trail Refinement Area' of the Washington County TSP. A 'Refinement Area' is defined as "a location that has been identified where further study is needed to determine the mode, function, and/or general location of a future solution or transportation improvement. Further study of a refinement area may occur through a transportation planning process, capital improvement project development, or the land development process." This application demonstrates how the proposed realignment of the regional trail will improve safety without significant out of direction travel.

At the existing Oak Street intersection, side street traffic movements are stop controlled. As such, pedestrians are obligated to select and cross the highway when there is an appropriate gap in bustling two-way highway traffic. By comparison, the new controlled roundabout crossing at OR 47 and Martin Road requires all motor vehicles to yield to pedestrians. As shown on Figure 6, below, the realigned Council Creek Trail is incorporated in the roundabout design as a planned 10-foot multiuse pathway. Pedestrians will have a safer option to walk along the realigned trail and cross OR 47 at the roundabout crosswalk (where all vehicles must yield). For further information, please see the Technical Transportation Memorandum within Exhibit D.

Figure 4: Council Creek Regional Trail [TSP Figure 5-4; Ord. No 2016-02]

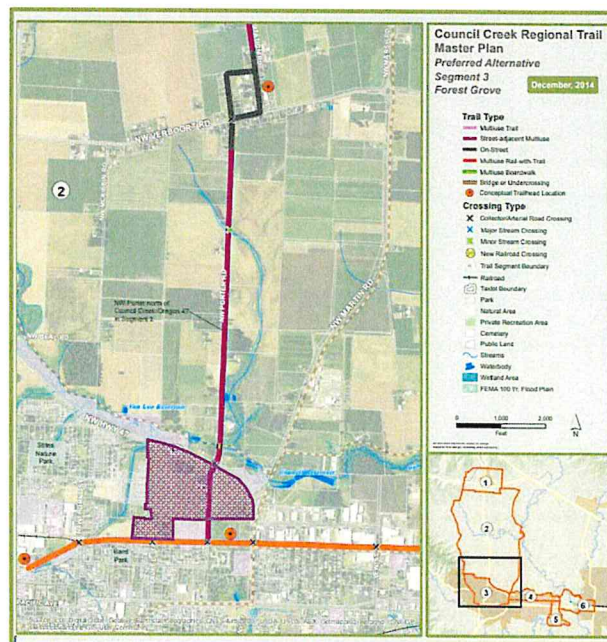


Figure 5: Washington County Pedestrian System [TSP Urban Area Map 1]

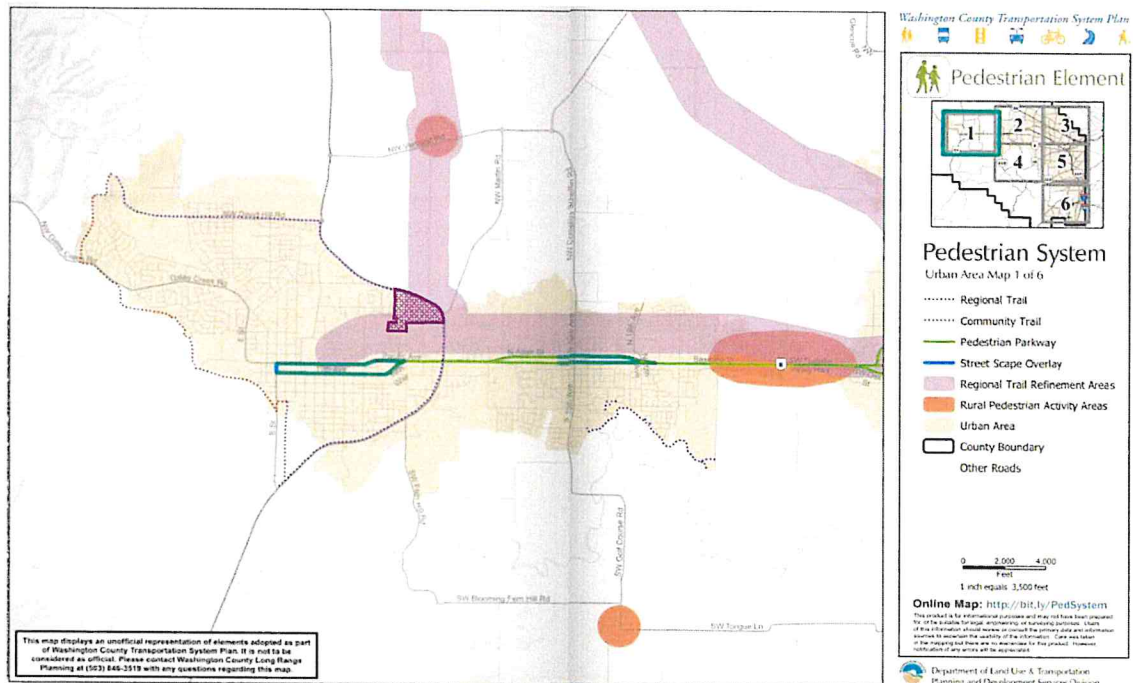
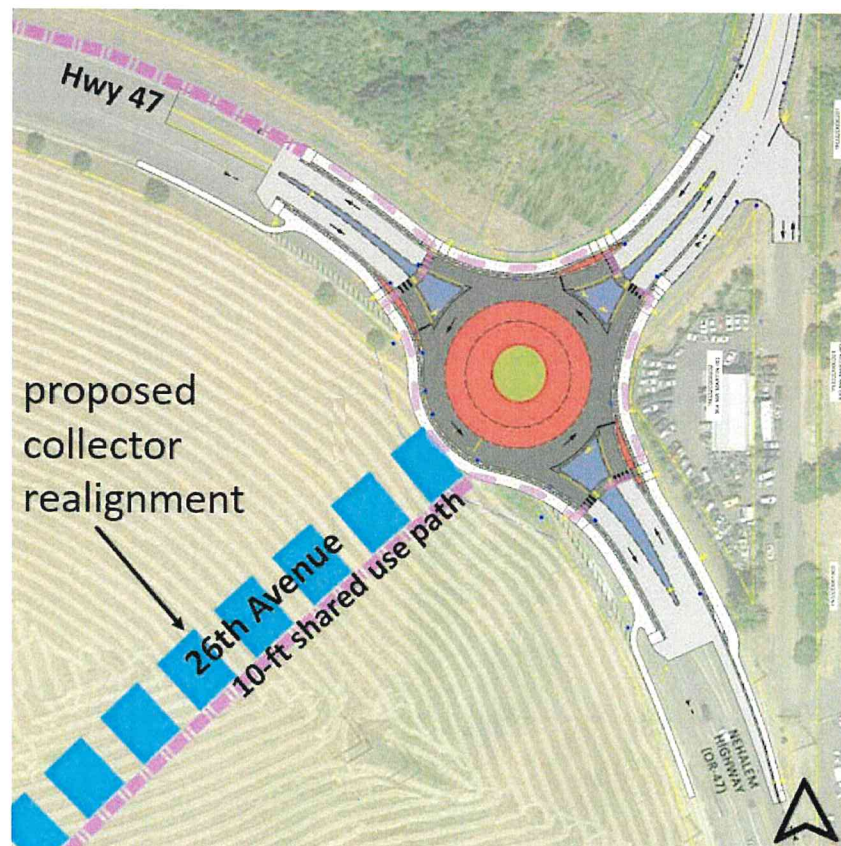
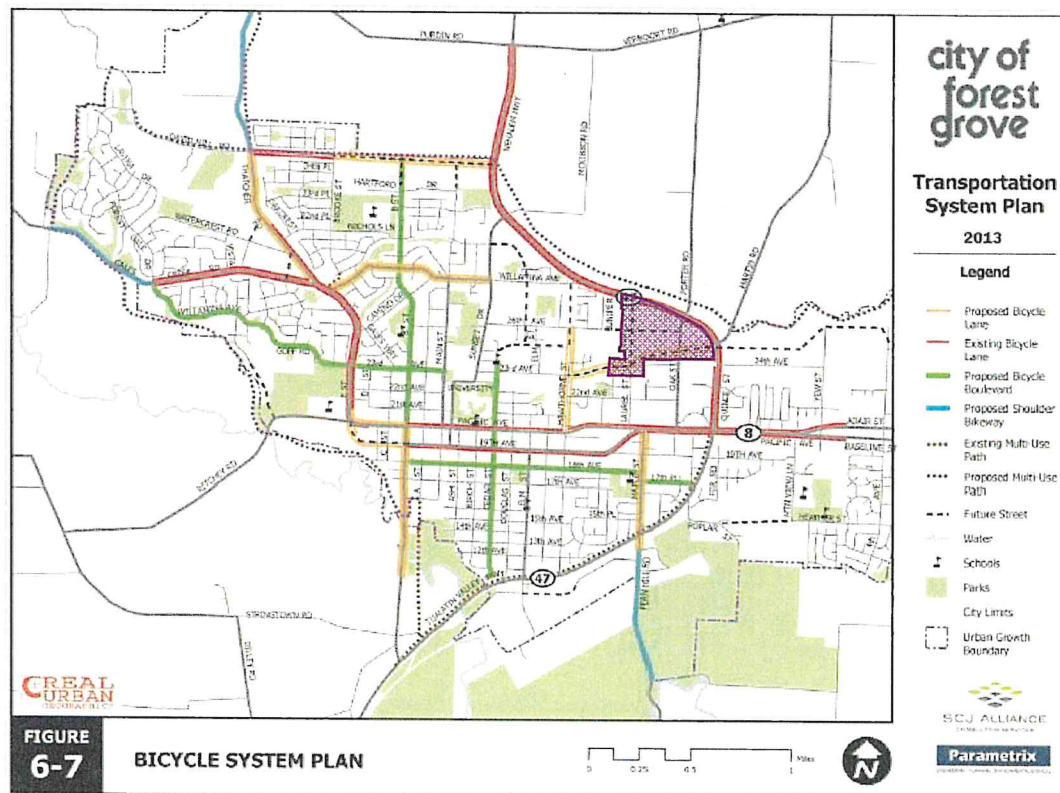


Figure 6: Proposed Trail Alignment



The proposed roadway realignment will continue to provide bike lanes on both sides of the realigned roadways, as detailed in the cross section for collector roadways in the TSP. This application will not change the implementing standards for the design and construction of bicycle facilities within the realigned streets. Figure 6, below, illustrates bicycle lanes are proposed along the future 23rd/24th Avenue extension. Both the Proposed Roadway Plan (Exhibit B) and Alternative Realignment Concept Plan (Exhibit C) will provide a safe bicycle system as intended in the Forest Grove TSP. For further information, please see the Technical Transportation Memorandum within Exhibit D.

Figure 7: Bicycle System Plan [TSP Figure 6-7]



Oregon's Tualatin Valley Scenic Bikeway Alignment

In addition to planned roadways, another facility is mapped through the Oak Street Area—Oregon's Tualatin Valley (TV) Scenic Bikeway. The TV Scenic Bikeway is a 51-mile bicycle route from Hillsboro to Vernonia, funded by Travel Oregon (Oregon Tourism Commission). The TV Scenic Bikeway follows a mapped GPS route through Forest Grove as shown on Figures 7 and 8 (below).

Similar to the pedestrian amenities discussed above, required bicycle facilities within the City's roadway cross sections will facilitate the TV Scenic Bikeway. This application does not elect to change the cross section for Collector roadways, as adopted by the TSP. The TV Scenic Bikeway is planned to be realigned with the planned bicycle facilities, as shown in Exhibit B. As illustrated with green linework, the bikeway will be incorporated along realigned 26th Avenue, providing east-west movement to the new roundabout at Martin Road and resulting in a consolidated crossing of OR 47. This design will increase safety for

bicyclists by removing the uncontrolled crossing at OR 47/Oak Street. Bicyclists will have the option to either ride with motorists through the planned 21-foot roundabout circulation lane or walk their bikes along the planned 10-foot multiuse pathway and cross OR 47 at the roundabout pedestrian crossing (where all vehicles must yield). After the efficient roundabout crossing, the bicycle route will move northwest along OR 47, where existing bike lanes are present, as shown in Figure 7.

Through the land use application process, connections were made with stakeholders at both Travel Oregon and the Washington County Visitor's Association, who are both facilitators of the TV Scenic Bikeway. Based on these conversations, the roadway realignments will not be substantial enough to require revision of map signage. However, a review of existing physical bikeway directional signs is warranted, as existing signs may need to be relocated or added for clarity. Therefore, both the Proposed Roadway Plan (Exhibit B) and Alternative Realignment Concept Plan (Exhibit C) will provide adequate facilities for bicyclists. Please see the Technical Transportation Memorandum (Exhibit D) and Stakeholder Correspondence (Exhibit I) for further information.

Figure 8: Oregon's TV Scenic Bikeway Route [TSP Figure 3-4]

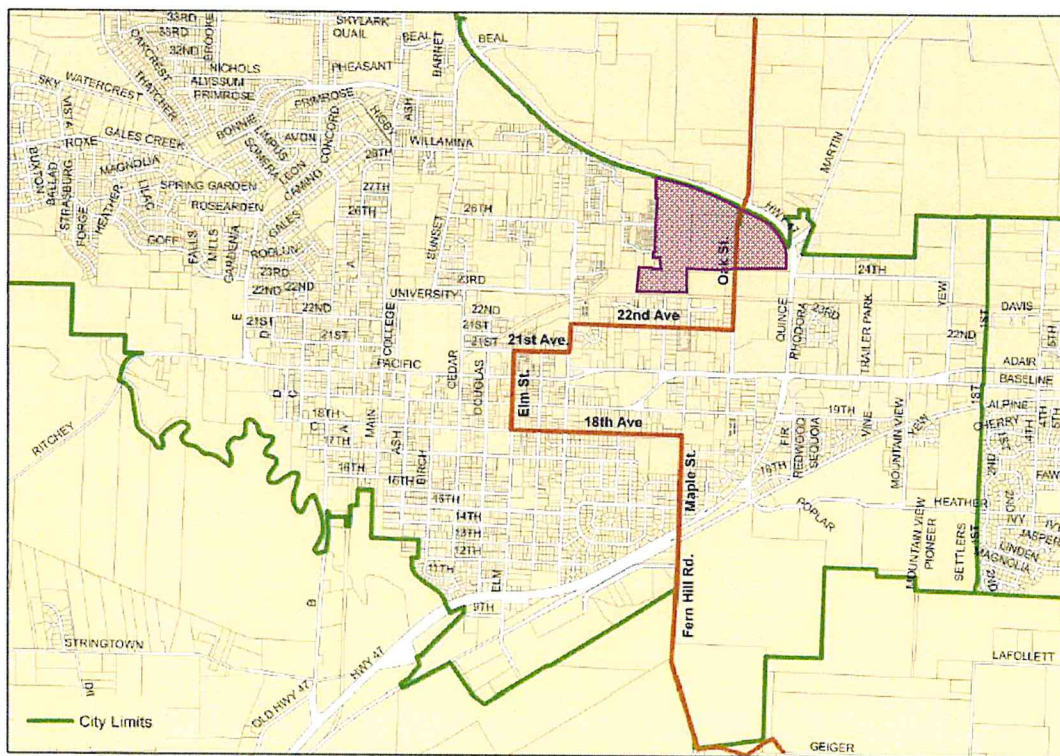
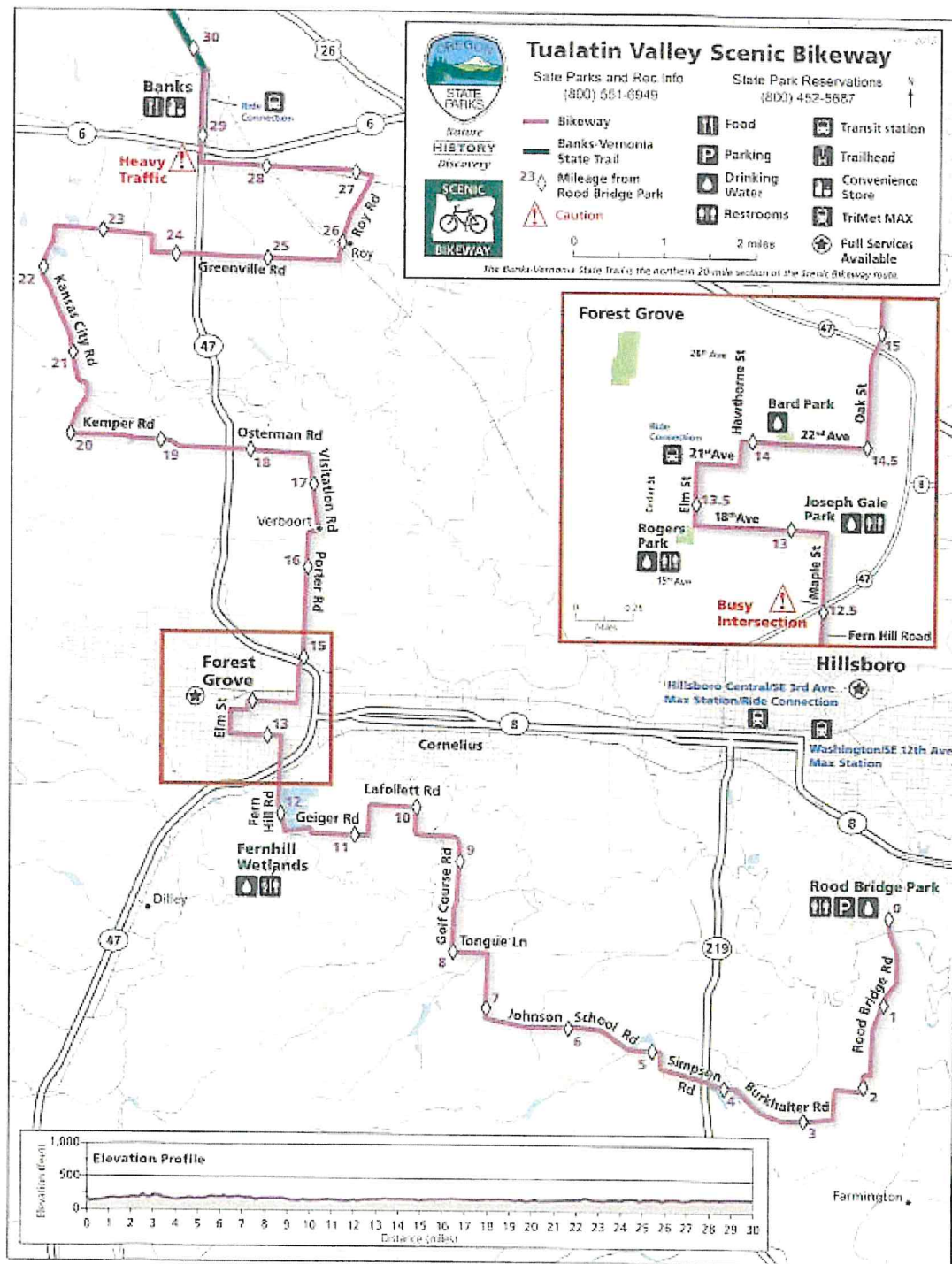


Figure 9: Oregon's TV Scenic Bikeway Route [TSP Figure 6-8]



IV. Applicable Review Criteria

OREGON ADMINISTRATIVE RULES (OARs)

Chapter 660-012-0000 – TRANSPORTATION PLANNING

Response: OAR 660, Division 12, is the Oregon Transportation Planning Rule (the TPR) adopted by the Land Conservation and Development Commission (LCDC). The TPR implements Goal 12, Transportation, and is an independent approval standard in addition to Goal 12 for map amendments. OAR 660-012-0060(1) and (2) apply to amendments to acknowledged maps, as is the case with this application.

The TPR requires a two-step analysis. First, under OAR 660-012-0060(1), the Applicant must determine if the application has a “significant effect,” as that term is defined in OAR 660-012-0060(1). The City and County may rely on transportation improvements found in TSPs, as allowed by OAR 660-012-0060(3)(a), (b), and (c), to show that failing intersections will not be made worse or intersections not now failing will not fail. If there is a “significant affect,” then the Applicant must demonstrate appropriate mitigation under OAR 660-012-0060(2), et seq.

660-012-0015 – Preparation and Coordination of Transportation System Plans

...

- (3) Cities and counties shall prepare, adopt and amend local TSPs for lands within their planning jurisdiction in compliance with this division:

- (a) Local TSPs shall establish a system of transportation facilities and services adequate to meet identified local transportation needs and shall be consistent with regional TSPs and adopted elements of the state TSP;

...

- (4) Cities and counties shall adopt regional and local TSPs required by this division as part of their comprehensive plans. Transportation financing programs required by OAR 660-012-0040 may be adopted as a supporting document to the comprehensive plan.

...

- (5) The preparation of TSPs shall be coordinated with affected state and federal agencies, local governments, special districts, and private providers of transportation services.

...

- (7) Where conflicts are identified between proposed regional TSPs and acknowledged comprehensive plans, representatives of affected local governments shall meet to discuss means to resolve the conflicts. These may include:

- (a) Changing the draft TSP to eliminate the conflicts; or
- (b) Amending acknowledged comprehensive plan provision to eliminate the conflicts;
- (c) For MPOs which are not metropolitan service districts, if conflicts persist between regional TSPs and acknowledged comprehensive plans after efforts to achieve compatibility, an affected local government may petition the Commission to resolve the dispute.

Response: This application and associated materials demonstrate the facilities and services necessary to support the transportation amendments are consistent with the following applicable review criteria, plans, and policies:

- Statewide Planning Goals
- Metropolitan Regional Transportation Functional Plan
- Adopted County and City Transportation System Plans
- Forest Grove Comprehensive Plan
- Forest Grove Development Code

Please see the Transportation Technical Memorandum (Exhibit D) for additional information.

660-012-0060 – Plan and Land Use Regulation Amendments

- (1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:
 - (a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);
 - (b) Change standards implementing a functional classification system; or
 - (c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.
 - (A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

Response: As discussed in the Transportation Technical Memorandum (Exhibit D) prepared by Kittelson & Associates, Inc., this amendment constitutes a “significant affect” on the local transportation system as defined in OAR 660-012-0060(1)(c)(A) given that changes to the functional classifications of selected streets are proposed from those identified, by mode, in the adopted TSPs. Please see Exhibit D for further information on adequacy and performance of the transportation service facilities and how the criteria of OAR 660-012-0060(1) are met.

- (B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

Response: The TSP amendment does not include requests to deviate from the standards implementing the functional classification systems and only the existing and planned transportation facilities within the TSP. Therefore, no “significant affect” occurs as defined in OAR 660-012-0060(1)(c)(B). Please see Exhibit D for further information on adequacy and performance of the transportation service facilities and how the criteria of OAR 660-012-0060(1) are met.

- (C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Response: Further, the amendment does not constitute a “significant affect” as defined by OAR 660-012-0060(1)(c)(C) given that changes included to the proposed amendments do not result in degradation of the intersection operations from the adopted TSP and that the applicable mobility targets can be satisfied with the changes. Please see Exhibit D for further information on adequacy and performance of the transportation service facilities and how the criteria of OAR 660-012-0060(1) are met.

- (2) If a local government determines that there would be a significant effect, then the local government must ensure that allowed land uses are consistent with the performance standards of the facility measured or projected at the end of the planning period identified in the adopted TSP through one or a combination of the remedies listed in subsections (a) through (e) below, unless the amendment meets the balancing test in subsection (e) or qualifies for partial mitigation in section (11) of this rule. A local government using subsection (e), section (3), section (10) or section (11) to approve an amendment recognizes that additional motor vehicle traffic congestion may result and that other facility providers would not be expected to provide additional capacity for motor vehicles in response to this congestion.

Response: As discussed in the Transportation Technical Memorandum (Exhibit D) prepared by Kittelson & Associates, Inc., this application does not create a “significant affect” on the local transportation system as defined in OAR 660-012-0060(1)(c)(B-C). Therefore, the proposed amendment does not require changes no. Please see Exhibit D for further information on adequacy and performance of the transportation service facilities and how the criteria of OAR 660-012-0060(1) are met.

(...)

- (3) Notwithstanding sections (1) and (2) of this rule, a local government may approve an amendment that would significantly affect an existing transportation facility without assuring that the allowed land uses are consistent with the performance standards of the facility where:

Response: As discussed in the Transportation Technical Memorandum (Exhibit D) prepared by Kittelson & Associates, Inc., this application does not create a “significant affect” on the local transportation system as defined in OAR 660-012-0060(1)(c)(B-C). Therefore, the criterion above is not relevant, and the remainder of the section has been omitted for brevity. Please see Exhibit D for further information on adequacy and performance of the transportation service facilities and how the criteria of OAR 660-012-0060(1) are met.

(...)

- (4) Determinations under sections (1)–(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.

-
- (a) In determining whether an amendment has a significant effect on an existing or planned transportation facility under subsection (1)(c) of this rule, local governments shall rely on existing transportation facilities and services and on the planned transportation facilities, improvements and services set forth in subsections (b) and (c) below.
 - (b) Outside of interstate interchange areas, the following are considered planned facilities, improvements and services:
 - (A) Transportation facilities, improvements or services that are funded for construction or implementation in the Statewide Transportation Improvement Program or a locally or regionally adopted transportation improvement program or capital improvement plan or program of a transportation service provider.
 - (B) Transportation facilities, improvements or services that are authorized in a local transportation system plan and for which a funding plan or mechanism is in place or approved. These include, but are not limited to, transportation facilities, improvements or services for which: transportation systems development charge revenues are being collected; a local improvement district or reimbursement district has been established or will be established prior to development; a development agreement has been adopted; or conditions of approval to fund the improvement have been adopted.
 - (C) Transportation facilities, improvements or services in a metropolitan planning organization (MPO) area that are part of the area's federally-approved, financially constrained regional transportation system plan.
 - (D) Improvements to state highways that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when ODOT provides a written statement that the improvements are reasonably likely to be provided by the end of the planning period.
 - (E) Improvements to regional and local roads, streets or other transportation facilities or services that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when the local government(s) or transportation service provider(s) responsible for the facility, improvement or service provides a written statement that the facility, improvement or service is reasonably likely to be provided by the end of the planning period.
 - (c) Within interstate interchange areas, the improvements included in (b)(A)–(C) are considered planned facilities, improvements and services, except where:
 - (A) ODOT provides a written statement that the proposed funding and timing of mitigation measures are sufficient to avoid a significant adverse impact on the Interstate Highway system, then local governments may also rely on the improvements identified in paragraphs (b)(D) and (E) of this section; or
 - (B) There is an adopted interchange area management plan, then local governments may also rely on the improvements identified in that plan and which are also identified in paragraphs (b)(D) and (E) of this section.
 - (d) As used in this section and section (3):

-
- (A) Planned interchange means new interchanges and relocation of existing interchanges that are authorized in an adopted transportation system plan or comprehensive plan;
 - (B) Interstate highway means Interstates 5, 82, 84, 105, 205 and 405; and
 - (C) Interstate interchange area means:
 - (i) Property within one-quarter mile of the ramp terminal intersection of an existing or planned interchange on an Interstate Highway; or
 - (ii) The interchange area as defined in the Interchange Area Management Plan adopted as an amendment to the Oregon Highway Plan.
 - (e) For purposes of this section, a written statement provided pursuant to paragraphs (b)(D), (b)(E) or (c)(A) provided by ODOT, a local government or transportation facility provider, as appropriate, shall be conclusive in determining whether a transportation facility, improvement or service is a planned transportation facility, improvement or service. In the absence of a written statement, a local government can only rely upon planned transportation facilities, improvements and services identified in paragraphs (b)(A)-(C) to determine whether there is a significant effect that requires application of the remedies in section (2).

Response: This section of the Transportation Planning Rule requires coordination with affected transportation service providers. The City, County, and State provide the roads that serve the subject property, as follows:

- OR 47 is functionally classified as a Principal Arterial and is under ODOT jurisdiction.
- Oak Street is an existing roadway, designated as a Collector in the Washington County and Forest Grove TSPs. The portion of Oak Street between OR 47 and 22nd Avenue is a county facility (within city limits).
- Laurel Street, 23rd/24th Avenue, and 26th Avenue are planned future roadways, functionally classified as Collectors in the Washington County and Forest Grove TSPs.

Upon receipt of this land use application, the City has a duty to coordinate with transportation facility and service providers and other affected agencies, as applicable. Therefore, the criteria of OAR 660-012-0060 (1-4) can be met upon City coordination with other affected providers and governments. For further information, please see the Transportation Technical Memorandum (Exhibit D).

Chapter 660-015-0000 – OREGON STATEWIDE PLANNING GOALS AND GUIDELINES (The Goals)

The following Oregon Statewide Planning Goals are applicable to this action:

- Goal 1 – Citizen Involvement
- Goal 2 – Land Use Planning
- Goal 6 – Air, Land, and Water Resources Quality
- Goal 8 – Recreational Needs

-
- Goal 9 – Economic Development
 - Goal 11 – Public Facilities and Services
 - Goal 12 – Transportation

Goal 3 (Agricultural Lands) and Goal 4 (Forest Lands) are not applicable to lands within the City’s acknowledged Urban Growth Boundary (UGB) and have been omitted for brevity.

Goal 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces) is not applicable because there are no identified Goal 5 resources on the property and has been omitted for brevity.

Goal 7 (Areas Subject to Natural Hazards) is not applicable and has been omitted because the subject site does not contain mapped areas of steep slopes 25 percent or greater or other known hazard areas.

Goal 10 (Housing) is not applicable because the subject site is designated General Industrial (GI) on the City of Forest Grove Comprehensive Plan Map and Zoning Map. The City’s Housing Needs Analysis (HNA) serves as the City’s residential buildable land inventory under Goal 10. Residential land use, including household, group, and transitional living is not a permitted use in the GI zoning district, and thus, is not relevant to this application. The proposed TSP amendments refine the realignment of Collector roadways and do not change the allowed/required density or use requirements of the Comprehensive Plan or City of Forest Grove Development Code. For these reasons, the requirements of Goal 10 are met.

Goal 13 (Energy Conservation) generally imposes obligations on jurisdictions to develop plans and implementing measures that conserve energy. Goal 13 is not applicable because the TSP amendments do not affect the City of Forest Grove or Washington County goals or policies governing energy conservation.

Goal 14 (Urbanization) is not applicable because this application does not involve expansion of the UGB and thus analysis of the transition of rural to urban land uses is not relevant. The proposed refinement of the transportation network will not impact the amount of housing and employment units forecasted within the UGB. As such, the application is consistent with Goal 14.

Goals 15 (Willamette River Greenway), 16 (Estuarine Resources), 17 (Coastal Shorelands), 18 (Beaches and Dunes), and 19 (Ocean Resources) are not applicable because the subject site does not contain lands described in those goals. Thus, the approval criteria have been omitted for brevity.

Goal 1 (Citizen Involvement)

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

RESPONSE:

Goal 1 calls for the opportunity for citizens to be involved in all phases of the planning process. The City of Forest Grove has an established citizen involvement program. The application will be processed according to Article 1 of the Forest Grove Development Code (FGDC), which involves public notification, public hearings, and decision appeal procedures, as established in FGDC Section 17.1.

Regarding public engagement, two neighborhood meetings were held prior to application submittal. A virtual public neighborhood meeting was held on May 12, 2022 at 6 p.m. Notice was provided to property owners within 1,000 feet of the subject site and two public notice signs were posted on the property (at the intersections of Martin Road/OR

47 and Oak Street/OR 47) to encourage involvement and inform the community about the meetings. Thirty-nine members of the public participated in the first meeting.

A final meeting with the general public was held on June 7, 2022. The intent of an additional public outreach meeting was to demonstrate how public feedback was incorporated into the land use application. The presentation and preliminary plans presented at this meeting are included as Exhibit F. Although Type IV applications are only required to notify property owners within 300 feet of the site, notice was again provided to owners within 1,000 feet of the site boundaries to encourage community involvement. 21 members of the public joined the neighborhood forum.

In addition to neighborhood meetings, direct outreach was made to stakeholders identified by City staff and the project team, including:

- Oregon's Tualatin Valley Scenic Bikeway
- Council Creek Trail Coordination Group
- Oregon Department of Transportation (ODOT)
- Forest Grove/Cornelius Chamber of Commerce
- Forest Grove School District
- Forest Grove Light & Power
- Forest Grove Public Works
- City Club of Forest Grove
- Cornelius Community Development Department
- Pacific University

Please see the Neighborhood Meeting Documentation (e.g. public notification, list of attendees, meeting materials, etc.) within Exhibit F, demonstrating consistency with the provisions of FGDC Section 17.1.220. Additionally, Stakeholder Correspondence is included as Exhibit I. Therefore, Goal 1 Citizen Involvement is satisfied.

Goal 2 (Land Use Planning)

To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

RESPONSE: The application involves a legislative amendment to the TSP. The City will review and process the application consistent with FGDC procedures, including consideration of any public comments received regarding the application. Therefore, consistency with this Statewide Planning Goal is established.

The City can also find that the other two substantive requirements of Goal 2 are satisfied. First, the application provides an accurate factual basis for the City to approve the application because it describes the transportation proposal and applies those facts to the relevant approval criteria. Second, Goal 2 requires the city to coordinate the application with affected governmental entities. Coordination requires notice of an application, an opportunity for the affected governmental entity to comment on the application, and the City's incorporation of the comments to a reasonable extent. The City can find that coordination of the application will be accomplished in two ways: by the

Applicant prior to submittal of the application, and by the City in the review process for the application.

Goal 6 (Air, Water, Land and Resource Quality)

To maintain and improve the quality of air, water, and land resources of the state.

RESPONSE: Goal 6 is implemented by Comprehensive Plan policies to protect air, land, and water resources. Generally, these policies rely on coordination with the Oregon Department of Environmental Quality (DEQ) for their implementation. Specific standards related to the project include requirements for addressing stormwater runoff, grading, and erosion control through site planning for specific project elements (e.g. transportation improvements). This project does not involve alterations to the site or the construction of improvements; therefore, after the TSP amendment is approved, the site's physical appearance will remain the same. Thus, the application is consistent with Goal 6.

Goal 8 (Recreational Needs)

To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

RESPONSE: Goal 8 is facilitated by the City's Parks, Recreation & Open Space Master Plan (adopted November 2016). The Master Plan identifies a regional trail and bike path, the Council Creek Regional Trail, planned by Metro and implemented in coordination with multiple jurisdictions (i.e. Washington County, local municipalities, etc.). The Council Creek Regional Trail Master Plan (Metro) coordinates the implementation of a 15-mile, multiuse pathway for pedestrians, bicyclists, and other nonmotorized travelers for recreational and transportation purposes. A portion of the Council Creek Trail is identified along Oak Street, along the subject site's frontage. The planned TSP amendments acknowledge the importance of relocating the trail in this area to connect to the existing and planned regional network through the City of Forest Grove. As such, coordination efforts were made with the stakeholders Metro, Washington County, Forest Grove, and the Council Creek Corridor Working Group to facilitate the realignment of the north-south portion of the trail from its conceptual location along Oak Street to 26th Avenue, crossing OR 47 at the planned roundabout at Martin Road and continuing northwest. As shown on Exhibit B, the proposed realignment accommodates safe multimodal travel and controlled crossing at the planned Martin Road roundabout, eliminating the existing uncontrolled OR 47 crossing at Porter Road. The trail realignment sites the recreational facility in an alternative location that meets the intent of the adopted TSP by providing trail connectivity. Therefore, Goal 8 is satisfied.

Goal 9 (Economic Development)

To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

RESPONSE: Goal 9 imposes an obligation on local governments to adopt comprehensive plans and implementing policies that support a wide variety of economic development opportunities. In April 2019, the City Council amended the Comprehensive Plan and adopted the Economic Opportunities Analysis (dated December 2018) under Ordinance No. 2019-01. The proposed transportation amendments do not impact the amount of

employment lands in the City's land inventory. As such, this application does not impact the City's ability to provide adequate opportunities for economic activities. In fact, the proposed amendments accommodate a more feasible alignment for the conceptual subject streets, resulting in an unconstrained and consolidated industrial property.

The subject site includes approximately 65 acres of industrial property and is one of the City's largest clusters of employment land, including existing developed areas within City limits. The property is planned to accommodate a large-scale industrial user that will provide diverse economic activity to the City. The Fiscal and Economic Impact Analysis (Exhibit E), prepared by Johnson Economics, provides a third-party analysis of the economic impacts of the desired land use (i.e. data center campus) on site. The report details the build-out of the proposed 63-acre data center campus would entail a very high level of investment in real property and equipment over the coming years. As detailed in Exhibit E, the projected range of positive economic and fiscal impacts on the communities of Forest Grove, Washington County, and the broader Metro area include new employment, payroll, construction and operation expenses, new tax revenue, system development charges, and indirect and induced economic activity.

In contrast, the Fiscal and Economic Impact Analysis (Exhibit E) analyzes the potential public benefits of alternate development scenarios for the 63-acre site. Under the current, mostly agricultural use, the site generates little in terms of employment, housing, or tax base. The property has been within the UGB as a potential industrial site for many years and the proposed data center is a viable development. For a large industrial user, such as the proposed data center campus, to consider a community—these types of large industrial sites must be available to accommodate the user, or other locations will be sought. In this case, the conceptual Collector roadways adopted in the TSP bisect the 63-acre site and inhibit its productive use. As such, the proposed TSP amendments will facilitate the site's ability to accommodate urban employment and use land more efficiently.

According to the preliminary analysis by Johnson Economics (Exhibit E), the economic and fiscal impact of a data center campus would ultimately be significantly higher than an alternative land use scenario. As discussed in the Transportation Technical Memorandum (Exhibit D), the updated street network will provide adequate regional connectivity that meets the intent of the TSP. Therefore, this TSP amendment application supports Goal 9.

Goal 11 (Public Facilities and Services)

To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

RESPONSE:

According to Section 17.12.210 of the FGDC urban services and facilities include public sanitary and storm sewer systems, public water supply, street systems, police and fire protection, public schools, public parks, and public library services. The proposed TSP amendment does not change the necessary capacity for water, sewer, or other urban services listed above, nor does this application introduce a new land use designation. The TSP amendments facilitate the development of a significant Collector road network for the north portion of Forest Grove, as the alignment is refined to make its construction

timelier and more feasible. Amending the Comprehensive Plan will result in orderly and efficient arrangement of public facilities, improving local transportation circulation and benefitting the general community.

Goal 12 (Transportation)

To provide and encourage a safe, convenient, and economic transportation system.

RESPONSE: The Oak Street Area is planned to be served by an updated transportation network and multimodal connections which meet the intent of the TSP and are designed to welcome pedestrians, bicyclists, and motorists. The TSP amendment does not propose to deviate from the standards implementing the functional classification systems and only the existing and planned alignments of transportation facilities within the TSP. The Proposed Roadway Plan (Exhibit B) contains a transportation framework that focuses on connectivity, circulation, and safety by routing pedestrians and vehicles to a controlled crossing, located at the roundabout at OR 47 and Martin Road. As such, the City can find that the application will result in a safe, convenient, and economic transportation system. The Transportation Technical Memorandum prepared by Kittelson & Associates, Inc. is included within Exhibit D that documents compliance with Goal 12 and the applicable State, County, and City transportation-related requirements. Please refer to Exhibit D for further information. Therefore, this application is consistent with Goal 12.

METRO REGIONAL TRANSPORTATION FUNCTIONAL PLAN

Subsection 3.08.510C of the Metro Regional Transportation Functional Plan (MRTFP) establishes the procedural requirements for a City to amend an adopted Comprehensive Plan or TSP. Table 3.08-2 Interim Regional Mobility Policy Deficiency Thresholds and Operating Standards identifies the applicable demand-to-capacity ratios relative to the TSP amendments. As such, the following policy sections are applicable to this TSP amendment application. In addition to the responses below, please see the Transportation Technical Memorandum (Exhibit D) for robust findings relative to the MRTFP.

TITLE 5: AMENDMENT OF COMPREHENSIVE PLANS

3.08.510 Amendments of City and County Comprehensive and Transportation System Plans

- A. When a city or county proposes to amend its comprehensive plan or its components, it shall consider the strategies in subsection 3.08.220A as part of the analysis required by OAR 660-012-0060.

Response: This application involves amendments to the adopted Forest Grove and Washington County TSP. Therefore, the City and County should consider the transportation solution strategies discussed in MRTFP subsection 3.08.220A as part of the analysis. Please see the Transportation Technical Memorandum (Exhibit D), and the associated responses to OAR 660-12-0060 (above).

- B. If a city or county adopts the actions set forth in subsection 3.08.230E and Title 6 of the UGMFP, it shall be eligible for the automatic reduction provided in Title 6 below the vehicular trip generation rates reported by the Institute of Transportation Engineers when analyzing the traffic impacts, pursuant to OAR 660-012-0060, of a plan amendment in a Center, Main Street, Corridor or Station Community.

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- C. If a city or county proposes a transportation project that is not included in the RTP and will result in a significant increase in SOV capacity or exceeds the planned function or capacity of a facility designated in the RTP, it shall demonstrate consistency with the following in its project analysis:
1. The strategies set forth in subsection 3.08.220A (1) through (5);
 2. Complete street designs adopted pursuant to subsection 3.08.110A and as set forth in *Creating Livable Streets: Street Design Guidelines for 2040* (2nd Edition, 2002) or similar resources consistent with regional street design policies; and
 3. Green street designs adopted pursuant to subsection 3.08.110A and as set forth in *Green Streets: Innovative Solutions for Stormwater and Street Crossings* (2002) and *Trees for Green Streets: An Illustrated Guide* (2002) or similar resources consistent with federal regulations for stream protection.

Response: The Transportation Technical Memorandum (Exhibit D) identified four transportation projects within the study area that are included in the 2018 Regional Transportation Plan (RTP). The analysis demonstrates the TSP amendments do not exceed the planned function or capacity of the listed projects. Further, the study intersections along OR 47 and OR 8 are anticipated to meet the subject mobility target per MRFTP Table 3.08-2. Please see Exhibit D for further details.

TITLE 2: DEVELOPMENT AND UPDATE OF TRANSPORTATION SYSTEM PLANS

3.08.220 Transportation Solutions

- A. Each city and county shall consider the following strategies, in the order listed, to meet the transportation needs determined pursuant to section 3.08.210 and performance targets and standards pursuant to section 3.08.230. The city or county shall explain its choice of one or more of the strategies and why other strategies were not chosen:
1. TSMO strategies, including localized TDM, safety, operational and access management improvements;
 2. Transit, bicycle and pedestrian system improvements;
 3. Traffic-calming designs and devices;
 4. Land use strategies in OAR 660-012-0035(2) to help achieve the thresholds and standards in Tables 3.08-1 and 3.08-2 or alternative thresholds and standards established pursuant to section 3.08.230;
 5. Connectivity improvements to provide parallel arterials, collectors or local streets that include pedestrian and bicycle facilities, consistent with the connectivity standards in section 3.08.110 and design classifications in Table 2.6 of the RTP, in order to provide alternative routes and encourage walking, biking and access to transit; and
 6. Motor vehicle capacity improvements, consistent with the RTP Arterial and Throughway Design and Network Concepts in Table 2.6 and section 2.5.2 of the RTP, only upon a demonstration that other strategies in this subsection are not appropriate or cannot adequately address identified transportation needs.
- B. A city or county shall coordinate its consideration of the strategies in subsection A with the owner of the transportation facility affected by the strategy. Facility design is subject to the approval of the facility owner.

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- C. If analysis under subsection 3.08.210A indicates a new regional or state need that has not been identified in the RTP, the city or county may propose one of the following actions:
1. Propose a project at the time of Metro review of the TSP to be incorporated into the RTP during the next RTP update; or
 2. Propose an amendment to the RTP for needs and projects if the amendment is necessary prior to the next RTP update.

Response: MRFTP subsection 3.08.510A, referenced above, requires that the City and County consider the above strategies to meet transportation needs and implement TSP amendments. If the City and County provide this analysis and coordination, the TSP amendment application will comply with the MRFTP upon final approval by the City. Please see Exhibit D for supporting information.

3.08.230 Performance Targets and Standards

- A. Each city and county shall demonstrate that solutions adopted pursuant to section 3.08.220 will achieve progress toward the targets and standards in Tables 3.08-1, and 3.08-2 and measures in subsection D, or toward alternative targets and standards adopted by the city or county pursuant to subsections B and, C. The city or county shall include the regional targets and standards or its alternatives in its TSP.
- B. A city or county may adopt alternative targets or standards in place of the regional targets and standards prescribed in subsection A upon a demonstration that the alternative targets or standards:
1. Are no lower than the modal targets in Table 3.08-1 and no lower than the ratios in Table 3.08-2;
 2. Will not result in a need for motor vehicle capacity improvements that go beyond the planned arterial and throughway network defined in Figure 2.12 of the RTP and that are not recommended in, or are inconsistent with, the RTP; and
 3. Will not increase SOV travel to a degree inconsistent with the non-SOV modal targets in Table 3.08-1.
- C. If the city or county adopts mobility standards for state highways different from those in Table 3.08-2, it shall demonstrate that the standards have been approved by the Oregon Transportation Commission.
- D. Each city and county shall also include performance measures for safety, vehicle miles traveled per capita, freight reliability, congestion, and walking, bicycling and transit mode shares to evaluate and monitor performance of the TSP.
- E. To demonstrate progress toward achievement of performance targets in Tables 3.08-1 and 3.08-2 and to improve performance of state highways within its jurisdiction as much as feasible and avoid their further degradation, the city or county shall adopt the following:
1. Parking minimum and maximum ratios in Centers and Station Communities consistent with subsection 3.08.410A;
 2. Designs for street, transit, bicycle, freight and pedestrian systems consistent with Title 1; and
 3. TSMO projects and strategies consistent with section 3.08.160; and
 4. Land use actions pursuant to OAR 660-012-0035(2).
- ...

Table 3.08-2 Interim Regional Mobility Policy Deficiency Thresholds and Operating Standards			
Location	Standard	Standard	
	Mid-Day One-Hour Peak	PM 2-Hour Peak	
		1 st Hour	2 nd Hour
Corridors Industrial Areas Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	.90	.99	.99

Response: MRFTP subsection 3.08.220A, referenced above, requires that the city and county consider the performance targets and mobility standards of this section. As discussed in the Transportation Technical Memorandum (Exhibit D), the TSP amendments will not result in exceeding the planned function or capacity of the mobility standards for industrial areas of Table 3.08-2. Therefore, the criteria are met; Please see Exhibit D for further information.

WASHINGTON COUNTY TRANSPORTATION SYSTEM PLAN

Part 2 – General Transportation Policies for Washington County

Goal 1: Safety

Provide a safe transportation system for all users.

Goal 2: Economic Vitality

Provide a reliable transportation system that enhances the economic health of Washington County.

Goal 3: Livability

Preserve and enhance Washington County's quality of life for all residents, workers, and visitors.

Goal 4: Natural Environment

Create and maintain a transportation system that first avoids, then minimizes, then mitigates impacts to the natural environment.

Response: The City of Forest Grove is the lead agency facilitating review of this land use application. The Washington County Transportation System Plan (effective September 26, 2019) will also need to be amended to reflect the proposed roadway realignments. Part 2 of the Washington County TSP identifies the four goals listed above with associated policies and action items, which are also included within the County's Comprehensive Plan.

The Proposed Roadway Plans (Exhibit B) provide alternative transportation network options that address functional safety needs for pedestrians, bicyclists, and vehicles. This

application proposes to shift specific roadway alignments and does not seek to change the implementing standards for roadway infrastructure, including required sidewalk and bicycle lane improvements. As proposed and upon coordination with City of Forest Grove, this land use application is compliant with the Washington County TSP. Please see the Transportation Technical Memorandum (Exhibit D) for written responses demonstrating the TSP amendments are in compliance.

CITY OF FOREST GROVE TRANSPORTATION SYSTEM PLAN

Chapter 8 Roadway Plan

8.9.1 Local Street Connectivity

Much of the local street network in Forest Grove is fairly well connected, with multiple access opportunities for entering or exiting neighborhoods. This is particularly true for the area south of Pacific Avenue, where a “grid” street system is in place. However, there are a number of locations in Forest Grove where, due to lack of connection points, the majority of neighborhood traffic is funneled onto one single street. This type of street network results in out-of-direction travel for motorists and an imbalance of traffic volumes. In addition to motor vehicles, direct connections contribute greatly to accessibility for pedestrians and bicyclists.

By providing connectivity between neighborhoods, out-of-direction travel and vehicle miles traveled (VMT) can be reduced, accessibility between various modes can be enhanced and traffic levels can be balanced out between various streets. The proposed connections in this section are intended to accomplish these objectives. Local connections can reduce potential neighborhood traffic impacts and mitigate capacity deficiencies by better dispersing traffic.

The preferred criteria used for providing connections is as follows

- Every 300 to 500 foot grid for pedestrians and bicycles
- Every 500-1,000 foot grid for automobiles

New local connections are most important in areas north of the Pacific Avenue both to the east where there is a significant amount of undeveloped industrial land, and to the west, where there is a significant amount of anticipated residential development. Figure 8-7 shows the proposed local street connections for Forest Grove. In each case, the specific alignments and design will be better determined upon further engineering and/or development review. Topography, railroads and environmental conditions limit the level of connectivity in Forest Grove. Where appropriate, neighborhood traffic management may be incorporated into design and construction of new connections to protect existing neighborhoods from potential traffic impacts.

Response: As discussed in the Transportation Technical Memorandum (Exhibit D) prepared by Kittelson & Associates, Inc., the TSP amendment can be compliant with the TSP Preferred Roadway Network identified on TSP Figure 8-7. As shown on the Proposed Roadway Plans (Exhibit B), the realigned transportation system still provides necessary connections for pedestrians, bicyclists, and motorists. As intended by the TSP, these proposed connections link people to OR 47 and allow localized travel that does not rely on OR 47. The updated design shown on the Preliminary Plans (Exhibit B) continues to support a connected transportation network. For further information, please see Exhibit D.

CITY OF FOREST GROVE COMPREHENSIVE PLAN

Chapter 4 – Land Use

Industrial Land Use Policies

Industrial and Employment Objectives



Objective 3. Ensure the availability of at least one large industrial tract comprising at least 50 gross acres in land area

Response: This application proposes amendments to the adopted TSP to modify alignments for planned roadways identified in the Oak Street area. As shown on the Preliminary Plans (Exhibit B), the realigned street network will continue to provide efficient transportation circulation to the local area while preserving one of the largest portions of contiguous industrial land that remains within City limits. The subject ±65-acre site (Tax Lots 400, 500, 600, and 700 of Washington County Assessor's Map 1 N 3 32C) is currently bisected by Oak Street and planned roadway extensions of 23rd Avenue, 26th Avenue, and Laurel Street. Relocation of the roadways will allow efficient use of the site and promote economic development benefitting the City of Forest Grove.

As documented in the City's Economic Opportunities Analysis and further discussed in the Fiscal and Economic Impact Analysis (Exhibit E), a specific challenge in planning for future industrial land needs within Forest Grove limits is the unpredictability of engaging a high-value industrial user to a given site. However, in the event a large user like the envisioned data center considers developing in a community, large industrial sites must be available or more feasible locations in alternative communities will be sought. The Oak Street industrial site has been within the UGB and zoned for industrial activity for many years. By accommodating an industrial user of this size, the City of Forest Grove will receive wide-ranging economic benefits including local job creation, tax revenue, system development charges, development fees, and more. These benefits are described in depth in Exhibit E and outweigh the retention of the adopted road alignment in the TSP. Therefore, Objective 3 is met.

Objective 10. Access to industrial sites shall be from arterials or local industrial streets, oriented away from residential areas wherever feasible.

Response: As shown on the TSP's Figure 8-1 Functional Classification Map, access to the Oak Street industrial area is planned from Collector facilities and not from Arterial or Local industrial streets as desired by Objective 10, above. The future extensions of 26th Avenue and Laurel Street as planned would allow through movement from OR 47 to the residential neighborhood to the west. By realigning the future roadway extensions as shown on the Preliminary Plans (Exhibit B), travelers will be routed around the consolidated industrial campus instead of across it. The gridded transportation network in this area will be replaced by a curved street system, which may have a traffic calming effect in contrast to long, straight streets. Additionally, Oak Street is proposed to be redesignated as a private, local road and be maintained in private ownership. Private access to the industrial site is planned to remain from Oak Street, oriented away from the existing residential neighborhoods to the west of the site. This application supports Industrial and Employment Objective 10.

Objective 18. Seek opportunities to recruit industrial activities that could take advantage of the City's cost-competitive electricity rates and the skills of the resident labor force.

Response: The Applicant is a large industrial developer seeking to establish a high-tech data center campus on the subject site. The property is positioned adjacent to an existing utility substation to allow efficient interconnection with the power grid, creating a unique advantage in the design and siting of electrical infrastructure. As shown on the Preliminary Plans (Exhibit B), the proposed alternative road alignments will fulfill the intent and purpose of the TSP, while preserving the large developable site. Approval of the amendments to the TSP will allow a significant industrial development to promote economic growth in the City of Forest Grove.

Objective 23. Implement development standards and incentives to encourage the preservation of large industrial sites.

Response: This application for TSP Amendment will facilitate the consolidation of an expansive ±65-acre buildable site by realigning future transportation infrastructure and providing multi-modal connections which meet the intent of the adopted TSP. The subject site is designated as a large portion of General Industrial land on the City's Comprehensive Plan Map. Developing the site with a data center campus is in line with the Comprehensive Plan to meet projected industrial demand over the next twenty years. The approval of this application will preserve the Oak Street Area and promote industrial activity in Forest Grove.

Chapter 6 – Economic Development

Economic Development Goals & Policies

Goal 1 Strengthen Forest Grove's Economy

Policy 1.1: Provide incentive programs to attract and retain businesses including ecologically sound "green industries" to Forest Grove.

Response: This application is the first step in the land use process to facilitate the construction of a green data center. The applicant has demonstrated commitment to meeting and potentially exceeding local and state environmental standards, ensuring that the energy used by the data center will be from renewable sources and that the center will make every effort to achieve net-zero carbon and net-zero water use to the extent possible.

Goal 2 Enhance the Job Skill Level of Forest Grove Residents

Policy 2.1: Increase the marketable skill level of Forest Grove residents by offering internship and training programs in coordination with the Forest Grove School District, Portland Community College and other organizations.

Goal 3 Develop Cooperative Partnerships to Foster Economic Development

Policy 3.1: Continue to strengthen partnerships with the Forest Grove Chamber of Commerce, Washington County Visitors Association, Pacific University and area economic organizations.

Response: As part of the comprehensive community engagement process, the applicant has already convened and is in ongoing discussions with several different economic development organizations, local education institutions, trade associations, and key community stakeholders about opportunities to support the local workforce and promote the sustainable growth of Forest Grove and the surrounding region. Please see Exhibit I for further information.

Policy 3.2: Continue coordinated planning and economic development efforts with the cities of Banks, North Plains, Cornelius, and Hillsboro.

Response: This application involved public outreach to engage the local community and garner stakeholder feedback, including from neighboring cities. Additionally, Stakeholder Correspondence is included as Exhibit I. The potential economic development from the planned data center will provide indirect and direct impacts to the entire region. The Applicant is interested in continuing to develop and strengthen cooperative partnerships to foster growth.

Goal 4 Promote Industrial Activities

Policy 4.1: Designate a total of between 160 and 300 acres of land on the Comprehensive Plan map to meet projected industrial demand over the next twenty-years.

Response: The subject site is designated as a large portion of GI-zoned land on the City's Comprehensive Plan Map. Developing the site with a data center campus is in line with the Comprehensive Plan's projected industrial demand over the next twenty years. This application for TSP amendment will facilitate the consolidation of an expansive ±65-acre buildable site by realigning future transportation infrastructure and providing multimodal connections which meet the intent of the adopted TSP. The approval of this application will promote industrial activity in Forest Grove, supporting Goal 4 and Policy 4.4, above.

Chapter 11 – Transportation

Goal 1 Develop and maintain a balanced transportation system that provides travel choices and reduces the number of trips by single occupant vehicles (SOV).

Goal 2 Develop and maintain a transportation system that reduces the length of travel and limits congestion.

Goal 3 Develop and maintain a transportation system that is safe.

Goal 4 Design and construct transportation facilities in a manner that enhances the livability of Forest Grove.

Goal 5 Promote the development of Forest Grove, the state and the national economy through the efficient movement of people, goods, services, and information in a safe and efficient manner.

Goal 6 Establish and maintain a context sensitive set of transportation design and development regulations.

Goal 7 Provide a transportation system that meets present needs without compromising the ability of future generations to meet their needs.

Goal 8 Provide transportation performance measures set and maintained by the City.

Goal 9 Develop a transportation system that is consistent with the City's Comprehensive Plan and adopted state and regional plans.

Goal 10 Efficiently use funding sources to implement transportation system improvement projects recommended in the TSP.

Response: Chapter 11 (Transportation) of the City's Comprehensive Plan identifies the ten goals listed above with associated policies and action items, also included within the City's adopted TSP. Please see the Transportation Technical Memorandum (Exhibit D) for written responses demonstrating the TSP amendments are compliant with Chapter 11.

CITY OF FOREST GROVE DEVELOPMENT CODE

ARTICLE 1 INTRODUCTION AND PROCEDURES

APPLICATION PROCESS AND PROCEDURES

17.1.215 PRE-APPLICATION CONFERENCE

The Director shall not accept a Type II, III or IV land use application for processing unless the applicant or the applicant's representative has attended a pre-application conference, or the Director has, in his or her discretion, signed a waiver of the pre-application conference.

The purpose of the pre-application conference is to acquaint the applicant with the requirements of this Code, the Comprehensive Plan and other relevant criteria. It is designed to assist the applicant. The applicant assumes the risk for delays or other problems caused by failure to attend a pre-application conference. It is impossible, however, for the pre-application conference to be an exhaustive review of all potential issues and the conference shall not prevent the city from enforcing all applicable regulations.

Response: This application involves amendments to the adopted TSP subject to the Type IV Legislative review process. A pre-application meeting with the City was held on August 25, 2021, fulfilling the requirements above. Then on December 13, 2021, the Applicant attended a scoping meeting with the City to discuss the technical framework and prepare the transportation impact analysis for the project. For further information, please see the Pre-Application Conference Documentation (Exhibit G), and the Scoping Memorandum and Materials (Exhibit H). The requirement above is satisfied.

17.1.220 NEIGHBORHOOD MEETING

When the Director determines that a proposed project has the potential to raise concerns of neighborhood or community impact, the applicant shall initiate, attend and conduct a neighborhood meeting. The purpose of the neighborhood meeting is to allow the neighbors and other interested parties to become familiar with the proposal and to identify issues that may be associated with an application. The Director shall identify the need for the meeting within seven days after the pre-application conference is held.

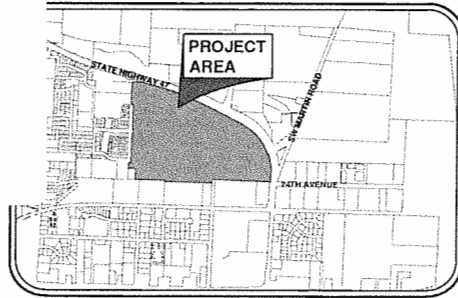
The neighborhood meeting is intended to result in an application that is responsive to neighborhood concerns, reducing the likelihood for delays and appeals of the application. The city expects an applicant to take the reasonable concerns and recommendations of the neighborhood into consideration when preparing an application. The city expects the neighbors will work with the applicant to provide such input.

Neighborhood meetings must be conducted before the city will accept an application on any portion of the proposal. The applicant can request a sign-in sheet from the Community Development Department or provide his or her own sign-in sheet, which must be completed on the night of the neighborhood meeting and submitted to the city at the time of application as verification that the meeting was held. The sign-in sheet should indicate the date, time and location of the meeting, a brief heading describing the subject of the proposal, and the signatures of those in attendance at the meeting. The city shall retain the sign-in sheet as part of the record in the land use case file.

Those notified of the neighborhood meeting shall, at minimum, include all surrounding property owners and residents located at the notification distance of the greatest level permit or 300 feet if the permit type is not known, as well as any other interested parties identified by the Director.

Response: This application involves amendments to the TSP subject to the Type IV Legislative review process. Two neighborhood meetings were held on May 12, 2021, and June 7, 2021, at 6:00 p.m. via virtual Zoom Webinar. A list of attendees (i.e. sign-in sheet) and summary

OAK STREET AREA TRANSPORTATION SYSTEM PLAN AMENDMENT



VICINITY MAP
1" = 1000'

LEGEND			
EXISTING	PROPOSED	EXISTING	PROPOSED
DECIDUOUS TREE		STORM DRAIN CLEAN OUT	
CONIFEROUS TREE		STORM DRAIN CATCH BASIN	
FIRE HYDRANT		STORM DRAIN AREA DRAIN	
WATER BLOWOFF		STORM DRAIN MANHOLE	
WATER METER		GAS METER	
WATER VALVE		GAS VALVE	
DOUBLE CHECK VALVE		CUT WIRE ANCHOR	
AIR RELEASE VALVE		UTILITY POLE	
SANITARY SEWER CLEAN OUT		POWER VAULT	
SANITARY SEWER MANHOLE		POWER JUNCTION BOX	
SIGN		POWER PEDISTAL	
STREET LIGHT		COMMUNICATIONS VAULT	
MAILBOX		COMMUNICATIONS JUNCTION BOX	
		COMMUNICATIONS RISER	
LEGEND			
EXISTING	PROPOSED	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		BOUNDARY LINE	
BOUNDARY LINE		PROPERTY LINE	
PROPERTY LINE		CENTERLINE	
CENTERLINE		DITCH	
DITCH		CURB	
CURB		EDGE OF PAVEMENT	
EDGE OF PAVEMENT		EASEMENT	
EASEMENT		FENCE LINE	
FENCE LINE		GRAVEL EDGE	
GRAVEL EDGE		POWER LINE	
POWER LINE		OVERHEAD WIRE	
OVERHEAD WIRE		COMMUNICATIONS LINE	
COMMUNICATIONS LINE		FIBER OPTIC LINE	
FIBER OPTIC LINE		GAS LINE	
GAS LINE		STORM DRAIN LINE	
STORM DRAIN LINE		SANITARY SEWER LINE	
SANITARY SEWER LINE		WATER LINE	

PRELIMINARY PLANS

APPLICANT:

ROWAN DIGITAL INFRASTRUCTURE, PBLLC
600 A AVENUE
LAKE OSWEGO, OR 97034

PLANNING / ENGINEERING / SURVEYING TEAM:

AKS ENGINEERING & FORESTRY, LLC
CONTACT: MIAMI DOUKAS, AICP, RLA
EMAIL: MIAMI@AKS-ENG.COM
12905 SW HERMAN RD, SUITE 100
TUALATIN, OR 97062
PH: 503-563-6151

PROJECT LOCATION:

WEST OF THE INTERSECTION OF NW MARTIN ROAD AND
STATE HIGHWAY 47 - FOREST GROVE, OR

PROPERTY DESCRIPTION:

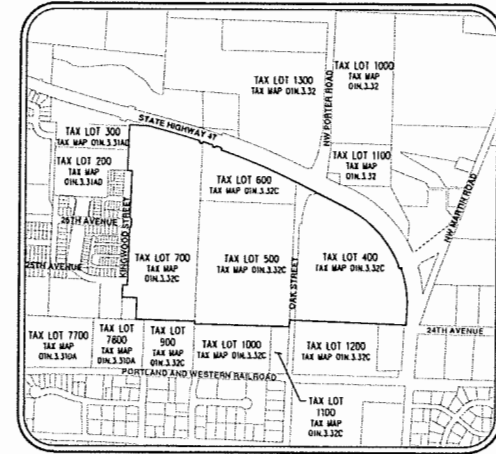
TAX LOT 400, 500, 600, 700, WASHINGTON COUNTY ASSESSOR'S
MAP IN 3W 32. LOCATED IN TOWNSHIP 1 NORTH, RANGE 3 WEST,
SECTION 32, WILLAMETTE MERIDIAN, CITY OF FOREST GROVE,
WASHINGTON COUNTY, OREGON.

VERTICAL DATUM:

VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS
BENCHMARK NO. 061456, LOCATED AT 2510 TURNER ROAD
SOUTHEAST ELEVATION = 209.10 FEET (NAVD 88) THEN
ADJUSTED TO NGVD 29 WITH A VERTICAL SHIFT OF -3.36 FEET
SETTING THE NGVD 29 ELEVATION AT 205.74.

HORIZONTAL DATUM:

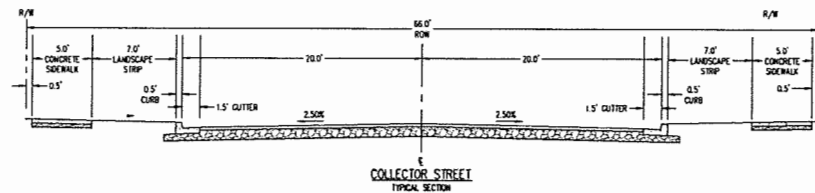
HORIZONTAL DATUM: A LOCAL DATUM PLANE DERIVED FROM
STATE PLANE OREGON NORTH 3601 NAD83(2011) EPOCH
2010.0000 BY HOLDING A PROJECT MEAN GROUND COMBINED
SCALE FACTOR OF 1.0001024952 AT A CENTRAL PROJECT
POINT WITH INTERNATIONAL FOOT STATE PLANE GRID
COORDINATES N462102.451 E7586745.205 AND A MERIDIAN
CONVERGENCE ANGLE OF -1'44"22". STATE PLANE
COORDINATES WERE DERIVED FROM GPS OBSERVATIONS USING
THE TRIMBLE VRS NOW NETWORK. DISTANCES SHOWN ARE
INTERNATIONAL FOOT GROUND VALUES.



SITE MAP
1" = 500'

SHEET INDEX

- P-01 COVER SHEET WITH LEGEND, VICINITY, AND SITE MAPS
- P-02 PRELIMINARY EXISTING CONDITIONS PLAN
- P-03 PROPOSED ROADWAY PLAN WITH TSP OVERLAY
- P-04 PROPOSED ROADWAY PLAN
- P-05 CONCEPTUAL SITE PLAN



- [illegible]

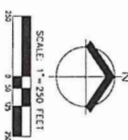
KEY ROLES

1. RECAUON B
KINCHWOOD

1. RECORD LABEL, STREET NAME/ADDRESS TO CORRECT TO THE PROPOSED 3RD STREET NAME/ADDRESS, ABOVE THE PROPOSED PORTION OF LABEL, STREET DESIGNATION TO INCREASE NO. 1
2. RECORD THE PROPOSED PORTION OF 2ND/3RD STREET LABEL, STREET DESIGNATION TO INCREASE NO. 1
3. RECORD THE PORTION OF 4TH STREET DESIGNATED AS A COLLECTION BETWEEN INCREASE NO. 1/2 AND THE PROPOSED 3RD STREET NAME/ADDRESS
4. RECORD THE PORTION OF 4TH STREET DESIGNATED AS A COLLECTION BETWEEN INCREASE NO. 1/2 AND THE PROPOSED 3RD STREET NAME/ADDRESS
5. RECORD CROSS STREET, TO FOLLOW THE PROPOSED 3RD STREET NAME/ADDRESS, TO FOLLOW THE INCREASE/NO. 1/2 AND INCREASE/NO. 1/2 AND 4TH STREET TO FOLLOW THE PROPOSED 3RD STREET NAME/ADDRESS
6. RECORD IN SCENE PREVIEW TO FOLLOW THE PROPOSED 3RD STREET NAME/ADDRESS, TO FOLLOW THE INCREASE/NO. 1/2 AND INCREASE/NO. 1/2 AND 4TH STREET TO FOLLOW THE PROPOSED 3RD STREET NAME/ADDRESS

LEGEND

- | | |
|---|--|
|  | EXISTING PERIMETER AIRLIFT, PER
EXISTING TSP |
|  | EXISTING AIRLIFT, PER CURRENT TSP |
|  | PROPOSED COLLECTOR PER CURRENT
TSP |
|  | CONCEPTUAL COLLECTOR PER CURRENT
TSP |
|  | PROPOSED TV ZONE, BENTLEY ROUTE
ADDITION PER TSP ADDENDUM |
|  | PROPOSED TV ZONE, BENTLEY ROUTE
ADDITION PER TSP ADDENDUM |
|  | PROPOSED CONDUIT, CROSS STREET,
PER TSP ADDENDUM PER TSP ADDENDUM |
|  | CONCEPTUAL CONDUIT, CROSS STREET,
PER TSP ADDENDUM PER TSP ADDENDUM |
|  | TSP ADDENDUM TO BE AWARDED/REMOVED |
- APPROXIMATE LOCATION OF NEW
HOVLAN TSP AT HOVLAN ROAD
OVERLAP, SEE FIGURE 8 IN TSP
PERMIT.



P-03

JOE MUMFORD 8808-C
PAY 6/10/2012
DEPOSIT BY PC
PAID BY CAC
C-COLD BY PC

PRELIMINARY
NOT FOR
CONSTRUCTION

**PROPOSED ROADWAY PLAN WITH TSP OVERLAY
OAK STREET AREA TSP AMENDMENT
ROWAN DIGITAL INFRASTRUCTURE, PBLLC
FOREST GROVE, OR**

AKS ENGINEERING & FORESTRY, LLC
12965 SW HERMAN RD, STE 100
TUALATIN, OR 97062
503.563.6151
WWW.AKS-ENG.COM

ENGINEERING • SURVEYING • NATURAL RESOURCES
FORESTRY • PLANNING • LANDSCAPE ARCHITECTURE

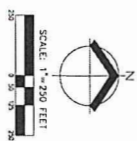
1. PROPERTY TAXES ARE BASED ON RECORDS SURVEY RECORDS AND THE PROPERTY TAX MAPS. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS.
2. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS.
3. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS.
4. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS.
5. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS. THE RECORDS SURVEY RECORDS ARE THE BASIS FOR THE PROPERTY TAX MAPS.

LEGEND

	DESIGN MINOR, MINOR, OR DESIGN TP
	DESIGN MINOR, MINOR, OR DESIGN TP
	DESIGN COLLECTOR OR DESIGN TP
	DESIGN COLLECTOR OR TP
	DESIGN COLLECTOR OR DESIGN TP
	DESIGN TP, SINK, DRAIN, POLE, ADOPTED OR DESIGN TP
	DESIGN, TP, SINK, DRAIN, POLE, ADOPTED OR DESIGN TP
	DESIGN DRAIN, DRAIN, POLE, ADOPTED OR TP, ADOPTED
	DESIGN DRAIN, DRAIN, POLE, ADOPTED OR DESIGN TP

TP: ADOPTED TO BE ADOPTED/PROPOSED

APPROXIMATE LOCATION OF NEW
ADDITION TO THE MAIN ROAD
ADDITION TO THE MAIN ROAD
ADDITION TO THE MAIN ROAD
ADDITION TO THE MAIN ROAD



P-04

PRO NUMBER	8858-01
DATE	6/10/2022
PERSON ID	JPC
PLAN ID	005
CHRGD BY	JPC

**PROPOSED ROADWAY PLAN
OAK STREET AREA TSP AMENDMENT
ROWAN DIGITAL INFRASTRUCTURE, PBLLC
FOREST GROVE, OR**

AKS ENGINEERING & FORESTRY, LLC
12965 SW HERMAN RD, STE 100
TUALATIN, OR 97062
503.563.6131
WWW.AKS-ENG.COM

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FORESTRY • PLANNING • LANDSCAPE ARCHITECTURE



DISCLAIMER: THIS CONCEPT SITE PLAN IS PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY AND IS NOT A GUARANTEE OF ANY KIND. IT DOES NOT CONSTITUTE A PROFESSIONAL ENGINEERING, PLANNING, OR SURVEYING REPORT. THE PROJECT IS SUBJECT TO CHANGE AND SUBJECT TO DRAINAGE.

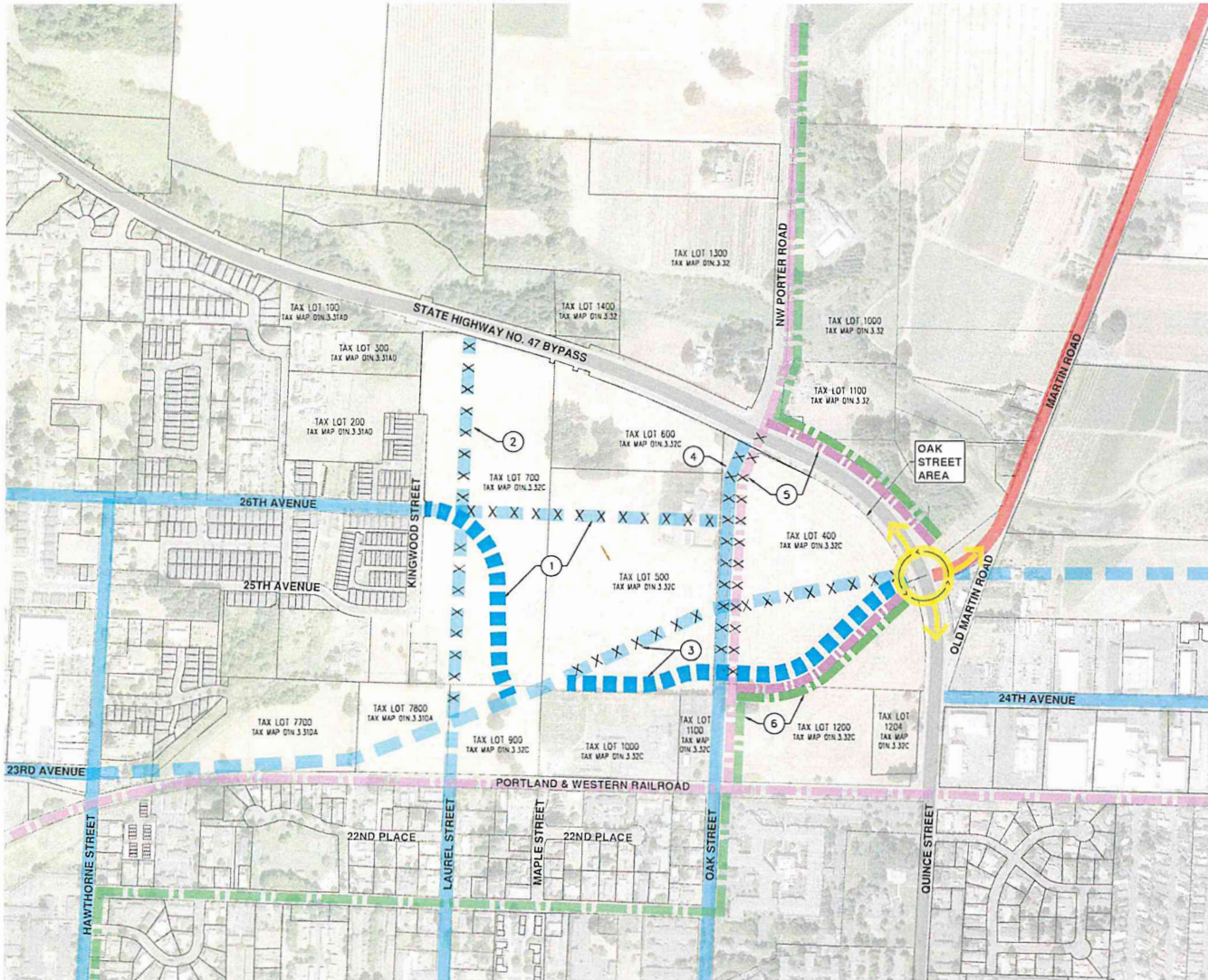
P-05

DATE	08/04/20
DATE	8/19/2022
DESIGNED BY	AKS
CHECKED BY	AKS
APPROVED BY	AKS

**PRELIMINARY
NOT FOR
CONSTRUCTION**

CONCEPTUAL SITE PLAN OAK STREET AREA TSP AMENDMENT ROWAN DIGITAL INFRASTRUCTURE, PBLLC FOREST GROVE, OR

Exhibit D: Alternative Realignment Concept Plan



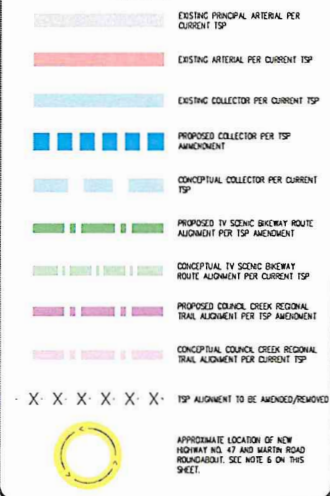
KEY NOTES:

1. REALIGN THE PROPOSED PORTION OF 26TH AVENUE TO CONNECT TO THE PROPOSED 23RD/24TH AVENUE REALIGNMENT.
2. REMOVE THE PROPOSED PORTION OF LAUREL STREET EXTENDING TO HIGHWAY NO. 47.
3. SHIFT THE PROPOSED PORTION OF 23RD/24TH AVENUE BEGINNING WEST OF OAK STREET, TO THE SOUTH TO MAINTAIN A NEW CONSOLIDATED CONNECTION AT THE PLANNED 4TH LEO OF THE NEW ROUNDABOUT AT HIGHWAY 47 AND MARTIN ROAD.
4. REMOVE THE PORTION OF OAK STREET DESIGNATED AS A COLLECTOR BETWEEN HIGHWAY NO. 47 AND THE PROPOSED 23RD/24TH AVENUE REALIGNMENT.
5. REALIGN COUNCIL CREEK TRAIL TO FOLLOW THE PROPOSED 26TH AVENUE REALIGNMENT TO THE NEW ROUNDABOUT AT HIGHWAY NO. 47 AND MARTIN ROAD AND ALONG HIGHWAY NO. 47 TO NW PORTER ROAD.
6. REALIGN TV SCenic BIKWAY TO FOLLOW THE PROPOSED 26TH AVENUE REALIGNMENT TO THE NEW ROUNDABOUT AT HIGHWAY 47 AND MARTIN ROAD AND ALONG HIGHWAY 47 TO NW PORTER ROAD.

NOTES:

1. PROPERTY LINES ARE BASED ON RECORDED SURVEYS, RECORDED DEEDS, AND COUNTY GIS TAX LOT INFORMATION. PROPERTY LINES ARE CONSIDERED APPROXIMATE AND ARE SUBJECT TO CHANGE.
2. THIS MAP IS FOR PLANNING PURPOSES ONLY AND IS CONSIDERED APPROXIMATE.
3. THE STREET ALIGNMENTS AND FUNCTIONAL CLASSIFICATIONS AS SHOWN ARE PER FIGURE 8-1 OF THE ADOPTED CITY OF FOREST GROVE TRANSPORTATION SYSTEM PLAN (2014).
4. THE COUNCIL CREEK REGIONAL TRAIL ALIGNMENT IS SHOWN PER THE COUNCIL CREEK REGIONAL TRAIL MASTER PLAN (2015) AND CITY OF FOREST GROVE TRANSPORTATION SYSTEM PLAN AMENDMENT #2 (2017).
5. THE TUALATIN VALLEY (TV) SCenic BIKWAY IS SHOWN PER FIGURE 3-4 OF THE ADOPTED CITY OF FOREST GROVE TRANSPORTATION SYSTEM PLAN (2014).
6. REFER TO THE TECHNICAL MEMORANDUM FOR ADDITIONAL INFORMATION.
7. IN COORDINATION WITH CITY OF FOREST GROVE AND WASHINGTON COUNTY PROJECT STAFF IT WAS CONFIRMED THAT THE NEW ROUNDABOUT AT HIGHWAY 47 AND MARTIN ROAD IS PLANNED TO INCLUDE 4 LEOs. INITIAL CONSTRUCTION (ANTICIPATED COMPLETION FALL 2022) WILL INCLUDE 3 LEOs (NORTHERN AND SOUTHERN LEOs TO HIGHWAY NO. 47 AND AN EASTERN LEO TO MARTIN ROAD). A 4TH (FUTURE, WESTERN) LEO IS PLANNED FOR AND ACCOMMODATED IN THE ROUNDABOUT DESIGN.

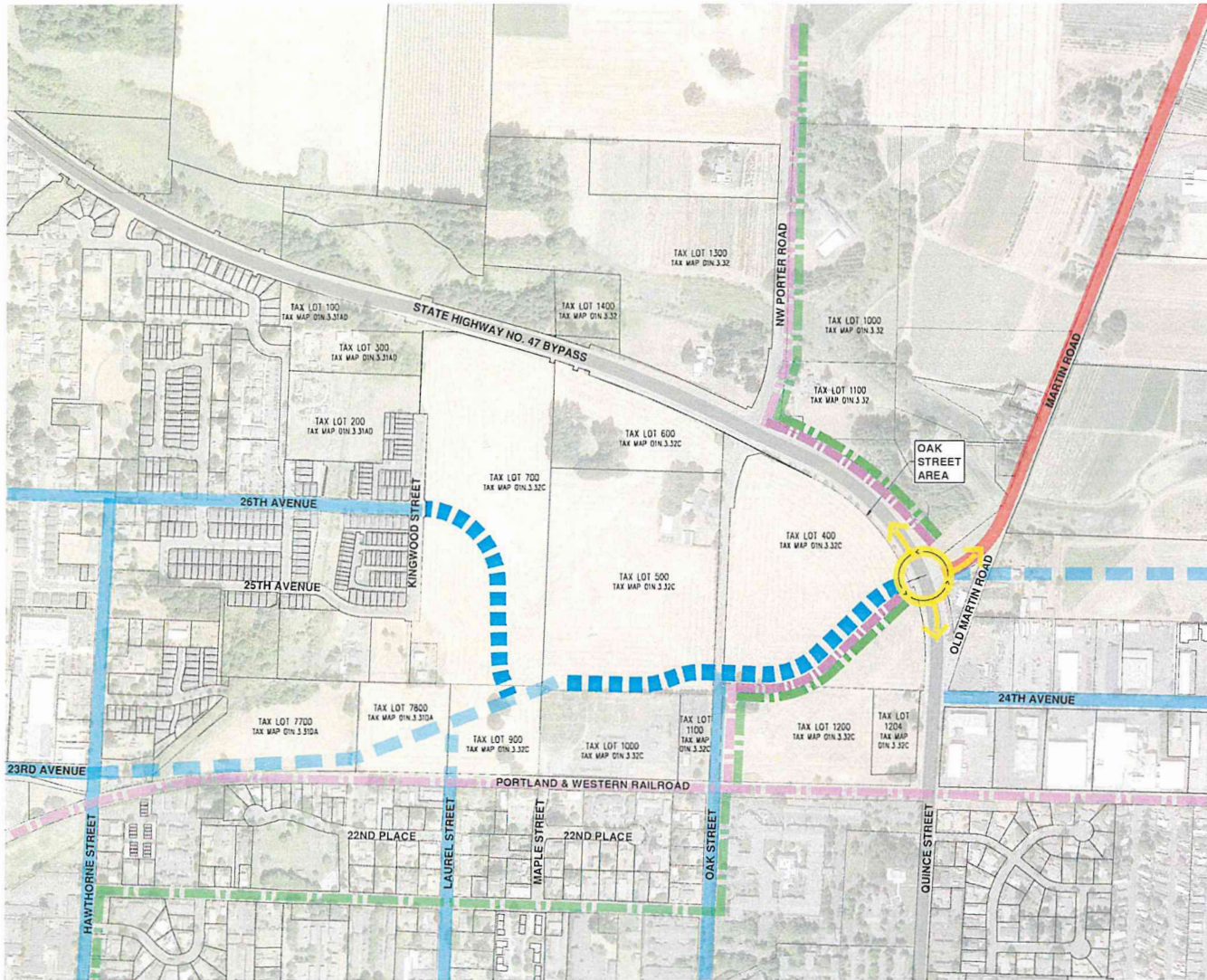
LEGEND



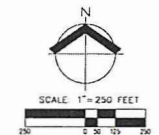
ALTERNATIVE REALIGNMENT CONCEPT PLAN WITH TSP OVERLAY OAK STREET AREA TSP AMENDMENT

ROWAN DIGITAL INFRASTRUCTURE
 FOREST GROVE





- NOTES:**
1. PROPERTY LINES ARE BASED ON RECORDED SURVEYS, RECORDED DEEDS, AND COUNTY DSS TAX LOT INFORMATION. PROPERTY LINES ARE CONSIDERED APPROXIMATE AND ARE SUBJECT TO CHANGE.
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 6. REFER TO THE TECHNICAL MEMORANDUM FOR ADDITIONAL INFORMATION.
 7. IN COORDINATION WITH CITY OF FOREST GROVE AND WASHINGTON COUNTY PROJECT STAFF IT WAS CONFIRMED THAT THE NEW ROUNDABOUT AT HIGHWAY 47 AND MARTIN ROAD IS PLANNED TO INCLUDE 4 LECs. INITIAL CONSTRUCTION (ANTICIPATED COMPLETION FALL 2022) WILL INCLUDE 3 LECs (NORTHERN AND SOUTHERN LEGS TO HIGHWAY NO. 47 AND AN EASTERN LEG TO MARTIN ROAD). A 4TH FUTURE, WESTERN LEG IS PLANNED FOR AND ACCOMMODATED IN THE ROUNDABOUT DESIGN.



ALTERNATIVE REALIGNMENT CONCEPT PLAN OAK STREET AREA TSP AMENDMENT

ROWAN DIGITAL INFRASTRUCTURE, PBLLC
 FOREST GROVE, OREGON

EXH-02

Technical Memorandum

June 9, 2022

Project# 26843

To: Dan Riordan, City of Forest Grove

From: Julia Kuhn & Chris Brehmer

CC: Derek Robbins, City of Forest Grove
Jinde Zhu, Stacy Shetler & Steve L. Kelly, Washington County
Avi Tayar & Marah Danielson, ODOT Region 1
Mimi Doukas, Cody Street & Marie Holladay, AKS Engineering & Forestry LLC
David Shiflett, Rowan Digital Infrastructure, PBLLC

RE: Forest Grove Transportation System Amendment

Rowan Green Data, LLC (Rowan, Applicant) is proposing to amend the Forest Grove Transportation System Plan (TSP) and the Washington County TSP to remove three street extensions currently identified in the City and County TSPs. These include: the extension of Oak Street north to OR 47, the extension of 26th Avenue east to Oak Street and the extension of 23rd Avenue east to OR 47. The proposed amendment would also require the change in the Council Creek Trail alignment currently shown along the Oak Street extension. In lieu of the existing TSP functional classifications, and as graphically illustrated in Appendix 1, the Applicant proposes to extend 26th Avenue from Kingwood Street to the OR 47/Martin Road intersection and extend Laurel Street north to the 26th Avenue extension. As proposed, the Council Creek Trail will follow the Laurel Street and 26th Avenue extensions to connect to the OR 47/Martin Road intersection. These changes are proposed to facilitate the potential future development of industrial-related uses that require larger lots sizes and the ability to provide secure access to the property. On behalf of the Applicant, this memo outlines the findings of our analyses associated with the TSP amendment request. AKS Engineering & Forestry, LLC has also prepared technical and policy analyses to assist with the request and this memorandum is intended to support that work.

As discussed herein, the TSPs can be amended as proposed to change the intended collector street locations (and associated pedestrian and bicycle facilities and Council Creek Trail alignment) currently shown on The City TSP's Table 1-2, Table 5-1, Table 6-2, Table 8-3, Table 10-3, Figure 5-3, Figure 6-7, Figure 6-8, Figure 8-1, and Figure 8-7 (TSP as amended in 2017¹) as well as the associated maps in the County TSPs.

STATE REQUIREMENTS FOR AMENDING THE TSP

The Oregon Department of Transportation's (ODOT) Transportation Planning Rule outlines the steps that must be followed to adopt or amend a Transportation System Plan (TSP). Per these requirements, the proposed amendment to the TSPs must address the following relevant sections from Oregon Administrative Rule (OAR) 660-012-0015:

(3) Cities and counties shall prepare, adopt and amend local TSPs for lands within their planning jurisdiction in compliance with this division:

(a) Local TSPs shall establish a system of transportation facilities and services adequate to meet identified local transportation needs and shall be consistent with regional TSPs and adopted elements of the state TSP;

¹ ord.2017-08.adopting_transportation_system_plan_amendments_file_no.311-17-000013-plng.pdf (forestgrove-or.gov)

(4) Cities and counties shall adopt regional and local TSPs required by this division as part of their comprehensive plans. Transportation financing programs required by OAR 660-012-0040 may be adopted as a supporting document to the comprehensive plan.

(5) The preparation of TSPs shall be coordinated with affected state and federal agencies, local governments, special districts, and private providers of transportation services.

(7) Where conflicts are identified between proposed regional TSPs and acknowledged comprehensive plans, representatives of affected local governments shall meet to discuss means to resolve the conflicts. These may include:

(a) Changing the draft TSP to eliminate the conflicts; or

(b) Amending acknowledged comprehensive plan provision to eliminate the conflicts;

(c) For MPOs which are not metropolitan service districts, if conflicts persist between regional TSPs and acknowledged comprehensive plans after efforts to achieve compatibility, an affected local government may petition the Commission to resolve the dispute.

Consistent with the applicable TPR requirements for amending the TSPs, the following section address:

- The facilities and services needed to support the amendment and consistency with the adopted City TSP (as amended in 2017);
- Consistency of the amendments with the City's Comprehensive Plan;
- Consistency of the proposed amendments with the relevant adopted County, MPO and State plans and policies; and,
- Coordination efforts between the affected agencies by this amendment.

NEEDED FACILITIES AND SERVICES

OAR 660-012-0060 outlines the criteria for determining whether the proposed amendments would "significantly affect an existing or planned transportation facility." The TPR defines the steps needed to determine if a significant affect occurs as a result of the amendment and how to address. The relevant sections of the TPR for this proposed amendment are outlined below in italics.

DETERMINATION OF A SIGNIFICANT AFFECT PER THE TPR (660-012-0060)

"the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

(b) Change standards implementing a functional classification system; or

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

(2) If a local government determines that there would be a significant effect, then the local government must ensure that allowed land uses are consistent with the identified function, capacity, and performance standards of the facility measured at the end of the planning period identified in the adopted TSP through one or a combination of the remedies listed in (a) through (e) below, unless the amendment meets the balancing test in subsection (2)(e) of this section or qualifies for partial mitigation in section (11) of this rule. A local government using subsection (2)(e), section (3), section (10) or section (11) to approve an amendment recognizes that additional motor vehicle traffic congestion may result and that other facility providers would not be expected to provide additional capacity for motor vehicles in response to this congestion.

(a) Adopting measures that demonstrate allowed land uses are consistent with the planned function, capacity, and performance standards of the transportation facility.

(b) Amending the TSP or comprehensive plan to provide transportation facilities, improvements or services adequate to support the proposed land uses consistent with the requirements of this division; such amendments shall include a funding plan or mechanism consistent with section (4) or include an amendment to the transportation finance plan so that the facility, improvement, or service will be provided by the end of the planning period.

(c) Amending the TSP to modify the planned function, capacity or performance standards of the transportation facility.

(4) Determinations under sections (1)–(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.

Response to TPR regarding Significant Affect and Needed Transportation Services Facilities

The existing TSPs establish a system of street, bicycle facilities, transit facilities, pedestrian facilities, trail improvements and for the movement of goods and services needed to comply with the State's Transportation Planning Rule (TPR). The TSPs define the functional classification for each mode of travel as well as those standards implementing the functional classification systems.

Finding: As proposed, the amendment constitutes a significant affect (as defined by OAR 660-012-0060(1)(c)(A)) given that changes to the functional classifications of the Oak Street, 26th Avenue, and 24th Avenue corridors are proposed from those identified, by mode, in the adopted TSPs.

Finding: As proposed, the amendments to the TSP do not include any requests to change the standards implementing the functional classification systems but only the existing and planned transportation facilities identified in the TSP. Therefore, no significant affect occurs as defined in OAR 660-012-0060(1)(c)(B).

To test whether the proposed amendments degrade the performance of the planned facilities below the adopted performance standards (per OAR 660-012-0060(1)(c)(B)), this section of the memorandum addresses the following:

- Adequacy of the street and intersections in the vicinity to accommodate the proposed amendments, as defined by a capacity analyses of the following intersections:
 - OR 47/Sunset Drive
 - OR 47/Oak Street/Porter Road
 - OR 47/Martin Road
 - OR 47/24th Avenue
 - OR 47/Quince Street/Pacific Avenue
- Pedestrian facilities needed to address the identified deficiencies in lieu of those included in the adopted TSPs;
- Bicycle facilities needed to address the identified deficiencies in lieu of those included in the adopted TSPs; and,
- Trail facilities needed to address the identified deficiencies in lieu of those included in the adopted TSPs.

The proposed amendment does not require any changes nor does it affect the transit, air, pipeline or rail model plans identified in the adopted TSPs.

ADEQUACY OF THE STREETS AND INTERSECTIONS

The adopted TSPs assess the transportation facility needs associated with continued economic development consistent with the Comprehensive Plan, as measured by year 2035 transportation demand. Within the proximity of the proposed TSP amendment, the City and ODOT have spent considerable time in planning for the transportation system that serves people walking, riding bikes, driving and taking transit in this area. Most recently, the City's Draft Oak Street Refinement Plan technical analyses² provide updated future year traffic volumes that provide a reasonable basis for this analysis (i.e., they are slightly higher than those included in the City's adopted TSP and ODOT's Intersection Control Evaluation for OR 47/Martin Road). If one were to use the TSP or the Intersection Control Evaluation volumes, the analyses would be based on lower traffic volumes and may not highlight needed capacity changes and/or a significant affect for vehicles that may otherwise result.

Therefore, this analyses reflects intersection street needs using the future year 2040 weekday PM peak hour traffic volumes in the *Oak Street Refinement Plan Transportation Baseline Report*. The analyses also provides a comparison of intersection capacity needs associated with the adopted TSP facilities and the proposed amendments on the following locations:

1. OR 47/Sunset Drive
2. OR 47/Oak Street/Porter Road
3. OR 47/Martin Road
4. OR 47/24th Avenue
5. OR 47/Quince Street/Pacific Avenue³

² *Oak Street Refinement Plan Draft Transportation Baseline Report*. August 2020 (this plan is not adopted yet but serves as a basis for the technical review).

³ Analysis assumes construction of a second westbound left-turn lane and separate eastbound right-turn lane at the intersection per the City TSP and Regional Transportation Project (RTP) Constrained Project List Project ID 10780.

YEAR 2040 ADOPTED TSP CAPACITY NEEDS

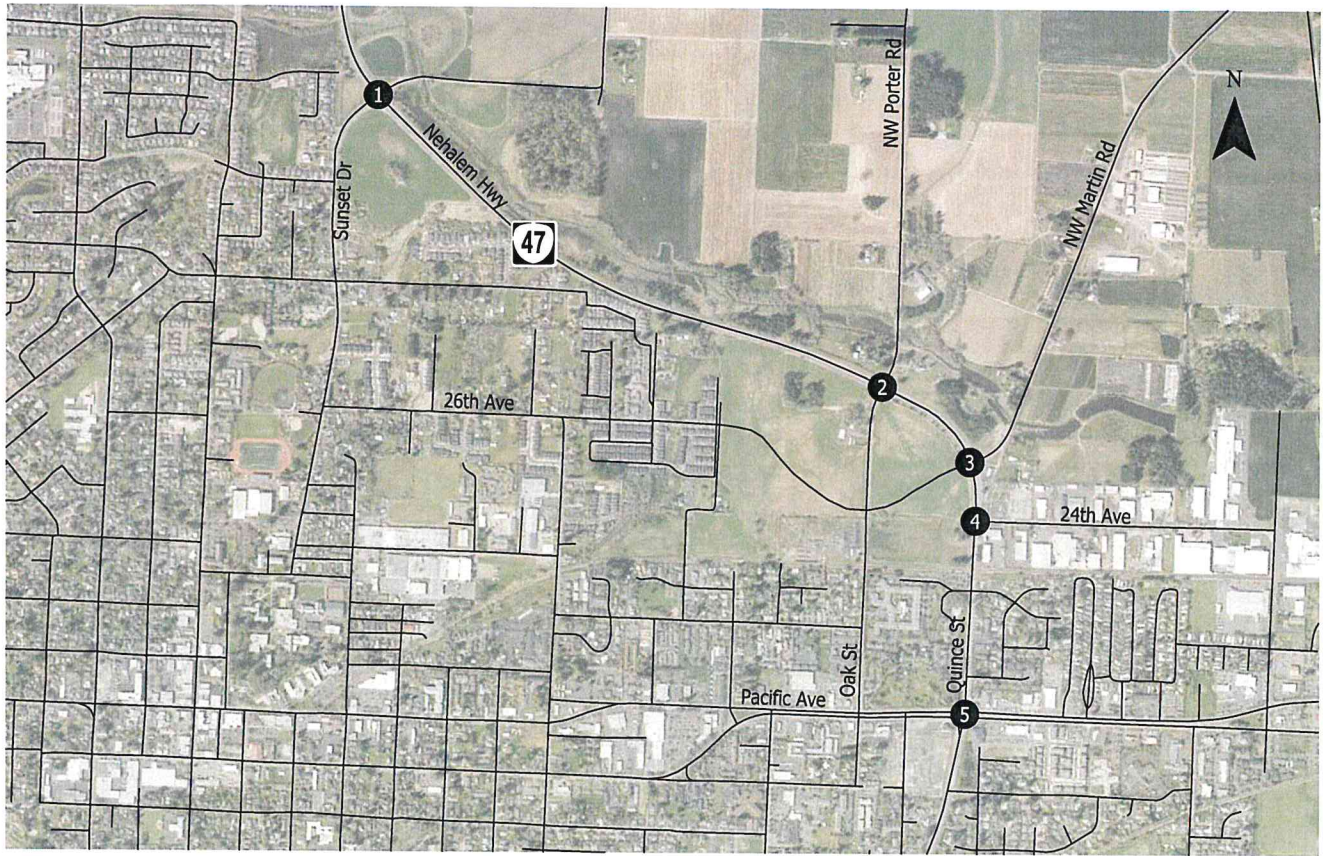
Figure 1 identifies the year 2040 traffic intersection volumes and operations analysis associated with the five identified intersections above and associated streets included in the adopted TSPs. As defined in the City TSP, each of the five intersections are subject to ODOT mobility targets for OR 47, which are defined by a volume-to-capacity ratio (v/c) of no more than 0.99. As shown in the figure, the adopted TSP facilities comply with the applicable mobility target.

YEAR 2040 PROPOSED AMENDMENT CAPACITY NEEDS

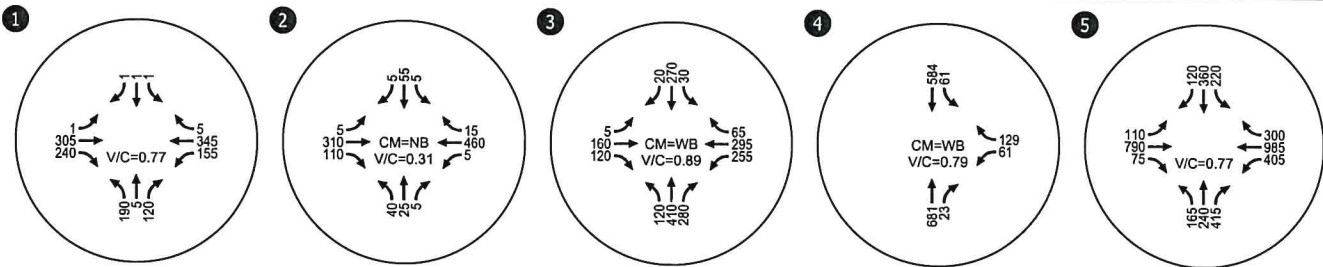
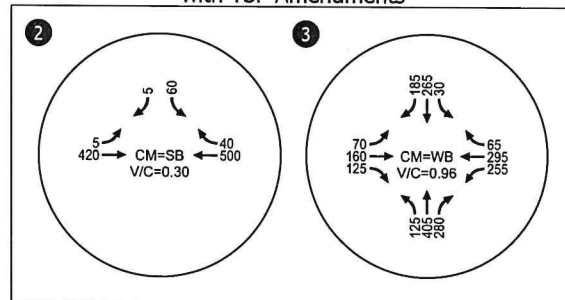
Figure 1 also identifies the change in year 2040 traffic volumes and intersection operations associated with the streets and intersection changes proposed in the amendment. The 2040 volumes were defined by simply re-routing the traffic shown to use the planned 24th Street extension to OR 47 and the planned Oak Street extension to OR 47/Porter Road in Figure 1 to instead use the proposed 26th Street extension to the OR 47/Martin Road intersection. As shown in the figure, the proposed amendments would still enable the applicable mobility targets to be satisfied at each of the intersections.

The intersection operations analysis worksheets are included in Appendix 2.

Finding: As proposed, the amendment does not constitute a significant affect (as defined by OAR 660-012-0060(1)(c)(C)) given that changes included to the proposed amendments do not result in a degradation of the intersection operations from the adopted TSP and that the applicable mobility targets can be satisfied at each location with the changes.



Year 2040 Base Condition PM Peak Hour Traffic Volumes

Year 2040 Future Condition PM Peak Hour Traffic Volumes
with TSP Amendments**LEGEND**

CM = Critical Movement (Unsignalized)
 V/C = Volume-To-Capacity Ratio
 (Overall for Signalized Intersections,
 for CM at Stop Control and Roundabout)

Year 2040 Traffic Conditions
 Weekday PM Peak Hour
 Forest Grove, Oregon

Figure
 1

Response to Consistency with the City's Comprehensive Plan Transportation Goals and Policies

The City's Comprehensive Plan (adopted in 2014) identifies ten transportation-related goals with associated policies and action items. These same goals are also included within the City's TSP. The following identifies how the proposed amendment complies with each of the identified goals.

GOAL 1 DEVELOP AND MAINTAIN A BALANCED TRANSPORTATION SYSTEM THAT PROVIDES TRAVEL CHOICES AND REDUCES THE NUMBER OF TRIPS BY SINGLE OCCUPANT VEHICLES (SOV).

Within this goal, the policies statements support a connected network of walkways and bikeways, collaboration with TriMet to provide convenient and accessible transit service, providing options to reduce SOV, establishing targets to reduce SOV travel, and encouraging local employment and retail development to reduce the need to travel outside of the City for daily activities.

Finding: As proposed, the amendment is compliant with Goal 1 because it:

- Provides connections for people walking and riding bikes via the proposed 26th Avenue extension from Kingwood to OR 47/Martin Road as well as from the existing northern terminus of Laurel to the proposed 26th Avenue extension. Like the connections shown in the TSP, these proposed connections link people in the neighborhoods to the west and south with OR 47 to the east, thereby continuing to support a network of connected walkways and bikeways.
- Provides an alternative trail connection to OR 47/Martin Road along the proposed 26th Avenue extension as well as a trail along OR 47 to connect to the Porter Road intersection to fulfill the TSP connection via Oak Street to OR 47/Porter Road.
- Does not change the need for nor the provision of existing or proposed transit service.
- Does not result in changes to the established SOV targets nor does it affect the City's ability to achieve these targets.
- Continues to support the planned employment and residential uses in the vicinity of the amendment by connecting people to jobs and houses via the streets, sidewalks, bike lanes and bike paths planned and proposed for amendment.

GOAL 2 DEVELOP AND MAINTAIN A TRANSPORTATION SYSTEM THAT REDUCES THE LENGTH OF TRAVEL AND LIMITS CONGESTION.

Within this goal, the policies statements support a connected network of streets with a preferred spacing of less than 530 feet for vehicle connections and less than 330 feet for pedestrian connections, adhering to the access spacing requirements and providing for the orderly flow of vehicles and freight.

Finding: As proposed, the amendment is compliant with Goal 2 because it:

- Still provides connections for people driving, walking and riding bikes via the proposed 26th Avenue extension from Kingwood to OR 47/Martin Road as well as from the existing northern terminus of Laurel to the proposed 26th Avenue extension. Like the connections shown in the TSP, these proposed connections link people in the neighborhoods to the west and south with OR 47 to the east and also allow for localized travel that does not rely on OR 47 and OR 8, thereby continuing to support a connected transportation network.

- The collector streets included in the TSP do not meet the preferred spacing criteria for local streets (i.e., 530 feet for streets and 330 feet for pedestrian connections); however, the identified streets do not preclude the provision of local streets in the future that meet these criteria. The proposed amendment also does not preclude the provision of a local street network to the east or west in the future and does not materially increase the distance provided between the collector streets from that shown in the TSP.

GOAL 3 DEVELOP AND MAINTAIN A TRANSPORTATION SYSTEM THAT IS SAFE

Within this goal, the policies statements support the design of pedestrian, bicycle and roadway facilities that are safe and feel secure to users, are accessible, are well-lit, and encourage non-auto travel.

Finding: As proposed, the amendment is compliant with Goal 3 because it:

- Does not change the jurisdictional design standards nor the access management standards that will dictate how the proposed transportation network will be designed, constructed, operated or maintained.

GOAL 4 DESIGN AND CONSTRUCT TRANSPORTATION FACILITIES IN A MANNER THAT ENHANCES THE LIVABILITY OF FOREST GROVE

Within this goal, the policies statements support the design of transportation facilities that are reflective of the adjacent community and neighborhoods, increase the health and physical well-being of citizens, protect residential neighborhoods from cut-through and speeding traffic, and reduce the barriers for all users, especially the transportation-disadvantaged from having access to a variety of travel options.

Finding: As proposed, the amendment is compliant with Goal 4 because it:

- Does not change the City's design standards for the streets, pedestrian or bicycle facilities.
- Does not result in any new planned connections into the adjacent neighborhoods and as such does not present any new potential cut-through routes.
- Still provides for local street connectivity to the TriMet service provided via Route 57 on OR 8 to the south.
- Does not result in a change to the transit service design guidelines nor the future transit system plan outlined in the TSP.

GOAL 5 PROMOTE THE DEVELOPMENT OF FOREST GROVE, THE STATE AND THE NATIONAL ECONOMY THROUGH THE EFFICIENT MOVEMENT OF PEOPLE, GOODS, SERVICES AND INFORMATION IN A SAFE AND EFFICIENT MANNER

Within this goal, the policies statements support the design of freight facilities that safe, reliable and efficient, minimize conflicts with other users, provide for the safe routing of materials, provide for safe rail crossings, and provide for a transportation system that supports continued economic growth in the City.

Finding: As proposed, the amendment is compliant with Goal 5 because it:

- Does not change the City's designation of streets prioritized for freight movement (i.e., arterials).
- Does not result in the need for any new rail crossing locations or changes to those planned for in the TSP.

- Provides a network of streets that can be constructed in collaboration with adjacent land development.
- Provides connections between homes and jobs.

GOAL 6 ESTABLISH AND MAINTAIN A CONTEXT SENSITIVE SET OF TRANSPORTATION DESIGN AND DEVELOPMENT REGULATIONS

Within this goal, the policies statements support the design of streets consistent the City, County, Metro and ODOT designations and standards, provide for the needs of emergency services, integrate pedestrian and bicycle facilities into all planning and design efforts, design transportation facilities that reflect the adjacent surroundings, and require the construction of appropriate transportation facilities at the time of land development.

Finding: As proposed, the amendment is compliant with Goal 6 because it:

- Does not change the City's designation of streets prioritized for emergency services (i.e., arterials).
- Does not change the implementing standards for the design and construction of streets, pedestrian or bicycle facilities within the City.
- Clearly designates a system of streets (with associated sidewalks and bicycle facilities) within the study area in a manner that still provides connectivity and meets the overall intents of the TSP designations.
- Still provides for right-of-way designations and future construction of new streets, sidewalks and bicycle facilities that can be included as part of future land development.

GOAL 7 PROVIDE A TRANSPORTATION SYSTEM THAT MEETS PRESENT NEEDS WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR NEEDS

Within this goal, the policies statements support the design of streets and pedestrian and bicycle facilities that encourage and increase walking and riding bikes in the City, minimize the environmental impacts associated with automobile travel and roadway construction and reflect an overall stewardship of the natural resources in the City.

Finding: As proposed, the amendment is compliant with Goal 7 because it:

- Does not change the City's implementing standards for design of transportation facilities related to environment protection.
- Still provides for a system of sidewalks and bicycle facilities that provide connections between jobs, neighborhoods and to the adjacent highways as well as to transit along OR 8.
- Still requires the construction of appropriate facilities to serve people walking and riding bikes as part of adjacent land development.
- Still provides for a connection of the trail system between OR 8 in the south and OR 47 to the north.

GOAL 8 PROVIDE TRANSPORTATION PERFORMANCE MEASURES SET AND MAINTAINED BY THE CITY

Within this goal, the policies statements support maintaining a level of service D for vehicular operations at intersections and the establishment of appropriate parking ratios to serve existing and future development.

Finding: As proposed, the amendment is compliant with Goal 8 because it:

- Does not change the City's level-of-service standards.
- Allows for intersection operations that meet City and ODOT performance metrics in the future.
- Does not constitute a need to change the established parking ratios.

GOAL 9 DEVELOP A TRANSPORTATION SYSTEM THAT IS CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN AND ADOPTED STATE AND REGIONAL PLANS

Within this goal, the policies statements support interagency collaboration in planning for, operating and making changes to the transportation system in and through the City and providing clearly defined transportation standards that allow for consistency between agency requirements.

Finding: As proposed, the amendment is compliant with Goal 9 because it:

- Does not change the City's interagency collaboration.
- Still supports existing and future transit service.
- Does not change the need for rail service or rail crossing locations.
- Does not change any of the implementing standards for the planning and construction of new transportation facilities.
- Has been coordinated with the applicable planning and regulatory agencies.

GOAL 10 EFFICIENTLY USE FUNDING SOURCES TO IMPLEMENT TRANSPORTATION SYSTEM IMPROVEMENT PROJECTS RECOMMENDED IN THE TSP

Within this goal, the policies statements support the City continuing to identify a variety of funding sources to construct, operate and maintain the transportation system in a "state of good repair." These policies also require cost sharing as part of land development to ensure that new users pay their fair share of future transportation system needs.

Finding: As proposed, the amendment is compliant with Goal 10 because it:

- Does not change the City's interagency collaboration on future funding source opportunities nor on future funding partnerships.
- Does not change the City requirements for requiring new development to pay their fair share.
- Continues to identify a network of streets, sidewalks and bicycle facilities that will be required to be constructed as part of future land development.

Response to Consistency with the City TSP Functional Classifications by Mode and Preferred Projects

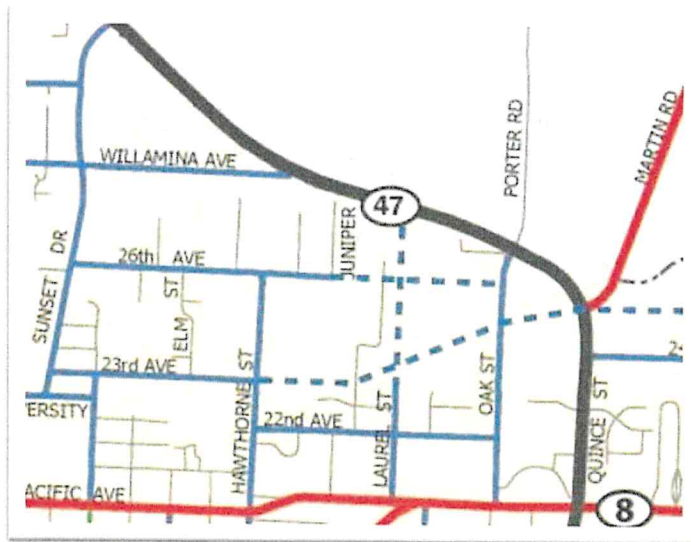
The City's TSP (adopted in 2014 and amended in 2016 and 2017) will need to be amended to remove the Oak Street and 24th Avenue extensions (and associated pedestrian and bicycle facilities) and to replace instead with the 26th Avenue and Laurel Street extensions. This amendment would affect Table 1-2, Table 5-1, Table 6-2, Table 8-3, Table 10-3, Figure 5-3, Figure 6-7, Figure 6-8, Figure 8-1, and Figure 8-7 of the City's TSP.

The following identifies how the proposed amendments still comply with the multimodal projects and functional classification designations identified in the TSP.

TSP STREET SYSTEM

The TSP currently identifies the extension of Oak Street north to OR 47, 26th Avenue to the east to Oak Street and 23rd Avenue east to OR 47 all as collector facilities. Exhibit A shown below reflects the current alignments in the adopted TSP (all blue lines indicate collector facilities). These designated extensions and associated intersection changes are also included in TSP Table 8-3.

Exhibit A. Functional Classification Map (source Forest Grove TSP Figure 8-1).



Per the TSP, collector streets are intended to provide access and circulation within residential and industrial/employment areas and are designed to include three vehicular lanes, bike lanes and sidewalks. The need for the three streets proposed for amendment was identified to address the projected capacity deficiencies at OR 47/Porter Road/Oak Street and OR 47/Martin Road as well as to provide connectivity and balance traffic flows within this area. These objectives are consistent with TSP Goal 2 and related policies.

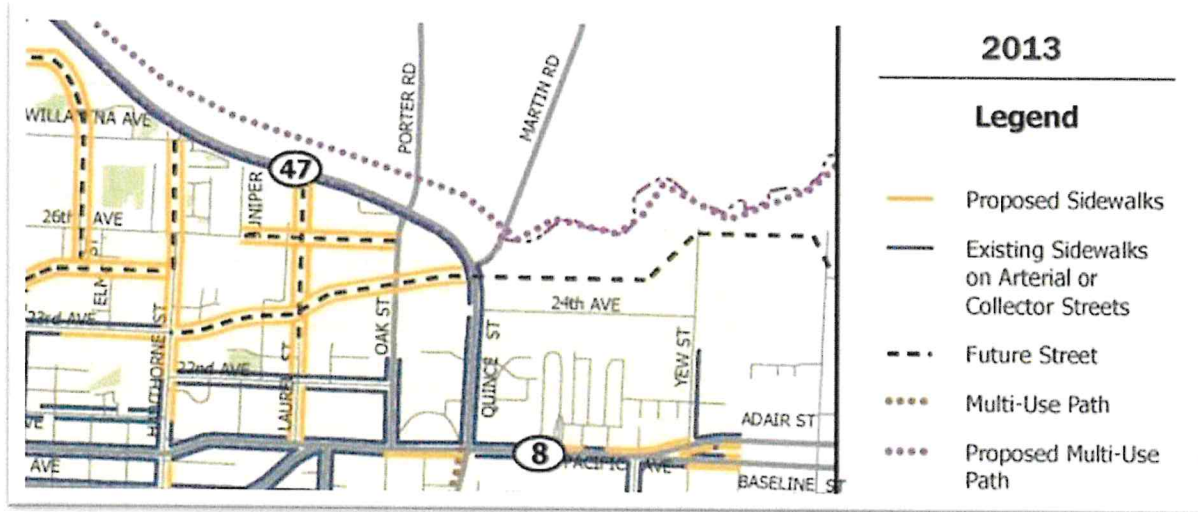
Finding: As proposed, the amendment can be compliant with the TSP Preferred Roadway Network and Preferred Project List because it:

- Still provides connections for people driving, walking and riding bikes via the proposed 26th Avenue extension from Kingwood to OR 47/Martin Road as well as from the existing northern terminus of Laurel to the proposed 26th Avenue extension. Like the connections shown in the TSP, these proposed connections link people in the neighborhoods to the west and south with OR 47 to the east and also allow for localized travel that does not rely on OR 47 and OR 8, thereby continuing to support a connected transportation network.
- Enables acceptable intersection operations at the OR 47/Porter Road and OR 47/Martin Road intersections.

TSP PEDESTRIAN SYSTEM

The TSP notes that sidewalks are required as part of all new street construction as well as along site frontages as part of land development. In addition, the TSP also identifies the future extension of 23rd Avenue east to OR 47 as a high priority new sidewalk corridor and the Council Creek Trail Crossing of OR 47 as a high priority location for intersection crossing improvements. Exhibit B shown below reflects the sidewalk locations in the originally adopted TSP (this map was subsequently amended via ordinance in 2016 to add the Council Creek Trail Regional Trail Alignment 3). These designated changes to the pedestrian system are also included in TSP Table 5-1.

Exhibit B. Pedestrian System Map (source Forest Grove TSP Figure 5-3).



Per the TSP, the new sidewalk locations reflect the overall need for increased connectivity within the area as well as providing access to Bus Route 57 on OR 8. These objectives are consistent with TSP Goals 1, 2, 4 and 7 and the related policies.

Finding: As proposed, the amendment can be compliant with the TSP Preferred Pedestrian Network and Preferred Project List because it:

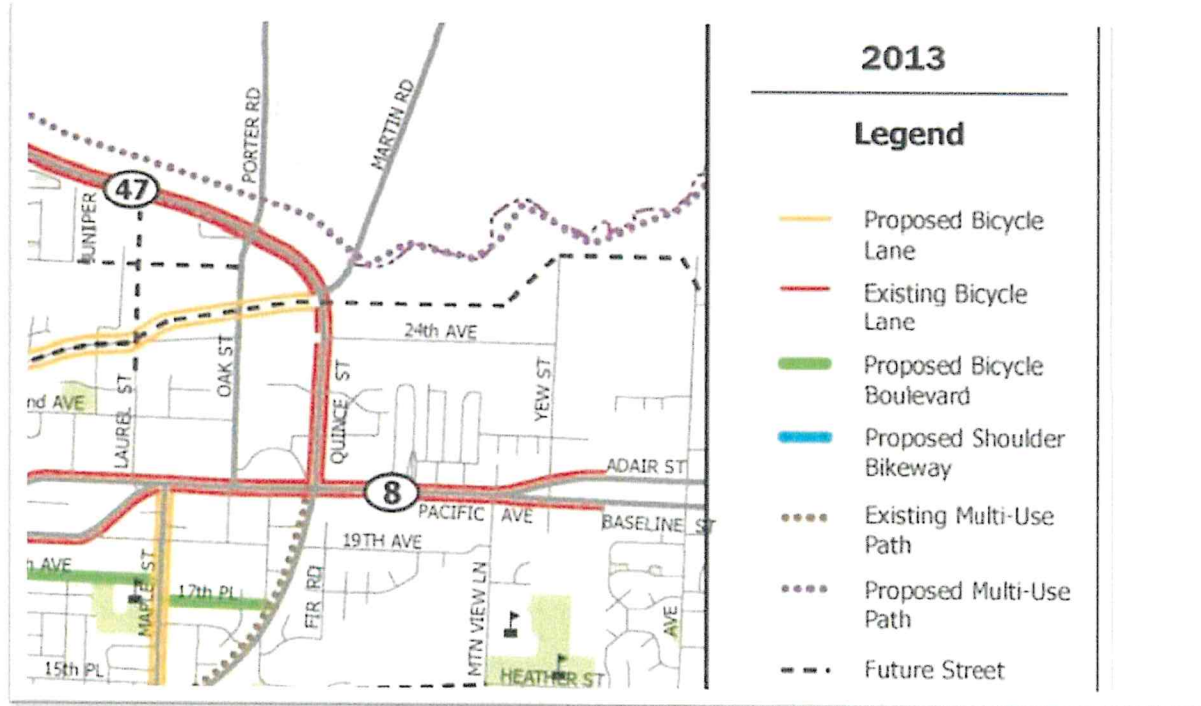
- Still connects people walking via the proposed 26th Avenue extension from Kingwood to OR 47/Martin Road as well as from the existing northern terminus of Laurel to the proposed 26th Avenue extension. Like the connections shown in the TSP, these proposed connections link people in the neighborhoods to the west and south with OR 47 to the east, thereby continuing to support a network of connected walkways.
- Provides an alternative trail connection to OR 47/Martin Road along the proposed 26th Avenue extension as well as a trail along OR 47 to connect to the Porter Road intersection. Pedestrian crossing improvements on OR 47 for trail users would also be provided.
- Still requires future land development to construct needed sidewalks along the existing and planned collector and local streets in the area.
- Still provides a connection for people to walk to the transit stops along OR 8 via the Laurel Street extension.

TSP BICYCLE SYSTEM

The TSP reflects a vision for the City to become one of the "region's most bikeable communities." New bike facility locations are prioritized to allow for safe and comfortable bicycle travel on lower speed, lower volume streets than might be available on the City's arterial streets. The TSP notes that bike facilities are required as part of all new collector and arterial street construction as well as along site frontages as part of land development where appropriate.

The TSP also identifies the future extension of 23rd Avenue east to OR 47 as a high priority new bike facility corridor and the Council Creek Trail Crossing of OR 47 as a high priority location for intersection crossing improvements. Exhibit C shown below reflects the bike facility locations in the originally adopted TSP (this map was subsequently amended via ordinance in 2016 to add the Council Creek Trail Regional Trail Alignment 3). These designated changes to the bicycle system are also included in TSP Table 6-2. One point to note is that although the Oak Street and 26th Avenue extensions are currently shown as collector streets in the TSP, no bicycle lanes are designated as provided along these future corridors. Therefore, the only amendments needed are to replace the 23rd Avenue bike lanes with the proposed east-west extension in the amendment.

Exhibit C. Bicycle System Map (source Forest Grove TSP Figure 6-3)



Finding: As proposed, the amendment can be compliant with the TSP Preferred Bicycle Network and Preferred Project List because it:

- Still connects people riding bikes via the proposed 26th Avenue extension from Kingwood to OR 47/Martin Road as well as from the existing northern terminus of Laurel to the proposed 26th Avenue extension. Like the connections shown in the TSP, these proposed connections link people in the neighborhoods to the west and south with OR 47 to the east, thereby continuing to support a network of connected bike lanes.

- Provides an alternative trail connection to OR 47/Martin Road along the proposed 26th Avenue extension as well as a trail along OR 47 to connect to the Porter Road intersection. Bicycle crossing improvements on OR 47 for trail users would also be provided.
- Still requires future land development to construct needed bike lanes along the east-west collector street extension identified in the TSP in the area.

Response to Metro Region Transportation Functional Plan Requirements

Metro's Regional Transportation Functional Plan Section 3.08.510.C and related Table 3.08-2 *Interim Regional Mobility Policy Deficiency Thresholds and Operating Standards* establishes the procedural requirements for the City to amend the Comprehensive Plan and the TSP.

Per Section 3.08.510.C, "If a city or county proposes a transportation project that is not included in the RTP and will result in a significant increase in SOV capacity or exceeds the planned function or capacity of a facility designated in the RTP, it shall demonstrate consistency with the following in its project analysis: The strategies set forth in subsection 3.08.220A (1) through (5)," etc. Further, per the Mobility Standards, the study intersections along OR 47 and OR 8 are subject to a mobility target of 0.99 (this was also discussed above).

The adopted 2018 RTP list includes the following projects in the study area:

- Project 11479 – Council Creek Regional Trail from Forest Grove through Washington County, the City of Banks, connecting to the Banks-Vernonia State Trail. This project is not on the financially constrained list.
- Project 10774 – 23rd Avenue Extension to connect OR 47 at Martin Road. This project is on the financially constrained list.
- Project 10780 – OR 47/OR 8/Pacific Avenue intersection improvements to add a west-bound left turn lane and an eastbound right turn lane. This project is on the financially constrained list.
- Project 11661 – OR 47/ Martin Road intersection improvements to construct a roundabout at the intersection. This project is on the financially constrained list.

Finding: As proposed and described above, the amendment does not exceed the planned function or capacity of the four RTP projects above. Response to the projects in the RTP list is discussed below.

- Council Creek Regional Trail – AKS Forestry and Engineering has addressed the alternatives considered for the slight realignment to the Trail proposed in the study area. As discussed under separate cover, the proposed Trail segment:
 - Still connects to OR 47/Porter Road in the north and the east-west trail along the railroad in the south, therefore still providing the same connectivity for users as specified in the City TSP.
 - Is intended to include appropriate intersection crossing treatments for trail users at both the OR 47/Martin Road and OR 47/Porter Road intersections.
 - Includes a trail segment along OR 47 between Martin Road and Porter Road, providing comfortable and convenient trail access between the two intersections.
 - Still helps to address the needed trail connectivity within the region.
 - Does not measurably change the number of trail users along this segment and therefore the planned function and capacity are still met.

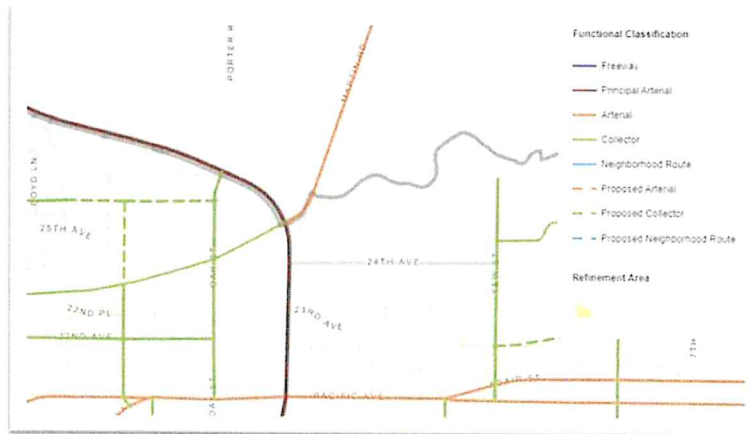
- 23rd Avenue extension – as proposed, the slight realignment still provides the collector street connection to the OR 47/Martin Road intersection. Further and as described in the above TPR section, the volumes along this segment of the collector do not measurably change from those in the TSP, still are consistent with a collector street, and still provide for the mobility target to be met at the OR 47/Martin Road roundabout. Therefore, the planned function and capacity are not exceeded.
- OR 47/OR 8 intersection improvements – as described in the above TPR section, the proposed realignments do not materially change the traffic demand at this intersection and still enable the mobility target to be met. Therefore, the planned function and capacity of the intersection improvements are not exceeded.
- OR 47/Martin intersection improvements – as described in the above TPR section, the proposed realignments still enable the mobility target to be met. Therefore, the planned function and capacity of the intersection improvements are not exceeded.

Response to Washington County TSP

The County's TSP (effective in September 2019) will need to be amended to remove the Oak Street and 23rd Avenue extensions (and associated pedestrian and bicycle facilities) and to replace instead with the 26th Avenue and Laurel Street extensions as well as with the proposed Council Creek Regional Trail alignment. This amendment would affect the County's Functional Classification Map, Pedestrian System Map and Bicycle System Map.

Exhibits D – F below illustrate the existing designations that will need to be amended within the County TSP.

Exhibit D. Functional Classification Map (source County TSP⁴)



⁴ TSP - Functional Classification (arcgis.com)

Exhibit E. Pedestrian System Map (Source: Washington County TSP⁵)

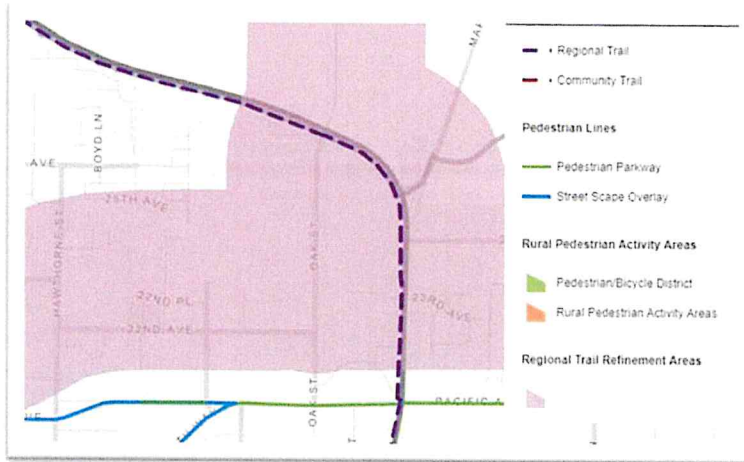


Exhibit F. Bicycle System Map (Source: Washington County TSP⁶)



In addition to the above maps that will need to be amended, compliance with the four goals identified in the TSP needs to be demonstrated. These goals include:

- **Goal 1 – Safety:** Provide a safe transportation system for all users. This goal is supported by specific objectives and strategies that outline engineering solutions, performance monitoring, collaboration with other public agencies and the private sector, and education and enforcement strategies aimed at addressing documented safety needs for people riding bikes, walking, taking transit, driving and the movement of freight to/from and within the County.
- **Goal 2 – Economic Vitality:** Provide a reliable transportation system that enhances the economic health of Washington County. This goal is supported by specific objectives and strategies that outline engineering solutions, economic investments and collaboration strategies to facilitate and

⁵ TSP - Pedestrian System (arcgis.com)

⁶ TSP - Bike Element (arcgis.com)

protect the movement of goods, services and agricultural products and equipment within and to the County via roadway, rail, air, and pipeline.

- Goal 3 – Livability: Preserve and enhance Washington County's quality of life for all residents, workers, and visitors. This goal is supported by specific objectives and strategies that consider how the transportation system is designed, operated and maintained to support the viability of neighborhoods, businesses, agricultural areas and historic/cultural resources. The goal includes engineering solutions, collaboration strategies and transportation investment priorities that support quality of life.
- Goal 4 – Natural Environment – Create and maintain a transportation system that first avoids, then minimizes, then mitigates impacts to the natural environment. This goal is supported by specific objectives and strategies that focus on air quality, global climate changes, promoting land use types that reduce the need to travel via automobile, protecting natural resources, and reducing energy and fuel consumption.

The following identifies how the proposed amendments still comply with the goals and multimodal projects and functional classification designations identified in the County TSP.

GOAL 1 SAFETY: PROVIDE A SAFE TRANSPORTATION SYSTEM FOR ALL USERS.

Finding: As proposed, the amendment is compliant with Goal 1 because it:

- Does not change the jurisdictional design standards that will dictate how the proposed network of streets will be designed and constructed, does not change the performance monitoring and/or the educational and enforcement strategies, and provides for specific connections for people walking and riding bikes from adjacent neighborhoods to employment and commercial uses as well as to the Council Creek Trail.

GOAL 2 ECONOMIC VITALITY: PROVIDE A RELIABLE TRANSPORTATION SYSTEM THAT ENHANCES THE ECONOMIC HEALTH OF WASHINGTON COUNTY.

Finding: As proposed, the amendment is compliant with Goal 2 because it:

- Does not change the designated freight, rail, air or pipeline facilities identified in the TSP.
- Does not result in the need for any new rail crossing locations or changes to those planned for in the TSP.
- Provides a network of streets that can be constructed in collaboration with adjacent land development.
- Provides connections between homes and jobs.
- Enables acceptable transportation operations to be maintained overtime on the adjacent highway system as well as City street system.

GOAL 3 LIVABILITY: PRESERVE AND ENHANCE WASHINGTON COUNTY'S QUALITY OF LIFE FOR ALL RESIDENTS, WORKERS, AND VISITORS.

Finding: As proposed, the amendment is compliant with Goal 3 because it:

- Still provides for a system of sidewalks and bicycle facilities that provide connections between jobs, neighborhoods and to the adjacent highways as well as to transit along OR 8.

- Still requires the construction of appropriate facilities to serve people walking and riding bikes as part of adjacent land development.
- Still provides for a connection of the trail system between OR 8 in the south and OR 47 to the north.
- Does not result in any impacts to agricultural, rural or resource areas.
- Adheres to the coordinated land use and transportation planning strategies identified in this goal.
- Has been coordinated with the applicable planning and transportation agencies.

GOAL 4 NATURAL ENVIRONMENT – CREATE AND MAINTAIN A TRANSPORTATION SYSTEM THAT FIRST AVOIDS, THEN MINIMIZES, THEN MITIGATES IMPACTS TO THE NATURAL ENVIRONMENT.

Finding: As proposed, the amendment is compliant with Goal 4 because it:

- Does not change the County's implementing standards for design of transportation facilities related to environment protection nor does it change the associated monitoring or performance metrics.
- Does not affect mapped Significant Natural Resources.

TSP FUNCTIONAL CLASSIFICATION SYSTEM

Finding: As proposed, the amendment can be compliant with the TSP Functional Classification Map because it:

- Still provides connections for people driving, walking and riding bikes via the proposed 26th Avenue extension from Kingwood to OR 47/Martin Road as well as from the existing northern terminus of Laurel to the proposed 26th Avenue extension. Like the connections shown in the TSP, these proposed connections link people in the neighborhoods to the west and south with OR 47 to the east and also allow for localized travel that does not rely on OR 47 and OR 8, thereby continuing to support a connected transportation network.
- Does not change the implementing standards associated with the functional classification system.
- The changes proposed have been coordinated with the City TSP and County TSP.

TSP PEDESTRIAN SYSTEM

Finding: As proposed, the amendment can be compliant with the TSP Pedestrian System Map because it:

- Still connects people walking via the proposed 26th Avenue extension from Kingwood to OR 47/Martin Road as well as from the existing northern terminus of Laurel to the proposed 26th Avenue extension. Like the connections shown in the TSP, these proposed connections link people in the neighborhoods to the west and south with OR 47 to the east, thereby continuing to support a network of connected walkways.
- Provides an alternative trail connection to OR 47/Martin Road along the proposed 26th Avenue extension as well as a trail along OR 47 to connect to the Porter Road intersection. Pedestrian crossing improvements on OR 47 for trail users would also be provided.
- Still provides a connection for people to walk to the transit stops along OR 8 via the Laurel Street extension.

- Does not change the implementing standards associated with the pedestrian system improvements.
- Has been coordinated with the City and County TSPs.

TSP BICYCLE SYSTEM

Finding: As proposed, the amendment can be compliant with the TSP Bicycle System Map because it:

- Still connects people riding bikes via the proposed 26th Avenue extension from Kingwood to OR 47/Martin Road as well as from the existing northern terminus of Laurel to the proposed 26th Avenue extension. Like the connections shown in the TSP, these proposed connections link people in the neighborhoods to the west and south with OR 47 to the east, thereby continuing to support a network of connected bike lanes.
- Provides an alternative trail connection to OR 47/Martin Road along the proposed 26th Avenue extension as well as a trail along OR 47 to connect to the Porter Road intersection. Bicycle crossing improvements on OR 47 for trail users would also be provided.
- Does not change the implementing standards associated with the bicycle system improvements.
- Has been coordinated with the City and County TSPs.

CONCLUSIONS

As documented herein, the proposed TSP amendment is compliant with the state requirements for amending the TSP, does not result in a significant impact per the Transportation Planning Rule, is compliant with the applicable Metro Region Transportation Functional Plan requirements, is compliant with the existing adopted TSPs for the City and the County, and has been coordinated with the affected planning and regulatory agencies. Please let us know if you have any questions as you review our information.

ATTACHMENT

Appendix A – Map of Proposed TSP Amendment

Appendix B – 2040 Intersection Operations Analysis Worksheets

Appendix B
2040 Intersection Operations Analysis
Worksheets

HCM Signalized Intersection Capacity Analysis

1: Sunset Drive-Beal Road & OR 47

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	305	240	155	345	5	190	5	120	1	1	1
Future Volume (vph)	1	305	240	155	345	5	190	5	120	1	1	1
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	4.0	4.0	6.0	4.0		5.5	5.5		5.5	5.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1662	1620	1444	1614	1632		1604	1498		1662	1598	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.76	1.00		0.62	1.00	
Satd. Flow (perm)	1662	1620	1444	1614	1632		1277	1498		1084	1598	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1	321	253	163	363	5	200	5	126	1	1	1
RTOR Reduction (vph)	0	0	116	0	0	0	0	100	0	0	1	0
Lane Group Flow (vph)	1	321	137	163	368	0	200	31	0	1	1	0
Confl. Peds. (#/hr)	2					2	2					2
Heavy Vehicles (%)	0%	8%	3%	3%	7%	7%	3%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4				8
Permitted Phases			2				4			8		
Actuated Green, G (s)	1.8	62.9	62.9	14.8	75.9		24.3	24.3		24.3	24.3	
Effective Green, g (s)	2.8	64.9	64.9	14.8	77.9		24.8	24.8		24.8	24.8	
Actuated g/C Ratio	0.02	0.54	0.54	0.12	0.65		0.21	0.21		0.21	0.21	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	38	876	780	199	1059		263	309		224	330	
v/s Ratio Prot	0.00	c0.20		c0.10	0.23			0.02			0.00	
v/s Ratio Perm			0.09				c0.16			0.00		
v/c Ratio	0.03	0.37	0.18	0.82	0.35		0.76	0.10		0.00	0.00	
Uniform Delay, d1	57.3	15.8	14.0	51.3	9.5		44.8	38.6		37.8	37.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	1.2	0.5	22.4	0.9		12.2	0.1		0.0	0.0	
Delay (s)	57.5	17.0	14.5	73.7	10.4		57.0	38.7		37.8	37.8	
Level of Service	E	B	B	E	B		E	D		D	D	
Approach Delay (s)		15.9			29.8			49.8			37.8	
Approach LOS		B			C			D			D	
Intersection Summary												
HCM 2000 Control Delay	28.9			HCM 2000 Level of Service			C					
HCM 2000 Volume to Capacity ratio	0.52											
Actuated Cycle Length (s)	120.0			Sum of lost time (s)			15.5					
Intersection Capacity Utilization	57.8%			ICU Level of Service			B					
Analysis Period (min)	15											
c Critical Lane Group												

HCM 6th Signalized Intersection Summary
1: Sunset Drive-Beal Road & OR 47

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	305	240	155	345	5	190	5	120	1	1	1
Future Volume (veh/h)	1	305	240	155	345	5	190	5	120	1	1	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1641	1709	1709	1654	1654	1709	1750	1750	1750	1750	1750
Adj Flow Rate, veh/h	1	321	0	163	363	5	200	5	21	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	8	3	3	7	7	3	0	0	0	0	0
Cap, veh/h	418	725		408	733	10	289	52	219	272	312	0
Arrive On Green	0.25	0.44	0.00	0.25	0.45	0.43	0.18	0.18	0.17	0.18	0.18	0.00
Sat Flow, veh/h	1667	1641	1448	1628	1628	22	1287	292	1228	1289	1750	0
Grp Volume(v), veh/h	1	321	0	163	0	368	200	0	26	1	1	0
Grp Sat Flow(s), veh/h/ln	1667	1641	1448	1628	0	1650	1287	0	1521	1289	1750	0
Q Serve(g_s), s	0.1	16.3	0.0	10.0	0.0	18.9	18.2	0.0	1.7	0.1	0.1	0.0
Cycle Q Clear(g_c), s	0.1	16.3	0.0	10.0	0.0	18.9	18.2	0.0	1.7	1.8	0.1	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.81	1.00		0.00
Lane Grp Cap(c), veh/h	418	725		408	0	743	289	0	271	272	312	0
V/C Ratio(X)	0.00	0.44		0.40	0.00	0.50	0.69	0.00	0.10	0.00	0.00	0.00
Avail Cap(c_a), veh/h	418	725		408	0	743	504	0	526	487	605	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.7	23.3	0.0	37.4	0.0	23.4	48.0	0.0	41.4	42.0	40.5	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.6	0.0	2.4	3.0	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	10.4	0.0	7.0	0.0	11.8	10.0	0.0	1.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	25.2	0.0	38.1	0.0	25.7	51.0	0.0	41.5	42.0	40.5	0.0
LnGrp LOS	C	C		D	A	C	D	A	D	D	D	A
Approach Vol, veh/h		322	A		531			226			2	
Approach Delay, s/veh		25.2			29.5			49.9			41.2	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.1	57.0		26.9	35.1	58.0		26.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	10.0	51.0		41.0	9.0	52.0		41.0				
Max Q Clear Time (g_c+l1), s	12.0	18.3		20.2	2.1	20.9		3.8				
Green Ext Time (p_c), s	0.0	1.7		0.7	0.0	2.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
2: Oak Street-Porter Road & OR 47

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	310	110	5	460	15	40	25	5	5	55	5
Future Vol, veh/h	5	310	110	5	460	15	40	25	5	5	55	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	6	5	2	5	0	0	0	8	0	2	0
Mvmt Flow	5	326	116	5	484	16	42	26	5	5	58	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	500	0	0	442	0	0	928	904	384	912	954	492
Stage 1	-	-	-	-	-	-	-	394	394	-	502	-
Stage 2	-	-	-	-	-	-	-	534	510	-	410	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.1	6.5	6.28	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.5	4	3.372	3.5	4.018	3.3
Pot Cap-1 Maneuver	1075	-	-	1118	-	-	250	279	651	257	259	581
Stage 1	-	-	-	-	-	-	635	609	-	555	542	-
Stage 2	-	-	-	-	-	-	534	541	-	623	570	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1075	-	-	1118	-	-	204	276	651	235	257	581
Mov Cap-2 Maneuver	-	-	-	-	-	-	204	276	-	235	257	-
Stage 1	-	-	-	-	-	-	632	606	-	552	540	-
Stage 2	-	-	-	-	-	-	470	539	-	588	567	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	26.8	23.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	238	1075	-	-	1118	-	-	267
HCM Lane V/C Ratio	0.31	0.005	-	-	0.005	-	-	0.256
HCM Control Delay (s)	26.8	8.4	-	-	8.2	-	-	23.1
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.3	0	-	-	0	-	-	1

MOVEMENT SUMMARY

 Site: 1 [OR 47/Martin Road - 2040 BK]

New Site
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: NB OR 47												
3	L2	126	2.0	0.815	20.4	LOS C	21.2	557.4	0.86	1.06	1.61	28.1
8	T1	432	6.0	0.815	20.6	LOS C	21.2	557.4	0.86	1.06	1.61	28.0
18	R2	295	9.0	0.815	20.7	LOS C	21.2	557.4	0.86	1.06	1.61	27.3
Approach		853	6.4	0.815	20.6	LOS C	21.2	557.4	0.86	1.06	1.61	27.8
East: WB Martin Road												
1	L2	268	7.0	0.893	36.2	LOS E	17.4	448.4	1.00	1.68	2.91	23.3
6	T1	311	2.0	0.893	36.0	LOS E	17.4	448.4	1.00	1.68	2.91	23.3
16	R2	68	2.0	0.893	36.0	LOS E	17.4	448.4	1.00	1.68	2.91	22.9
Approach		647	4.1	0.893	36.1	LOS E	17.4	448.4	1.00	1.68	2.91	23.2
North: SB OR 47												
7	L2	32	3.0	0.544	15.1	LOS C	3.5	92.5	0.77	0.92	1.23	30.3
4	T1	284	6.0	0.544	15.3	LOS C	3.5	92.5	0.77	0.92	1.23	30.2
14	R2	21	2.0	0.544	15.0	LOS C	3.5	92.5	0.77	0.92	1.23	29.5
Approach		337	5.5	0.544	15.2	LOS C	3.5	92.5	0.77	0.92	1.23	30.1
West: EB Martin Road												
5	L2	5	2.0	0.418	10.7	LOS B	2.3	59.2	0.70	0.76	0.87	32.4
2	T1	168	2.0	0.418	10.7	LOS B	2.3	59.2	0.70	0.76	0.87	32.3
12	R2	126	2.0	0.418	10.7	LOS B	2.3	59.2	0.70	0.76	0.87	31.4
Approach		300	2.0	0.418	10.7	LOS B	2.3	59.2	0.70	0.76	0.87	31.9
All Vehicles		2137	4.9	0.893	23.0	LOS C	21.2	557.4	0.87	1.18	1.84	27.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

LANE LEVEL OF SERVICE

Lane Level of Service

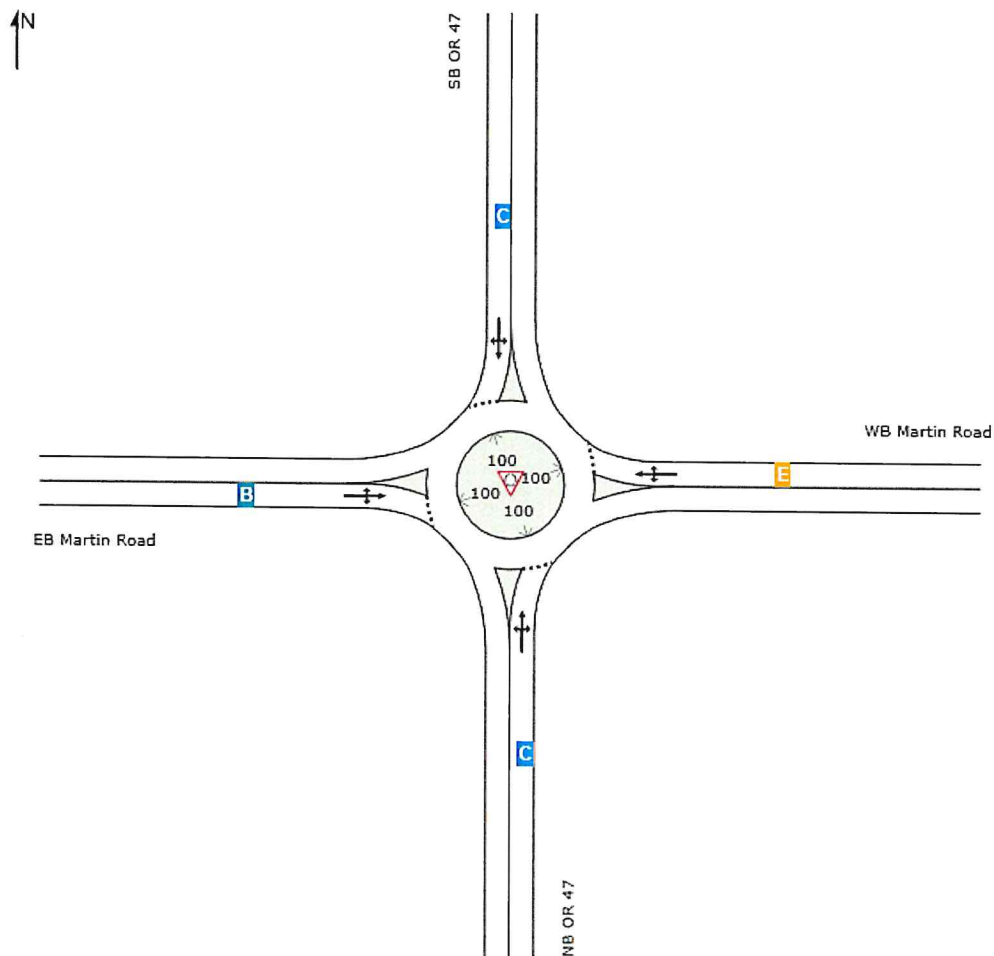
 **Site: 1 [OR 47/Martin Road - 2040 BK]**

New Site

Site Category: (None)

Roundabout

	Approaches				Intersection
	South	East	North	West	
LOS	C	E	C	B	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

HCM 6th TWSC
4: OR 47 & 24th Avenue

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

Intersection						
Int Delay, s/veh	7.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	61	129	681	23	61	584
Future Vol, veh/h	61	129	681	23	61	584
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	6	4	17	8	7
Mvmt Flow	63	133	702	24	63	602

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1442	714	0	0	726
Stage 1	714	-	-	-	-
Stage 2	728	-	-	-	-
Critical Hdwy	6.45	6.26	-	-	4.18
Critical Hdwy Stg 1	5.45	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-
Follow-up Hdwy	3.545	3.354	-	-	2.272
Pot Cap-1 Maneuver	144	425	-	-	850
Stage 1	480	-	-	-	-
Stage 2	473	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	133	425	-	-	850
Mov Cap-2 Maneuver	133	-	-	-	-
Stage 1	480	-	-	-	-
Stage 2	438	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	57.6	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	249	850
HCM Lane V/C Ratio	-	-	0.787	0.074
HCM Control Delay (s)	-	-	57.6	9.6
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	5.9	0.2

HCM Signalized Intersection Capacity Analysis 5: OR 47 & Pacific Avenue

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	790	75	405	985	300	165	240	415	220	360	120
Future Volume (vph)	110	790	75	405	985	300	165	240	415	220	360	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frbp, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1703	3539	2724	3303	3471	1529	1736	1727	1489	1770	1759	1524
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1703	3539	2724	3303	3471	1529	1736	1727	1489	1770	1759	1524
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	115	823	78	422	1026	312	172	250	432	229	375	125
RTOR Reduction (vph)	0	0	51	0	0	178	0	0	345	0	0	94
Lane Group Flow (vph)	115	823	27	422	1026	135	172	250	87	229	375	31
Confl. Peds. (#/hr)	9		1	1		9			10	10		
Heavy Vehicles (%)	6%	2%	2%	6%	4%	1%	4%	10%	6%	2%	8%	6%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	10.9	40.9	40.9	20.6	50.6	50.6	12.0	21.7	21.7	19.8	29.5	29.5
Effective Green, g (s)	10.9	41.9	41.9	20.6	51.6	51.6	12.0	21.7	21.7	19.8	29.5	29.5
Actuated g/C Ratio	0.09	0.35	0.35	0.17	0.43	0.43	0.10	0.18	0.18	0.17	0.25	0.25
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	154	1235	951	567	1492	657	173	312	269	292	432	374
v/s Ratio Prot	0.07	0.23		c0.13	c0.30		c0.10	c0.14		0.13	c0.21	
v/s Ratio Perm			0.01			0.09			0.06			0.02
v/c Ratio	0.75	0.67	0.03	0.74	0.69	0.20	0.99	0.80	0.32	0.78	0.87	0.08
Uniform Delay, d1	53.2	33.1	25.7	47.2	27.7	21.4	54.0	47.1	42.8	48.1	43.4	34.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.8	2.9	0.1	5.3	2.6	0.7	66.4	13.7	0.7	12.9	16.6	0.1
Delay (s)	71.0	36.0	25.7	52.5	30.3	22.1	120.4	60.8	43.5	60.9	60.0	34.9
Level of Service	E	D	C	D	C	C	F	E	D	E	E	C
Approach Delay (s)		39.2			34.1			64.0			56.0	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay			44.8									
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			120.0									
Intersection Capacity Utilization			75.8%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM 6th Signalized Intersection Summary 5: OR 47 & Pacific Avenue

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (veh/h)	110	790	75	405	985	300	165	240	415	220	360	120		
Future Volume (veh/h)	110	790	75	405	985	300	165	240	415	220	360	120		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach	No			No			No			No				
Adj Sat Flow, veh/h/ln	1811	1870	1870	1811	1841	1885	1841	1752	1811	1870	1781	1811		
Adj Flow Rate, veh/h	115	823	0	422	1026	0	172	250	0	229	375	0		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	6	2	2	6	4	1	4	10	6	2	8	6		
Cap, veh/h	139	1331		500	1551		175	309		296	432			
Arrive On Green	0.08	0.37	0.00	0.15	0.44	0.00	0.10	0.18	0.00	0.17	0.24	0.00		
Sat Flow, veh/h	1725	3554	2790	3346	3497	1598	1753	1752	1535	1781	1781	1535		
Grp Volume(v), veh/h	115	823	0	422	1026	0	172	250	0	229	375	0		
Grp Sat Flow(s),veh/h/ln	1725	1777	1395	1673	1749	1598	1753	1752	1535	1781	1781	1535		
Q Serve(g_s), s	7.9	22.6	0.0	14.7	27.7	0.0	11.7	16.5	0.0	14.8	24.2	0.0		
Cycle Q Clear(g_c), s	7.9	22.6	0.0	14.7	27.7	0.0	11.7	16.5	0.0	14.8	24.2	0.0		
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00		
Lane Grp Cap(c), veh/h	139	1331		500	1551		175	309		296	432			
V/C Ratio(X)	0.83	0.62		0.84	0.66		0.98	0.81		0.77	0.87			
Avail Cap(c_a), veh/h	158	1331		809	1551		175	380		296	490			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	54.3	30.5	0.0	49.7	26.3	0.0	53.9	47.5	0.0	47.8	43.6	0.0		
Incr Delay (d2), s/veh	26.2	2.2	0.0	4.6	2.2	0.0	62.2	10.3	0.0	11.9	14.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(95%),veh/ln	7.9	15.2	0.0	10.5	17.1	0.0	12.7	12.5	0.0	12.1	18.2	0.0		
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh	80.5	32.7	0.0	54.2	28.5	0.0	116.1	57.8	0.0	59.7	57.6	0.0		
LnGrp LOS	F	C		D	C		F	E		E	E			
Approach Vol, veh/h	938		A	1448		A	422		A	604		A		
Approach Delay, s/veh	38.6			36.0			81.6			58.4				
Approach LOS	D			D			F			E				
Timer - Assigned Phs	1	2	3	4	5	6	7	8						
Phs Duration (G+Y+Rc), s	21.9	49.0	16.0	33.1	13.7	57.2	24.0	25.1						
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0						
Max Green Setting (Gmax), s	29.0	29.0	12.0	33.0	11.0	47.0	19.0	26.0						
Max Q Clear Time (g_c+l1), s	16.7	24.6	13.7	26.2	9.9	29.7	16.8	18.5						
Green Ext Time (p_c), s	1.2	2.2	0.0	1.3	0.0	6.5	0.2	0.7						

Intersection Summary

HCM 6th Ctrl Delay 46.3
HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM Signalized Intersection Capacity Analysis 1: Sunset Drive-Beal Road & OR 47

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	305	240	155	345	5	190	5	120	1	1	1
Future Volume (vph)	1	305	240	155	345	5	190	5	120	1	1	1
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	4.0	4.0	6.0	4.0		5.5	5.5		5.5	5.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1662	1620	1444	1614	1632		1604	1498		1662	1598	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.76	1.00		0.62	1.00	
Satd. Flow (perm)	1662	1620	1444	1614	1632		1277	1498		1084	1598	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1	321	253	163	363	5	200	5	126	1	1	1
RTOR Reduction (vph)	0	0	116	0	0	0	0	100	0	0	1	0
Lane Group Flow (vph)	1	321	137	163	368	0	200	31	0	1	1	0
Confl. Peds. (#/hr)	2					2	2					2
Heavy Vehicles (%)	0%	8%	3%	3%	7%	7%	3%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases			2				4			8		
Actuated Green, G (s)	1.8	62.9	62.9	14.8	75.9		24.3	24.3		24.3	24.3	
Effective Green, g (s)	2.8	64.9	64.9	14.8	77.9		24.8	24.8		24.8	24.8	
Actuated g/C Ratio	0.02	0.54	0.54	0.12	0.65		0.21	0.21		0.21	0.21	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	38	876	780	199	1059		263	309		224	330	
v/s Ratio Prot	0.00	c0.20		c0.10	0.23			0.02			0.00	
v/s Ratio Perm			0.09				c0.16			0.00		
v/c Ratio	0.03	0.37	0.18	0.82	0.35		0.76	0.10		0.00	0.00	
Uniform Delay, d1	57.3	15.8	14.0	51.3	9.5		44.8	38.6		37.8	37.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	1.2	0.5	22.4	0.9		12.2	0.1		0.0	0.0	
Delay (s)	57.5	17.0	14.5	73.7	10.4		57.0	38.7		37.8	37.8	
Level of Service	E	B	B	E	B		E	D		D	D	
Approach Delay (s)		15.9			29.8			49.8			37.8	
Approach LOS		B			C			D			D	
Intersection Summary												
HCM 2000 Control Delay	28.9			HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio	0.52											
Actuated Cycle Length (s)	120.0			Sum of lost time (s)				15.5				
Intersection Capacity Utilization	57.8%			ICU Level of Service				B				
Analysis Period (min)	15											
c Critical Lane Group												

HCM 6th Signalized Intersection Summary
1: Sunset Drive-Beal Road & OR 47

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	305	240	155	345	5	190	5	120	1	1	1
Future Volume (veh/h)	1	305	240	155	345	5	190	5	120	1	1	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1641	1709	1709	1654	1654	1709	1750	1750	1750	1750	1750
Adj Flow Rate, veh/h	1	321	0	163	363	5	200	5	21	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	8	3	3	7	7	3	0	0	0	0	0
Cap, veh/h	418	725		408	733	10	289	52	219	272	312	0
Arrive On Green	0.25	0.44	0.00	0.25	0.45	0.43	0.18	0.18	0.17	0.18	0.18	0.00
Sat Flow, veh/h	1667	1641	1448	1628	1628	22	1287	292	1228	1289	1750	0
Grp Volume(v), veh/h	1	321	0	163	0	368	200	0	26	1	1	0
Grp Sat Flow(s),veh/h/ln	1667	1641	1448	1628	0	1650	1287	0	1521	1289	1750	0
Q Serve(g_s), s	0.1	16.3	0.0	10.0	0.0	18.9	18.2	0.0	1.7	0.1	0.1	0.0
Cycle Q Clear(g_c), s	0.1	16.3	0.0	10.0	0.0	18.9	18.2	0.0	1.7	1.8	0.1	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.81	1.00		0.00
Lane Grp Cap(c), veh/h	418	725		408	0	743	289	0	271	272	312	0
V/C Ratio(X)	0.00	0.44		0.40	0.00	0.50	0.69	0.00	0.10	0.00	0.00	0.00
Avail Cap(c_a), veh/h	418	725		408	0	743	504	0	526	487	605	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.7	23.3	0.0	37.4	0.0	23.4	48.0	0.0	41.4	42.0	40.5	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.6	0.0	2.4	3.0	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	10.4	0.0	7.0	0.0	11.8	10.0	0.0	1.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	25.2	0.0	38.1	0.0	25.7	51.0	0.0	41.5	42.0	40.5	0.0
LnGrp LOS	C	C		D	A	C	D	A	D	D	D	A
Approach Vol, veh/h		322	A		531			226			2	
Approach Delay, s/veh		25.2			29.5			49.9			41.2	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.1	57.0		26.9	35.1	58.0		26.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	10.0	51.0		41.0	9.0	52.0		41.0				
Max Q Clear Time (g_c+1), s	12.0	18.3		20.2	2.1	20.9		3.8				
Green Ext Time (p_c), s	0.0	1.7		0.7	0.0	2.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
2: Oak Street-Porter Road & OR 47

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	420	0	0	500	40	0	0	0	60	0	5
Future Vol, veh/h	5	420	0	0	500	40	0	0	0	60	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	6	5	2	5	0	0	0	8	2	0	0
Mvmt Flow	5	442	0	0	526	42	0	0	0	63	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	568	0	0	442	0	0	1002	1020	442	999	999	547
Stage 1	-	-	-	-	-	-	452	452	-	547	547	-
Stage 2	-	-	-	-	-	-	550	568	-	452	452	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.1	6.5	6.28	7.12	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.12	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.12	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.5	4	3.372	3.518	4	3.3
Pot Cap-1 Maneuver	1014	-	-	1118	-	-	223	239	603	222	245	541
Stage 1	-	-	-	-	-	-	591	574	-	521	521	-
Stage 2	-	-	-	-	-	-	523	510	-	587	574	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1014	-	-	1118	-	-	220	238	603	221	244	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	220	238	-	221	244	-
Stage 1	-	-	-	-	-	-	588	571	-	518	521	-
Stage 2	-	-	-	-	-	-	518	510	-	584	571	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	0	26.9
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1014	-	-	1118	-	-	232
HCM Lane V/C Ratio	-	0.005	-	-	-	-	-	0.295
HCM Control Delay (s)	0	8.6	-	-	0	-	-	26.9
HCM Lane LOS	A	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	1.2

MOVEMENT SUMMARY

 Site: 1 [OR 47/Martin Road - 2040 TT]

New Site
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: NB OR 47												
3	L2	132	2.0	0.874	27.1	LOS D	26.6	698.3	1.00	1.50	2.35	25.9
8	T1	426	6.0	0.874	27.2	LOS D	26.6	698.3	1.00	1.50	2.35	25.9
18	R2	295	9.0	0.874	27.3	LOS D	26.6	698.3	1.00	1.50	2.35	25.2
Approach		853	6.4	0.874	27.3	LOS D	26.6	698.3	1.00	1.50	2.35	25.7
East: WB Martin Road												
1	L2	268	7.0	0.958	49.8	LOS E	22.0	568.0	1.00	1.93	3.71	20.5
6	T1	311	2.0	0.958	49.5	LOS E	22.0	568.0	1.00	1.93	3.71	20.5
16	R2	68	2.0	0.958	49.5	LOS E	22.0	568.0	1.00	1.93	3.71	20.1
Approach		647	4.1	0.958	49.6	LOS E	22.0	568.0	1.00	1.93	3.71	20.4
North: SB OR 47												
7	L2	32	3.0	0.811	29.8	LOS D	9.8	253.7	0.92	1.36	2.27	25.3
4	T1	279	6.0	0.811	29.9	LOS D	9.8	253.7	0.92	1.36	2.27	25.2
14	R2	195	2.0	0.811	29.7	LOS D	9.8	253.7	0.92	1.36	2.27	24.7
Approach		505	4.3	0.811	29.8	LOS D	9.8	253.7	0.92	1.36	2.27	25.0
West: EB Martin Road												
5	L2	74	2.0	0.517	12.8	LOS B	3.6	91.1	0.75	0.87	1.10	31.0
2	T1	168	2.0	0.517	12.8	LOS B	3.6	91.1	0.75	0.87	1.10	30.9
12	R2	132	2.0	0.517	12.8	LOS B	3.6	91.1	0.75	0.87	1.10	30.1
Approach		374	2.0	0.517	12.8	LOS B	3.6	91.1	0.75	0.87	1.10	30.7
All Vehicles		2379	4.6	0.958	31.6	LOS D	26.6	698.3	0.94	1.49	2.51	24.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

LANE LEVEL OF SERVICE

Lane Level of Service

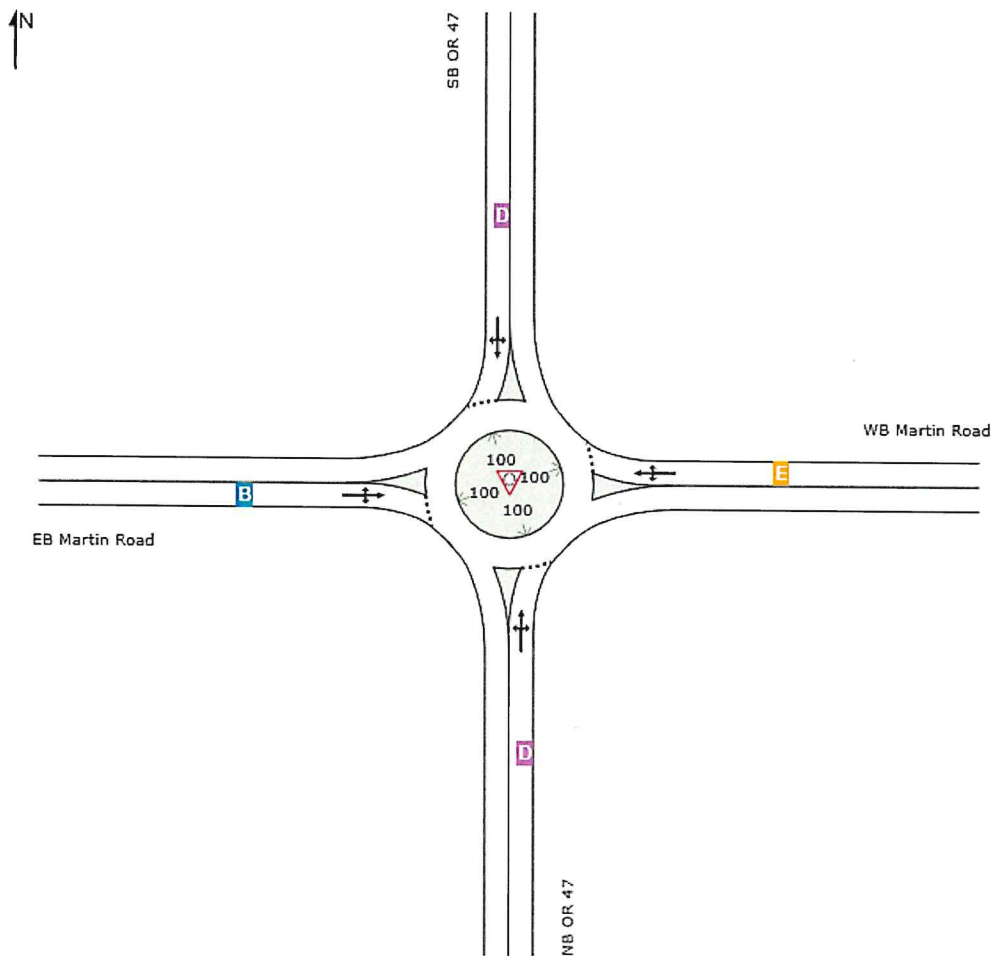
 **Site: 1 [OR 47/Martin Road - 2040 TT]**

New Site

Site Category: (None)

Roundabout

	Approaches				Intersection
	South	East	North	West	
LOS	D	E	D	B	D



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

HCM 6th TWSC
4: OR 47 & 24th Avenue

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

Intersection						
Int Delay, s/veh	7.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	61	129	681	23	61	584
Future Vol, veh/h	61	129	681	23	61	584
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	6	4	17	8	7
Mvmt Flow	63	133	702	24	63	602

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1442	714	0
Stage 1	714	-	-
Stage 2	728	-	-
Critical Hdwy	6.45	6.26	-
Critical Hdwy Stg 1	5.45	-	-
Critical Hdwy Stg 2	5.45	-	-
Follow-up Hdwy	3.545	3.354	-
Pot Cap-1 Maneuver	144	425	-
Stage 1	480	-	-
Stage 2	473	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	133	425	-
Mov Cap-2 Maneuver	133	-	-
Stage 1	480	-	-
Stage 2	438	-	-

Approach	WB	NB	SB
HCM Control Delay, s	57.6	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	249	850
HCM Lane V/C Ratio	-	-	0.787	0.074
HCM Control Delay (s)	-	-	57.6	9.6
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	5.9	0.2

HCM Signalized Intersection Capacity Analysis 5: OR 47 & Pacific Avenue

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	790	75	405	985	300	165	240	415	220	360	120
Future Volume (vph)	110	790	75	405	985	300	165	240	415	220	360	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frbp, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1703	3539	2724	3303	3471	1529	1736	1727	1489	1770	1759	1524
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1703	3539	2724	3303	3471	1529	1736	1727	1489	1770	1759	1524
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	115	823	78	422	1026	312	172	250	432	229	375	125
RTOR Reduction (vph)	0	0	51	0	0	178	0	0	345	0	0	94
Lane Group Flow (vph)	115	823	27	422	1026	135	172	250	87	229	375	31
Confl. Peds. (#/hr)	9		1	1		9			10	10		
Heavy Vehicles (%)	6%	2%	2%	6%	4%	1%	4%	10%	6%	2%	8%	6%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	10.9	40.9	40.9	20.6	50.6	50.6	12.0	21.7	21.7	19.8	29.5	29.5
Effective Green, g (s)	10.9	41.9	41.9	20.6	51.6	51.6	12.0	21.7	21.7	19.8	29.5	29.5
Actuated g/C Ratio	0.09	0.35	0.35	0.17	0.43	0.43	0.10	0.18	0.18	0.17	0.25	0.25
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	154	1235	951	567	1492	657	173	312	269	292	432	374
v/s Ratio Prot	0.07	0.23		c0.13	c0.30		c0.10	c0.14		0.13	c0.21	
v/s Ratio Perm			0.01			0.09			0.06			0.02
v/c Ratio	0.75	0.67	0.03	0.74	0.69	0.20	0.99	0.80	0.32	0.78	0.87	0.08
Uniform Delay, d1	53.2	33.1	25.7	47.2	27.7	21.4	54.0	47.1	42.8	48.1	43.4	34.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.8	2.9	0.1	5.3	2.6	0.7	66.4	13.7	0.7	12.9	16.6	0.1
Delay (s)	71.0	36.0	25.7	52.5	30.3	22.1	120.4	60.8	43.5	60.9	60.0	34.9
Level of Service	E	D	C	D	C	C	F	E	D	E	E	C
Approach Delay (s)		39.2			34.1			64.0			56.0	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay	44.8			HCM 2000 Level of Service			D					
HCM 2000 Volume to Capacity ratio	0.80											
Actuated Cycle Length (s)	120.0			Sum of lost time (s)			16.0					
Intersection Capacity Utilization	75.8%			ICU Level of Service			D					
Analysis Period (min)	15											
c Critical Lane Group												

HCM 6th Signalized Intersection Summary
5: OR 47 & Pacific Avenue

2040 Baseline - Weekday PM Peak Hour
26843 Forest Grove TSP Amendment

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (veh/h)	110	790	75	405	985	300	165	240	415	220	360	120		
Future Volume (veh/h)	110	790	75	405	985	300	165	240	415	220	360	120		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach	No			No			No			No				
Adj Sat Flow, veh/h/ln	1811	1870	1870	1811	1841	1885	1841	1752	1811	1870	1781	1811		
Adj Flow Rate, veh/h	115	823	0	422	1026	0	172	250	0	229	375	0		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	6	2	2	6	4	1	4	10	6	2	8	6		
Cap, veh/h	139	1331		500	1551		175	309		296	432			
Arrive On Green	0.08	0.37	0.00	0.15	0.44	0.00	0.10	0.18	0.00	0.17	0.24	0.00		
Sat Flow, veh/h	1725	3554	2790	3346	3497	1598	1753	1752	1535	1781	1781	1535		
Grp Volume(v), veh/h	115	823	0	422	1026	0	172	250	0	229	375	0		
Grp Sat Flow(s),veh/h/ln	1725	1777	1395	1673	1749	1598	1753	1752	1535	1781	1781	1535		
Q Serve(g_s), s	7.9	22.6	0.0	14.7	27.7	0.0	11.7	16.5	0.0	14.8	24.2	0.0		
Cycle Q Clear(g_c), s	7.9	22.6	0.0	14.7	27.7	0.0	11.7	16.5	0.0	14.8	24.2	0.0		
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00		
Lane Grp Cap(c), veh/h	139	1331		500	1551		175	309		296	432			
V/C Ratio(X)	0.83	0.62		0.84	0.66		0.98	0.81		0.77	0.87			
Avail Cap(c_a), veh/h	158	1331		809	1551		175	380		296	490			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	54.3	30.5	0.0	49.7	26.3	0.0	53.9	47.5	0.0	47.8	43.6	0.0		
Incr Delay (d2), s/veh	26.2	2.2	0.0	4.6	2.2	0.0	62.2	10.3	0.0	11.9	14.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(95%),veh/ln	7.9	15.2	0.0	10.5	17.1	0.0	12.7	12.5	0.0	12.1	18.2	0.0		
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh	80.5	32.7	0.0	54.2	28.5	0.0	116.1	57.8	0.0	59.7	57.6	0.0		
LnGrp LOS	F	C		D	C		F	E		E	E			
Approach Vol, veh/h	938		A	1448		A	422		A	604		A		
Approach Delay, s/veh	38.6			36.0			81.6			58.4				
Approach LOS	D			D			F			E				
Timer - Assigned Phs	1	2	3	4	5	6	7	8						
Phs Duration (G+Y+Rc), s	21.9	49.0	16.0	33.1	13.7	57.2	24.0	25.1						
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0						
Max Green Setting (Gmax), s	29.0	29.0	12.0	33.0	11.0	47.0	19.0	26.0						
Max Q Clear Time (g_c+I1), s	16.7	24.6	13.7	26.2	9.9	29.7	16.8	18.5						
Green Ext Time (p_c), s	1.2	2.2	0.0	1.3	0.0	6.5	0.2	0.7						

Intersection Summary

HCM 6th Ctrl Delay 46.3
HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

**FISCAL AND ECONOMIC IMPACT ANALYSIS
OF A PROSPECTIVE
DATA CENTER DEVELOPMENT PROJECT
IN FOREST GROVE, OREGON**

PREPARED FOR
ROWAN GREEN DATA LLC
JUNE 2022



**JOHNSON
ECONOMICS**



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I. INTRODUCTION

JOHNSON ECONOMICS was hired to prepare a third-party analysis of the economic and fiscal impacts of a proposed data center campus in Forest Grove, Oregon. The assumptions used in this analysis were built through research of third-party sources on data center development costs, employment, and direct and indirect impacts. The prospective developer of the data center campus has advised on the details of the proposed development itself, including preliminary site plan, number of buildings and approximate square footage, estimated costs, and necessary infrastructure.

The preliminary details of the proposed development are likely to change at least somewhat through the planning and development process. The ultimate tenant businesses of the proposed data center campus will also impact the amount of investment and employment at the site. While findings are presented in precise figures, achieved results are likely to differ somewhat. Therefore, the forecast presented in this analysis is intended to provide order-of-magnitude estimates of the likely economic impacts of a data center campus in this location, based on the best and most reasonable assumptions available at the time this analysis was completed.

This analysis considers the following categories of economic and fiscal impact from the proposed development:

- A. **Economic Impacts:** Impacts on employment, payroll, and capital investment from the construction of the facility, and on-going operations. Direct, indirect, and induced impacts are considered.
- B. **Fiscal Impacts:** Projected impacts to local, state, and federal revenues from property and income taxes, fees, and system development charges.
- C. **Spillover Benefits:** Additional potential qualitative benefits are discussed in the conclusions section.

II. EXECUTIVE SUMMARY

The build-out of the proposed 63-acre data center campus would entail a very high level of investment in real property and equipment over the coming years. Investment in these types of facilities is very high, at an estimated \$1,000 to \$1,200 per square foot of built space, or \$7 million per critical megawatt (cMW) or greater. For a facility of this size, only high-tech manufacturing users rival this level of investment in a suburban environment.

As outlined in this report, the proposed development is projected to have a range of positive economic and fiscal impacts on the Forest Grove community, the county and broader Metro area. The impacts include new employment, payroll, spending with vendors on construction and operations, new tax revenue, and indirect and induced economic activity.

Projected impacts are summarized below:

- \$1.1 billion in direct investment in the data center campus over four years. \$475 million in additional indirect and induced economic output.
- 7,700 jobs directly and indirectly during the construction phase, including over 4,500 directly through all phases of development. (This is likely to represent many of the same workers, over multiple years/phases



of the development process. Similar data center projects have supported 1,600 to 2,000 distinct jobs during development, with hundreds of workers on site at any one time.)

- \$615 million in labor income over the construction phase. (Labor income is included in total investment presented above.)
- The operations phase is expected to support 105 jobs across the campus, and economic output of \$81 million per year, including cost of power, staffing, maintenance, and equipment refresh. The indirect and induced impact is projected to support an additional 120 jobs locally, and in the county, and \$20 million in economic output annually.
- Upon completion the facility is forecasted to offer on-site employment at nearly twice the average wages for working residents of Forest Grove.
- Total projected economic output of the construction phase plus ten years of operation of over \$2.5 billion in local and regional impacts.
- \$190 million in cumulative property tax revenue to local districts over 20 years, including 41% to the school district, and 32% to the City of Forest Grove.
- At the revenue peak, after initial Enterprise Zone exemptions, the estimated revenue would reach over \$4 million annually to the city, and over \$6 million annually to the school district. At its peak, property tax revenue from the project could increase local tax revenue by over 25%, and total general fund revenue by 12%.
- \$154 million annually in federal, and \$71 million, in state business and personal tax revenue.
- An estimated \$3.1 million in system development charges and development fees.
- Alternate industrial development scenarios would likely generate a much lower economic and fiscal impact due to the lower investment that traditional industrial use entails. An alternative large, high-investment industrial employer is hypothetically possible, but highly speculative and unlikely to greatly exceed the projected impacts of the proposed data center campus.
- The draft Oak Street Refinement Plan land use concept would provide a number of economic impacts, and other benefits such as housing stock. However, preliminary analysis by Johnson Economics suggests that the economic and fiscal impact of this development program would ultimately be significantly lower than the proposed data center campus. The estimated direct investment to achieve the land use concept would be 33% of the investment in the data center, and because taxable assessed value is limited for residential and commercial development, the taxable value would be an estimated 30% of the projected taxable value of the data center in its highest value year.

The following report outlines these findings in more detail and the methodologies used. The forecast presented in this analysis is intended to provide order-of-magnitude estimates of the likely economic impacts of a data center campus in this location, based on the best and most reasonable assumptions available at the time this analysis was completed.



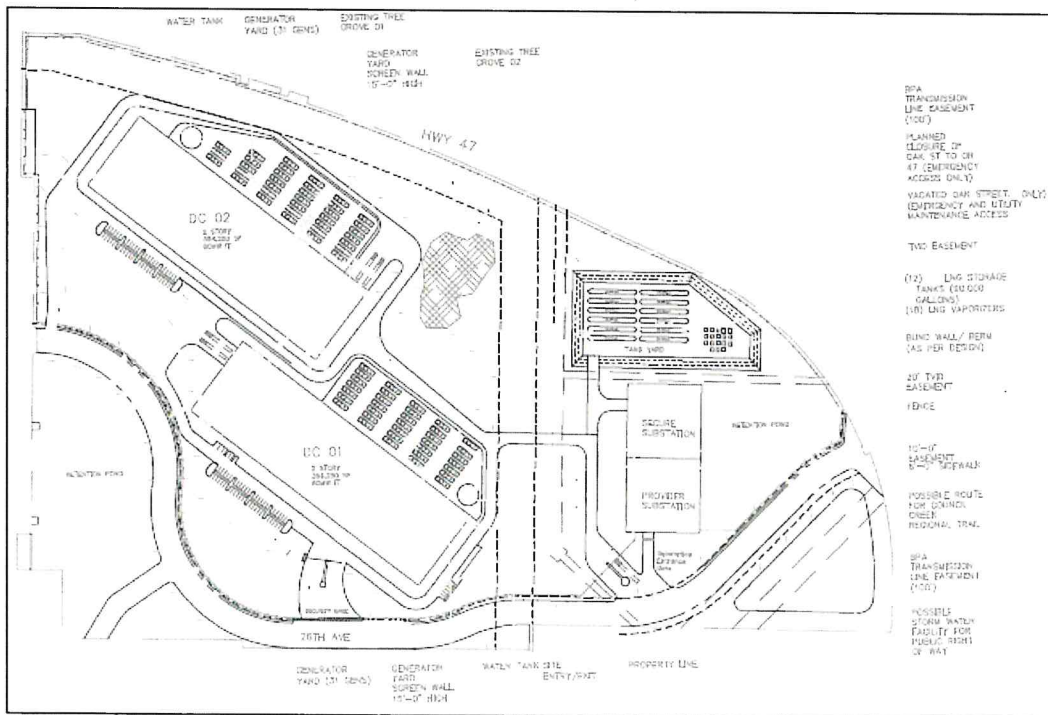
III. PROJECT DESCRIPTION

This analysis evaluates the fiscal and economic impact profile of a speculative data center campus development on a site of roughly 63 acres, located in northeast Forest Grove, Oregon. The site consists of multiple contiguous tax lots, zoned for industrial use.

The proposed development is a data center collocation campus. The preliminary site plan calls for two separate data center facilities on the site with a total built space of 730,000 sq. ft. As a “collocation” facility, the campus is not intended to serve the data center needs of the site developer, but would lease data center space to at least one, but likely several, tenant businesses who would be expected to make additional investments in technology and on-site employment. The campus would include shared infrastructure, including for parking/circulation, mechanical, HVAC, landscaping and stormwater management, and back-up power generation. The location benefits from the presence of ample, cost-effective power from a nearby substation.

The large size and ultimate amount of compute space at the site would qualify the project collectively as a “mega” data center, or collection of three “massive” data centers.¹ The campus plans for a total power capacity of up to 150MW, if approved. For this analysis, the campus is assumed to be developed in the following sequence: site development, then each building in turn as the capacity in the prior building(s) is utilized. Figure 1 presents the preliminary site plan for the proposed project that serves as the basis of assumptions for this analysis. This site plan is subject to change during the planning process but is expected to be broadly representative of the ultimate development program at the site.

FIGURE 1: PRELIMINARY SITE PLAN, SUBJECT SITE



Source: Dotterweich, Carlson, Mehner Design, Inc., Birch Infrastructure

¹ “Mega” is the largest of six classifications recognized by the Data Center Institute.



Figure 2 presents the expected timeline for development of the campus site and the two buildings (labeled DC01 and DC02). Data centers forecast utilization using a “ramp schedule”, which considers how the usage of available megawattage (MW) of the facility “ramps up” over time. The power capacity is discussed in terms of total “utility MW” or the total available power to run all aspects of the property (150 MW in this case), and the “critical MW” (cMW) which is the power load required to maintain the critical IT functions of the data center business (120 cMW in this case.)

Figure 2 presents two potential ramp schedules:

- The base case is a five-year ramp up, in which the buildings are built over three years, and the available cMW are utilized by year five as the buildings are tenanted. This base case presents full ramp up by 2029. Capital investment is at estimated \$1.1B (excluding land cost), and cost per cMW at full ramp up is \$9.1M.
- The conservative ramp schedule assumes the same eventual capital investments, but over a ten-year ramp schedule. The two buildings are completed over six years, and fully utilized after ten years.

FIGURE 2: PRELIMINARY DEVELOPMENT AND RAMP SCHEDULE, SUBJECT SITE

YEAR	BASE CASE RAMP SCHEDULE			CONSERVATIVE RAMP SCHEDULE		
	Capital Improvements	Capital Outlay	\$ per cMW	Capital Improvements	Capital Outlay	\$ per cMW
2024	Site Development	\$72.8 M	NA	Site Development	\$72.8 M	NA
2025	DC01 (60 cMW)	\$507.3 M	\$72.5 M	DC01 (60 cMW)	\$507.3 M	\$145.0 M
2026			\$21.3 M			\$72.5 M
2027	DC02 (60 cMW)	\$507.3 M	\$13.6 M			\$33.0 M
2028			\$9.7 M			\$21.3 M
2029			\$9.1 M	DC02 (60 cMW)	\$507.3 M	\$20.3 M
2030						\$13.6 M
2031						\$11.3 M
2032						\$9.7 M
2033						\$9.4 M
2034						\$9.1 M
Totals:		\$1087.3 M	\$9.1 M		\$1087.3 M	\$9.1 M

Source: Birch Infrastructure, Johnson Economics

* Exclusive of land cost.

As Figure 3 shows, the projected investment in this data center campus would be an estimated \$1.1 billion for land development, building, mechanical and electrical infrastructure. The forecasted costs are broken down by cost per cMW as is the industry standard. Because the costs of data centers can vary widely depending on location, design, the availability of labor and materials, transportation constraints, and other factors, estimated development costs are subject to change.

Data centers are a very high-investment category of development due to the amount of infrastructure and equipment needed to run these specialized buildings, in addition to the high density of information technology that tenants install within them. On average, the cost of development for data centers exceeds the cost for traditional industrial uses and even most high-tech manufacturing uses (see Section VI).



FIGURE 3: PRELIMINARY DEVELOPMENT AND RAMP SCHEDULE, SUBJECT SITE

2022 Pricing	\$ per cMW	Bldg DC01 60 Critical MW	Bldg DC02 60 Critical MW	Bldgs. 1-2 120 Critical MW
<u>Data Center Facilities</u>				
Electrical	4.3 M	256.7 M	256.7 M	513.4 M
Mechanical	1.6 M	96.3 M	96.3 M	192.5 M
Shell	1.2 M	71.3 M	71.3 M	142.6 M
Interior	1.0 M	59.9 M	59.9 M	119.8 M
<u>Site Development</u>				
Site Work	0.5 M	32.1 M	32.1 M	64.2 M
Utilities	0.2 M	9.3 M	9.3 M	18.5 M
<u>Land</u>				
Land basis	0.2 M	14.3 M	14.3 M	28.5 M
<u>Shared</u>				
Cap Labor	0.0 M	1.8 M	1.8 M	3.6 M
Commissions	0.0 M	2.1 M	2.1 M	4.3 M
Total Cost	\$ 9.1 M	\$ 543.7 M	\$ 543.7 M	\$ 1,087.3 M

Source: Birch Infrastructure, Johnson Economics

IV. ECONOMIC IMPACTS – LOCAL AND REGIONAL

The construction and ongoing business operations of the data center campus will have significant economic impacts to the local and regional economy. To model the economic impacts of various activities, Johnson Economics utilized the IMPLAN (IMPact for PLANning)² economic multiplier model. IMPLAN is an economic impact model designed for analyzing the effects of industry activity (employment, income, or business revenues) upon all other industries in an economic area.

A. IMPLAN MODELING METHODOLOGY

Social Accounting Matrices

Regional Social Accounting Matrices, or SAM, represent an IMPLAN extension for regional economic modeling. SAMs provide information on non-market financial flows. IMPLAN type inter-industry models provide information on market transactions between firms and consumers, and they capture payments of taxes by individuals and businesses, transfers of government funds to people and businesses, and transfer of funds from people to people.

IMPLAN Multipliers

Social Accounting Matrices are constructed to show the effects of a given change on the economy of interest. These are called Multiplier Models. Multiplier Models study the impacts of a user—specified change in the chosen economy for a given industry or industries. Because the Multiplier Models are built directly from the region-specific SAM, they will reflect the region’s unique structure and trade situation.

Multiplier Models are the framework for construction impact analysis questions. Derived mathematically, these models estimate the magnitude and distribution of economic impacts, and measure three types of effects. These

² Minnesota IMPLAN Group (MIG), Stillwater, Minnesota



are the direct, indirect, and induced changes within the economy. The following is a brief definition of the three impact types:

Direct Impacts: The actual change in activity affecting a local economy. For example, if a new industrial building is constructed, direct economic impacts represent the value-added output for that firm/user, as well as the jobs required by that business and the labor income paid.

Indirect Impacts: Indirect impacts reflect the response of all other local businesses within the geographic area to the direct impact. Continuing the previous example, indirect impacts of a new institutional user would comprise revenues for related vendors (e.g., real estate services, vendors, etc.), and the jobs and labor income thereby generated.

Induced Impacts: These reflect the response of households within the geographic area affected by direct and indirect impacts. In the given example, induced impacts would be the increase in all categories of spending by households in the geography directly or indirectly employed by the businesses' activities.

Our analysis will evaluate the Jobs, Labor Income, and Value-Added Output of our estimated direct industry change and commodity change activities.

Glossary of Terms³

Value Added Output: The difference between an industry's or an establishment's total output and the cost of its intermediate inputs. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported). Value added consists of compensation of employees, taxes on production and imports less subsidies (formerly indirect business taxes and nontax payments), and gross operating surplus (formerly "other value added").

Labor Income: All forms of employment income, including Employee Compensation (wages and benefits) and Proprietor Income.

Industry: A group of establishments engaged in the same or similar types of economic activity.

Commodity: A commodity is a product or service. It may be produced by one or by many industries. Commodity output represents the total output of the product or service, regardless of the industry that produced it. If an industry and the commodity produced by the industry have the same name, the commodity is considered the primary product of that industry. Any other commodity produced by that industry is a secondary product of that industry.

Geographic Level

Impact analysis has varying degrees of geographic coverage. Specifically, vendors who provide goods and services in response to modeled impacts are in a range of locales. For this analysis, we focused on impacts retained in Washington County. That is, indirect and induced impacts which leak outside of the county are not included. The degree to which indirect and induced impacts are captured within the City of Forest Grove will be a function of how well local businesses capitalize on the opportunities associated with the facilities.

³ From the United States Bureau of Economic Analysis (BEA)



B. ECONOMIC IMPACTS OF CONSTRUCTION ACTIVITY

To evaluate the temporary construction impacts of the proposed development program, we calculated the **total** construction spending of the project measured as a direct industry change in construction of new nonresidential commercial structures. Estimated construction expenditures were converted into estimated contributions to employment income and output at the Washington County level (Figure 2).

- Construction spending would translate into an estimated 4,530 direct full time equivalent (FTE) jobs over the construction period (assumed to be five years for site and facilities improvements). Direct jobs would pay an estimated average of over \$90,000 per FTE, for wages and benefits. Benefits average 30% in the construction industry (via BLS), indicating an average annual wage of \$63,000 per FTE. This is 10% higher than the average earnings of an employed Forest Grove resident: \$57,800 (Census).
- Because the development period is estimated to extend over multiple years, the direct construction jobs projected likely represent some of the same employees, employed throughout the project lifecycle over multiple buildings/phases.
- Each direct construction job would support approximately 0.7 indirect and induced jobs.
- The direct economic impact (\$1.1B development cost) is joined by over \$475 million in indirect and induced impact, for an estimated total impact of \$1.56 billion in total economic impacts from the construction phase.

FIGURE 4: SUMMARY OF FIVE-YEAR CONSTRUCTION IMPACTS
DATA CENTER CAMPUS (BASE CASE)

	PROJECTED IMPACTS, WASHINGTON COUNTY (2022 \$s)			
	Employment	Labor Income	Value Added ¹	Output
Direct Effect	4,530	\$416,676,000	\$670,660,000	\$1,087,336,000
Indirect Effect	1,420	\$105,731,000	\$139,409,000	\$225,891,000
Induced Effect	1,750	\$93,031,000	\$162,429,000	\$249,533,000
Total Effect	7,700	615,438,000	972,498,000	1,562,760,000

¹ Value Added includes Labor Income. Difference between total Output and Value Added represents cost of materials and other inputs.

Source: IMPLAN, Johnson Economics

C. ECONOMIC IMPACTS OF ON-GOING OPERATING ACTIVITY

The on-going economic impacts locally and in Washington County result from the completed construction of the development and resulting operations of the facilities (Figure 5). As opposed to the construction impacts, which are temporary, these numbers reflect annual recurring economic impacts.

- Upon completion, employment at the development modeled would be expected to be approximately 105 FTE employees. Employment at the site would include employees of the data center's tenant businesses, maintenance, security, and other property management functions. Indirect and induced employment supported by ongoing operations would support an additional 120 employees in Washington County, including vendors, commercial services, and beneficiaries of spending in the community from operations and employees at the site.
- Direct employment at the data center and power generation industries is expected to pay employee compensation of approximately \$163,000 per FTE (wages and benefits), while indirect and induced wages are lower. Excluding the value of benefits, the average direct job provided is projected to have an average wage of \$95,000, well higher than the average annual earnings of employed Forest Grove residents (\$57,800).



**FIGURE 5: SUMMARY OF ON-GOING ANNUAL OPERATIONAL IMPACTS
DATA CENTER CAMPUS (BASE CASE)**

	PROJECTED IMPACTS, WASHINGTON COUNTY (2021 \$s)			
	Employment	Labor Income	Value Added ¹	Output
Direct Effect	106	\$14,626,000	\$35,241,000	\$81,000,000
Indirect Effect	50	\$2,560,000	\$5,093,000	\$8,157,000
Induced Effect	70	\$3,065,000	\$6,423,000	\$9,867,000
Total Effect	226	\$20,251,000	\$46,757,000	\$99,024,000

¹ Value Added includes Labor Income. Difference between total Output and Value Added represents cost of materials and other inputs.

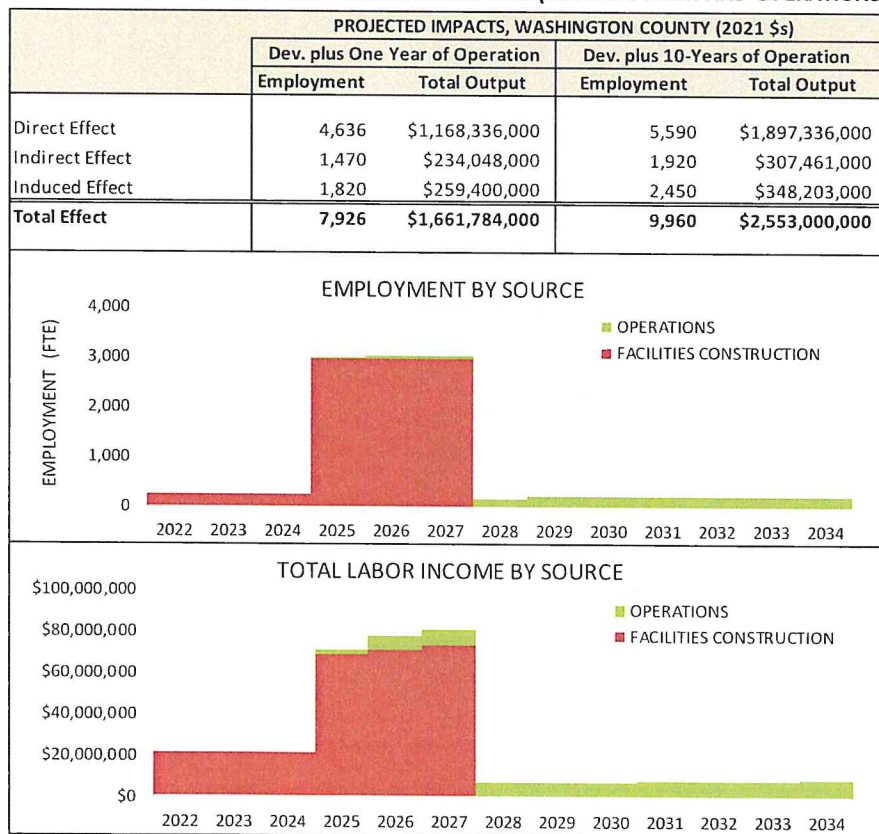
Source: IMPLAN, Johnson Economics

- Annual economic output from operations is projected to be \$81 million, with a large share being the cost of power, maintenance, and staffing. Total economic impact, including indirect and induced impacts is projected to be \$99 million annually.

D. COMBINED ECONOMIC IMPACTS (CONSTRUCTION AND OPERATIONS)

The combined impacts from construction and operations over one- and ten-year periods are presented in Figure 6:

FIGURE 6: SUMMARY OF TOTAL ECONOMIC IMPACTS (CONSTRUCTION AND OPERATIONS)



SOURCE: Johnson Economics and Minnesota IMPLAN Group, Inc.



After completion of all phases of the development and one year of operations, the total impact of the development (direct, indirect, and induced) is estimated to be nearly \$1.7 billion to the local and regional economy. After ten years of operation, it is estimated to be over \$2.5 billion to the local and regional economy.

V. FISCAL IMPACT

In addition to economic impacts, the data center campus development would have fiscal implications for the City of Forest Grove, Washington County, other local service providers and the State of Oregon. These impacts include property taxes, income and business taxes, and development charges and fees.

A. PROPERTY TAX IMPACTS

For local government and service providers, the primary revenue generator on an ongoing basis will be property taxes. The following is an outline of the 2021/22 millage rates for the property, located in Washington County tax code 15.19:

FIGURE 7: 2021/2022 PROPERTY TAX SCHEDULE

Tax Code 15.19		Tax Rate (per \$1,000 of TAV)			
Taxing District	School	Government	Bond	Total	
Washington County		2.8847	0.0675	2.9522	
City of Forest Grove		5.4609		5.4609	
Forest Grove School District	4.7968		2.1725	6.9693	
Metro		0.1903	0.3774	0.5677	
NW Regional ESD	0.1502			0.1502	
Port of Portland		0.0685		0.0685	
Portland Community College	0.2761		0.3803	0.6564	
Tualatin Soil & Water District		0.0806		0.0806	
Urban Renewal - Forest Grove		0.2817		0.2817	
Total Tax Rate	5.2231	8.9667	2.9977	17.1875	

Source: Washington County Assessor

The overall millage rate is approximately \$17.19 per \$1,000 of assessed value, of which the Forest Grove School District receives 41%, the City of Forest Grove received 32%, and Washington County receives 17%.

Taxable Assessed Value and Enterprise Zone Incentives

The subject site is located in a designated Enterprise Zone (EZ) that covers much of the city's remaining industrial lands. The EZ program allows localities to offer property tax benefits as an incentive for new property investment. The program offers a total exemption from property taxes on new real property and equipment for three to five



years. Projects seeking a five-year exemption pay a community service fee equal to 25% of the tax savings in years four and five.⁴

Many data center developments around Oregon have used the EZ program to reduce the tax burden on what are typically very large investments in property and equipment. The program can be applied to initial development, as well as subsequent expansions and newly added equipment. Because the server equipment used in data centers is typically replaced on a three-to-four-year schedule, the EZ program can shield much of this equipment from property taxes, however state law requires that this equipment be returned to the tax role for one year after the program.

Figure 8 shows the estimated annual growth in Real Market Value over 20 years (\$1.1 billion in investment over five years, depreciated over 31 years), how this translates into Taxable Assessed Value (TAV) on the property after accounting for five-year EZ exemptions on each phase, and the projected total annual tax and cumulative tax revenue over a 20-year period (in 2022 dollars).

**FIGURE 8: PROJECTED GROWTH IN TAXABLE VALUATION, AND PROPERTY TAX REVENUE
FIVE-YEAR DATA CENTER CAMPUS DEVELOPMENT**

Development Phase	Year	Real Market Value (RMV)	Tax Treatment	Taxable Assessed Value (TAV)	Annual Prop. Tax Revenue*	Cummulative Tax
Site Development DC01 (60 cMW)	2021	\$11,845,000	Land only:	\$888,000	\$15,300	\$15,300
	2022	\$12,201,000		\$915,000	\$15,700	\$31,000
	2023	\$12,567,000		\$942,000	\$16,200	\$47,200
	2024	\$85,778,000	Ent. Zone 1:	\$12,944,000	\$222,500	\$269,700
	2025	\$591,068,000	Ent. Zone 1,2:	\$13,332,000	\$229,100	\$498,800
	2026	\$572,831,000		\$13,732,000	\$236,000	\$734,800
	2027	\$1,062,458,000	Ent. Zone 1,2,3:	\$14,144,000	\$4,747,600	\$5,482,400
	2028	\$1,029,066,000		\$14,568,000	\$4,609,600	\$10,092,000
	2029	\$996,777,000	Ent. Zone 2,3:	\$61,821,000	\$5,079,900	\$15,171,900
	2030	\$965,557,000	Ent. Zone 3:	\$490,374,000	\$10,470,100	\$25,642,000
DC02 (60 cMW)	2031	\$935,372,000		\$474,555,000	\$10,136,500	\$35,778,500
	2032	\$906,190,000	After Ent. Zone:	\$889,794,000	\$15,363,800	\$51,142,300
	2033	\$877,979,000		\$861,091,000	\$14,800,000	\$65,942,300
	2034	\$850,709,000		\$833,313,000	\$14,322,600	\$80,264,900
	2035	\$824,349,000		\$806,432,000	\$13,860,600	\$94,125,500
	2036	\$798,873,000		\$780,418,000	\$13,413,400	\$107,538,900
	2037	\$774,252,000		\$755,244,000	\$12,980,800	\$120,519,700
	2038	\$750,459,000		\$730,881,000	\$12,562,000	\$133,081,700
	2039	\$727,470,000		\$707,304,000	\$12,156,800	\$145,238,500
	2040	\$705,259,000		\$684,488,000	\$11,764,600	\$157,003,100
Year 20	2041	\$683,801,000		\$662,408,000	\$11,385,100	\$168,388,200
	2042	\$663,075,000		\$641,040,000	\$11,017,900	\$179,406,100
	2043	\$643,058,000		\$620,361,000	\$10,662,500	\$190,068,600

* Includes Community Service Fee of 25% of the abated tax, to be paid in year 4 and 5 of the Enterprise Zone eligibility.

Source: Johnson Economics

- After the sunset of the EZ program benefits, the taxable value of the facility is expected to remain very high despite some depreciation of the real property. At its peak, annual property tax revenue (to all taxing

⁴ Under its current authorization, the Enterprise Zone program will sunset in June of 2025. This analysis assumes that this program will be extended, but this is uncertain. It is anticipated that there will be support from Oregon communities and businesses to continue this widely used program.



jurisdictions) is projected to exceed \$15.3 million annually. By the 20th year, total tax revenue is projected to total over \$190 million dollars.

- Figure 9 shows this projected revenue by local taxing jurisdiction over ten and 20-year periods. Benefits to the city, county and school district are projected to be in the tens of millions of dollars over these periods.
- At the revenue peak (2032), after initial EZ exemptions, the estimated revenue would reach over \$4 million annually to the city, and over \$6 million annually to the school district.
- In the year of peak revenue, the over \$4 million in projected revenue from this project would increase the City's total property tax revenue (estimated at \$17.4 million based on past growth) by over 25%. It would increase total projected general fund resources by 12% in that year.
- Total projected tax revenue to the City could exceed \$20 million over 10 years, and nearly \$60 million over 20 years. Total projected tax revenue to the School District could exceed \$27 million over 10 years, and \$75 million over 20 years. (Figure 9)

FIGURE 9: PROJECTED TAX REVENUE BY DISTRICT (2021/22 RATES)

Tax Code 15.19 Taxing District	Tax Rate (per \$1,000 of TAV)				10-Year	20-Year
	School	Government	Bond	Total	(2024 - 2033)	(2024 - 2043)
Washington County		2.8847	0.0675	2.9522	\$10,880,970	\$31,377,403
City of Forest Grove		5.4609		5.4609	\$20,472,271	\$59,035,796
Forest Grove School District	4.7968		2.1725	6.9693	\$27,631,691	\$79,681,380
Metro		0.1903	0.3774	0.5677	\$2,200,595	\$6,345,846
NW Regional ESD	0.1502			0.1502	\$563,248	\$1,624,234
Port of Portland		0.0685		0.0685	\$256,736	\$740,349
Portland Community College	0.2761		0.3803	0.6564	\$2,521,702	\$7,271,822
Tualatin Soil & Water District		0.0806		0.0806	\$312,874	\$902,233
Urban Renewal - Forest Grove		0.2817		0.2817	\$1,055,013	\$3,042,337
Total Tax Rate	5.2231	8.9667	2.9977	17.1875	\$65,895,100	\$190,021,400

Source: Washington County, Johnson Economics

Conservative Ramp Schedule: The prior figures reflect the base case scenario with a five-year ramp schedule. The alternative, more conservative ramp schedule which would take place over ten years, involves the same amount of taxable investment. However, because the capital investment is realized over a longer schedule, the tax revenue generated is projected to grow more slowly, amounting to \$170 million over the first 20 years, in comparison to the \$190 million presented for the base case above.

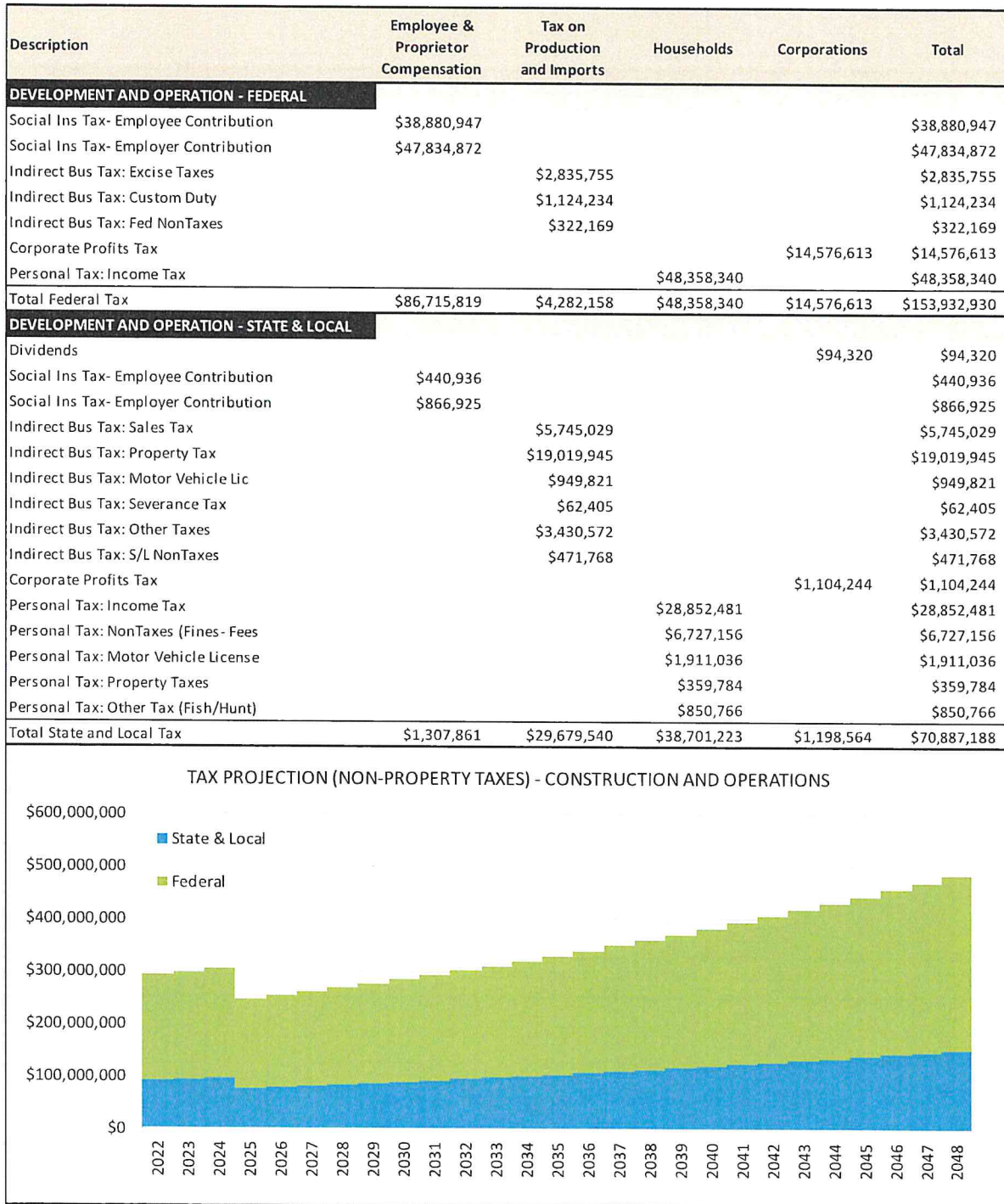
B. ADDITIONAL TAX IMPACTS (OTHER THAN PROPERTY TAX)

Figure 10 (next page) presents an estimate of other tax contributions, such as income and business taxes, from the projects construction and operations based on the modeling assumptions in the IMPLAN scenarios. Estimates are broken down by federal, vs. state and local contributions.

- Through the first year of full operations, the project is expected to contribute \$154 million federally, and \$71 million in state business and personal tax revenue.
- Figure 10 presents forecasted annual growth based on an estimated growth rate of 3% per year.



**FIGURE 10: PROJECTED ONGOING TAX REVENUE IMPACTS
OTHER THAN PROPERTY TAX (2022 DOLLARS)
PROJECT CONSTRUCTION AND ONE-YEAR OPERATIONS**



SOURCE: Johnson Economics and Minnesota IMPLAN Group, Inc.



C. FEES AND SYSTEM DEVELOPMENT CHARGES

Figure 11 presents an estimate of revenue generated from the new development through development fees and system development charges (SDC's). SDC's are one-time charges which occur at the time of development. These fees are meant to off-set the impact of the new development on current city systems such as streets, parks, and the water and sewer system. The fees are used for capital improvements to expand these systems or reimburse the city for prior expansions that benefit the new development.

The estimates presented in Figure 11 are based on the best good-faith efforts of the consultant to estimate charges based on available information, including preliminary development plans that may be subject to change. Ultimately, development fees and charges are subject to the application of complex formulas by multiple jurisdictions, based on the characteristics of the final proposed development. Minor fees, such as application and process fees that amount to a few thousand dollars or less may not be included below.

The estimated transportation system charge is the largest single line item in Figure 11. All estimates in Figure 11 should be assumed to be approximate.

FIGURE 11: ESTIMATED SDC & FEES, DATA CENTER CAMPUS

System Development Charge		Estimated Charge
Transportation SDC	City	\$2,199,000
2" Water Meter SDC	City	\$54,000
Sanitary Sewer SDC	Clean Water Services	\$58,000
Stormwater SDC	Clean Water Services	\$62,000
Parks SDC	City (Resid. Only)	\$0
School Excise Tax	School District	\$25,000
Metro Excise Tax	Metro	\$12,000
TOTAL:		\$2,410,000
Development Fees		Estimated Fee
Site Plan Review	City	\$30,000
Building Permit Fee	City	\$310,798
Building Plan Review Fee	City	\$202,019
Fire & Life Safety Plan Review Fee	City	\$124,319
Plumbing permit	City	unspecified
Mechanical permit	City	unspecified
Site Dev. Inspection Fee:	Clean Water Services	\$61,200
TOTAL:		\$728,336
COMBINED TOTAL:		\$3,138,336

Source: City of Forest Grove, Washington County, Clean Water Services, Johnson Economics

* Best estimates of fees and charges were generated using methodology provided by the responsible jurisdictions for each line item. Estimates are subject to change with changes to methodology, and details of the final development program.



VI. ALTERNATE DEVELOPMENT SCENARIOS

The potential public benefits of the proposed data center campus development can be considered in comparison to alternate development scenarios for this acreage.

Under Current Use: Currently, the six tax lots comprising the site have an estimated real value of \$11.8 million and a taxable value of \$888,000 (Washington County Assessor.) Under the current, mostly agricultural use, the site generates an estimated \$16,000 in annual property taxes. In terms of economic impact, the current uses generate very little in terms of employment, housing, or tax base.

Alternate Industrial Use: The subject property has been within the Urban Growth Boundary (UGB) as a potential industrial site for many years. The lack of viable development proposals under the current industrial zoning has been one impetus to planning efforts in the area to consider alternatives (see below).

The proposed data center development is a viable use under the current zoning. As acknowledged in the Goal 9 Economic Opportunities Analysis planning process undertaken by the city, one “wild card” in planning for future industrial land needs is the unpredictability of recruiting a high-value, large lot employment use to a community. For this reason, large sites like the subject site can remain underutilized for an extended period. However, in the event a large user like the proposed data center campus does consider a community, these large sites must be available to accommodate them, or they will seek other locations.

In considering the economic impacts of the proposed data center, a comparison to alternate allowed industrial uses at the subject site may be useful. General industrial uses are typically among the lowest value urban land uses on a per-square-foot basis in comparison to residential or commercial land uses. Industrial development often features improvements such as warehouses and other large tilt-up construction, with low floor-area ratios, basic internal finishing and furnishing, and ample outdoor storage yards and circulation space. The land value is reflected in industrial space lease rates, which are typically the lowest on a per-square-foot basis of the major urbanized real estate categories.

The exceptions to this rule are some high-value industrial uses including high-tech manufacturing and data centers, which combine the need for industrial land with advanced facilities requiring extra investment in infrastructure, mechanical and electrical capabilities, and expensive high-tech equipment. Examples from the Washington County area include multiple data center developments such as QTS, Digital Realty, T5 and high-tech manufacturers such as Genentech, Intel and other semiconductor manufacturers. These facilities feature high levels of investment, producing high taxable values, while creating generally high-paying skilled employment. As demonstrated in the prior analysis, the proposed data center campus meets these benchmarks.

Therefore, in comparison to other hypothetical industrial uses at the site, the proposed development is projected to greatly exceed the economic impact of traditional industrial types such as food and natural resource processing, distribution, low-value manufacturing, repair, and storage.

A hypothetical high-tech advanced manufacturer at the site might feature more comparable high levels of investment and wages as a data center. But as is the case with all hypothetical industrial alternatives, proposals for that type of development have not materialized at the subject site since it has been in the UGB. As noted, the arrival of large-lot, high-investment industrial users is unpredictable and difficult to plan for. The data center campus is an



active and viable proposal that meets these criteria today. There is an ongoing opportunity cost to the community from this large area remaining undeveloped indefinitely.

Draft Oak Street Area Land Use Refinement Plan: The area around the subject site has recently been the subject of land use planning efforts by the city that have examined a range of alternate land use scenarios, including residential and commercial uses that are not allowed under the current zoning. The planning effort includes some properties outside of the subject property considered in this analysis, but the subject property does represent the majority of the planning area. This “Oak Street Land Use Refinement Plan” effort has considered a range of land use concepts that combine these uses in different ratios.

While this planning effort is on hold, and has not been adopted, the process was arriving at a general land use framework for the Oak Street area which is summarized below. It is worth comparing this general concept to the proposed data center use at the site to weigh the relative economic and fiscal impacts.

FIGURE 12: OAK STREET LAND USE REFINEMENT PLAN CONCEPT

Land Use District	Gross Acres	Net Acres	Units/Jobs	Density/ Acre
Residential	60	44	660 units	15
Commercial	9	7	210 jobs	30
Community Industrial	17	10	230 jobs	22
Total:	86	61		

* This land use concept is a preliminary recommendation. The planning process is not complete and no final concept has been recommended.

Source: City of Forest Grove

This land use concept would provide a number of economic impacts, and other benefits such as housing stock. However, preliminary analysis by Johnson Economics suggests that the economic and fiscal impact of this development program would ultimately be significantly lower than the proposed data center campus. Johnson Economics estimates the potential build-out valuation of the land use concept as follows (in 2022 dollars):

FIGURE 13: DRAFT OAK STREET LAND USE REFINEMENT PLAN CONCEPT, ESTIMATED VALUATION

Land Use District	Units/ Jobs	Est. RMV	Changed Prop. Ratio	Est. TAV	Avg. Wage	Labor Income
Residential	660 units	\$281,000,000	0.623	\$175,063,000		
Commercial	210 jobs	\$14,427,000	0.616	\$8,887,000	\$38,211	\$8,024,240
Community Industrial	230 jobs	\$68,198,000	1	\$68,198,000	\$89,168	\$20,508,638
Total:		\$363,625,000	0.693	\$252,148,000	\$64,847	\$28,532,878

* Assumptions: FAR of 0.3 for commercial and community industrial uses. Average value of housing of \$423k per unit. Average wages for retail and manufacturing employment in Washington County.

Source: Johnson Economics, RMLS, RSMeans, Oregon Employment Department

- The preliminary land use concept, at full build out, would generate an estimated \$364 million in total direct investment, or roughly 33% of the direct investment of the data center campus.



- Because taxable value is not set at market value for residential and commercial development, the taxable assessed value would be a lower \$253 million. The projected highest taxable value of the data center campus, (after the expiration of the Enterprise Zone benefits, and prior to depreciation) is over \$880 million, or over three times greater.
- The preliminary land use concept could theoretically house an estimated 440 commercial and industrial jobs, in comparison to 105 ongoing jobs at the data center campus. Because of the high average wage of the data center employment, the total labor income generated is very similar at an estimated \$28.5 million vs. \$29 million annually.
- Note that the full build-out of the site under this land-use concept may be a 10- to 25-year endeavor, whereas the economic impacts of the data center proposal are projected to take place in the next five to ten years.

VII. SUMMARY OF FINDINGS

The build-out of the proposed 63-acre data center campus would entail a very high level of investment in real property and equipment over the coming years. Investment in these types of facilities is very high, at an estimated \$1,000 to \$1,200 per square foot of built space, or \$7 million per cMW or greater. For a facility of this size, only high-tech manufacturing users rival this level of investment in a suburban environment.

As outlined in this report, the proposed development is projected to have a range of economic and fiscal impacts on the Forest Grove community, the county and broader Metro area. The impacts include new employment, payroll, spending with vendors on construction and operations, new tax revenue, and indirect and induced economic activity.

Projected impacts are summarized below:

- \$1.1 billion in direct investment in the data center campus over four years. \$475 million in additional indirect and induced economic output.
- 7,700 jobs directly and indirectly during the construction phase, including over 4,500 directly through all phases of development. (This is likely to represent many of the same workers, over multiple years/phases of the development process. Similar data center projects have supported 1,600 to 2,000 distinct jobs during development, with hundreds of workers on site at any one time.)
- \$615 million in labor income over the construction phase. (Labor income is included in total investment presented above.)
- The operations phase is expected to support 105 jobs across the campus, and economic output of \$81 million per year, including cost of power, staffing, maintenance, and equipment refresh. The indirect and induced impact is projected to support an additional 120 jobs locally, and in the county, and \$20 million in economic output annually.
- Upon completion the facility is forecasted to offer on-site employment at nearly twice the average wages for working residents of Forest Grove.
- Total projected economic output of the construction phase plus ten years of operation of over \$2.5 billion in local and regional impacts.



- \$190 million in cumulative property tax revenue to local districts over 20 years, including 41% to the school district, and 32% to the City of Forest Grove.
- At the revenue peak, after initial Enterprise Zone exemptions, the estimated revenue would reach over \$4 million annually to the city, and over \$6 million annually to the school district. At its peak, property tax revenue from the project could increase local tax revenue by over 25%, and total general fund revenue by 12%.
- \$154 million annually in federal, and \$71 million, in state business and personal tax revenue.
- An estimated \$3.1 million in system development charges and development fees.
- Alternate industrial development scenarios would likely generate a much lower economic and fiscal impact due to the lower investment that traditional industrial use entails. An alternative large, high-investment industrial employer is hypothetically possible, but highly speculative and unlikely to greatly exceed the projected impacts of the proposed data center campus.
- The draft Oak Street Refinement Plan land use concept would provide a number of economic impacts, and other benefits such as housing stock. However, preliminary analysis by Johnson Economics suggests that the economic and fiscal impact of this development program would ultimately be significantly lower than the proposed data center campus. The estimated direct investment to achieve the land use concept would be 33% of the investment in the data center, and because taxable assessed value is limited for residential and commercial development, the taxable value would be an estimated 30% of the projected taxable value of the data center in its highest value year.



VIII. SOURCES

The analysis presented in this report is based on many assumptions drawn from a range of sources. Every real estate development is unique, with unique cost factors based on location, local land prices, availability of construction labor and materials, power resources and countless other factors. The following is a partial list of sources relied upon to generate the best assumptions of cost, economic and fiscal impacts:

- Birch Infrastructure (proposed site developer)
- Business Oregon
- City of Forest Grove
- City of Hillsboro Economic Development Dept.
- Clean Water Services
- Data Center Institute (AFCOM)
- Digital Realty
- Economic Development for Central Oregon
- IMPLAN (Minn. IMPLAN Group)
- Oregon Employment Department
- Oregon Transparency
- Port of Morrow
- Port of Umatilla
- Regional Multiple Listing Services
- RSMeans
- S&P Global
- Turner & Townsend Data Centre Cost Index
- Uptime Institute
- US Chamber of Commerce Technology Engagement Center
- Washington County Assessor

ATTACHMENT A-6



June 8, 2022

Neighborhood Meeting Minutes: Oak Street Area Transportation System Plan Amendment
Type IV Land Use Application Review

Meeting #1: Thursday, May 12, 2022
Meeting #2: Tuesday, June 7, 2022
Time: 6:00 p.m.
Location: Online Zoom Webinar

In preparation for the submission of the Oak Street Area Transportation System Plan (TSP) Amendment land use application (for a Type IV Legislative Comprehensive Plan Amendment), the applicant fulfilled intentions to provide robust public outreach. The project team hosted two neighborhood meetings, firstly on May 12, 2022, and secondly on June 7, 2022, over Zoom Webinar. Notice was mailed to adjacent property owners within 1,000 feet of the subject site, amounting to over triple the notification area required by the City of Forest Grove (City) Development Code. The mailed notice included a description of the TSP Amendment project, the registration information, and a map of the project location and vicinity area.

Panelists from the applicant's team present at the meeting included David Shiflett with Rowan Digital Infrastructure, PBLLC; Marie Holladay, Mimi Doukas, Cody Street, and Glen Southerland with AKS Engineering & Forestry, LLC; Chris Brehmer with Kittelson & Associates, Inc.; and Nathaniel Brown and James Adkins with Hubbell Communications. To engage all interested participants, Spanish language translation services were provided at both neighborhood meetings, contracted from the Immigrant and Refugee Community Organization (IRCO).

May 12, 2022 – First Meeting Summary

As documented on the attached Attendee Report, 71 members of the public registered for the first neighborhood meeting and 39 people attended. The meeting began with Marie Holladay opening the Zoom Webinar and providing introductions of the applicant and project team. Ms. Holladay provided an overview of the Oak Street Area, the challenges of the adopted Forest Grove Transportation System Plan (TSP), and key features of the preliminary plans and conceptual roadway network options. Toward the end of the presentation, a summary of the land use submittal and review process was provided, including the opportunities for public input during the next neighborhood meeting and the public comment period after the land use application is submitted. Following the presentation, the project team facilitated a discussion period. Interested participants asked questions and provided general comments about the project. The meeting concluded at approximately 7:21 p.m.

June 7, 2022 – Second Meeting Summary

As documented on the second Attendee Report, attached, 30 people registered for the second neighborhood meeting and 21 people attended. The meeting followed a similar format as the first and began with Marie Holladay opening the Zoom Webinar and providing introductions of the applicant and project team. Ms. Holladay provided a brief overview of the discussion from the first meeting, background information on the Oak Street Area, the challenges of the adopted Forest Grove Transportation System

Plan (TSP), and details on the proposed roadway network options. At this second meeting, the applicant's team provided robust details associated with the proposed pedestrian highway crossing experience, realigned multimodal connections, and the approved and funded Washington County roundabout improvement at OR 47 and Martin Road. Toward the end of the presentation, a summary of the land use submittal and review process was again provided, including the opportunities for public input through the City's land use process. Following the presentation, the project team facilitated a discussion period. Attendees were again given the chance to voice comments and questions in relation to the project. The meeting concluded at approximately 7:15 p.m.

The table on the following page provides a summary of the neighborhood outreach, including generalized topics discussed and the responses provided at both meetings.

Breakdown of Discussions at Neighborhood Meetings		
Item	Topic	Response
1	Why does the City's adopted TSP need to be amended?	As adopted in the current TSP, the ±65-acre Oak Street Area is bisected by Oak Street and other planned future roadways, resulting in a transportation network across the site that inhibits development of a large industrial user. The proposed roadway realignments will facilitate consolidation of the site to construct a high-technology data center campus with a secure perimeter.
2	Summarize the Proposed Updated Roadway Plan.	As shown on the Proposed Updated Roadway Plan (Exhibit B), the Collector roadways planned for extension across the central portion of the site are reconfigured along the perimeter of the site. This design shifts the 26 th Avenue Collector to the south, creating an east-west oriented roadway. This updated transportation design will consolidate access points to Oregon Route 47 (OR 47) by moving trips from the intersections of Laurel Street/OR 47 and Oak Street/OR 47 to the new roundabout at NW Martin Road/OR 47. This design benefits the state highway by implementing access management and reduced turn movement at the applicable intersections.

Breakdown of Discussions at Neighborhood Meetings		
Item	Topic	Response
3	Summarize the Alternative Updated Roadway Concept Plan. What are the differences between the two plans/options?	The Alternative Realignment Concept Plan (Exhibit C) design is the result of the public outreach process. The applicant engaged the existing neighborhood community to the west, the Casey Meadows Homeowners' Association, to receive feedback on the TSP Amendment project. These conversations led to an alternative design concept. The main difference associated with the Alternative Realignment Concept Plan is the interface of the realigned 26th Avenue. 26th Avenue is proposed to connect to the future 23rd/24th Avenue alignment adopted in the TSP. This will create a stop-controlled intersection at 23rd/24th Avenue and 26th Avenue, instead of allowing east-west travelers uninterrupted through movement to the roundabout at OR 47. This design is preferred by the existing residential neighbors to the west because the additional intersection discourages an 'expressway' or 'thoroughfare' to/from OR 47. The additional stop movement could potentially slow traffic movement by eliminating the long, curved stretch of 26th Avenue roadway.
4	Does the applicant/property owner prefer one option over another?	The Proposed Roadway Plan (Exhibit B) is preferred because it results in the most feasible opportunity to build main roadway connections in the short term, which provide regional connectivity. As shown in the Alternative Realignment Concept Plan (Exhibit C), 23rd/24th Avenue is the conceptual main route for east-west travelers. Currently, this route is encumbered with existing homes, natural resources, land acquisition challenges, and other factors, which make the timing and construction of the ultimate 23rd/24th Avenue connection uncertain. As shown on the Proposed Roadway Plan (and in contrast to the 23rd/24th Avenue extension), the Laurel Street extension is associated with fewer constraints to provide connectivity in a shorter timeframe. However, both options are viable alternatives to the adopted TSP, provided for policy makers to review and determine compliance with the City's envisioned goals for traffic circulation, localized connectivity, and land use policy.
5	Will other streets in the vicinity be reviewed and updated (e.g. widening 22 nd Avenue or Martin Road) with this application?	No, this application does not seek to change the cross sections or implement design standards for roadways, as adopted in the City's TSP. This application facilitates realignment of planned roadways in the Oak Street Area.

Breakdown of Discussions at Neighborhood Meetings		
Item	Topic	Response
6	Why does Oak Street need to be closed?	Currently, Oak Street bisects the ±65-acre industrial area, which inhibits economic opportunities from a large-scale industrial development. Oak Street is proposed to be closed to allow consolidation of the site for future construction of a high-technology data center campus with a secure perimeter.
	How will pedestrians and bicyclists who currently use Oak Street travel north to NW Porter Road?	The Proposed Roadway Plan (Exhibit B) incorporates alternative pedestrian, bicycle, and multiuse pathways currently mapped through the impacted Oak Street Area. This application does not seek to alter the City's adopted cross section for Collector roadways, as identified in the TSP. The proposed 26 th Avenue realignment will include sidewalks, bike lanes, and other mapped multimodal facilities to facilitate safe and efficient travel. Northbound travelers will move east on proposed 26 th Avenue, cross OR 47 at the controlled roundabout, and continue north to NW Porter Road.
7	How are controlled intersections safer for pedestrians and bicyclists?	From the perspective of people walking and riding bikes, having pedestrians and bicycles cross OR 47 at a single-lane roundabout (one lane at a time) would be safer than the north-south crossing at the current OR 47/Oak Street-NW Porter Road stop-controlled intersection (where pedestrians cross the shoulders, one lane in each direction, plus a left-turn lane). Drivers must yield to pedestrians using the crosswalks at a roundabout, whereas drivers are less likely to be expecting to yield to a north-south pedestrian movement at OR 47/Oak Street-NW Porter Road as configured today.
8	Why does 26 th Avenue need to be extended east from Kingwood Street?	As shown on the adopted TSP, 26 th Avenue is a Collector roadway planned for future extension to provide east-west local connectivity. 26 th Avenue is currently required to be extended with any future site development, unless the adopted TSP is amended through the Type IV Legislative process.
	Can the extension be removed all together?	The 26 th Avenue extension is an important east-west connection for local travel. This application proposes to shift the alignment of 26 th Avenue southward. In order to remove the extension entirely, an applicant would need to demonstrate how the local connectivity standards and the intent of the TSP are satisfied.

Breakdown of Discussions at Neighborhood Meetings		
Item	Topic	Response
9	What are the details of the future roundabout at NW Martin Road/OR 47? Can it be moved to an alternative location with this project?	The approved roundabout at NW Martin Road and OR 47 is a Washington County capital improvement project, which has already been designed and funded. According to the Washington County project website, construction is anticipated to begin in August 2022 with a completion goal of November 2023. The roundabout was designed to include four legs, though initial construction will only involve three legs (northern, southern, and eastern). No, the roundabout cannot be moved with this project; this TSP Amendment application does not involve adjustments to the planned roundabout at NW Martin Road and OR 47.
10	Impacts to existing residential neighborhoods (e.g. safety, character, increased traffic, etc.)	It is understood that there are existing neighborhoods to the west and south of the Oak Street industrial area. Currently, 26th Avenue terminates in stubbed roadway infrastructure, planned for future extension as adopted in the TSP. This TSP Amendment application proposes to realign planned Collector roadways currently mapped across the property to provide a consolidated site for future industrial development. This application does not seek to alter the cross sections for Collector roadways as adopted in the TSP; therefore, this project will benefit the community by facilitating additional sidewalks, bike lanes, etc. in the area and provide safe connections and infrastructure for existing residents. Further, the envisioned use of the site is a data center campus, forecasted to generate an insignificant amount of average daily trips and an insignificant impact to local traffic flows.
11	What will happen to the Tualatin Valley Scenic Bikeway?	The Tualatin Valley Scenic Bikeway is a mapped bicycle route through Forest Grove, using public right-of-way. Currently, the route is mapped along Oak Street, where there are no bike lanes, and northbound travelers must cross OR 47 at an uncontrolled intersection. This means bicyclists must cross two lanes of uncontrolled traffic, where cars are traveling at speeds of 45 to 60 miles per hour. With the proposed roadway realignments, the Tualatin Valley Scenic Bikeway will be rerouted with new bike lanes on proposed 26th Avenue. Northbound bicyclists will travel east on proposed 26th Avenue and cross OR 47 at the roundabout, then continue on the east side of OR 47 in the north direction to NW Porter Road. The out-of-direction travel for bicyclists is minor. The delay in travel at the uncontrolled intersection of Oak Street and OR 47, where a bicyclist must wait for a break in cars, is likely greater than the time needed for a controlled crossing at the roundabout.

Breakdown of Discussions at Neighborhood Meetings		
Item	Topic	Response
12	What will happen to the Council Creek Regional Trail?	Similar to the Tualatin Valley Scenic Bikeway, the Council Creek Regional Trail is proposed to be realigned with 26 th Avenue. Pedestrians will use a new 10-foot-wide shared-use path along the right-of-way, cross OR 47 at the roundabout, then continue on the east side of OR 47 in the north direction to NW Porter Road.
13	Concerns about additional traffic in the vicinity of the Oak Street Area.	This TSP Amendment application does not facilitate physical site development, generate traffic, or add trips to the Oak Street Area. A subsequent site plan review application will be submitted to determine compliance with vehicle trips generated from a future land use. The adopted TSP provides the framework for future roadway improvements and connections to provide regional connectivity to the area. We have heard concerns.
14	Concerns about speed limit in area (e.g. curved roads entice fast drivers, highway has higher speed limit, etc.)	It is understood that travelers do not always follow local traffic laws. This application will not alter county, state, or local speed limits. This application seeks to realign roadways, while providing safe and consolidated access to OR 47 through the roundabout.

Sincerely,

AKS ENGINEERING & FORESTRY, LLC



Mimi Doukas, AICP, RLA | Principal
 12965 SW Herman Road, Suite 100
 Tualatin, OR 97062
 (503) 563-6151 | mimid@aks-eng.com

Neighborhood Meeting Documentation Attachments (within Exhibit F):

Zoom Webinar Attendee Report (Sign-In Sheet) – May 12
 Meeting Presentation, dated May 12
 Notification and Registration Letter, dated April 28
 Mailing Notification List, dated April 8
 Affidavit of Mailing, dated April 28
 Sign Proof

Zoom Webinar Attendee Report (Sign-In Sheet) – June 7
 Meeting Presentation, dated June 7
 Notification and Registration Letter, dated May 24
 Mailing Notification List, dated May 19
 Affidavit of Mailing, dated May 24
 Sign Proof



The meeting will start shortly...

Visit



Call



Submit

If you haven't already, please visit

<https://www.aks-eng.com/Oak-Street-TSP/>

to register for this event.

If you are having audio difficulties, please call

+1-253-215-8782

Zoom ID **824 2667 5604**, Password **6151**

OR one of the telephone numbers listed on the Virtual Meeting Instructions sheet at the above website.

During the Question/Answer period, you can also **"Raise Your Hand"** to be called on to provide your questions and comments.

You can submit questions by typing them into the **Group Chat Box** – they will go directly to the Meeting Moderator. Questions will be answered after the presentation.

Servicios Lingüísticos

Cómo ver subtítulos

- En los controles de zoom, haga clic en **Transcripción en directo**
- Haga clic en **Mostrar subtítulo**
- Para cambiar el tamaño de fuente y otras configuraciones, haga clic en **Ajustes de subtítulos...**

Los controles de zoom están en la parte abajo de la pantalla

Como escuchar traduccion en español

- En sus controles de zoom haga clic en **Interpretación**
- Haga clic en **Español**
- Para escuchar el idioma interpretado solo, haga clic en **Silenciar el audio original**
 - Los participantes escucharán al intérprete al 80% del volumen y el audio original al 20% del volumen. Si el participante no desea escuchar el audio original, puede seleccionar silenciar el audio original.



City of Forest Grove Transportation System Plan Amendments

Virtual Neighborhood Meeting Webinar
May 12, 2022 at 6:00 pm



A place where families and businesses thrive.



Meeting Format – Zoom Webinar

Audio Help

- Meeting attendees will be muted throughout the presentation.
- Make sure your speakers are turned on and not muted.
- If you do not have speakers on your computer, you can join the audio by calling any of these toll-free numbers:

+1-669-900-6833

+1-346-248-7799

+1-929-205-6099

+1-253-215-8782

+1-301-715-8592

+1-312-626-6799

Project Team



» Woodfold-Marco MFG, Inc.

» Property Owner

» Rowan Digital Infrastructure

» Applicant

» David Shiftlett, Xiomara Gerlach



» Hubbell Communications

» Public Relations

» Nathaniel Brown, James Adkins



» AKS Engineering & Forestry, LLC

» Land Use Planning, Civil Engineering, Surveying, Landscape Architecture, Arborist, and Natural Resources Consultant

» Marie Holladay, Cody Street, Mimi Doukas



» Kittelison & Associates, Inc.

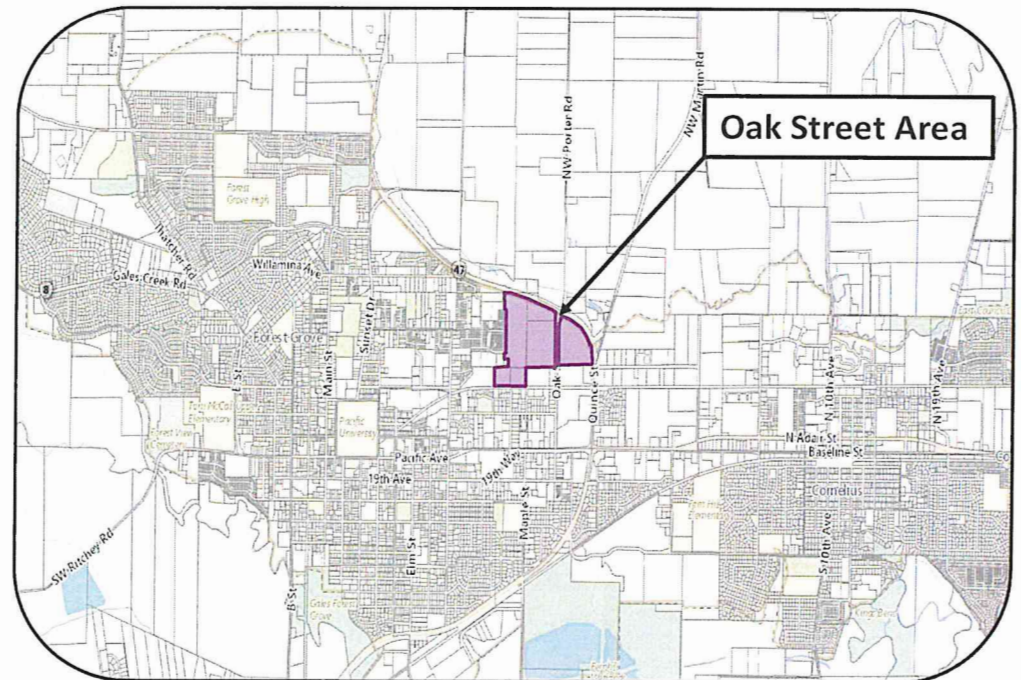
» Transportation Engineering

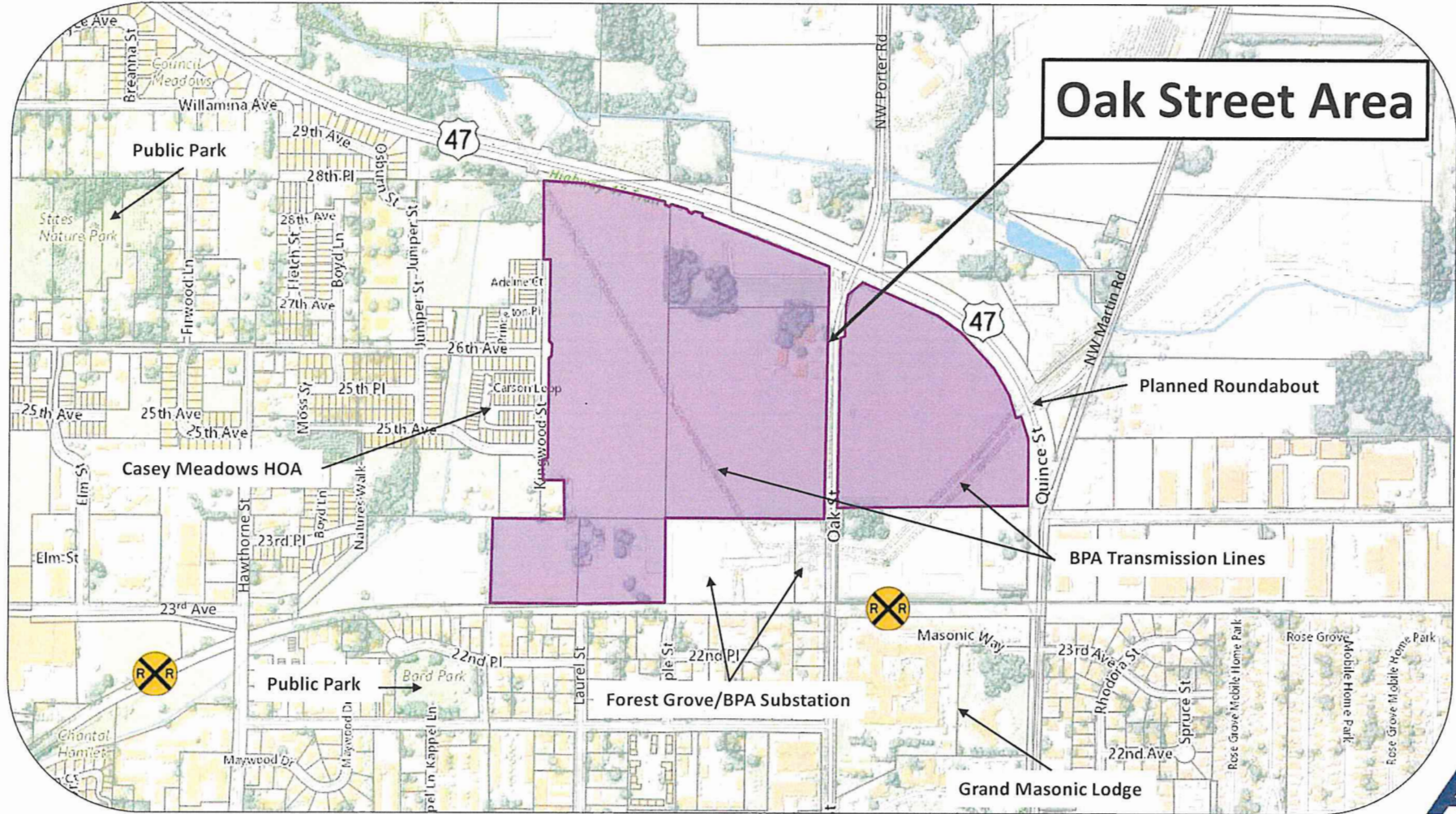
» Chris Brehmer



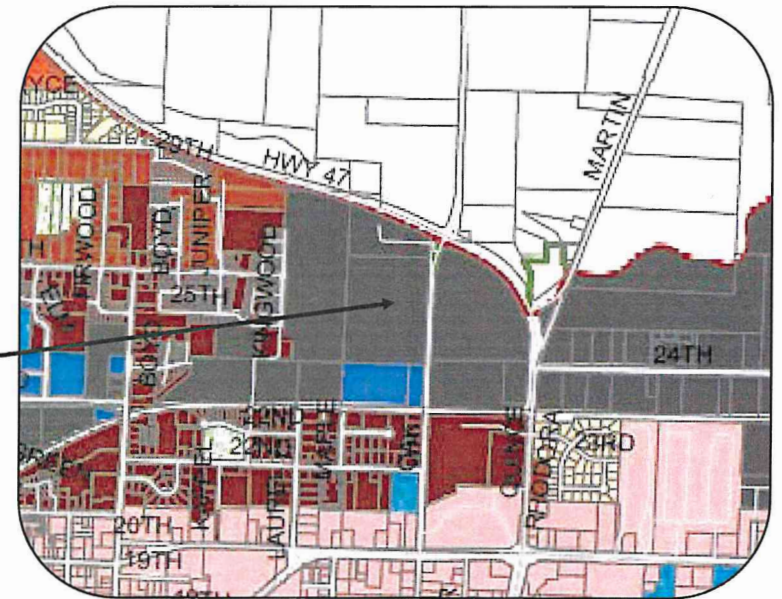
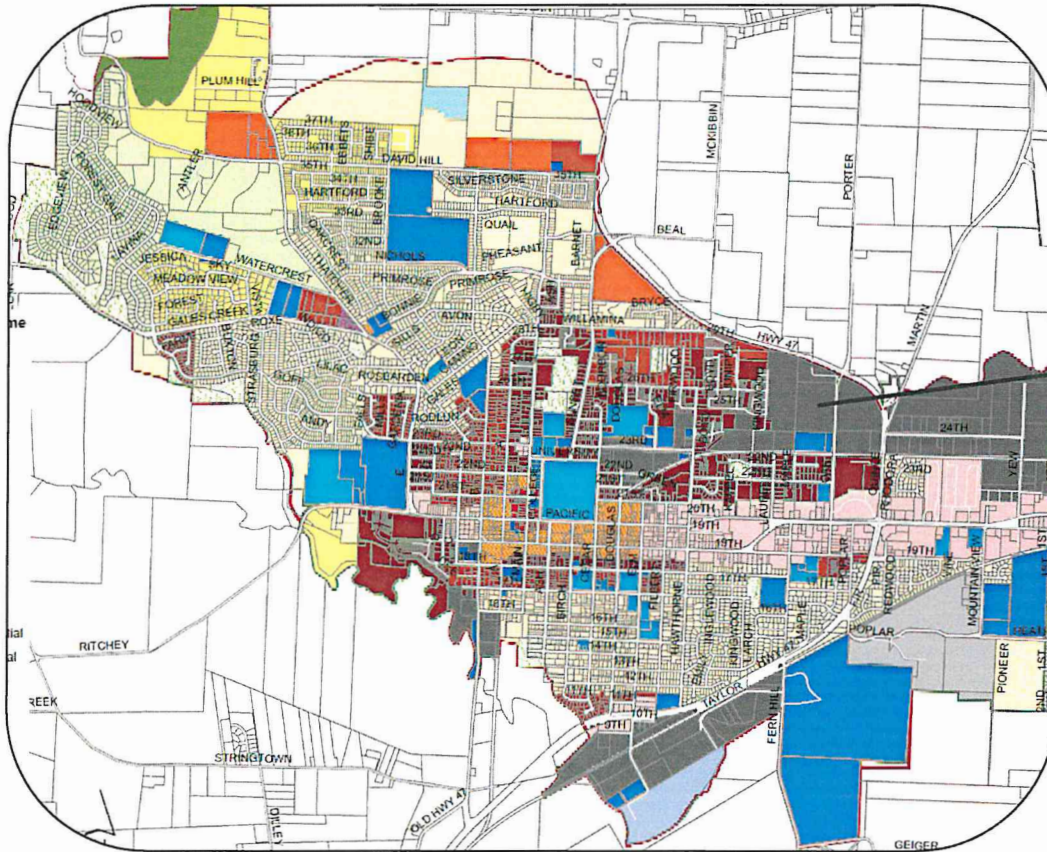
Application Overview

- » Type IV Legislative Transportation System Plan (TSP) Amendment
 - » Technical Transportation Report to address the regional functionality of the roadway network
 - » No physical alterations of the site
- » Site Plan Review Application
 - » Next step in the process
 - » Transportation Impact Analysis to address trip generation from specific use of the site – envisioned as a data center campus



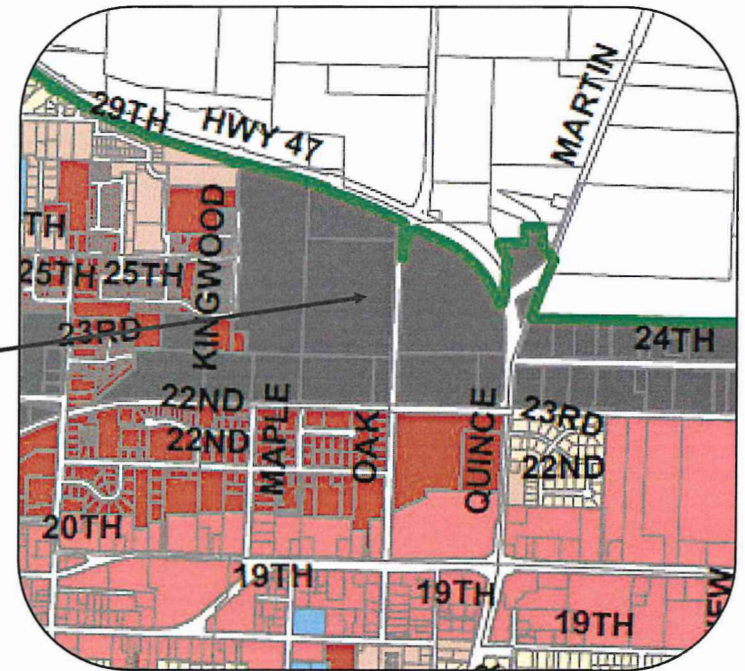
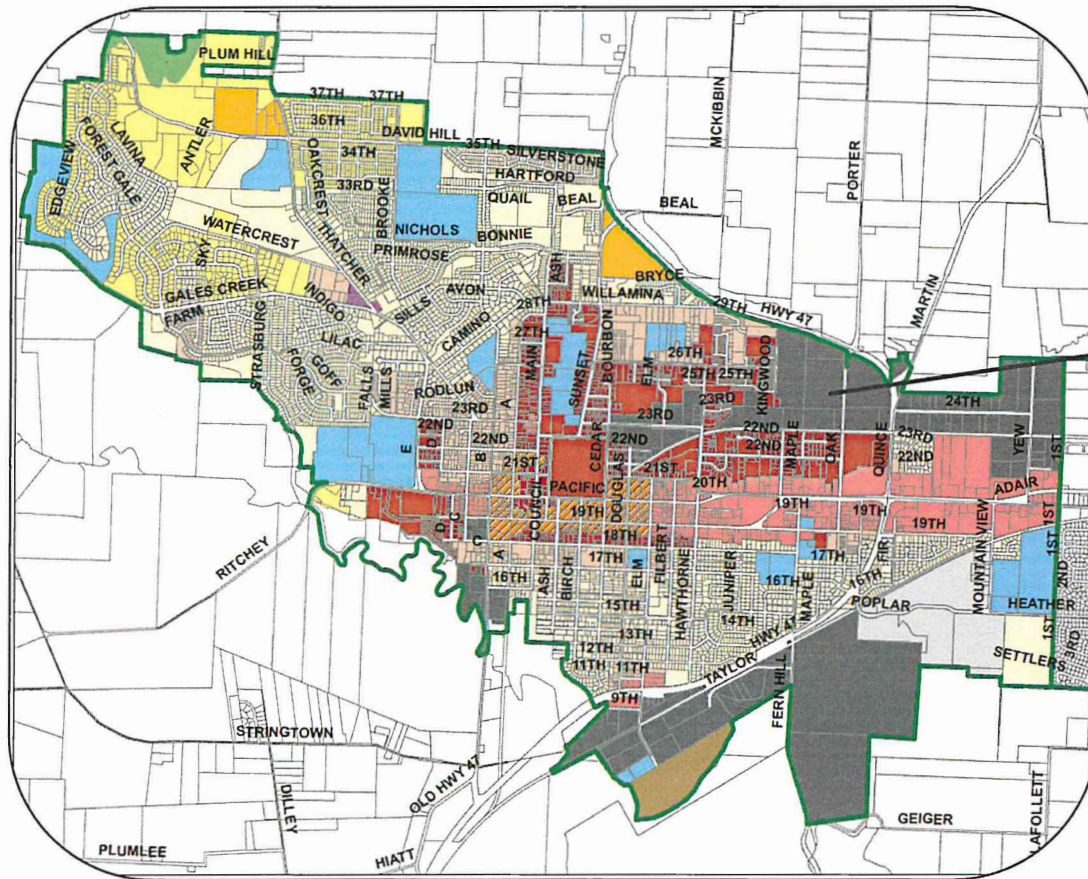


City of Forest Grove Comprehensive Plan



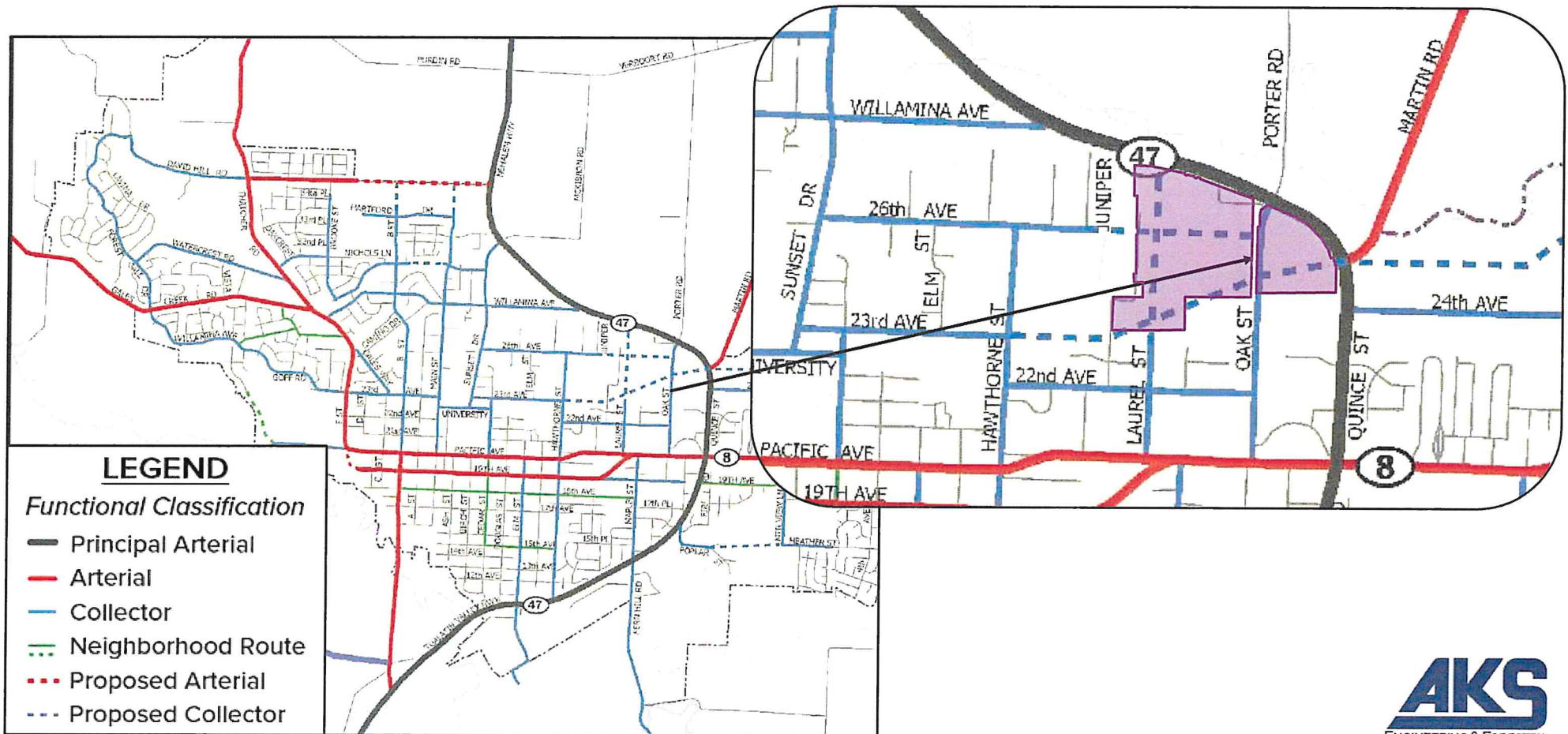
General Industrial (GI)

City of Forest Grove Zoning Map

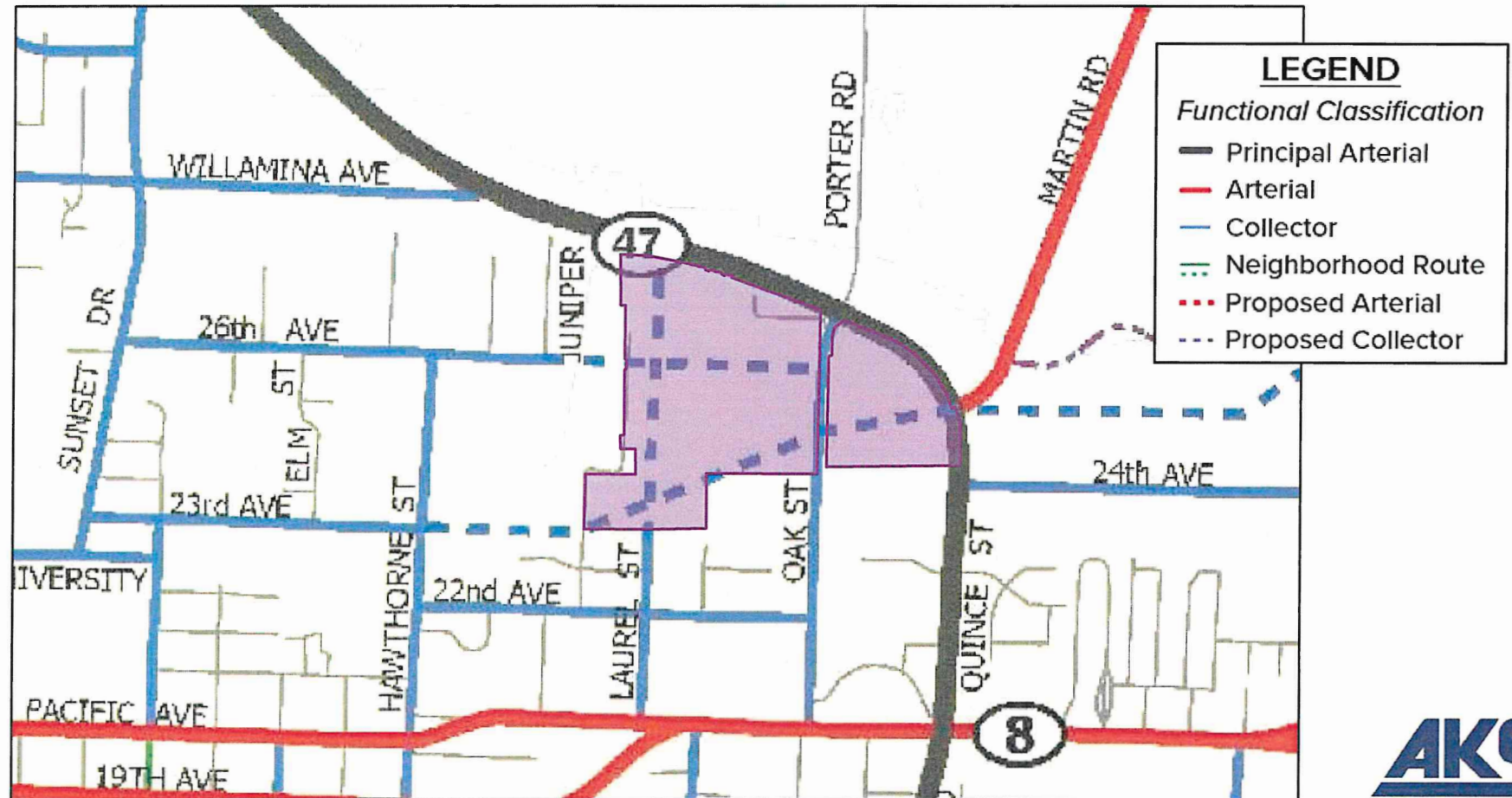


General Industrial (GI)

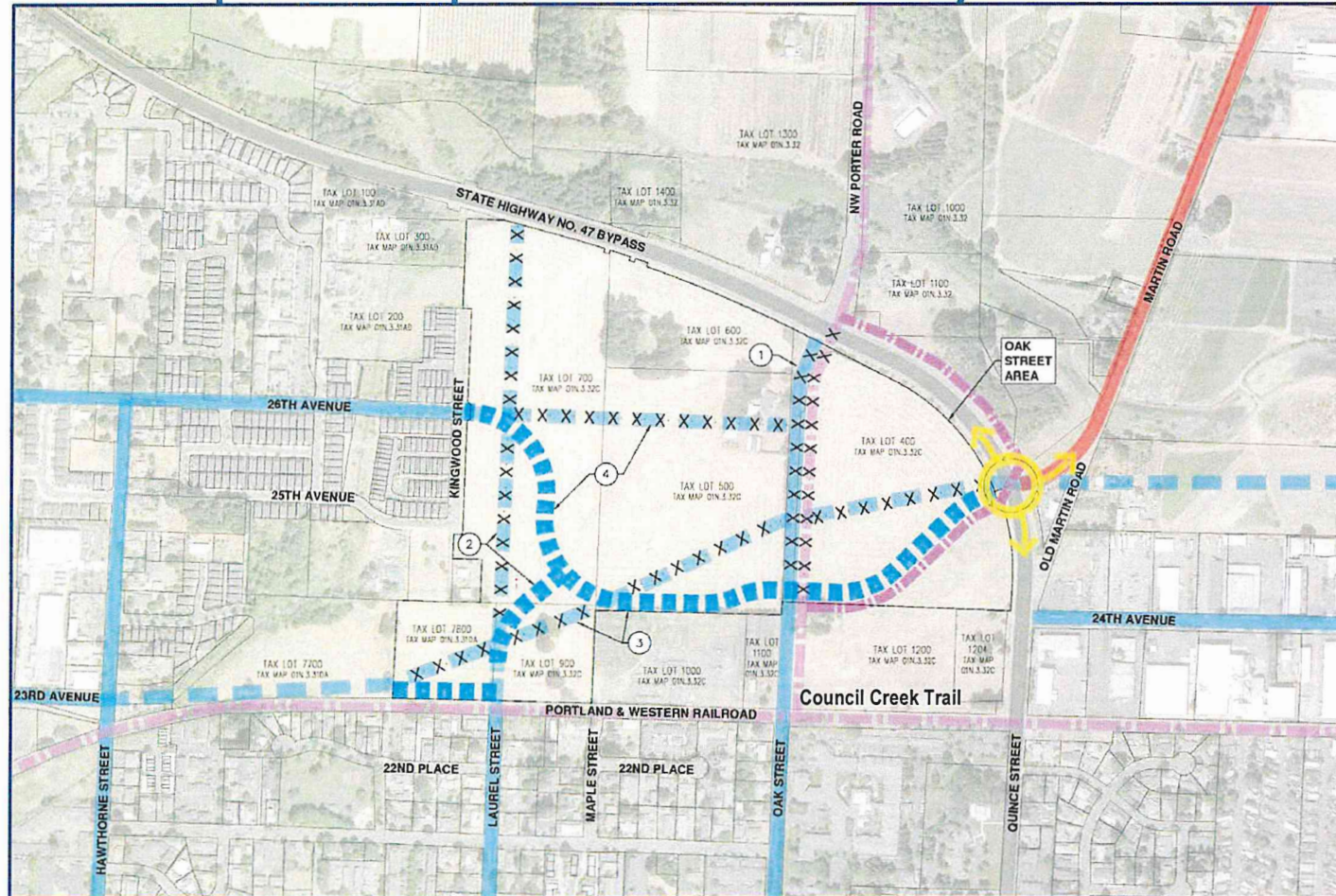
City of Forest Grove Transportation System Plan (2013)



City of Forest Grove Transportation System Plan (2013)



Conceptual Updated Roadway Plan



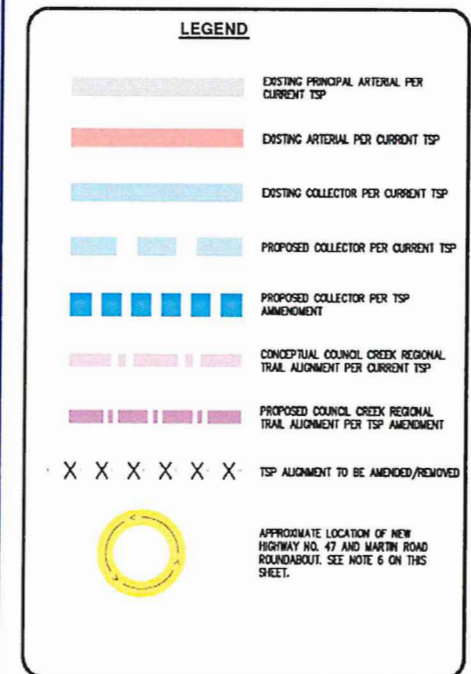
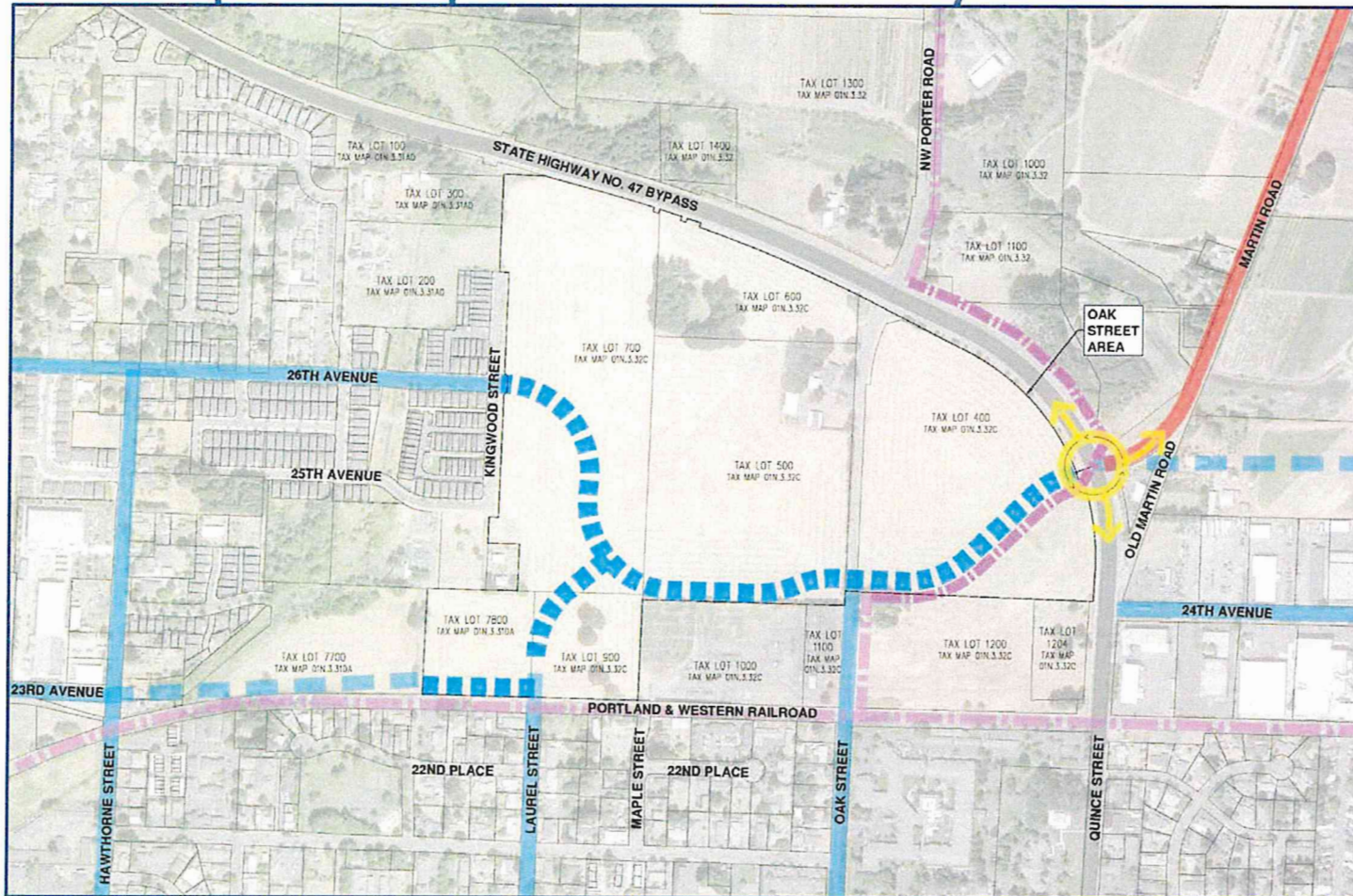
KEY NOTES:

1. REMOVE THE PORTION OF OAK STREET DESIGNATED AS A COLLECTOR BETWEEN HIGHWAY NO. 47 AND THE PROPOSED 26TH AVENUE REALIGNMENT.
2. REALIGN LAUREL STREET NORTHEAST TO CONNECT TO THE PROPOSED 26TH AVENUE REALIGNMENT. REMOVE THE PROPOSED PORTION OF LAUREL STREET EXTENDING TO HIGHWAY NO. 47.
3. REMOVE THE PROPOSED PORTION OF 23RD/24TH AVENUE BETWEEN LAUREL STREET EAST TO HIGHWAY NO. 47.
4. REALIGN THE PROPOSED PORTION OF 26TH AVENUE BETWEEN KINGWOOD STREET AND OAK STREET TO A NEW CONSOLIDATED CONNECTION AT THE PLANNED 4TH LEG OF THE NEW ROUNDABOUT AT HIGHWAY 47 AND MARTIN ROAD.

LEGEND

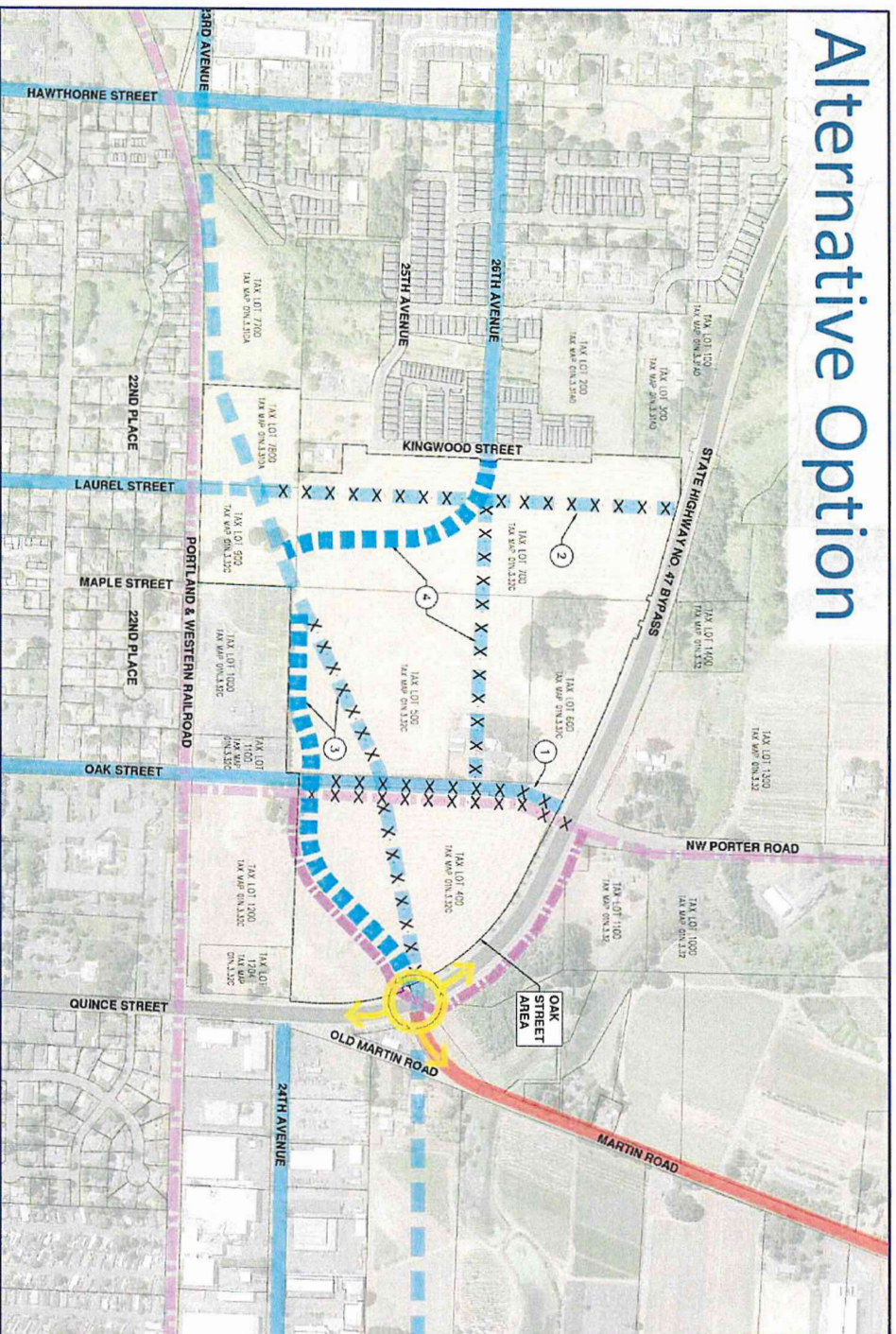
- EXISTING PRINCIPAL ARTERIAL PER CURRENT TSP
- EXISTING ARTERIAL PER CURRENT TSP
- EXISTING COLLECTOR PER CURRENT TSP
- PROPOSED COLLECTOR PER CURRENT TSP
- PROPOSED COLLECTOR PER TSP AMENDMENT
- CONCEPTUAL COUNCIL CREEK REGIONAL TRAIL ALIGNMENT PER CURRENT TSP
- PROPOSED COUNCIL CREEK REGIONAL TRAIL ALIGNMENT PER TSP AMENDMENT
- TSP ALIGNMENT TO BE AMENDED/REMOVED
- APPROXIMATE LOCATION OF NEW HIGHWAY NO. 47 AND MARTIN ROAD ROUNDABOUT. SEE NOTE 6 ON THIS SHEET.

Conceptual Updated Roadway Plan



Conceptual Updated Roadway Plan

Alternative Option



KEY NOTES:

1. REMOVE THE PORTION OF OAK STREET DESIGNATED AS A COLLECTOR BETWEEN HIGHWAY NO. 47 AND THE PROPOSED 23RD/24TH AVENUE REALIGNMENT.
2. REMOVE THE PROPOSED PORTION OF LAUREL STREET EXTENDING TO HIGHWAY NO. 47.
3. RELOCATE THE PROPOSED PORTION OF 23RD/24TH AVENUE BEGINNING WEST OF OAK STREET TO A NEW, CONSOLIDATED CONNECTION AT THE PLANNED 4TH LEG OF THE NEW ROUNDABOUT AT HIGHWAY 47 AND MARTIN ROAD.
4. RELOCATE THE PROPOSED PORTION OF 26TH AVENUE TO CONNECT TO THE PROPOSED 23RD/24TH AVENUE REALIGNMENT.

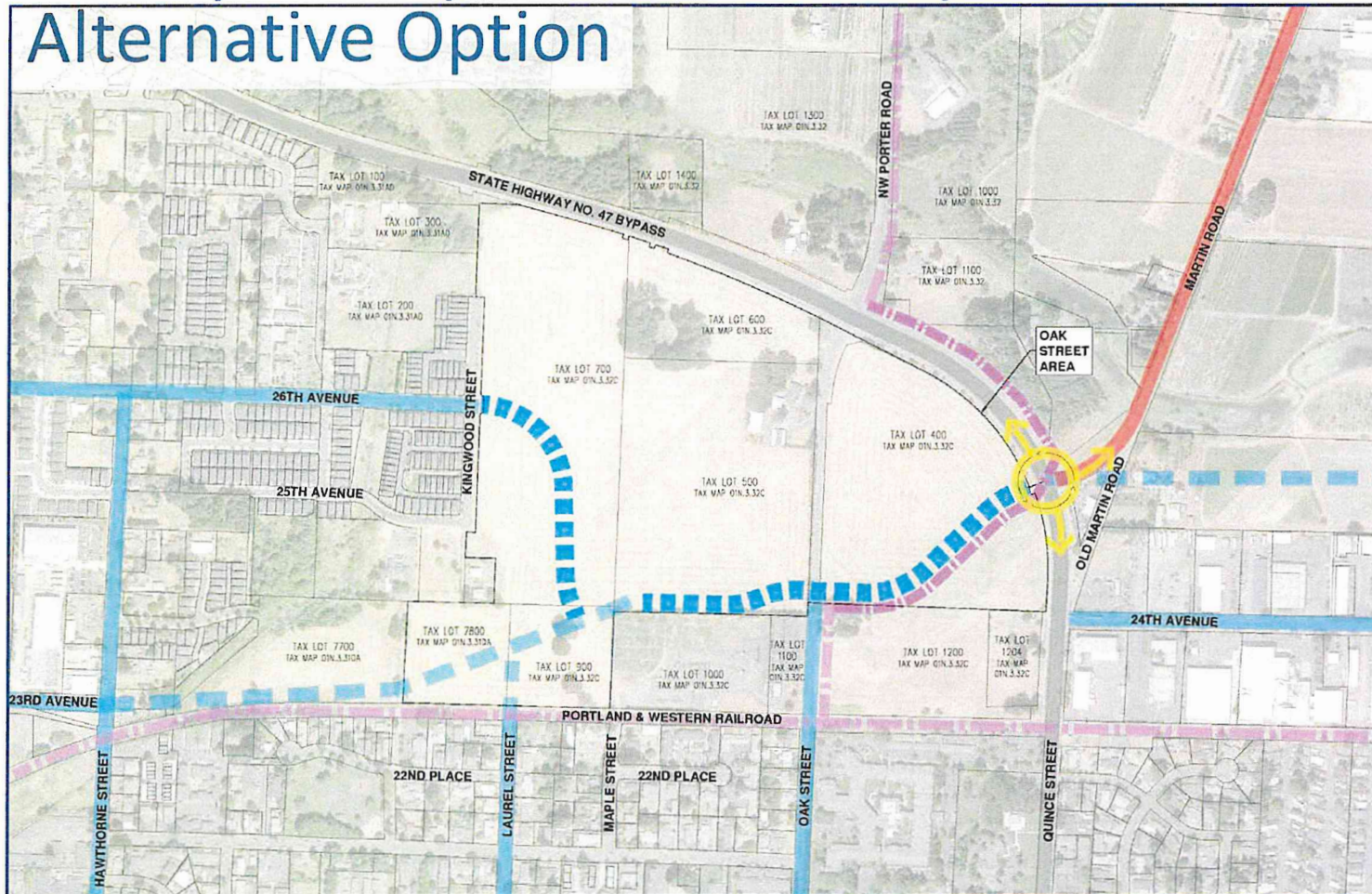
LEGEND

- EXISTING PRINCIPAL ARTERIAL PER CURRENT TSP
- EXISTING ARTERIAL PER CURRENT TSP
- EXISTING COLLECTOR PER CURRENT TSP
- PROPOSED COLLECTOR PER CURRENT TSP
- PROPOSED COLLECTOR PER TSP AMENDMENT
- CONCEPTUAL CANAL OASES REGIONAL TRAIL ALIGNMENT PER CURRENT TSP
- PROPOSED CANAL OASES REGIONAL TRAIL ALIGNMENT PER TSP AMENDMENT
- TSP ALIGNMENT TO BE AMENDED/REMOVED

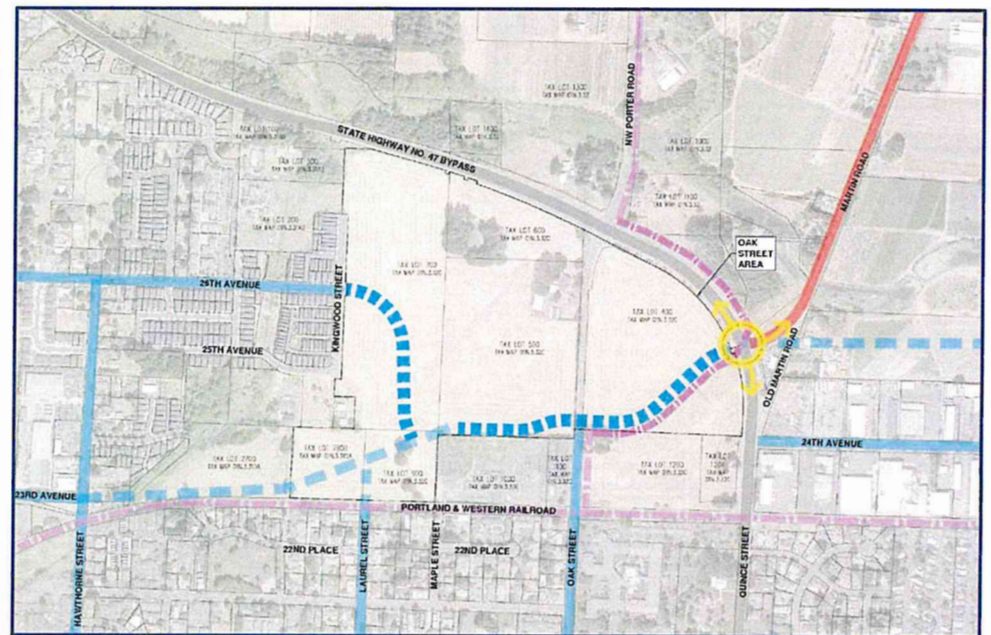
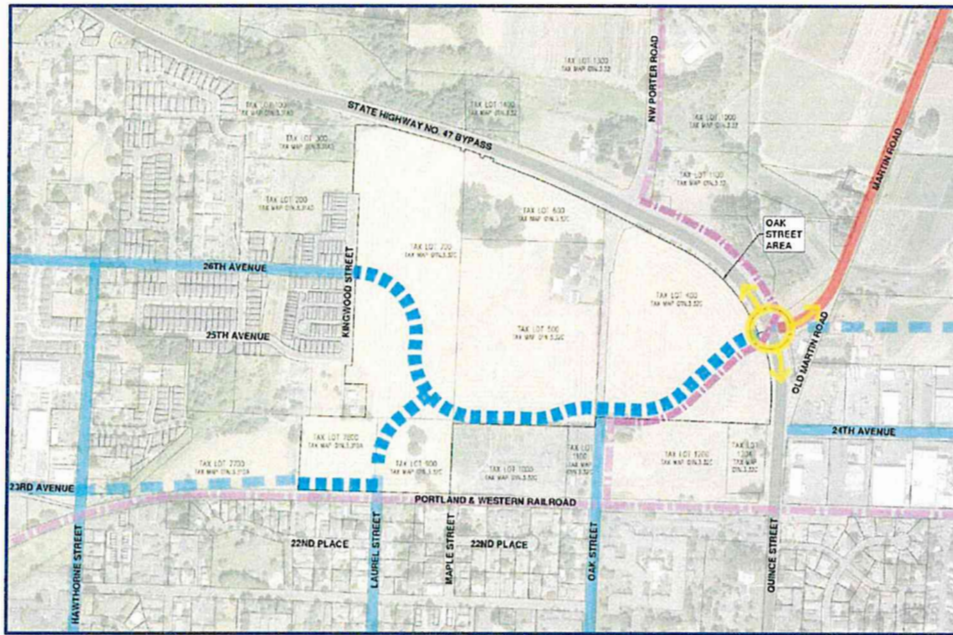


APPROXIMATE LOCATION OF NEW ROUNDABOUT SEE NOTE 6 ON THIS SHEET.

Conceptual Updated Roadway Plan Alternative Option



Conceptual Updated Roadway Plan Options



Summary of City of Forest Grove Type IV Legislative Land Use Application Process



- ✓ Pre-Application Conference
 - » **Neighborhood Meetings**
 - » Application Submittal
 - » Staff reviews application for acceptance and Notice of Completion is issued
 - » Public Notices Issued
 - » Applicant posts property
 - » Staff mails public notice
 - » 14-day comment period
 - » Public input is received
 - » Staff Report
 - » Staff reviews, comments, and prepares report
- » Public Hearing – Planning Commission
 - » Public testimony is received
 - » Planning Commission reviews and makes recommendation to City Council
- » Public Hearing – City Council
 - » Public testimony is received
 - » City Council reviews and makes final decision
- » Decision Notice
 - » Staff mails Notice of Decision
- » Appeal
 - » 21-day LUBA appeal period



Discussion

Press “**Raise Your Hand**” to be called on to provide your comments and questions.

You can submit questions by typing them into the **Group Chat Box** – they will go directly to the Meeting Moderator.

Nathaniel Brown

Hubbell Communications

6605 S Macadam Avenue, Suite 200

Portland, OR 97239

Nathaniel@thinkhubbell.com

(971) 219-5561

Marie Holladay

AKS Engineering & Forestry, LLC

12965 SW Herman Road, Suite 100

Tualatin, OR 97068

HolladayM@aks-eng.com

(503) 563-6151



April 28, 2022

Dear Community Member:

You are receiving this notice because your residence is within 1000 feet of the proposed Oak Street Area Transportation System Plan (TSP) amendment. Rowan Digital, a nationally recognized green data center developer, is leading this exciting work in collaboration with the current landowner, relevant City of Forest Grove staff, officials, and community stakeholders.

The team would like to invite you to a virtual community forum discussing the proposed amendment to the local Transportation System Plan (TSP) and the future utilization of the industrial property located between the Casey Meadows neighborhood and Highway 47 in Forest Grove.

During this community forum, the team will provide an overview of the current TSP and why it needs to be amended, as well as various details about the green data center project including the environmental, economic and social benefits, expected timeline, infrastructure considerations, and other components.

We understand that this project might raise questions. The team is committed to a robust and responsive public process, which includes this virtual community forum. Feedback from this event will be gathered and included in the eventual TSP amendment application, if applicable.

In the meantime, you can also learn all about the project on our website:

<https://www.meriwetherdatacenter.com/>.

Virtual Community Forum Details

Date: Thursday, May 12, 2022

Time: 6-7 p.m. Pacific

Please register in advance for this neighborhood meeting at: <https://www.aks-eng.com/oak-street-tsp/>

Submit questions in advance via email: MeriwetherDatacenter@rowandigit.al

We are looking forward to engaging in a productive discussion with our community. Thank you in advance for your participation.

Thank you,

David Shiflett
Managing Director, Development
Rowan Digital

Spanish language translation on back

28 de abril de 2022

Estimado(a) miembro de la comunidad:

Usted está recibiendo este aviso porque su residencia está a menos de 1000 pies de la enmienda propuesta del Plan del Sistema de Transporte del Área de Oak Street (TSP). Rowan Digital, un desarrollador de centros de datos ecológicos reconocido a nivel nacional, está liderando este emocionante trabajo en colaboración con el propietario actual, con el personal relevante de la Ciudad de Forest Grove, con los funcionarios y con las partes interesadas de la comunidad.

El equipo desea invitarlo/la a un foro comunitario virtual para hablar sobre la enmienda propuesta al Plan del Sistema de Transporte local (TSP) y la futura utilización de la propiedad industrial ubicada entre el vecindario de Casey Meadows y la autopista 47 en Forest Grove.

Durante este foro comunitario, el equipo proporcionará una visión general del TSP actual y el porqué debe modificarse, así como varios detalles sobre el proyecto del centro de datos verde, incluidos los beneficios ambientales, económicos y sociales, el cronograma esperado, las consideraciones de infraestructura y otros componentes.

Entendemos que este proyecto podría plantear preguntas. El equipo está comprometido con un proceso público robusto y receptivo, el cual incluye este foro virtual con la comunidad virtual. Los comentarios de este evento se recopilarán y se incluirán en una posible solicitud de enmienda al TSP de ser necesario.

Mientras tanto, usted también puede saber más sobre el proyecto en nuestro sitio web:

<https://www.meriwetherdatacenter.com/>.

Detalles del foro virtual con la comunidad

Fecha: miércoles, 12 de mayo de 2022

Hora: 6:00 p. m. - 7:00 p. m. Hora del Pacífico

Por favor regístrese con anticipación a esta junta de vecindario en: <https://www.aks-eng.com/oak-street-tsp/>

Envíe con antelación sus preguntas por correo electrónico a: MeriwetherDatacenter@rowandigit.al

Esperamos participar en una discusión productiva con nuestra comunidad. Agradecemos de antemano su participación.

Gracias,

David Shiflett
Director General, Desarrollo
Rowan Digital

Traducción en español al respaldo

**Instructions for Joining & Participating in the
Public Neighborhood Meeting for the Oak Street Area
Transportation System Plan (TSP) Amendment Project**
Virtual Meeting provided via Zoom Webinar

Thursday, May 12, 2022, at 6:00 PM

Please Register in Advance
(a list of attendees must be submitted to the City):

- Go to <https://www.aks-eng.com/Oak-Street-TSP/> and follow the link to register. Depending on your browser you may need to type this exactly as written.
- Complete the online registration form.
- You will receive a confirmation email containing a link to join the Zoom webinar at the scheduled time as well as additional instructions.
- Meeting materials will be available upon request at least 2 days before and 10 days after the meeting concludes.

How to Join the Meeting:

Join by computer, tablet, or smartphone

- **This is the preferred method as it allows you to see the Presenter's materials on screen.**
- Click on the "Click Here to Join" link provided in your registration confirmation email.
- If you registered but did not receive a confirmation email, please check your junk/spam folder before contacting the Meeting Administrator.
- You may be prompted to "download and run Zoom" or to install the App (ZOOM cloud meetings). Follow the prompts or bypass this process by clicking "join from your browser".
- You should automatically be connected to the virtual neighborhood meeting.

Join by telephone

- Dial any of the toll-free Zoom numbers below to connect to the neighborhood meeting:

+1-669-900-6833	+1-346-248-7799
+1-929-205-6099	+1-253-215-8782
+1-301-715-8592	+1-312-626-6799

- If you experience trouble connecting, please pick another number and try again.
- After dialing in, enter this Zoom ID when prompted: **824 2667 5604**
- The Password if needed is: **6151**

MEETING ADMINISTRATOR:
For technical assistance:
Email holladaym@aks-eng.com

During the Meeting

Audio Help

- Meeting attendees will be muted throughout the presentation. This will allow everyone to hear the presentation clearly without added distractions.
- Make sure that the speakers on your device are turned on and not muted.
- If you do not have speakers on your computer, you can join by phone (using the “Join by telephone” instructions) to hear the presentation while watching the presentation on your computer monitor.

Questions & Answers

Your questions are important to us. There will be time reserved during the meeting to take questions, using one of the submission options below. Our presentation team will make their best effort to answer all question(s) during the meeting.

Prior to the Meeting:

- If you cannot attend the meeting, you can Email your question(s) in advance to the Meeting Administrator.

Email holladaym@aks-eng.com

During the Meeting:

- **Preferred Method:** Use the “Q&A” button on the bottom of the presentation screen to submit a question in real time.
- Email your question to the Meeting Administrator:

Email holladaym@aks-eng.com

After the Meeting:

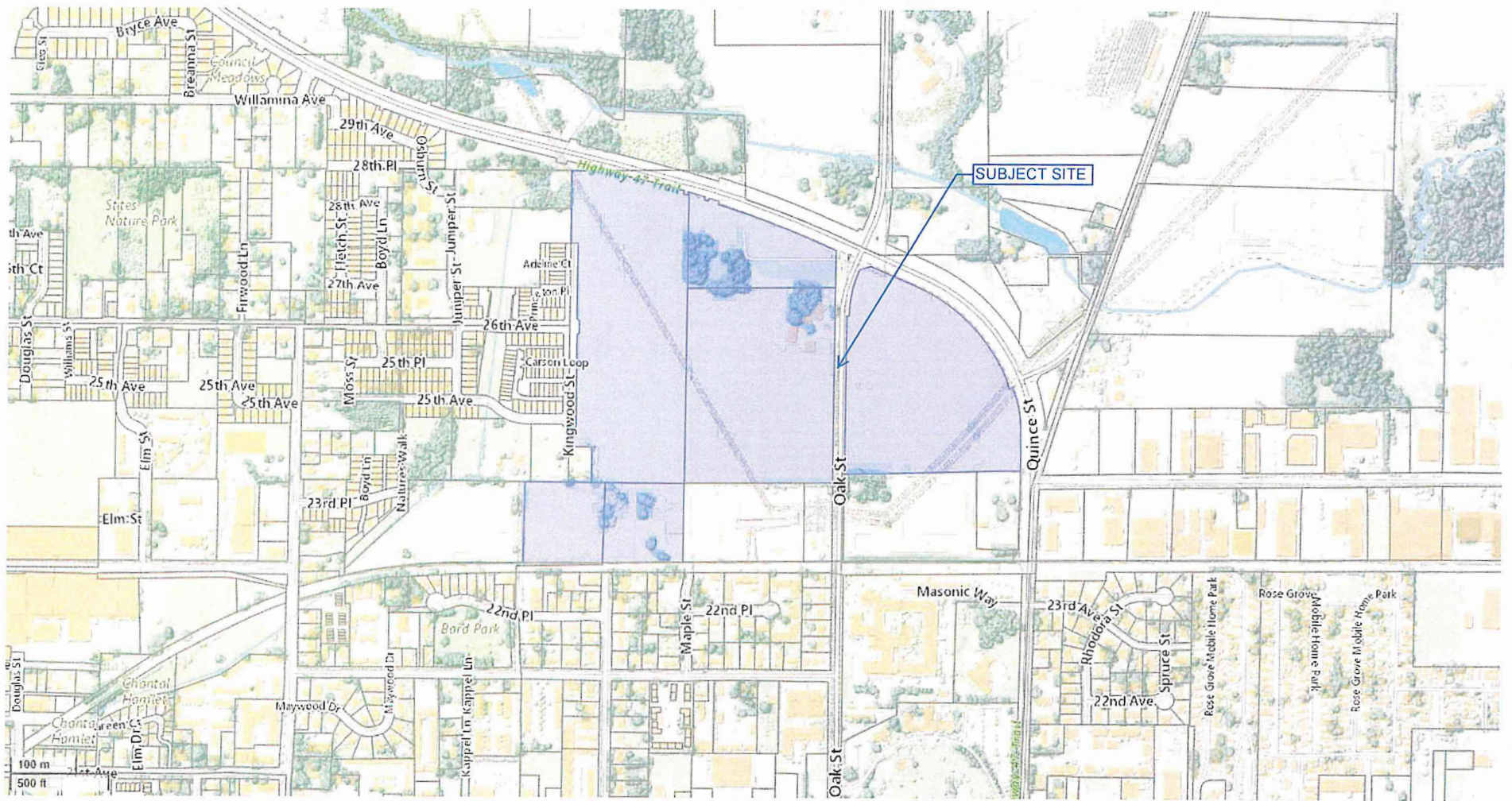
- We will continue to take questions after the meeting has ended. Please submit your question(s) to the Meeting Administrator:

Email holladaym@aks-eng.com

Helpful Hints/Troubleshooting

We want to start on time! Please join the meeting 5-10 minutes prior to the 6:00 PM start time to ensure successful connection.

- You do not need a Zoom account to join the meeting.
- You will need a valid email address at the time of registration to receive the confirmation email and link to join the webinar or receive answers to any questions submitted after the meeting.
- For first-time Zoom users, we recommend downloading and installing the Zoom App well in advance, by clicking on the “Click Here to Join” link in your confirmation email.
- For technical assistance, please contact the Meeting Administrator (contact above).
- If you have difficulties connecting by computer, tablet, or smartphone, we suggest disconnecting and instead use the “Join by telephone” instructions to listen in.



Data Resource Center
600 NE Grand Ave, Portland, OR 97232
503.797.1742 – drc@oregonmetro.gov

This Web site is offered as a public service, integrating various government records into a region-wide mapping system. The property assessment records are a multi-county integration of Clackamas, Multnomah and Washington County records. MetroMap blends each county's records into a common database on a quarterly basis. Therefore, to view each county's official records, go to their respective web sites or offices. The other MetroMap data are derived from city, county, state, federal and Metro sources. The metadata (data about the data) are included on this site, including the sources to be consulted for verification of the information contained herein. It describes some cases where Metro blends city and county records by generalizing the disparities. Metro assumes no legal responsibility for the compilation of multi-source government information displayed by Metro Map.

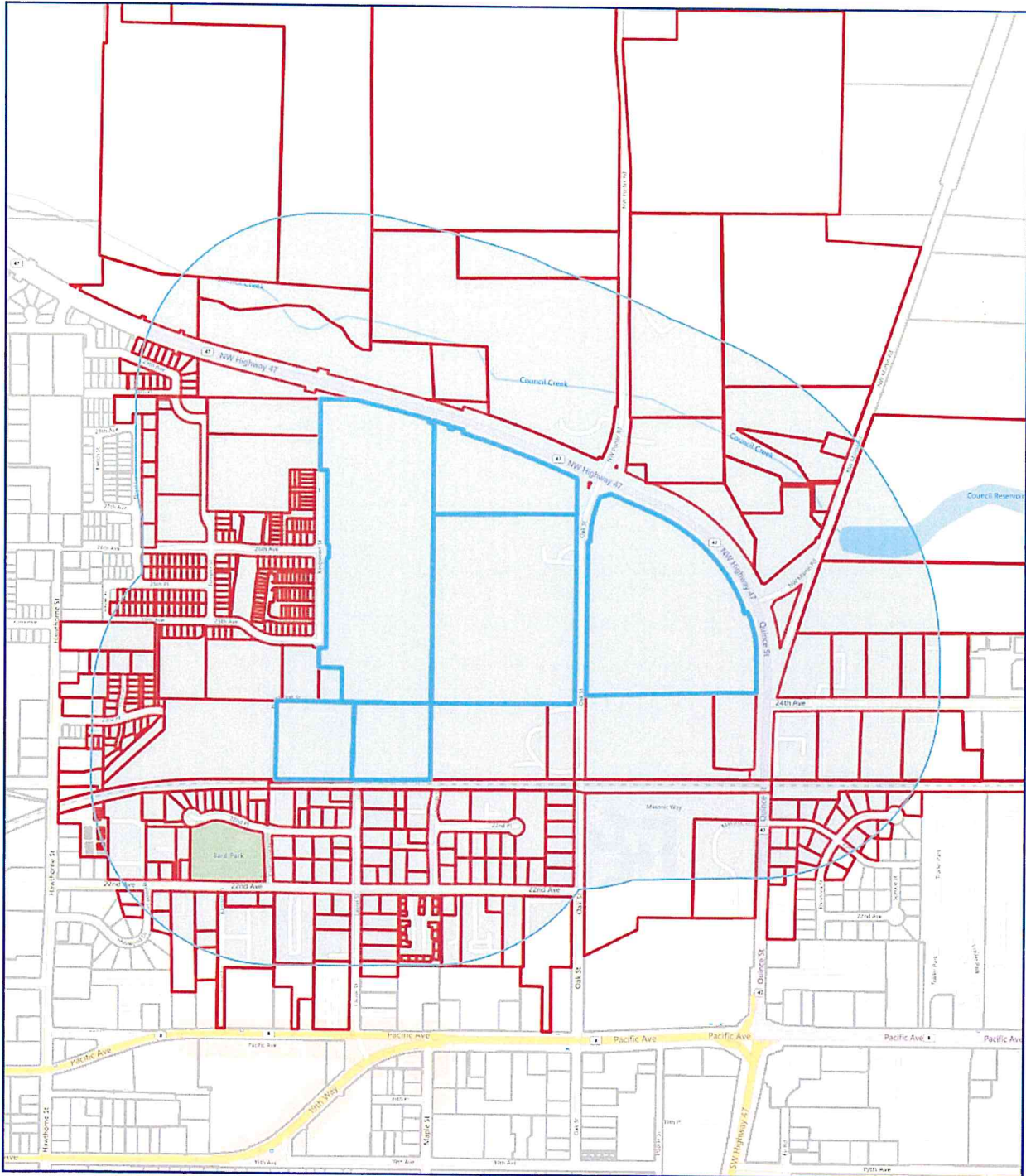
VICINITY MAP: OAK STREET AREA TRANSPORTATION SYSTEM PLAN (TSP) AMENDMENT PROJECT



1000 ft Buffer

No Site Address, Forest Grove, OR 97116

Report Generated: 4/8/2022



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NOTICE

VIRTUAL NEIGHBORHOOD MEETING WEBINAR

5/12/2022 – 6:00 p.m.

TO PARTICIPATE, REGISTER AT:

WWW.AKS-ENG.COM/OAK-STREET-TSP/

CONTACT: MARIE HOLLADAY

AKS ENGINEERING; (503) 563-6151



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City of Forest Grove Transportation System Plan Amendment

Virtual Neighborhood Meeting Webinar
June 7, 2022 at 6:00 pm



A place where families and businesses thrive.



Meeting Format – Zoom Webinar

Audio Help

- Meeting attendees will be muted throughout the presentation.
- Make sure your speakers are turned on and not muted.
- If you do not have speakers on your computer, you can join the audio by calling any of these toll-free numbers:

+1-669-900-6833

+1-346-248-7799

+1-929-205-6099

+1-253-215-8782

+1-301-715-8592

+1-312-626-6799

Project Team

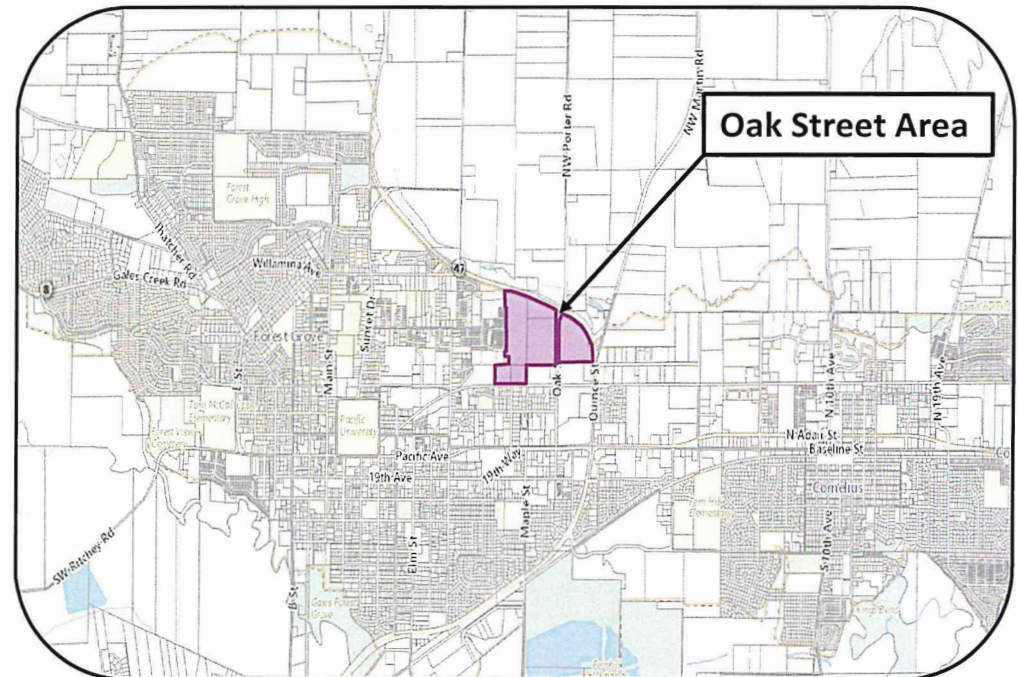


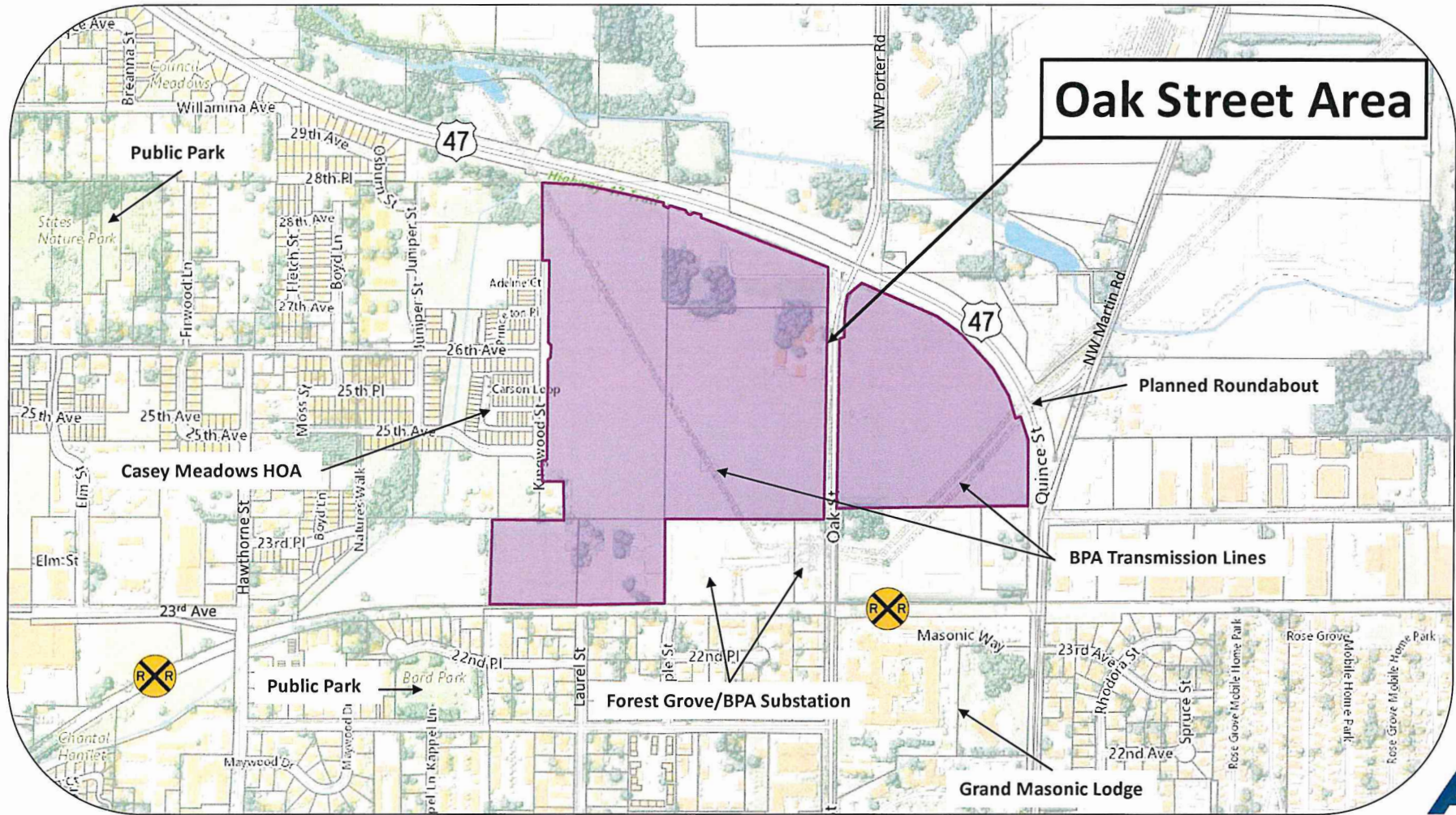
- » Woodfold-Marco MFG, Inc.
 - » Property Owner
- » Rowan Digital Infrastructure
 - » Applicant
 - » David Shiftlett, Xiomara Gerlach
- » Hubbell Communications
 - » Public Relations
 - » Nathaniel Brown, James Adkins
- » AKS Engineering & Forestry, LLC
 - » Land Use Planning, Civil Engineering, Surveying, Landscape Architecture, Arborist, and Natural Resources Consultant
 - » Marie Holladay, Cody Street, Mimi Doukas
- » Kittelson & Associates, Inc.
 - » Transportation Engineering
 - » Chris Brehmer



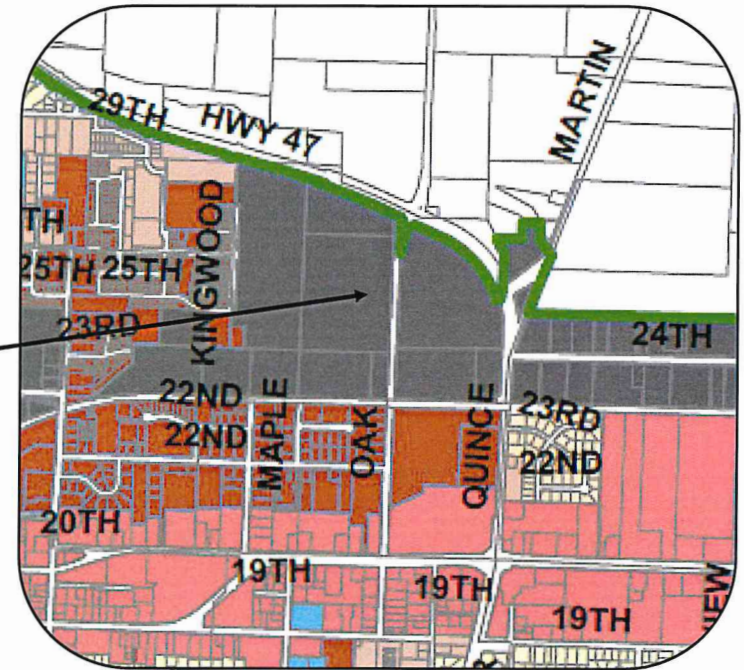
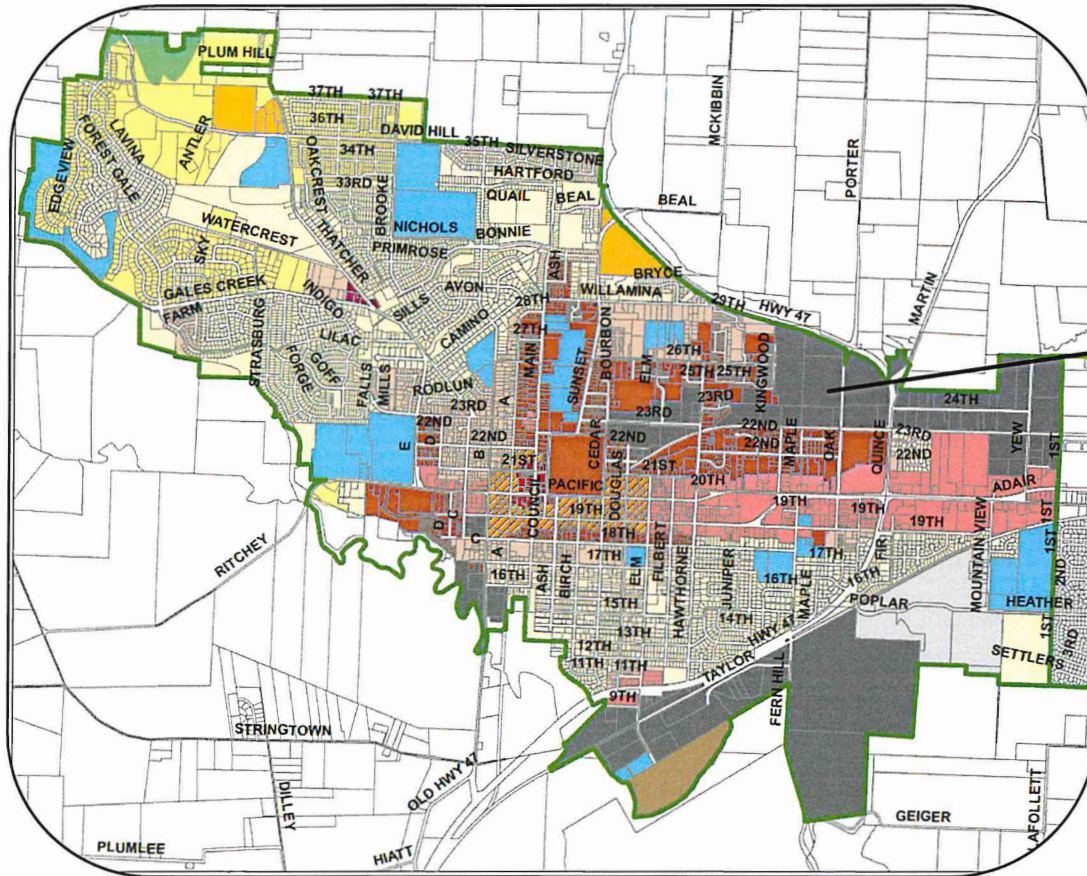
Application Overview

- » Type IV Legislative Transportation System Plan (TSP) Amendment
 - » Technical Transportation Report to address the regional functionality of the roadway network
 - » No physical alterations of the site
- » Site Plan Review Application
 - » Next step in the process
 - » Transportation Impact Analysis to address trip generation from specific use of the site – envisioned as a data center campus



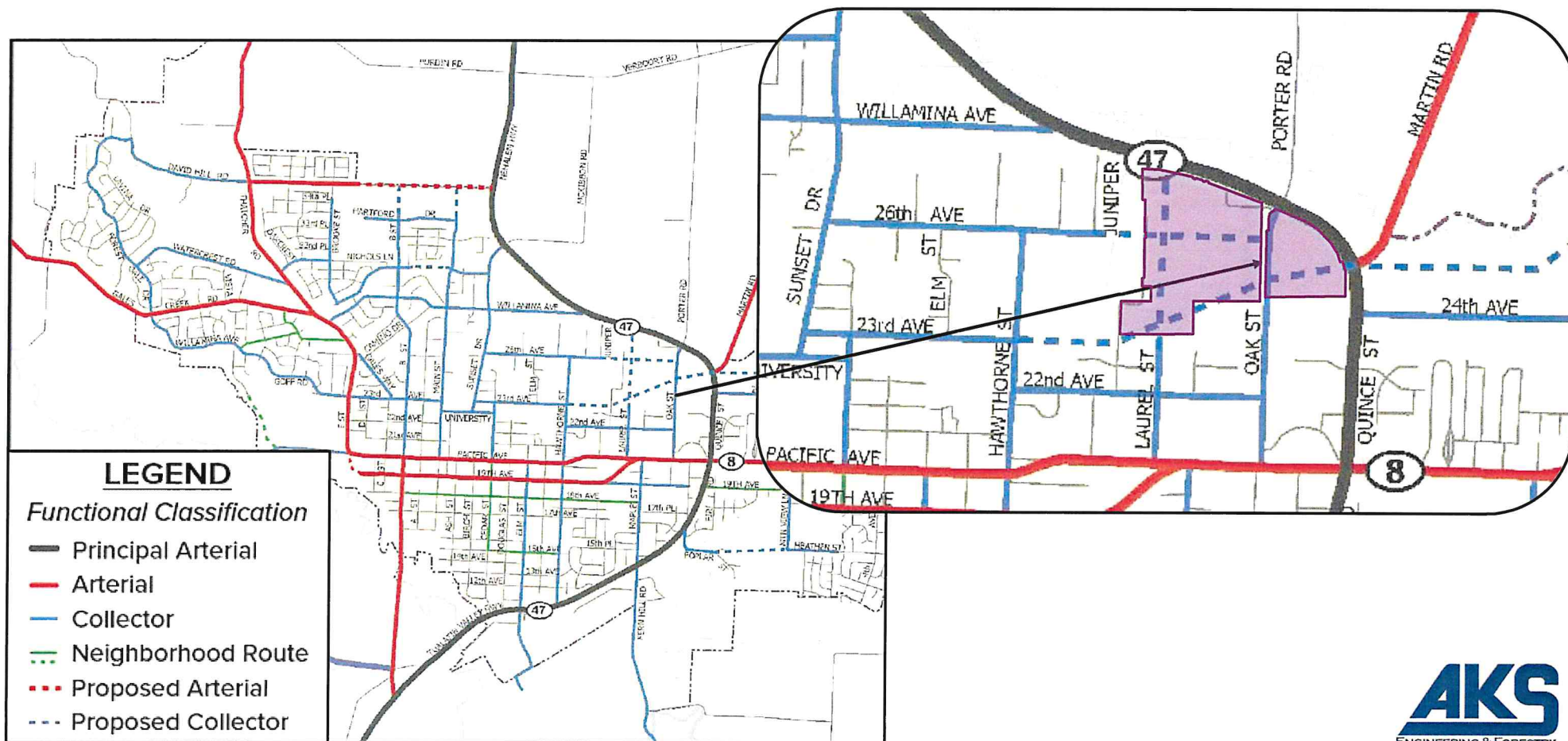


City of Forest Grove Zoning Map

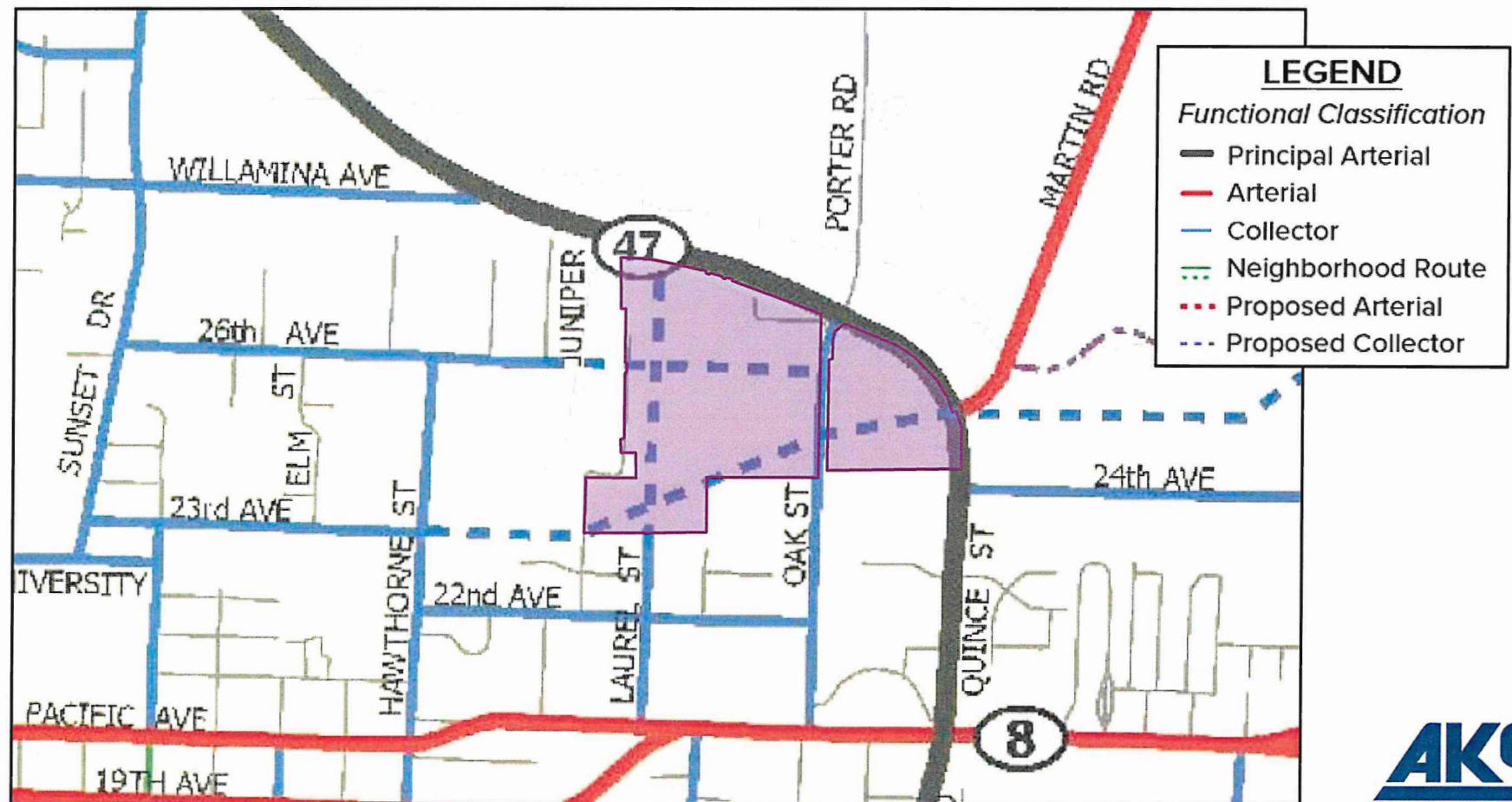


General Industrial (GI)

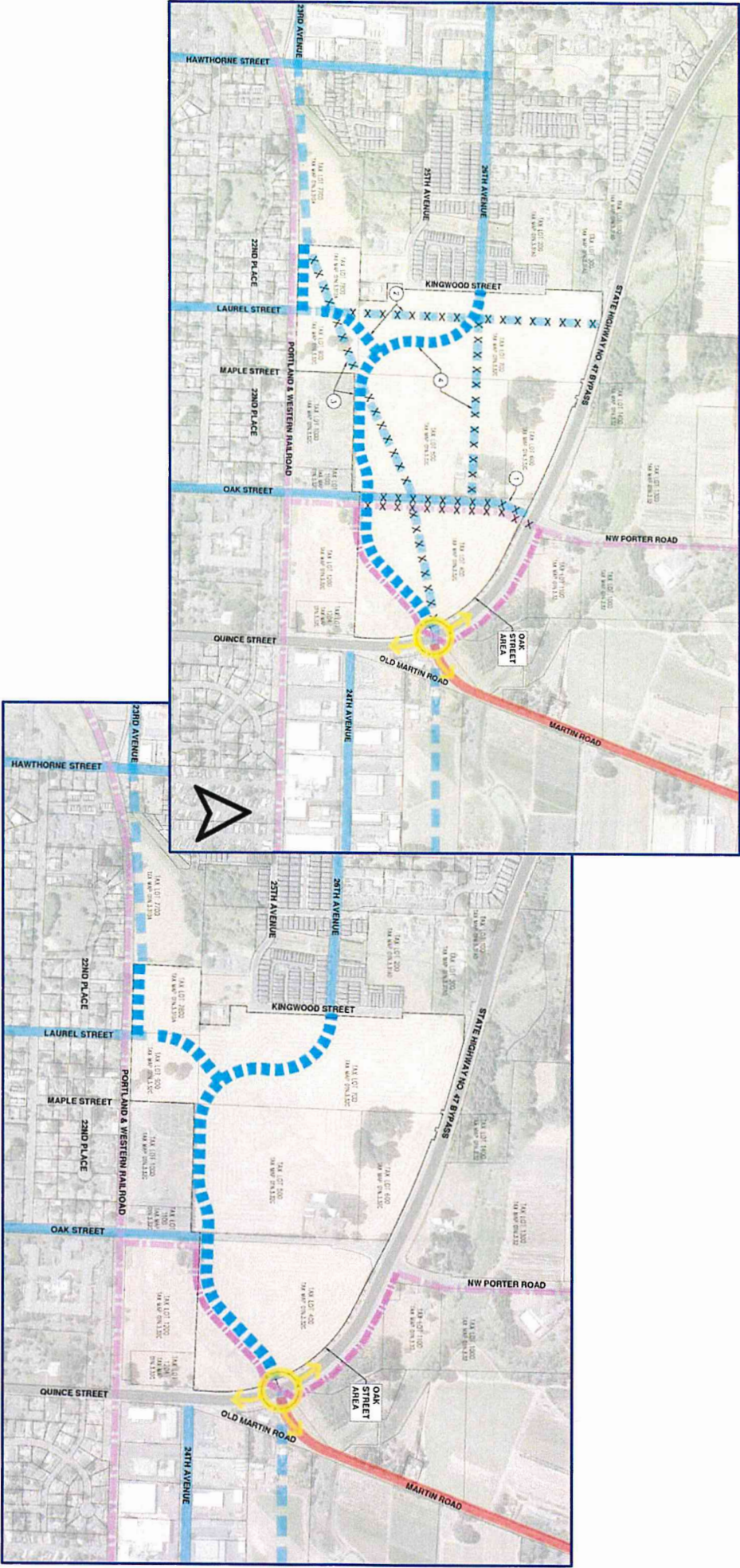
City of Forest Grove Transportation System Plan (2013)



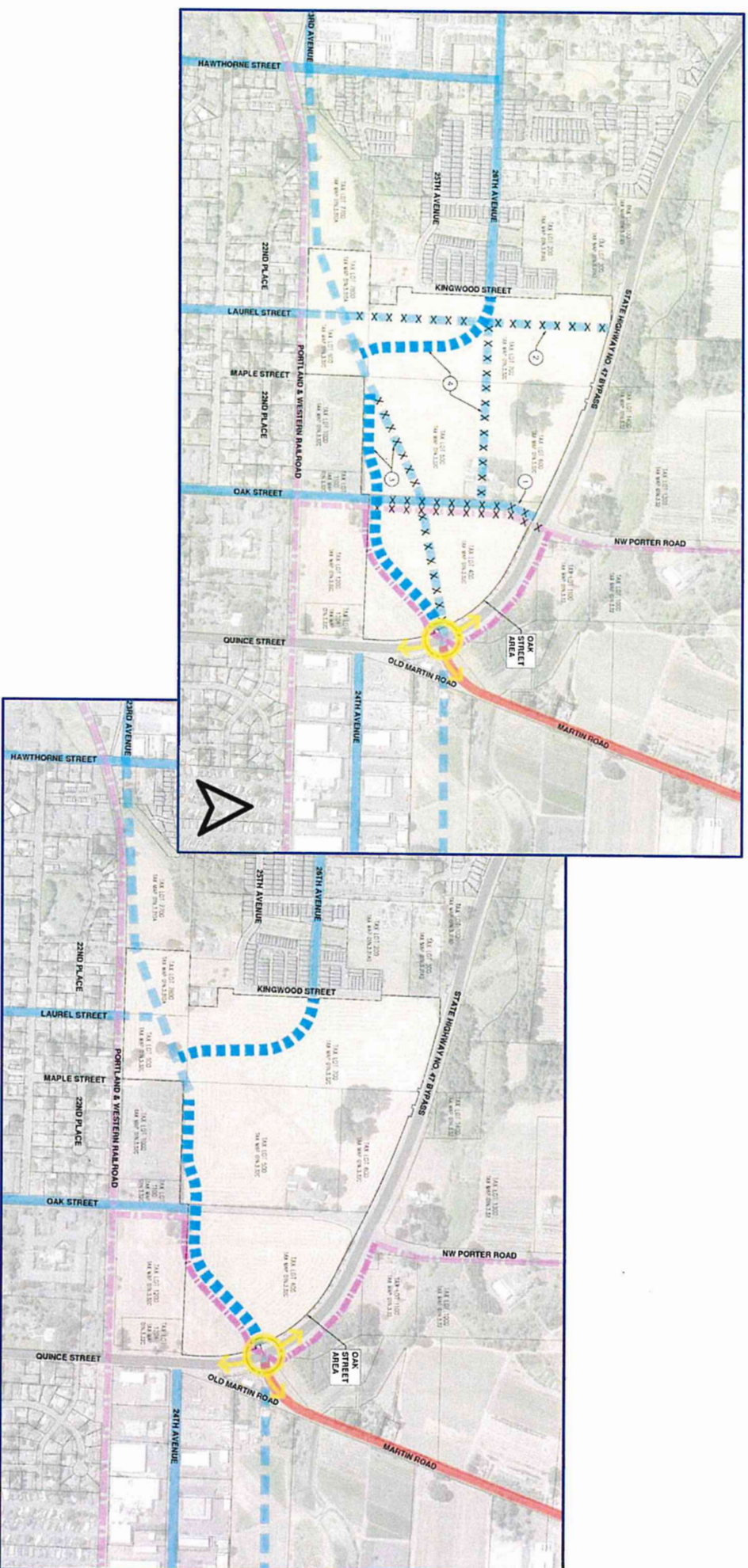
City of Forest Grove Transportation System Plan (2013)



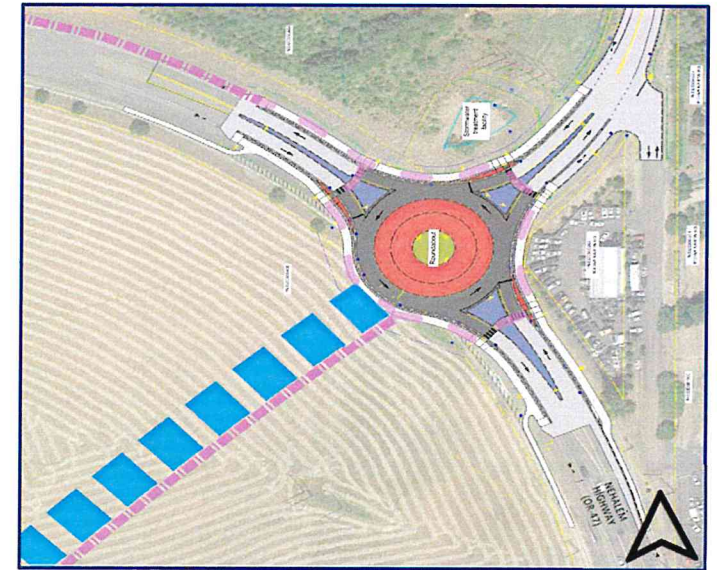
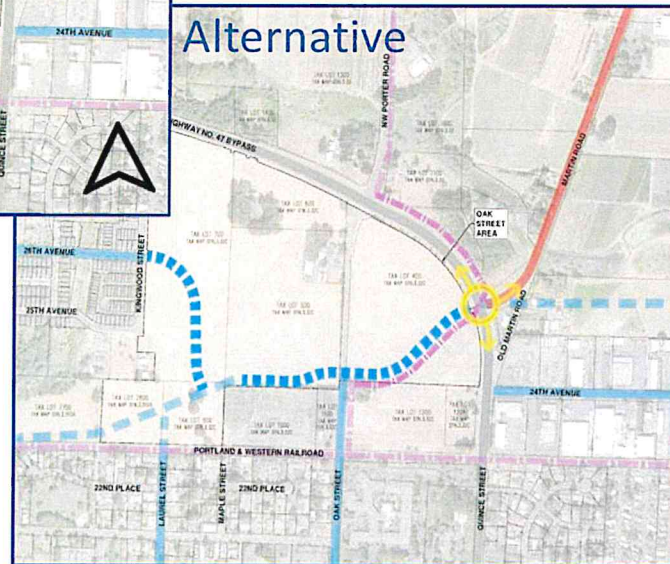
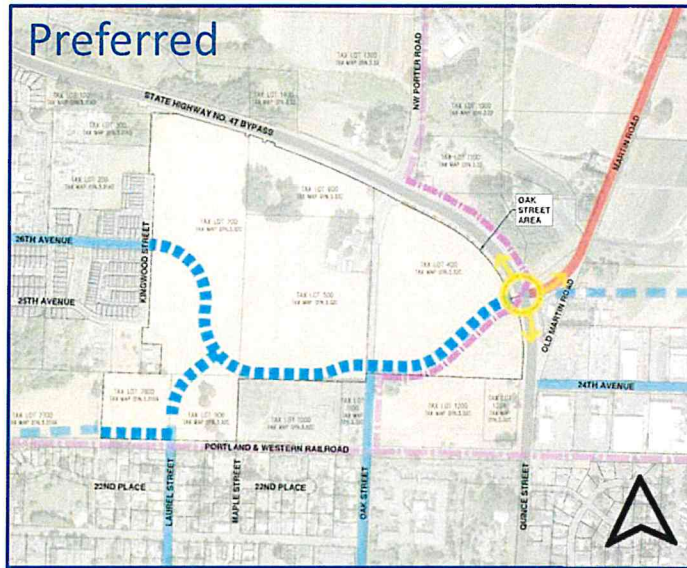
Proposed Updated Roadway Plan



Alternative Updated Roadway Concept

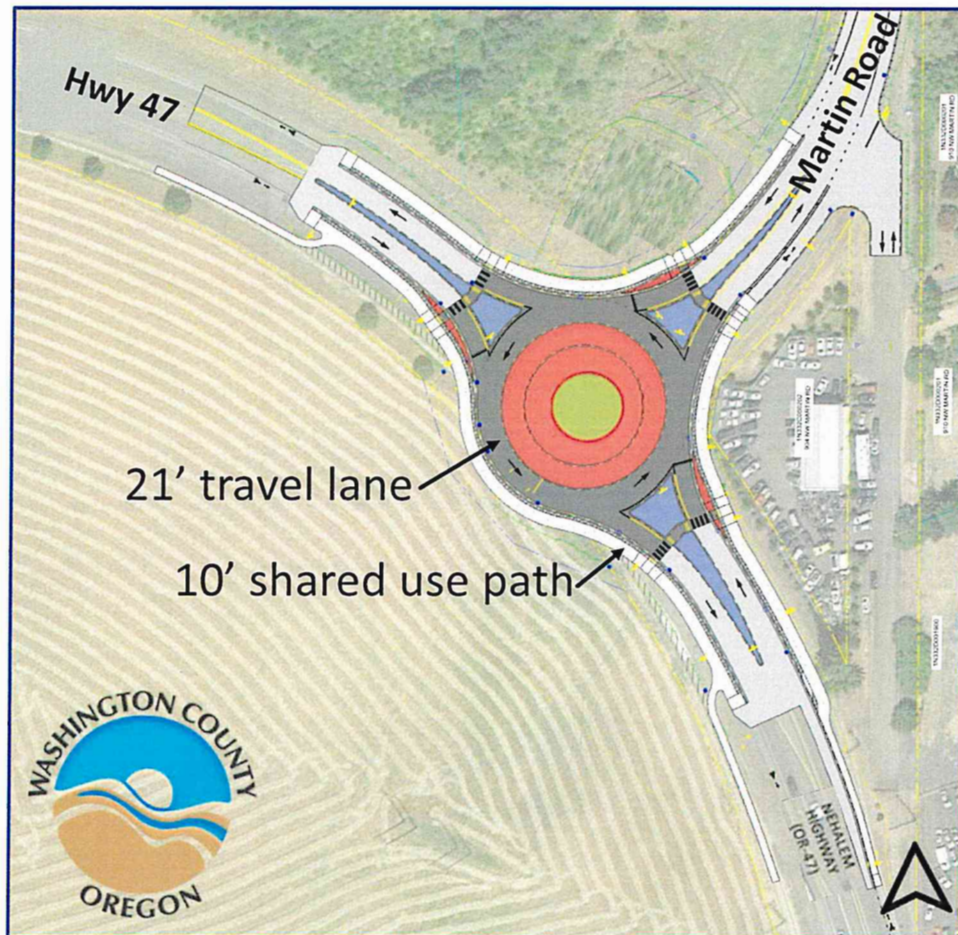


Proposed Connection to Highway 47

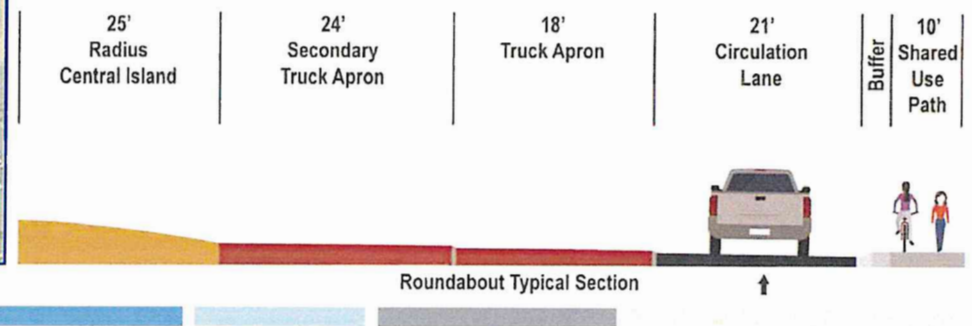
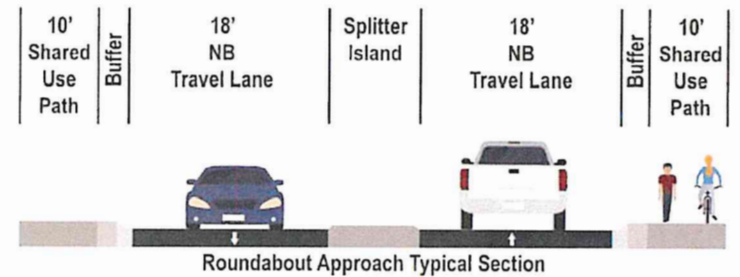


Highway 47 Connection
(same for both options)

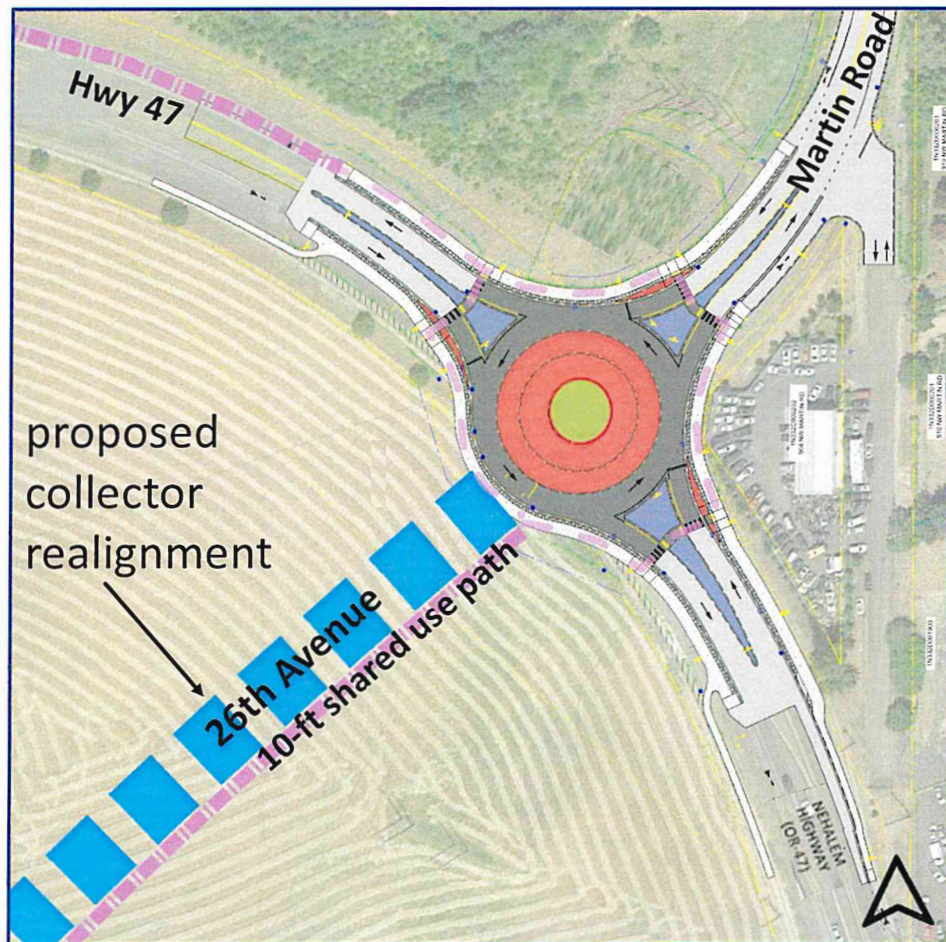
Roundabout at Martin Road & Highway 47



- » Approved & funded Washington County project
- » Construction begins August 2022, expected to finish November 2023
- » For more information, see County website: <https://www.co.washington.or.us/LUT/TransportationProjects/martinhwy47.cfm>



Proposed 26th Avenue Connection to Roundabout



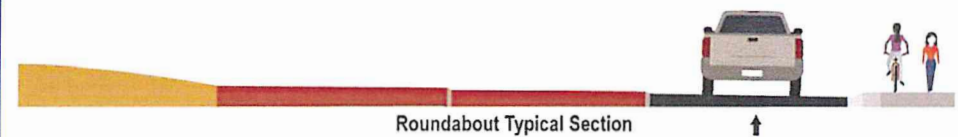
25'
Radius
Central Island

24'
Secondary
Truck Apron

18'
Truck Apron

21'
Circulation
Lane

10'
Shared
Use
Path



- » Proposed 26th Avenue to become west leg of roundabout
- » Planned 10-foot Shared Use Path
 - » Includes Council Creek Trail
 - » Includes TV Scenic Bikeway

Summary of City of Forest Grove Type IV Legislative Land Use Application Process



- ✓ Pre-Application Conference
- ✓ Neighborhood Meeting #1
- ✓ **Neighborhood Meeting #2**
 - » Application Submittal
 - » Staff reviews application for acceptance and Notice of Completion is issued
 - » Public Notices Issued
 - » Applicant posts property
 - » Staff mails public notice
 - » 14-day comment period
 - » Public input is received
 - » Staff Report
 - » Staff reviews and prepares report
 - » Public Hearing – Planning Commission
 - » Public testimony is received
 - » Planning Commission reviews and makes recommendation to City Council
 - » Public Hearing – City Council
 - » Public testimony is received
 - » City Council reviews and makes final decision
 - » Decision Notice
 - » Staff mails Notice of Decision
 - » Appeal
 - » 21-day LUBA appeal period



Discussion

Press “**Raise Your Hand**” to be called on to provide your comments and questions.

You can submit questions by typing them into the **Group Chat Box** – they will go directly to the Meeting Moderator.

Nathaniel Brown

Hubbell Communications

6605 S Macadam Avenue, Suite 200

Portland, OR 97239

Nathaniel@thinkhubbell.com

(971) 219-5561

Marie Holladay

AKS Engineering & Forestry, LLC

12965 SW Herman Road, Suite 100

Tualatin, OR 97068

HolladayM@aks-eng.com

(503) 563-6151



May 24, 2022

Dear Community Member:

You are receiving this second notice because your residence is within 1000 feet of the proposed Oak Street Area Transportation System Plan (TSP) amendment. Rowan Digital, a nationally recognized green data center developer, is leading this exciting work in collaboration with the current landowner, relevant City of Forest Grove staff, officials, and community stakeholders.

The team would like to invite you our second virtual community forum discussing the proposed amendment to the local Transportation System Plan (TSP) and the future utilization of the industrial property located between the Casey Meadows neighborhood and Highway 47 in Forest Grove.

During this additional community forum, the team will provide an overview of the current TSP and why it needs to be amended, gather additional feedback, and discuss various details about the green data center project.

The team is committed to a robust and responsive public process, which includes this second virtual community forum. Feedback from this event will be gathered and included in the eventual TSP amendment application, if applicable.

In the meantime, you can also learn all about the project (and view materials from the first community meeting) on our website: <https://www.meriwetherdatacenter.com/>.

Virtual Community Forum Details

Date: Tuesday, June 7, 2022

Time: 6-7 p.m. Pacific

Please register in advance for this neighborhood meeting at: <https://www.aks-eng.com/oak-street-tsp/>

Submit questions in advance via email: MeriwetherDatacenter@rowandigit.al

We are looking forward to engaging in another productive discussion with our community. Thank you in advance for your participation.

Thank you,

David Shiflett
Managing Director, Development
Rowan Digital

Spanish language translation on back

24 de mayo de 2022

Estimado(a) miembro de la comunidad:

Usted está recibiendo este aviso porque su residencia está dentro de los 1000 pies de la enmienda propuesta del Plan del Sistema de Transporte (TSP) del Área de Oak Street . Rowan Digital, un urbanizador de centros verdes para el procesamiento de datos, reconocido a nivel nacional, está liderando este emocionante trabajo en colaboración con el propietario actual, con el personal relevante de la Ciudad de Forest Grove, con los funcionarios y con las partes interesadas de la comunidad.

Al equipo le gustaría extenderle a usted una invitación a un foro comunitario virtual para hablar sobre la enmienda propuesta al Plan del Sistema de Transporte local (TSP) y sobre la futura utilización de la propiedad industrial ubicada entre el vecindario de Casey Meadows y la autopista 47 en Forest Grove.

Durante este foro comunitario adicional, el equipo dará un panorama del actual TSP y explicará por qué debe enmendarse, también recibirá comentarios adicionales y hablará sobre varios detalles del proyecto sobre el centro verde para el procesamiento de datos.

El equipo está comprometido con un proceso público robusto y receptivo, el cual incluye este segundo foro virtual con la comunidad. Los comentarios de este evento se recopilarán y se incluirán en una posible solicitud de enmienda al TSP de ser necesario.

Mientras tanto, usted también saber más sobre el proyecto (y ver los materiales de la primera reunión comunitaria) en nuestro sitio web: <https://www.meriwetherdatacenter.com/>.

Detalles del foro virtual con la comunidad

Fecha: Martes, 7 de junio de 2022

Hora: de 6:00 p. m. a 7:00 p. m. Hora del Pacífico

Por favor regístrese con anticipación a esta junta de vecindario en:

<https://www.aks-eng.com/oak-street-tsp/>

Envíe con antelación sus preguntas por correo electrónico: MeriwetherDatacenter@rowandigit.al

Esperamos participar en otra discusión productiva con nuestra comunidad. Agradecemos de antemano su participación.

Gracias,

David Shiflett
Director General, Desarrollo
Rowan Digital

Traducción en español al respaldo

Instructions for Joining & Participating in the Neighborhood Meeting for the Oak Street Area Transportation System Plan (TSP) Amendment Project

Virtual Meeting provided via Zoom Webinar

Tuesday, June 7, 2022, at 6:00 PM

Please Register in Advance **(a list of attendees must be submitted to the City):**

- Go to <https://www.aks-eng.com/Oak-Street-TSP/> and follow the link to register. Depending on your browser you may need to type this exactly as written.
- Complete the online registration form.
- You will receive a confirmation email containing a link to join the Zoom webinar at the scheduled time as well as additional instructions.
- Meeting materials will be available upon request at least 2 days before and 10 days after the meeting concludes.

How to Join the Meeting:

Join by computer, tablet, or smartphone

- **This is the preferred method as it allows you to see the Presenter's materials on screen.**
- Click on the "Click Here to Join" link provided in your registration confirmation email.
- If you registered but did not receive a confirmation email, please check your junk/spam folder before contacting the Meeting Administrator.
- You may be prompted to "download and run Zoom" or to install the App (ZOOM cloud meetings). Follow the prompts or bypass this process by clicking "join from your browser".
- You should automatically be connected to the virtual neighborhood meeting.

Join by telephone

- Dial any of the toll-free Zoom numbers below to connect to the neighborhood meeting:

+1-669-900-6833	+1-346-248-7799
+1-929-205-6099	+1-253-215-8782
+1-301-715-8592	+1-312-626-6799

- If you experience trouble connecting, please pick another number and try again.
- After dialing in, enter this Zoom ID when prompted: **870 0328 8260**
- The Password if needed is: **6151**

MEETING ADMINISTRATOR:
For technical assistance:
Email holladaym@aks-eng.com

During the Meeting

Audio Help

- Meeting attendees will be muted throughout the presentation. This will allow everyone to hear the presentation clearly without added distractions.
- Make sure that the speakers on your device are turned on and not muted.
- If you do not have speakers on your computer, you can join by phone (using the “Join by telephone” instructions) to hear the presentation while watching the presentation on your computer monitor.

Questions & Answers

Your questions are important to us. There will be time reserved during the meeting to take questions, using one of the submission options below. Our presentation team will make their best effort to answer all question(s) during the meeting.

Prior to the Meeting:

- If you cannot attend the meeting, you can Email your question(s) in advance to the Meeting Administrator.

Email holladaym@aks-eng.com

During the Meeting:

- **Preferred Method:** Use the “Q&A” button on the bottom of the presentation screen to submit a question in real time.
- Email your question to the Meeting Administrator:

Email holladaym@aks-eng.com

After the Meeting:

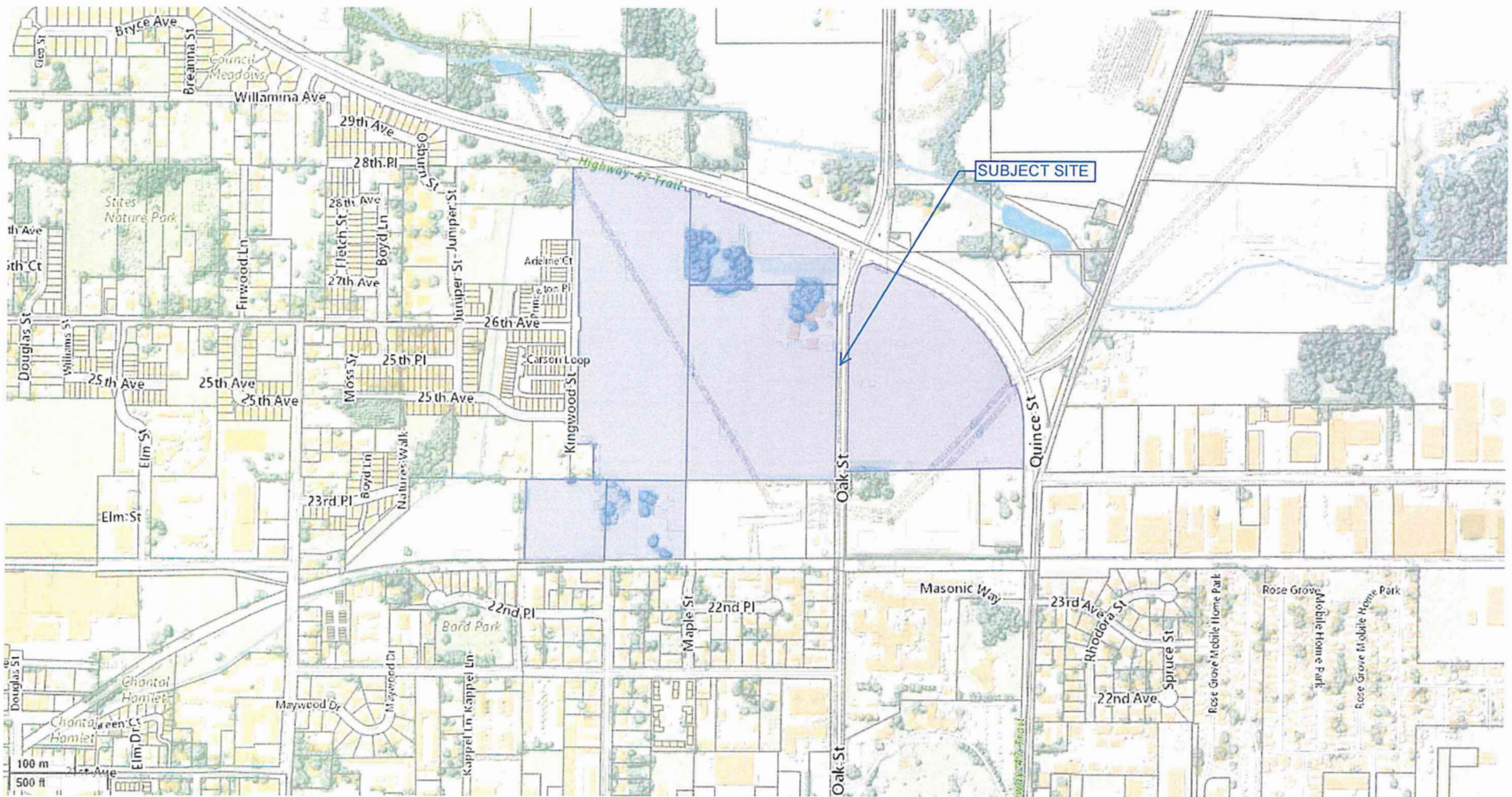
- We will continue to take questions after the meeting has ended. Please submit your question(s) to the Meeting Administrator:

Email holladaym@aks-eng.com

Helpful Hints/Troubleshooting

We want to start on time! Please join the meeting 5-10 minutes prior to the 6:00 PM start time to ensure successful connection.

- You do not need a Zoom account to join the meeting.
- You will need a valid email address at the time of registration to receive the confirmation email and link to join the webinar or receive answers to any questions submitted after the meeting.
- For first-time Zoom users, we recommend downloading and installing the Zoom App well in advance, by clicking on the “Click Here to Join” link in your confirmation email.
- For technical assistance, please contact the Meeting Administrator (contact above).
- If you have difficulties connecting by computer, tablet, or smartphone, we suggest disconnecting and instead use the “Join by telephone” instructions to listen in.



Data Resource Center
600 NE Grand Ave, Portland, OR 97232
503.797.1742 – drc@oregonmetro.gov

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VICINITY MAP: OAK STREET AREA TRANSPORTATION SYSTEM PLAN (TSP) AMENDMENT PROJECT

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6/7/2022 – 6:00 p.m.

TO PARTICIPATE, REGISTER AT:

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Oak Street Area Questions and Answers

- 1. Please advise if the conceptual roadway plan as shown is an acceptable modification to the TSP.**

The 2014 TSP shows two collector street extensions through the Oak Street area. One is the extension of 26th Avenue from its current terminus to Oak Street. The extension of 26th Avenue was identified as an important connection mostly for residential circulation.

The other project is an extension of 23rd/24th Avenue from Hawthorne Street to the future Martin Road/Highway 47 roundabout. The 23rd/24th Avenue extension is intended to provide an alternative to Pacific Avenue for east west traffic circulation. The 23rd/24th Avenue extension was a major topic of discussion during the major update to the TSP in 2011. The alignment was developed with stakeholders as an important east west roadway for traffic circulation.

The TSP recognizes that specific roadway alignments will be determined upon further engineering and/or development review. Conceptually, a roadway alignment for a new east west collector serving the Oak Street maximizing opportunities for development is acceptable and meets the City's goals for traffic circulation for the area and economic development including promoting industrial activities and preserving large lot industrial land.

- 2. What is the timeline and process for a TSP amendment?**

A TSP amendment is a Type IV legislative process requiring review and recommendation by the Planning Commission and adoption by City Council. The amendment is approved by ordinance and requires Planning Commission and City Council public hearings. Due to state and local public notification and hearing timelines, a TSP amendment will take approximately three months to complete after an application for amendment is deemed complete by the City.

- 3. Please discuss the level of qualitative analysis (for example, connectivity, access management considerations for the City and County/State facilities, roadway link carrying capacity) vs. quantitative (long-term intersection operations performance) analysis/documentation staff are anticipating the need for.**

The burden of proof justifying the TSP amendment is on the applicant and must be based on evidence supporting the request. At a minimum, the applicant should qualitatively describe why the TSP amendment is needed and how it meets the City's desire for improved traffic circulation serving the Oak Street area and adjacent areas to the west. The narrative should also address the applicable goals and policies in the Comprehensive Plan and performance measures in the TSP. At a minimum the following Comprehensive Plan policies should be addressed:

- a. Transportation Goal 2, Policy 2.1: Enhance street system connectivity, wherever practical and feasible.
- b. Transportation Goal 5, Policy 5.4: provide transportation facilities that support land development that is consistent with the Comprehensive Plan.
- c. Transportation Goal 6, Policy 6.1: Streets should be designed to support their intended users.

A performance measures to address quantitatively is the impact, if any, to current intersection level of service especially the Martin Road/Highway 47 intersection and Quince Street/Pacific Avenue intersections.

The Oregon Department of Transportation will likely require a traffic impact analysis for any development application since Highway 47 will be impacted. It's advisable to include the TIA as part of the TSP amendment application.

4. **Please discuss the TPR Refinement Area identified in TSP Figure 8-7 as they relate to the current proposal, if any.**

The refinement area shown on the TSP map is focused on Hwy 47 access including design treatment for the Martin Road/Highway 47 intersection. At the time the TSP was adopted it was uncertain if the preferred intersection control would be a traffic signal or roundabout. The 23rd/24th Avenue intersection was also unresolved. One option was aligning the 23rd/24th Avenue intersection with a future extension of Holladay Street east of Highway 47. Since adoption of the TSP it has been determined that the preferred intersection treatment is a roundabout with a leg providing access to the 23rd/24th Avenue extension.

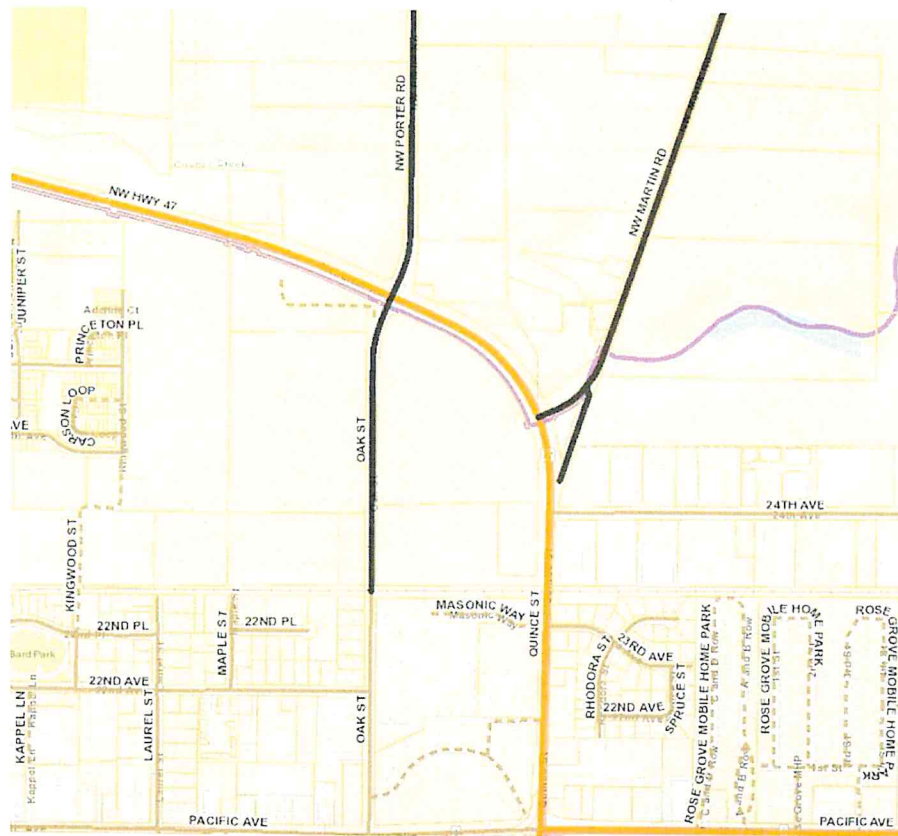
5. **Please advise whether copies of quantitative (traffic study capacity) analyses prepared for intersections in the site vicinity for the prior TSP amendments are available and/or useful to the current effort (some technical appendices are referenced in the TSP but were not readily apparent on the City website).**

The TSP technical appendices are available for viewing or downloading at:

<https://www.forestgrove-or.gov/engineering/page/transportation-system-plan-tsp-update-feb-2014>

6. **Please advise as to studies/processes/applications/timelines needed to support a vacation of Oak Street and the modification to the road and Council Creek Regional trail alignments as shown in the TSP.**

Oak Street, north of Pacific Avenue, is designated as a collector roadway by the TSP. Currently, the Oak Street right-of-way is owned by Washington County as shown below.



A vacation application must address how vacating Oak Street is in the public interest based on evaluation of current use of the right-of-way, and impact on utilities and emergency services. The application should be supported by intersection traffic counts and crash data if available.

7. **Is ODOT going to require that traffic on Oak Street and Porter Road will be limited to right-in and right-out movements as part of the Martin Road and Hwy 47 intersection improvements?**

ODOT hasn't made a formal determination to restrict turning movements at the Oak Street and Highway 47 intersection as part of the Martin Road Project.

8. **Please confirm a neighborhood meeting is required prior to submittal of the formal application.**

Yes, a neighborhood meeting is required prior to submittal of the formal application.

9. **Please discuss any future Development Code changes and what impact those Code changes may have on this project.**

The City has been studying the Oak Street area for alternative uses including residential and commercial uses. No Development Code amendments are anticipated as part of the effort that would affect the subject property.

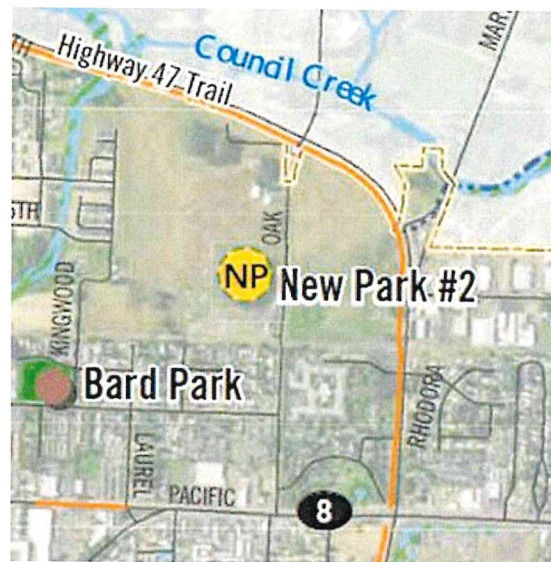
10. The applicant anticipates tree removal on-site. This is permitted when trees create an economic hardship. We will show site plan alternatives that show the development impacts of tree preservation.

Development Code 17.5.130 pertains to trees on developable land, prior to and during development. A permit is required for the removal or major pruning of trees six inches or greater in diameter or Oregon white oaks three inches or greater or diameter measured four and one-half feet above natural grade. Groves of trees do not have to be individually delineated; however, the approximate number of trees in a grove should be indicated. The permit should be accompanied by a narrative describing the reasons for tree removal and an assessment prepared by a certified arborist describing general condition of the tree grove.

11. Please provide any additional information regarding the proposed park (new park #2) as shown on the Forest Grove Parks Recreation and Open Space Master Plan (2016). Is this a required dedication? Is there a specific location this is intended to go?

The Parks and Recreation Master Plan identifies the need for a neighborhood park in the Oak Street area. The Parks and Recreation Master Plan indicates a need for a 2.5 acre park site for a mixed use park with plaza/seating area, play elements, low impact sports courts (e.g., bocce, shuffleboard, pickle ball, picnic area, and raised community garden). The Master Plan also states:

"Acquire and develop two new parks in unserved areas: Both north and northeast Forest Grove will need new local parks when these areas develop. The area around Oak Street, near the existing community garden, is planned to include business and light industrial uses. This area is also surrounded by nearby neighbors and senior centers. For this reason, the area needs a park that will function as a mixed-use recreation and social gathering space."



The marker indicated on the map above is not directly indicating a specific location but rather a park is needed and recommended in the northeast area of Forest Grove. Understanding there are limited opportunities to develop a park in this quadrant of town the Parks and Recreation Director is open to working the developer to secure an alternative park site. The Parks and

Recreation Director would like a dedication of land for park as a condition of development approval, but it doesn't have to be at the location indicated on the map.

12. The unlisted use per 17.8.515 doesn't require a significant amount of parking. What is required for parking needs analysis (17.8.520.D)?

The proposed land use classified as "Information" under the "Other" land use category in Development Code Table 3-14. The Information classification is defined to include activities such as distributing information and providing the means to transmit or distribute data or communications. The Information category includes establishments within the North American Industry Classification System (NAICS) Division 51.

The Other category, including Information uses, do not appear in the Development Code Parking Requirements table (Table 8-4). Therefore, determination of parking needs should be assessed based on the parking rates described in the Institute of Transportation Engineers Parking Generation Manual.

13. How are project TDTs calculated?

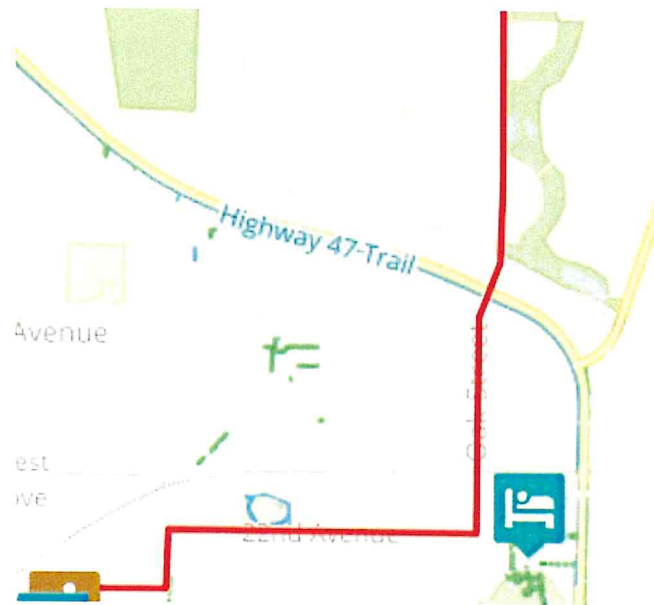
The TDT rate is calculated based on the uses listed on the Washington County TDT rate schedule. The rate schedule lists uses based on ITE land use category. The TDT amount is calculated based on the use and building area. The ITE Trip General Manual includes Data Centers (ITE Code 160). However, the TDT rate schedule does not include this use. The TDT rate includes Light Industrial (ITE Code 110) and Utilities (ITE Code 170). However, both of these uses appear to have higher trip generation rates compared to data centers.

The TDT Procedures Manual (Attachment B) provides an alternative TDT calculation process for uses not listed on the TDT rate table (see attached). A traffic study acceptable to Washington County may be used to establish an alternative TDT rate. For more information contact Steve L. Kelley with Washington County at (503) 846-3764 or SteveL_Kelley@co.washington.or.us.

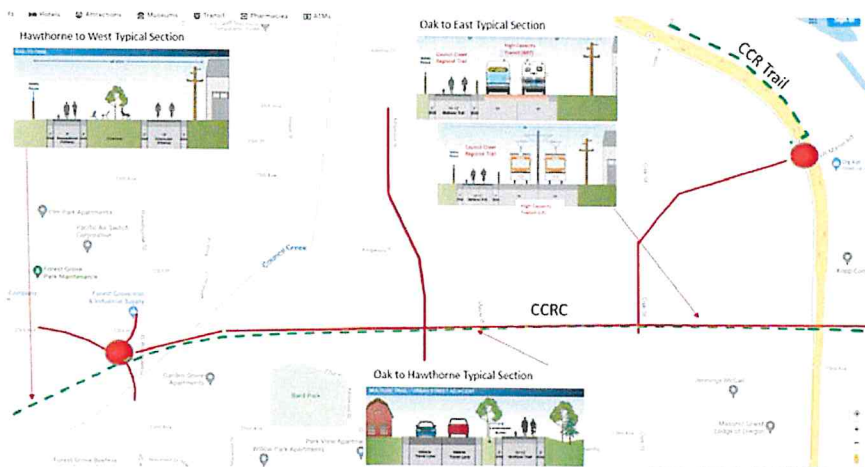
14. Council Creek Regional Trail

Derek Robins, the City's project manager, confirmed that the Council Creek Regional Trail (CCRT) is being managed by Washington County. The limits of the overall CCRT being undertaken by Washington County are from Hillsboro to Forest Grove along the existing rail line north of TV Highway. The project does not include any north-south extension to Porter Road. I am sure the consultant is aware of it, the Tualatin Valley Scenic Bikeway includes both Porter Road and Oak St (see image below) which may require coordination with another agency based on the proposed vacation of the Oak Street Right-of-Way. Derek suggested that there may be a need to coordinate or at least provide information to the CCRT team related to the proposed changes if Oak St right-of-way is vacated. The web link for the Tualatin Valley Scenic Bikeway Management Plan PDF, which may provide some useful information, is:

<https://www.oregon.gov/oprd/BWT/Documents/SB-TualatinValleyScenicBikewayPlanFinal.pdf>



A concept of how the CCRC design might be able to accommodate future development planning and maintain road circulation in the Hawthorne/Oak Street area are below for consideration.



Additional City Engineering Division Comments

The developer's consultant asked if we could provide the traffic analysis for the Martin Road and Hwy 47 intersection improvements. ODOT required the County to redo the traffic analysis because they had to project the demands to 20 years after construction is complete. ODOT has just started their review. Questions about the Martin Road/Highway 47 improvement project should be directed to Rich Blackmun, the City's Engineering Division Manager for follow-up rather than Washington County or ODOT (rblackmun@forestgrove-or.gov) or (503) 992-3192.

Concerning the water system hydraulic model - According to the Industrial Zone Development Analysis, it looks like fire flow at industrial sites 64 and 65 (where we plan to build) is not an issue. However, that analysis presumed a demand of 17.7 GPM - 25.9 GPM for those specific sites. Our data center could use up to 2,412 GPM - meaning there will not be a sufficient fire flow of 3000 GPM once the data center is fully built out. That is why a new water system hydraulic model is needed, correct?

City Response: The Industrial Zone Development Analysis water demands were based on the anticipated finished water demands associated with the assumed type of development that might occur, which was

not a data center. As the proposed water demands for the data center are significantly different than what was assumed, it will require an evaluation of what water system improvements may be required to be able to supply the potential data center water demands.

Concerning the Martin Road Intersection Improvement Project - The existing connection to the CWS 42-inch concrete sewer pipe will be taken out. This is what creates the need for us to extend the sewer line along porter road to the existing 8-inch sanitary sewer segment under HWY 47, correct?

City Response: There is no sewer line connection to the CWS 42" concrete sewer pipe at the Porter Road/Oak St/Hwy 47 intersection or at the HWY 47/Martin Road intersection. Currently there only exists a segment of 8 inch sanitary sewer under HWY 47 with manholes on each end at the Porter Road/Oak St/Hwy 47 intersection and the HWY 47/Martin Road intersection. The only sanitary sewer that connects to the CWS 42" concrete sewer pipe is the 8" sanitary sewer in Old Martin Road.

With the 24-inch Joint Water Commission pipe nearing capacity, Forest Grove's allocation of water from that pipe may need to be increased to facilitate further growth. Is this still accurate?

City Response: At this time, it is a correct statement that the City will need to lease capacity from Hillsboro in the 24" Joint Water Commission (JWC) Transmission Line (TL) in the future. This is based on the assumption that City's after Treatment Plant (WTP) is producing at least 0.5 million gallons per day (MGD), which is the available raw water per the City's oldest water right in our watershed. The City is working with Hillsboro to see how much of their capacity in the 24" JWC TL Hillsboro may consider leasing to the City.

The City's has asked the consultant preparing the WSMP to go back and review the assumed population growth rate and the very conservative industrial water demands assumptions for future industrial growth in the current draft WSMP. Without going into a long detailed explanation, we are anticipating that the result of the consultant's review will be a potential reduction in the population growth rate over the next 20 years and a reduction in residential water demand, and a reduction in the industrial water demand over the next 20 years. Even with these reductions in water demands, it is likely that the City will need to lease capacity from Hillsboro in the 24" JWC TL sometime in the next 10 to 15 years, if not sooner.

The City is currently designing the Heather Street Intertie to the Joint Water Commission (NTL) 72" North Transmission Line (NTL). At this time the Heather Street Intertie is for emergency water supply only. However, after the Willamette River Supply comes on line sometime after 2026, it will provide finished water to the City of Hillsboro, the Tualatin Valley Water District, and the City of Beaverton. At that time, there may be nonemergency finished water capacity in the JWC 72"NTL that the City of Forest Grove could acquire to address the potential capacity issues in the JWC 24" TL.

The Oak Street area has fire flow issues that could impact development. If I recall correctly, a fire flow analysis is the next step in determining what specifically needs to be improved in the Oak Street area.

City Response: To determine what water system improvements are required related to a data center being constructed in the Oak Street area, an analysis of the water system will have to be completed using the water system hydraulic model for the scenario that a fire occurs on the same day as the maximum day demand for finished water, to include the data center water demands. A 2016 analysis shows there are fire flow deficiencies in the 24th Avenue area east of Martin Road as well as a few fire flow deficiencies south of the Oak Street Area south of the railroad tracks.

An 8-inch sewer pipe extension to the Clean Water Services 42-inch concrete sewer pipe needs to be completed before the data center moves in.

City Response: The City's development code and CWS Standards will require that water, sewer, and stormwater facilities be extended to and through a development, so yes the sanitary sewer will have to be constructed.

Concerning the Martin Road Intersection Improvement Project, Birch may need to install and connect to another part of the Clean Water Services 42-inch concrete sewer pipe.

City Response: Currently there is an 8" sewer segment under Highway 47 in the vicinity of Oak Street and Porter Road and another 8" Sewer Segment under Highway 47 near the intersection of Martin Road and HWY 47. These segments consist of manholes located on each side of the Highway 47 right-of-way and the 8" sanitary sewer line between them and they do not connect to the Clean Water Service (CWS) 42-inch concrete Sewer pipe. The existing sewer segment at the intersection of Highway 47 and Martin Road will be removed and not replaced as part of the Highway 47 and Martin Road Intersection Improvements project which is scheduled to start in the spring of 22. There is an existing 8 inch sanitary sewer line that runs within Old Martin Road that does connect to the CWS 42-inch concrete sewer pipe that could be extended to the west, however I am not sure if it is deep enough to serve the area west of Oak St.



February 22, 2022

VIA EMAIL

Dan Riordan, Senior Planner
City of Forest Grove
Planning Division
P.O. Box 326
Forest Grove, OR 97116

RE: Forest Grove Transportation System Plan Amendment – Scoping Memorandum

Dear Dan:

We respectfully submit this letter and attached technical memorandum, seeking approval for the outlined Transportation System Plan (TSP) amendment process, on behalf of Woodfold Manufacturing, Rowan Green Data LLC, AKS Engineering & Forestry, LLC and Kittelson & Associates, Inc.

This project involves amendments to the TSP to allow for the consolidation of existing parcels of unused industrial land, thereby allowing the property to be fully utilized as an economic anchor within the community. The amendments requested meet the intent of the current TSP and are aligned with the economic and infrastructure goals of the City of Forest Grove.

In order to unlock the high economic potential of this property, amendments to the TSP are proposed that will include realignment of planned collector roadways, consolidation of access to Oregon Route 47, and reconfiguration of a pedestrian/trail system (i.e. Council Creek Trail, Oregon Scenic Bikeway, etc.). The proposed TSP amendments correspond with the Conceptual Roadway Plan, included herein. This memorandum highlights the Applicant's proposed scope of work to address these elements. Prior to this letter, a pre-application conference with the City of Forest Grove was held on August 25, 2021, and a subsequent TSP Scoping Meeting was held on December 13, 2021.

Technical Evaluation/Policy Assessment

The application will include a transportation impact analysis (TIA) prepared by the applicant's consulting engineer, Kittelson & Associates, Inc. Please see the Technical Memorandum, included herein, and provide feedback for the TIA preparation.

Additionally, page 2 of the Technical Memorandum outlines plans and policies that are applicable to the TSP Amendment. AKS will be reviewing other related policies in a coordinated effort with Kittelson & Associates, Inc. and City staff. Please let us know if there are additional documents that the application should demonstrate compliance with.

Public Outreach

City staff have advised a TSP amendment will be reviewed through a Type IV Legislative process, which requires the provision to host one neighborhood meeting as part of the public outreach. The Applicant

understands the importance of community involvement and the following information outlines a proposal for comprehensive public outreach.

Format of Neighborhood Meeting

The Applicant intends to host two neighborhood meetings, with Spanish language translation, to engage interested participants. Recognizing specific potential impacts to the adjacent neighborhood, the Applicant will also host members of the Casey Meadows Homeowners' Association for an introductory meeting at least two weeks prior to the official neighborhood meeting. The Applicant's team will provide a detailed presentation, including graphics, a summary of compliance with applicable plans and policy documents, and an overview of the jurisdictional process. Following the presentation, attendees will be given the opportunity for public input (both at the event and through subsequent follow-up).

Notification of Neighborhood Meeting

It is our understanding that in an effort to remain unbiased, the City of Forest Grove does not desire to attend or be involved in public outreach. The Applicant intends to provide two-week mailed notice to the following stakeholders:

- adjacent properties within 1000 feet (of Woodfold Properties combined site)
- stakeholders, including but not limited to:
 - Oregon's Tualatin Valley Scenic Bikeway
 - Council Creek Trail Coordination Group
 - Oregon Department of Transportation (ODOT)
 - Forest Grove/Cornelius Chamber of Commerce
 - Forest Grove School District
 - Forest Grove Light & Power
 - Forest Grove Public Works
 - City Club of Forest Grove
 - Cornelius Community Development Department
 - Pacific University
 - Other interested parties as they are identified

In addition to mailed notice, the Applicant plans to post physical signage on the subject site frontage along Oak Street and OR 47. The meeting and registration information, along with all relevant project updates, will be posted on the project website, as well as sent to City staff to be included on the City's website and Facebook page. Following the neighborhood meeting, the Applicant intends to schedule follow-up discussions with the stakeholders listed above to review and incorporate potential technical feedback into the TSP amendment application.

Thank you again for your expeditious review of this proposal. The Applicant's team appreciates the opportunity to work with the City and potential stakeholders through the application preparation process. The team welcomes City staff's questions and comments regarding the application scope, public engagement proposal, and transportation technical analysis scope. Please do not hesitate with any requests for additional information.



Sincerely,

AKS ENGINEERING & FORESTRY, LLC



Mimi Doukas, AICP, RLA
12965 SW Herman Road, Suite 100, Tualatin, OR 97062
(503) 563-6151 | mimid@aks-eng.com

Enclosures:

Technical Memorandum – Forest Grove Transportation System Amendment Proposed Scope
Conceptual Roadway Plan with Aerial & TSP Overlay

Technical Memorandum

February 22, 2022

Project# 26843

To: Dan Riordan, City of Forest Grove

From: Julia Kuhn & Chris Brehmer

CC: Derek Robbins, City of Forest Grove
Jinde Zhu, Stacy Shetler & Steve Kelly, Washington County
Avi Tayar & Marah Danielson, ODOT Region 1
Mimi Doukas, Cody Street & Marie Holladay, AKS Engineering & Forestry LLC
David Shiflett, Rowan Digital Infrastructure, PBLLC

RE: Forest Grove Transportation System Amendment Proposed Scope

Rowan Green Data, LLC (Rowan, Applicant) is proposing to amend the Forest Grove Transportation System Plan (TSP) to remove the need to extend Oak Street north to OR 47 as well as the need to extend 24th Avenue east to OR 47 as graphically illustrated in the attached Exhibit 1. Both streets are classified as collectors per the City and the County's TSPs. These changes are being proposed to facilitate the potential future development of industrial-related uses that require larger lots sizes and the ability to provide secure access to the property. On behalf of the Applicant, this memo outlines our proposed scope of work to assist with the TSP amendment request. AKS Engineering & Forestry, LLC is also preparing technical and policy analyses to assist with the request. Our work will be closely coordinated with the AKS analysis.

Based on our experience with other TSPs, our/AKS work will include the following elements:

- Review and compliance of the proposed amendment with adopted and ongoing planning documents that inform transportation within the area;
- Technical Evaluation of the vehicular-capacity related impacts of the proposed amendment;
- Alternative concepts that can fulfill the intent and purpose of the adopted TSP alignments;
- Council Creek Trail Alignment and OR 47 Crossing Needs; and,
- Next Steps

This memorandum highlights our proposed scope of work to address these elements.

COMPLIANCE WITH APPLICABLE PLANS AND POLICIES

The City, County and Oregon Department of Transportation (ODOT) have a number of policies and plans that will inform the TSP Amendment. We will work with AKS Engineering & Forestry to provide an overall assessment with the following plans, policies, and programs:

- City Comprehensive Plan Transportation goals and policies;
- City Transportation System Plan goals, policies, functional classification maps by mode, and preferred plan projects within the vicinity; this review will also focus on the connectivity standards and maximum block lengths incorporated into the TSP from Metro's guidance including Metro Regional Transportation Functional Plan Section 3.08.510.C and related Table 3.08-2 *Interim Regional Mobility Policy Deficiency Thresholds and Operating Standards*;
- Council Creek Regional Trail Plan;
- Tualatin Valley Scenic Bikeway as well as the Oregon Scenic Bikeway Programs;
- ODOT Intersection Control Evaluation for OR 47/Martin Road Roundabout;

- Washington County TSP applicable goals, policies, functional classification maps by mode, and preferred plan projects within the vicinity; and
- Oregon Statewide Land Use Planning Goals, in particular Economic Development (Oregon Administrative Rules Chapter 660-9) and Transportation Planning (Oregon Administrative Rules Chapter 660-12).

Please let us know if there are additional documents that you would like our team to demonstrate compliance of the requested TSP Amendment with applicable plans and policies.

TECHNICAL EVALUATION

The City and ODOT have both spent considerable time in planning for the transportation system that serves people walking, riding bikes, driving and taking transit in this area. We will build upon the transportation capacity analyses conducted as part of this work to ascertain if the proposed amendment will impact any of the needed intersection and/or street capacity within the vicinity. Our review of the NW Martin Road Intersection Control Evaluation¹, the City TSP technical appendices, and the Draft Oak Street Refinement Plan technical analyses² indicate that the Draft Oak Street Refinement Plan may provide the most comprehensive set of future year traffic volumes. Further, the Draft Oak Street Refinement Plan traffic volume projections are the highest of the three documents reviewed and thus would offer a reasonable "worse case" basis for analysis. Use of the TSP and the Intersection Control Evaluations would result in lower traffic volumes and may not highlight needed capacity changes for vehicles.

Based on our review, we propose to use the post-processed future year 2040 weekday PM peak hour traffic volumes in the *Oak Street Refinement Plan Transportation Baseline Report* and re-assign traffic to indicate the potential rerouting of vehicles associated with the proposed TSP amendment. The intersections we propose to study under future year conditions with and without the proposed amendment include:

- OR 47/Oak Street/Porter Road
- OR 47/Martin Road
- OR 47/Quince Street/Pacific Avenue
- OR 47/Sunset Drive

We note that this list is identical to the intersections studied in the *Oak Street Refinement Plan Transportation Baseline Report*.

ALTERNATIVE CONCEPT REVIEW

Our team will review the transportation alternatives (street, intersections, sidewalk, bike lane, Council Creek Trail, Oregon's Tualatin Valley Scenic Bikeway, etc.) reviewed as part of the agency plans and policies. We will build upon this information and present the trade-offs associated with alternative concepts that meet the purpose and intent of the adopted documents as well as meet the objective of the proposed TSP amendment.

¹ NW Martin Road – Intersection Control Analysis Memorandum. August 2021.

² Oak Street Refinement Plan Draft Transportation Baseline Report. August 2020 (this plan is not adopted yet but serves as a basis for the technical review).

COUNCIL CREEK TRAIL CONSIDERATIONS

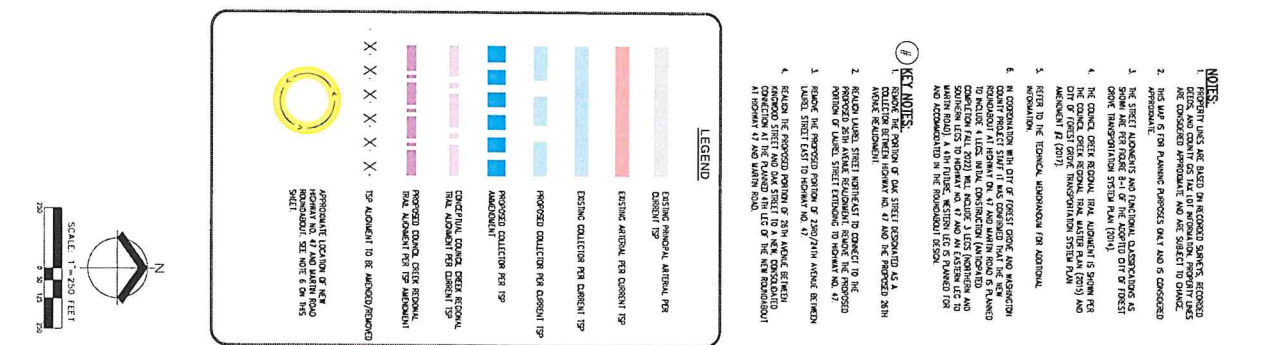
We will focus specifically on previous alternatives evaluated as part of the Council Creek Trail in our alternative concept review. We understand that the agencies have specific safety-related questions about how the Trail will cross OR 47.

NEXT STEPS

We look forward to receiving your feedback and working with you on this requested TSP amendment. Please let us know if you have any questions as you review our information.

ATTACHMENT

Exhibit 1– Map of Proposed TSP Amendment



ATTACHMENT A-9



MERIWETHER PROJECT STAKEHOLDER OUTREACH OVERVIEW

Between March and June 2022, Hubbell Communications conducted extensive stakeholder and community outreach in collaboration with the Meriwether Green Data Center project team.

This overview is intended to show the scope of our initial outreach and includes most communication dates and topics. The dates listed represent email communications, phone calls and/or meetings (individual virtual meetings, the two virtual community meetings, and in-person meetings). All listed stakeholders were personally invited to community meetings and/or met with when requested. If there are any questions, please contact Nathaniel Brown, Manager of Public Affairs, at nathaniel@thinkhubbell.com.

Name(s)	Affiliation	Comm method(s)	Date(s)	Topics discussed
Dave Parulo and Sylke Neal-Finnegan	Tualatin Valley Scenic Bikeway	Email, phone	4/27/22 5/9/22 5/12/22	Bike signage impacts (none). Safety improvements.
Mitch Taylor and Derek Robbins	Council Creek Regional Trail (CCRT) Group	Email, community meeting	4/26/22 4/28/22 5/11/22 5/12/22 5/13/22 5/17/22 5/18/22	North-South connectivity for pedestrians. Transportation System Plan connectivity requirements. Safety improvements. Community engagement scope.
Dyami Valentine and Julie Sosnovske	Washington County (CCRT members)	Email	5/13/22 5/16/22	Safety improvements. Mobility improvements.
Marah Danielson and Nicole Sprecher	Oregon Department of Transportation	Email	4/18/22 4/28/22 5/6/22	Transportation System Plan amendment technical aspects. Invited to community meetings (declined).
Justin Wylie, Kurt Burrese, and Mike Baskett	Casey Meadows HOA leadership	Email, virtual meeting, community meeting	3/15/22 3/17/22 3/19/22 3/22/22 3/23/22 4/9/22 4/10/22 4/14/22 5/12/22	Transportation System Plan connectivity requirements. Alternate routes. Safety concerns and improvements. Construction impacts.



Yvette Curiel, Victoria Chai, and Paige Hoag	Casey Meadows property management (Blue Mountain)	Email, phone	3/17/22 4/11/22 4/18/22 4/19/22	Connection with Casey Meadows. Offer for separate meeting with HOA (declined). Additional awareness options for residents beyond 1000 ft.
Juanita Lint	Forest Grove/Cornelius Chamber of Commerce	Email, in-person meeting, community meeting	3/10/22 3/11/22 3/30/22 4/8/22 4/21/22 5/12/22	Economic benefits of project and Transportation System Plan amendment. Improved safety and connectivity for businesses and customers.
David Warner	Forest Grove School District	Email	4/15/22 5/6/22	Project overview. Declined offer to meet individually.
Keith Hormann*	Forest Grove Light & Power	Email, in-person meeting	4/19/22	Electricity needs. City expansion needs. Transmission realignment. Transportation System Plan amendment.
Gregory Robertson*	Forest Grove Public Works	Email, in-person meeting	4/19/22	Potential water needs (minimal). Transportation System Plan amendment.
Paul Downey*	City of Forest Grove	Email, in-person meeting	4/19/22	Project overview.
Bryan Pohl	Forest Grove Community Development	Email, virtual meeting	3/24/22 4/19/22 4/21/22 4/26/22	Safety and mobility impacts. Stakeholder engagement.
Jesse VanderZanden	City of Forest Grove	Email, in-person meeting	4/19/22	Economic and community benefits of project.
Bobby Nuvolini	Tualatin Valley Irrigation District	Email, in-person meeting, community meeting	3/30/22 5/12/22	Potential water usage and source options.



Kelly Lowry	City Club of Forest Grove	Email	4/15/22 5/24/22 5/31/22	Invited to community meetings but unable to connect.
Rob Drake	Cornelius Community Development Department	Email, phone	4/15/22 5/9/22	Economic benefits of project. Transportation System Plan amendment.
Vanessa Reyes	Pacific University	Email, virtual meeting	6/3/22	Economic benefits of project. Workforce opportunities. Transportation System Plan amendment.
Brenna Fulks*, EDC members in attendance on 5/12/22	Forest Grove Economic Development Council	Email, in-person meeting	5/12/22 6/2/22	Economic benefits of project. Sustainability. Transportation System Plan amendment. Stakeholder engagement.
John Southgate	Westside Economic Alliance	Email	6/1/22 6/2/22	Economic benefits of project. Sustainability. Transportation System Plan amendment. Stakeholder engagement.
Deanna Palm	Washington County Chamber of Commerce	Email	6/2/22 6/6/22	Economic benefits of project. Sustainability. Transportation System Plan amendment. Stakeholder engagement.
Councilor Juan Carlos Gonzalez	Metro	Email, virtual meeting	4/10/22 4/19/22	Economic benefits of project. Sustainability. Transportation System Plan amendment. Stakeholder engagement.
Commissioner Jerry Willey	Washington County Commission	Email, virtual meeting	4/12/22 4/20/22	Economic benefits of project. Sustainability. Transportation System Plan amendment. Stakeholder engagement.



Skip Newberry	Technology Association of Oregon	Email, in-person meeting	4/5/22 4/20/22	Economic benefits of project. Sustainability. Transportation System Plan amendment. Stakeholder engagement.
Craig Campbell	Oregon Manufacturing & Innovation Center	Email, virtual meeting	4/21/22	Workforce opportunities. Economic benefits of project.
Shirley Araiza	1 st Congressional District (Bonamici)	Email, phone, virtual meeting	5/13/22 5/19/22 6/1/22	Economic benefits of project. Sustainability. Federal government process improvements.
Jon-Paul Bowles and Giles Rickett	Salmonberry Trail Intergovernmental Agency	Email	5/13/22	Transportation System Plan amendment.
Nick Triska	Greater Portland Inc.	Email, virtual meeting	4/4/22 4/7/22	Economic benefits of project. Sustainability. Transportation System Plan amendment. Stakeholder engagement.

**Met with frequently (outside of April 19 presentation) to discuss project logistics.*

WEBSITE INFORMATION

The website built for this project also served as an important information-sharing tool for stakeholders, city leaders, and the public. The site included an overview of the project, FAQs, project collateral, an estimated timeline, TSP presentation, and an opportunity to sign up for project updates/submit questions and comments.

The city of Forest Grove also linked to the site from their webpage, the Chamber included it in their weekly newsletter, and the link was included in most direct outreach to all stakeholders and meeting attendees. Site analytics are as follows (as of June 7, 2022):

- 771 total site visits
- 563 unique site visits
- 2,100 total page views
- 1 minute 10 seconds average time spent on site



Forest Grove City Council
1924 Council St.
Forest Grove, OR 97116

Mayor Truax and Members of the Council:

The Washington County Chamber of Commerce's mission is to strengthen the vibrancy of our regional economy and help businesses grow here. In line with that goal, our Chamber supports the Meriwether development, which would establish Forest Grove's first green data center.

Forest Grove's strong business community is an integral component of the entire Washington County economy. This project represents an extraordinary opportunity for Forest Grove to take a leading role in the continued growth of the Silicon Forest and provide a needed service to businesses not only in our county, but around the world.

This project has significant economic footprint in the local community through direct and indirect investments totaling more than a billion dollars. Jobs – both during construction and during the operation phase – will pay wages well above the average of Forest Grove. Our roads, schools and community projects will benefit for decades to come from increased property and income tax revenue generated by this data center.

The project team has clearly prioritized community engagement throughout the planning process. Responsive and comprehensive public outreach is key to the success of any project, and we are confident that the design, construction, and operation of this green data center will be completed with the community's needs in mind.

Additionally, the developer has proven their commitment to sustainability by ensuring the project has net-zero carbon and net-zero water use. This is exactly the kind of development that we want to encourage on our very few remaining parcels of industrial land in Washington County.

Please consider this letter as the Chamber's support for the amendment to the Transportation System Plan. It is essential that a project of this economic magnitude be approved by local leaders without unnecessary delays. Thank you for your consideration of our perspective.

Sincerely,

A handwritten signature in black ink that reads 'Deanna Palm'.

Deanna Palm
President/CEO



WASHINGTON COUNTY OREGON

June 15, 2022

Forest Grove City Council
1924 Council St.
Forest Grove, OR 97116

Dear Mayor Truax and members of the Council:

I write today in support of the Meriwether Green Data Center's (Meriwether) request for an amendment to the City of Forest Grove's Transportation Plan. This project has the ability to positively impact the community of Forest Grove and this amendment is critical to the ability of the project to move forward in the city.

As the commissioner for District 4 in Washington County, which is the most rural area of the county, I am always supportive of opportunities for economic growth and utilization of industrial land in the smaller communities of the district. Especially as we continue to recover from the economic devastation of COVID, it is vital that our workforce has access to good, family wage jobs, as projected to occur once construction of this facility is complete.

Another new reality in our lives as we recover from the pandemic, is the reliance on the internet in our daily lives. Whether it is for school, work, or a doctor's appointment, there has been a dramatic uptick in usage of the internet and need for reliable and affordable service. As a data center, Meriwether will increase the region's connectivity and ensure that it keeps pace with our evolving requirements for prosperity and success.

I am excited about this proposal for a sustainable, low impact, data center and the opportunities it brings to Forest Grove, our Silicon Forest, and the region. Please consider Meriwether's request with full and fair consideration and accept my strong recommendation of this project. Thank you in advance for your thoughtful review, please do not hesitate to contact me should you have questions.

Best regards,

Jerry Willey
Washington County Commissioner, District 4

Board of County Commissioners
155 North First Avenue, Suite 300, MS 22, Hillsboro, OR 97124-3072
phone: (503) 846-8681 • fax: (503) 846-4545



Forest Grove / Cornelius Chamber of Commerce

Forest Grove City Council
1924 Council St.
Forest Grove, OR 97116

Forest Grove/Cornelius Chamber of Commerce
2417 Pacific Ave.
Forest Grove, OR 97116

Mayor Truax and members of the Council:

As a primary champion of economic development and the leading voice on job growth in our community, the Forest Grove/Cornelius Chamber of Commerce supports the Meriwether development, which would establish our city's first green data center.

As a community, this is an incredible opportunity to take a leading role in the continued growth of the Silicon Forest and provide a needed service to local and global businesses alike.

This project will provide thousands of quality, years-long construction jobs and more than 105 full-time jobs when operational, at wages well above the average of Forest Grove. The direct and indirect investments that the developer is making will be in the hundreds of millions of dollars. Our roads, schools and community projects will benefit for decades to come from increased property and income tax revenue generated by this data center.

Further, the developer is committed to meeting and exceeding the environmental standards of our city and state. Robust economic development and strong environmental standards can co-exist, and this project proves that. We have an opportunity to encourage more developments like this. This is exactly the kind of development that we want to encourage on our very few remaining parcels of industrial land in Washington County.

Finally, the project team has done a tremendous job engaging with the community. From productive conversations with our neighborhoods and utilities, to fellow businesses and economic development officials, not to mention engaging Oregon Manufacturing Innovation Center (OMIC) for workforce development. I am confident that this data center will be a positive asset to the community for decades.

Please consider this letter as the Chamber's support for the amendment to the Transportation System Plan and other site-specific requests that you are considering. We are ready and willing to be an active partner in all economic development initiatives and appreciate your collaboration on our shared economic goals for Forest Grove.

Sincerely,

Juanita Lint
Executive Director



June 2, 2022

Forest Grove City Council
1924 Council St.
Forest Grove, OR 97116

Dear Mayor Truax and members of the Council,

I am writing on behalf of the Board of Directors for the Westside Economic Alliance (WEA), in support of the Meriwether Green Data Center project planned for Forest Grove and the proposed Transportation System Plan amendment that must be adopted for the project to move forward.

As you know, the WEA is a business advocacy group working collaboratively with business, government, and community service organizations throughout our region to improve the local business climate, enhance the livability of our communities, and promote economic development opportunities on the Westside of the Portland metropolitan region.

Through direct and indirect investments, the economic impact of this project will yield more than \$1 billion for Forest Grove and the surrounding communities, with thousands of stable, well-paying jobs (permanent, construction, and indirect), with significant increases in local tax revenue that can help fund our shared priorities around infrastructure, education, and other community projects.

We understand that the developer is also committed to net-zero carbon and net-zero water use for this project, which is important to the WEA and its members. Truly sustainable projects like this can serve as models for other development and we are encouraged by this intended use of one the few remaining parcels of industrial land in Washington County.

Having gone above and beyond the requirements of community engagement for a project like this, we are confident that the Meriwether project will be a positive asset for not only the Westside, but the entire region.

Thank you for your consideration.

Respectfully,

A handwritten signature in blue ink, appearing to read "Randy Ealy".

Randy Ealy, Board President
Westside Economic Alliance

10220 SW Nimbus Ave
Suite K-12
Tigard, Oregon 97223
Office 503.968.3100
Fax 503.624.0641
www.westsidealliance.org

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Rich Foley
Umpqua Bank

Mark Garber
Pamplin Media

Jason Green
CBRE

Maria Halstead
Washington Square

Blake Hering
Gantry

Mike Morey
StanCorp Mortgage

Tim Parker
Melvin Mark Companies

Josh Shearer
KG Investment Properties

Chair Kathryn Harrington
Washington County

Councilor Juan Carlos Gonzalez
Metro

Mayor Frank Bubenik
City of Tualatin

Mayor Steve Callaway
City of Hillsboro

Mayor Jason Snider
City of Tigard

Councilor Ashley Hartmeier-Prigg
City of Beaverton



TUALATIN VALLEY IRRIGATION DISTRICT

2330 Elm Street, Forest Grove, OR 97116

Phone: (503) 357-3118

FAX: (503) 359-9510

March 31, 2022

To whom it may concern,

This letter is to confirm a meeting between Tualatin Valley Irrigation District (TVID) Manager Bobby Nuvolini, Cody Street of AKS Engineering, David Shiflett of Rowan Digital Infrastructure, and Nathaniel Brown of Hubbell.

The meeting discussed the amended Transportation System Plan (TSP) proposed on the properties between Casey Meadows and Highway 47 in Forest Grove, Oregon. TVID operates and maintains irrigation water pipeline infrastructure under the amended TSP proposal. The pipeline infrastructure lies within an easement owned by the United States Bureau of Reclamation.

The meeting recognized the need to reach a mutual agreement to implement the amended TSP while protecting TVID assets. Possible solutions included three (3) separate crossing agreements where the amended TSP would encroach over the pipeline and in the Reclamation easement or complete relocation of the 48-inch main water line. All parties agreed to schedule future meetings with Reclamation to explore feasible options.

TVID elects to remain an active partner in discussions and planning efforts regarding the amended TSP and any future land use which may impact our District's operations.

Sincerely,

Bobby Nuvolini

Forest Grove City Council
1924 Council Street
Forest Grove, OR 97116

June 8, 2022

Mayor Truax and members of the Council:

Greater Portland Inc is the leading regional economic development organization, helping businesses locate and grow in seven counties in and around the metropolitan area. We advocate for smart, sustainable policies and support innovative businesses that look to locate and grow here.

We support the Meriwether Green Data Center project and their application to amend the Transportation System Plan. We believe this data center will be a tremendous asset for Forest Grove and Washington County.

This project represents an exciting opportunity for Forest Grove to lead the continued growth of the Silicon Forest, complementing the adjacent, ongoing expansion of the technology industry in the West Metro.

This project will provide more than 7,000 quality, years-long direct and indirect jobs, and more than 105 full-time jobs when operational, at wages above Forest Grove's average. The economic footprint of this project will be more than \$1 billion, with significant benefits to the City of Forest Grove and the broader region.

Further, we are encouraged by the developer's commitment to net-zero carbon and net-zero water use. A truly green data center is an innovative and exciting approach to one of the remaining parcels of industrial land in Washington County.

Finally, it is clear that the community and relevant stakeholders have been involved in the project throughout the process. Greater Portland Inc is appreciative of the intentional outreach work that the Meriwether team has conducted to ensure the community is an active partner in this project.

Please consider this letter evidence of Greater Portland Inc's support for the amendment to the Transportation System Plan and the site-specific requests that you are considering. We are ready and willing to be a partner in these efforts and appreciate your collaboration on our shared economic goals for Forest Grove and Greater Portland.

Sincerely,
Nick Triska
Business Development Manager
Greater Portland Inc



ATTACHMENT B

Planning Commission Findings and Decision Number 2022-

To Recommend City Council Approval of Amendments to the Forest Grove Transportation System Plan Affecting the Pedestrian, Bicycle, and Street Networks in the Highway 47/Oak Street Area

File Number: 311-22-000026-PLNG

WHEREAS, the Forest Grove City Council adopted the Forest Grove Transportation System Plan (TSP) Update in 2014; and

WHEREAS, the TSP includes a planned future pedestrian, bicycle, and roadway network for the City; and

WHEREAS, the TSP shows corridors for several street extensions in the Highway 47 and Oak Street area of the City; and

WHEREAS, planned street extensions include 26th Avenue from Kingwood Street to Oak Street, Laurel Street from the Portland and Western Railroad Corridor to north of the 26th Avenue extension and 23rd Avenue to Martin Road; and

WHEREAS, the proposed future street extensions bisect and divide property zoned for General Industrial land uses; and

WHEREAS, the affected property owner submitted an application to the City requesting approval of TSP amendments; and

WHEREAS, the affected property desires modification to the proposed future transportation network to preserve land for large scale, large lot, industrial uses consistent with Forest Grove Comprehensive Plan Industrial and Employment Objective 3: "Ensure the availability of at least one large industrial tract comprising at least 50 gross acres in land area"; and

WHEREAS, information provided by the applicant and included in the record indicates the proposed changes to the future transportation network requested by the applicant will not cause degradation to the transportation system to the point where minimum level of service standards are not met; and

WHEREAS, the applicant has demonstrated to the satisfaction of the Planning Commission that the proposed TSP amendments are consistent with the applicable goals, policies and objectives of the Forest Grove Comprehensive Plan, Forest Grove Transportation System Plan, Metro Regional Framework Plan, Metro Regional Transportation Functional Plan, Oregon Transportation Planning Rule (Oregon Revised Statutes Chapter 660-012-0060), and Oregon Highway Plan.

NOW THEREFORE, The Forest Grove Planning Commission does hereby recommend City Council approval of the Transportation System Plan amendments, making the following specific findings in support of this decision:

General Findings and Conclusions

Finding: The Planning Commission is relying on the following documents which provide the factual basis for the Planning Commission decision and recommendation:

1. Staff Report and Attachments, August 8, 2022
2. Application Including Applicant's Narrative Responses to Decision Considerations, Prepared by AKS Engineering & Forestry, LLC, dated June 2002 and Received by the Forest Grove Community Development Department on June 21, 2022
3. Forest Grove Comprehensive Plan (2014)
4. Forest Grove Transportation System Plan (TSP) (2014)
5. Washington County Transportation Plan (2015)
6. Oregon Administrative Rules OAR 660-012-0060 (Transportation Planning Rule)
7. Oregon Highway Plan
8. Metro Regional Transportation Framework Plan

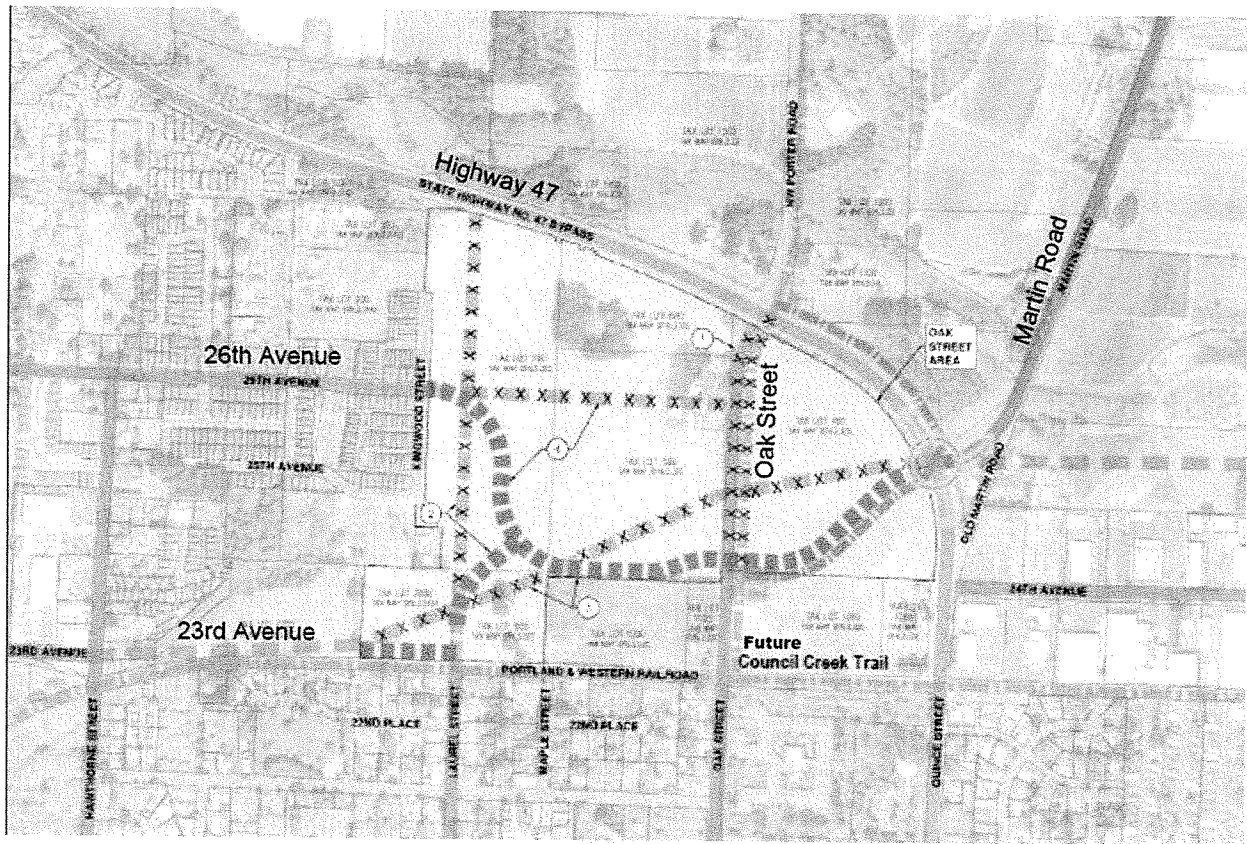
Finding: The Planning Commission makes the determination that the TSP amendments are legislative and subject to the requirements of the Forest Grove Comprehensive Plan and Forest Grove Development Code, Introductions and Procedures, Type IV, Legislative Land Use Decisions (17.1.700 – 17.1.740). This determination is based on the premise that the existing and future planned transportation system affects individual land owners and the broader community. Furthermore, ensuring an efficient and equitable traffic circulation system is a matter of city-wide significance.

Finding: The Planning Commission recommendation to City Council is based on the transportation analysis requirements contained in the Oregon Transportation Planning Rule (OAR 660-012-00060), land use, economic development and transportation goals, objectives and policies contained in the Forest Grove Comprehensive Plan especially Industrial and Employment Objective 3 to; "Ensure the availability of at least one large industrial tract comprising at least 50 gross acres of land area", goals and objectives contained in the Forest Grove Transportation System Plan, the highway mobility policies contained in the Oregon Highway Plan, and the transportation planning requirements contained in the Metro Regional Transportation Functional Plan.

Finding: The Planning Commission is not basing this recommendation on the merits of any specific development proposal since an application for development on potentially affected property has not been submitted for review by the City. This Planning Commission decision is not conditioned or predicated on any specific development proposal.

Finding: The Planning Commission is basing this recommendation on the general land uses allowed in the General Industrial(GI) zoning district as described in Forest Grove Development Code Article 3 (17.3.520) and the desire to ensure implementation of transportation systems that supports the land uses allowed by the current zoning of the affected area.

Finding: The Planning Commission supports and recommends the TSP amendments shown on the map below:



Oregon Transportation Planning Rule Findings (OAR 660-012-0060)

Finding: The Planning Commission finds, the Oregon Transportation Planning Rule states that an amendment significantly affects a transportation facility if its traffic impacts are found to change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan). The Planning Commission finds the proposed TSP amendments will result in a significant affect to Oak Street since the amendment will result in a change in the functional classification of Oak Street from a collector street to a local, private street. The Planning Commission further finds this significant effect does not rise to the level of requiring mitigation since traffic will have access to Highway 47 via the modified 26th Avenue extension and Martin Road roundabout and based on the traffic analysis provided the applicant the Martin Road roundabout will continue to function at or above minimum acceptable level of service standards.

Finding: The Planning Commission finds, the proposed amendments will not change the functional classification of an existing or planned transportation facility owned by the Oregon Department of Transportation (Oregon Highway 47 and Oregon Highway 8). Both Oregon Highway 47 and Oregon Highway 8 is designated as Statewide Routes in the 1999 Oregon Highway Plan. The proposed amendments will not result in a change to these classifications. Therefore, the proposed amendments will not have a "significant affect" on the state highway system.

Finding: The Planning Commission finds the Metro Regional Transportation Plan designates Oregon Highway 47 as a Throughway and Principal Arterial and Oregon Highway 8 as a Regional Street and Major Arterial roadway. The proposed amendments will not result in a change to these classifications. Therefore, the proposed amendments will not have a "significant affect" on the state highway system.

Finding: The Planning Commission finds the Forest Grove Transportation System Plan designates Oregon Highway 47 as a Major Arterial and Oregon Highway 8 as an Arterial roadway. The proposed amendments will not result in a change to these classifications. Therefore, the proposed amendments will not have a "significant affect" on the state highway system.

Finding: The Planning Commission finds the Washington County Transportation System Plan designates Oak Street, north of Pacific Avenue, as a Collector roadway. The proposed amendments include re-designating Oak Street from a Collector roadway to a local, private roadway. This amendment changes the functional classification of an existing facility. The proposed amendment will significantly affect Oak Street since the street classification is proposed to change.

Finding: The Planning Commission finds the Metro Regional Transportation Plan does not classify Oak Street since it is not part of the regional arterial or throughway network. Therefore, changing the classification of Oak Street from a Collector to a local, private street, does not affect the Regional Transportation Plan.

Finding: The Planning Commission finds the proposed amendments will result in a new alignment for the 26th Avenue extension and the Forest Grove Transportation System Plan classifies 26th Avenue as a Collector roadway. The Planning Commission further finds, the proposed amendments will not result in a change to the functional classification of 26th Avenue. Therefore, the proposed amendment will not significantly affect 26th Avenue.

Finding: The Planning Commission finds the proposed amendments will result in a change to the alignment for the 23rd Avenue/24th Avenue extension. As proposed, the 23rd/24th Avenue extension would terminate at the Laurel Street extension. The Forest Grove Transportation Plan classifies 23rd/24th Avenue as a Collector roadway. The proposed amendment will not result in a change to the functional classification of 23rd/24th Avenue. Therefore, the Planning Commission determines the proposed amendment will not significantly affect 23rd/24th Avenue.

Finding: The Planning Commission finds the proposed amendments would result in a modification to the proposed Laurel Street extension. Laurel Street is designated as a Collector roadway in the Forest Grove Transportation System Plan. The current Forest Grove Transportation System Plan shows an extension from its current terminus at the Portland and Western Railroad tracks to north of the 26th Avenue extension. The proposed amendment would terminate Laurel Street at the re-aligned 26th Avenue reducing its length by approximately 1,500 feet. While this change affects local traffic circulation, the Planning Commission determines, it does not result in a "significant affect" to a planned transportation facility since the functional classification of Laurel Street will not change.

Finding: The Planning Commission finds the Oregon Transportation Planning Rule states that an amendment significantly affects a transportation facility if it changes the standards implementing a functional classification system. The Function classification standards are contained in the TSP (Section 8.6.1) and Development Code (Article 8, Section 17.8.610, Table 8-8). The standard for a collector street is two vehicle travel lanes, a center median/turn lane, and bike lanes with 48 feet of pavement. The standard for a local industrial street is two lanes with 40 feet of pavement including parking. The proposed amendments do not change standards implementing a functional classification system.

Finding: The Planning Commission finds the Oregon Transportation Planning Rule states that an amendment significantly affects a transportation facility if it results in any of the following at the end of the planning period identified in the adopted TSP.

- Generate types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility.
- Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or
- Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Finding: Based on the traffic analysis technical memorandum and the 2040 Intersection Operations Analysis Worksheets, prepared by Kittelson and Associates, dated June 9, 2002, and submitted by the applicant, the Planning Commission determines the TSP amendments do not significantly affect a state transportation facility or facility on the regional highway network contained in the Regional Transportation Plan. The traffic analysis shows that affected intersections including the Porter Road and Oregon Highway 47, Martin Road and Oregon Highway 47, 24th Avenue and Oregon Highway 47, and Pacific Avenue and Quince Street (Oregon Highway 47) will operate at or above minimum acceptable level of service of LOS D for City of Forest Grove owned facilities (26th Avenue extension, Oak Street and Oregon Highway 47), Level of Service E for Washington County owned facilities (Porter Road and Martin Road), and vehicle to capacity ratio of 0.99 for Oregon Department of Transportation Facilities 0.99 (Oregon Highway 47 and Oregon Highway 8).

Finding: The Planning Commission finds that except for Oak Street the proposed amendment will not generate types or levels of travel that are inconsistent with the functional classification of any existing or planned transportation facility. The Planning Commission further finds mitigation is not required since traffic will be diverted from the Oak Street/Highway 47/Porter Road intersection to the Martin Road roundabout.

Finding: The Planning Commission finds the proposed amendment will result in a change to access if Oak Street is re-designated from a Collector roadway to a local, private roadway and the Oak Street with Highway 47 intersection is closed or travel is restricted. Although access to property from Oak Street will change due to the amendment the traffic analysis prepared by Kittelson and Associates indicates other nearby intersections will continue to meet acceptable level of service criteria. Specific impacts to nearby intersections will be reviewed further when an application for development is submitted.

Finding: The Planning Commission finds the traffic analysis prepared by Kittelson and Associates demonstrates the proposed amendments will not degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan. Performance standards are applied based on type of facility and jurisdiction. The Forest Grove Transportation System Plan establishes a minimum level of service standard of LOS D for City-owned facilities. The Washington County Transportation System Plan establishes an acceptable level of service standard of LOS E for County-owned facilities not located within Regional Centers, Town Centers, Main Streets, Stations Communities, and Rural Areas. The Oregon Department of Transportation has a minimum acceptable level of service standards based on a vehicle-to-capacity-ratio of 0.99 for state-owned facilities. The traffic analysis prepared by Kittelson and Associates shows that none of the street intersections potentially affected by the amendments will result in intersections operating below minimum acceptable level of service standards.

Pursuant to OAR 660-012-0060(2), if a local government determines that a proposed amendment will have a significant effect, approval of the proposal requires measures that will ensure that

allowed land uses are consistent with the identified function, capacity, and performance standards of the facility as measured at the end of the planning period in the adopted TSP. The local government must:

- Adopt measures that ensure that the allowed land uses are consistent with the planned function, capacity, and performance standards of the affected facility;
- Amend the TSP or comprehensive plan to provide transportation system improvements sufficient to support the proposed land uses and/or;
- Amend the TSP to modify the function, capacity, or performance standards of a non-state facility. An example would be changing the functional classification of roadway and/or its level of service standard.
- Require transportation system management measures or transportation improvements, including a timeframe for implementation, as a condition of development approval.

Finding: The Planning Commission finds the amendments will result in a significant impact to Oak Street if redesignated from a Collector Street to a local, private street.

Finding: The Planning Commission finds the area affected by the Transportation System Plan amendments is designated General Industrial on the Forest Grove zoning map and comprehensive plan map. The uses allowed by the General Industrial zoning are consistent with re-designating Oak Street as local, private street since traffic can be routed to the Oregon Highway 47 and Martin Road intersection. Based on the traffic analysis prepared by Kittelson and Associates the projected 2040 PM Peak Hour vehicle-to-capacity ratio is 0.89. With the proposed amendment the projected 2040 PM Peak Hour vehicle-to-capacity ratio increase to 0.96. This is below the minimum acceptable vehicle-to-capacity ratio of 0.99. Since the traffic analysis indicates performance standards will be met adoption of measures mitigating impacts are not required. Specific impacts to the street network, including the state highway system, will be assessed further when an application for development is submitted for City approval.

Forest Grove Transportation System Plan Findings

Goal 1: Develop and maintain a balanced transportation system that provides travel choices and reduces the number of trips by single occupant vehicles.

Policy e. Encourage local employment and commercial opportunities to reduce the number of locally generated regional work and shopping trips.

Finding: The Planning Commission finds the area affected by the proposed Transportation System Plan Amendment is designated General Industrial on the zoning map and comprehensive plan maps. The proposed amendment is consistent with encouraging local employment opportunities by maximizing developable site area for large scale/large lot industrial development including manufacturing, food processing, call centers, research and development activities, warehouses, wholesale operations, and information related uses. Encouraging local employment opportunities through a supportive transportation network Establishing a future street network supportive of employment opportunities may reduce regional work trips

Goal 2: Develop and maintain a transportation system that reduces the length of travel and limits congestion.

Policy a. Enhance street system connectivity wherever practical and feasible.

Policy b. Maintain traffic flow and mobility on arterial and collector roadways.

Finding: The Planning Commission finds the proposed amendment reduces street system connectivity due to fewer street intersections and longer block lengths if Oak Street is redesignated from a Collector street to a local private roadway. However, connectivity to Highway 47 will be improved since traffic will be directed to the planned Highway 47, Martin Road, and 26th Avenue roundabout. With this improvement a crossing at Highway 47 and Oak Street will no longer be necessary. This will result in safer access to Highway 47.

Finding: The Planning Commission determines removing the Oak Street and Highway 47 intersection will maintain traffic flow and mobility on Highway 47 which is designated as a Major Arterial in the Forest Grove Transportation System Plan by reducing opportunities for vehicle conflicts and potential traffic accidents.

Goal 3: Develop and maintain a transportation system that is safe.

Policy a. Safe and secure pedestrian and bicycle ways shall be designed between parks and other activity centers.

Finding: The Planning Commission finds the preferred alignment for the Council Creek Regional Trail adopted into the Forest Grove Transportation System Plan follows the Portland and Western Railroad Corridor and Oak Street north to Highway 47. The Tualatin Valley Scenic Bikeway also follows Oak Street. Oak Street is currently substandard with no sidewalks, no bike lanes or improved shoulders present north of the Portland and Western Railroad Corridor. Pedestrians and bicyclists must share travel lanes with vehicles.

Goal 4: Design and construct transportation facilities in a manner that enhances the livability of Forest Grove.

Policy a. Maintain the livability of Forest Grove through proper location and design of transportation facilities.

Policy b. Increase the health and physical well-being of citizens by providing safe and convenient opportunities for walking and bicycling.

Policy c. Protect residential neighborhoods from excessive through traffic and travel speeds while providing reasonable access to and from residential areas.

Policy d. Provide a seamless and coordinated transportation system that is barrier-free, provides affordable and equitable access to travel choices, and serve the needs of all people and businesses, including people with low income, children, seniors and people with disabilities.

Finding: The Planning Commission finds the transportation system is intended to enhance the livability of Forest Grove residents, businesses, workers and visitors by providing access to properties, reducing traffic conflicts and providing alternative routes of travel to destinations. Since the proposed TSP amendment does not eliminate the 26th Avenue extension and continues 26th Avenue to Highway 47 at planned Martin Road roundabout, opportunities for access to property will be provided as envisioned in the adopted Transportation System Plan. In addition, the 26th Avenue extension will provide an alternative east/west route of travel through the north-central part of Forest Grove separate from Pacific Avenue.

Finding: The Planning Commission finds the proposed Transportation System Plan amendments include routing the Council Creek Regional Trail along Oak Street from the Portland and Western Railroad Corridor to the realigned 26th Avenue connection across the Highway 47 and Martin Road roundabout and along the northside of Highway 47. This realignment will provide a

seamless, safe and convenient pedestrian and bicycling connection from the Portland and Western Railroad corridor to the Martin Road roundabout consistent with designing transportation facilities in a manner that enhances the livability of Forest Grove. This connection will also serve the residential area south of the railroad corridor and west Oak Street consistent with Policy b. and Policy d.

Goal 5: Promote the development of Forest Grove, the state, and the national economy through the efficient movement of people, goods, services, and information in a safe manner.

Policy d. Provide transportation facilities that support land development that is consistent with the Comprehensive Plan.

Finding: The Planning Commission finds the area affected by the Transportation System Plan is designated General Industrial on the Forest Grove Comprehensive Plan Map and Zoning Map. The proposed changes to the future street network support land development that is consistent with the Comprehensive Plan Map by preserving land for large lot industrial development. The current future street network in the Transportation System Plan for the area bisects the land designated for industrial development due to the extension of 26th Avenue from its current terminus to Oak Street, the Laurel Street extension north of the Portland and Western Railroad corridor to just south of Highway 47, and the 23rd Avenue/24th Avenue extension as shown in the Transportation System Plan (Figure 8-1 and Figure 8-7).

Goal 6: Establish and maintain a context sensitive set of transportation design and development regulations.

Policy a. Streets should be designed to support their intended users.

Policy d. Promote context-sensitive transportation facility design, which fits the physical context, responds to environmental resources, and maintain safety and mobility.

Finding: The Planning Commission finds the modified future street network will be constructed to the Collector street standards as shown in the Transportation System Plan (Figure 8-3). The complete cross-section includes sidewalks and bike lanes supporting these travel modes in addition to auto and truck traffic.

Finding: The Planning Commission finds the modified future street network fits the physical context of the area which is flat and largely vacant. This physical context allows for alternative roadway alignments to maintain safety and mobility through the area.

Goal 7: Provide a transportation system that meets present needs without compromising the ability of future generations to meet their needs.

Policy a. Encourage an energy efficient transportation system.

Policy b. Increase the use of walking and bicycling for all travel purposes.

Finding: The Planning Commission finds the Forest Grove Transportation System Plan includes performance measures related to reducing climate change impacts due to the transportation network (Transportation System Plan Table 2-1). One performance measure is reducing vehicle miles traveled by 10% compared to 2010. The TSP notes that commuting to jobs outside the city contributes to vehicle miles traveled. The TSP also notes a more completed bicycle and pedestrian network will help to decrease per capita vehicle miles traveled and the associated transportation-related emissions to meet the vehicle miles traveled reduction goal. The transportation network included in the amendments will maximize employment opportunities in

the area by preserving land for large scale industrial development. In addition, the transportation network included in the amendments will add to the bicycle and pedestrian network.

Goal 8: Provide transportation performance measures set and maintained by the City.

Policy a. A minimum intersection level of service standard shall be set for the City of Forest Grove. All public facilities under the city's jurisdiction shall be designed to meet this standard. (Note: the City's adopted level of service (LOS) standard is LOS D).

Finding: The Planning Commission finds that the traffic analysis technical memorandum and the 2040 Intersection Operations Analysis Worksheets, prepared by Kittelson and Associates, dated June 9, 2002, and submitted by the applicant, demonstrates this TSP amendment does not significantly affect a state transportation facility or facility on the regional highway network contained in the Regional Transportation Plan. The traffic analysis shows that affected intersections including the Porter Road and Oregon Highway 47, Martin Road and Oregon Highway 47, 24th Avenue and Oregon Highway 47, and Pacific Avenue and Quince Street (Oregon Highway 47) will operate at or above minimum acceptable level of service of LOS D for City of Forest Grove owned facilities (26th Avenue extension, Oak Street and Oregon Highway 47), Level of Service E for Washington County owned facilities (Porter Road and Martin Road), and vehicle to capacity ratio of 0.99 for Oregon Department of Transportation Facilities 0.99 (Oregon Highway 47 and Oregon Highway 8).

Goal 9: Develop a transportation system that is consistent with the City's Comprehensive Plan and adopted state and regional plans.

Policy a. Coordinate and cooperate with adjacent jurisdictions and other transportation agencies to develop transportation projects that benefit the City of Forest Grove and the region as a whole.

Policy b. Work collaboratively with other jurisdictions and agencies so the transportation system can function as one system.

Finding: The Planning Commission finds the applicant conducted outreach to other transportation agencies including the Oregon Department of Transportation and Washington County and discussed the transportation amendments and benefits to the City of Forest Grove and the region if the transportation system network is amended to preserve land for large scale, large lot development.

Goal 10: Efficiently use funding sources to implement transportation system improvement projects recommended in the TSP.

Policy a. Provide a cost-effective transportation system where the public, land use development and users pay their respective share of the system's costs proportional to their respective demands placed on the multimodal system.

Policy c. Ensure maintenance of the transportation system as a priority.

Finding: The Planning Commission finds the Washington County Transportation Development Tax will apply to development in the Oak Street Industrial Area. The Transportation Development Tax provides a revenue stream for transportation projects on the City's project list. The proposed transportation network will maximize development potential of the area by preserving large lots for large scale industrial development. This will in turn maximize revenue potential for transportation projects.

Finding: The Planning Commission finds the estimated annual cost of maintaining roadways under the jurisdiction of Forest Grove was estimated at \$1.1 million which is paid for by gas tax revenues from the state and county (Transportation System Plan Section 10.3.2). Costs associated with maintaining the transportation network is influenced by length of roadway segment, construction material, types of vehicles using the facility and traffic volume. Reducing the length of Laurel Street, combining the 26th Avenue extension with the 23rd Avenue/24th Avenue extension and redesignating Oak Street from a public collector to private local roadway could reduce overall maintenance costs for the transportation network in the Oak Street area.

Forest Grove Comprehensive Plan Findings

Industrial and Employment Objective 3: Ensure the availability of at least one large industrial tract comprising at least 50 gross acres in land area.

Finding: The Planning Commission finds the Woodfold ownership in the Oak Street area includes six parcels with a total land area of approximately 71.3 acres. These parcels could be consolidated into larger parcels to accommodate larger industrial uses. Another vacant parcel designated industrial is the TTM property at Mountain View Lane and Heather Street. This parcel is zoned Light Industrial and totals approximately 35 acres. The Woodfold property provides the opportunity to create the largest industrial tract in the City if parcels are consolidated and not bisected by streets. The proposed TSP amendment realigning streets supports Comprehensive Plan Industrial and Employment Objective 3 to ensure the availability of at least one large industrial tract comprising at least 50 gross acres in land area.

Tax Lot	Gross Acres
1N332C000400	18.35
1N332C000500	18.48
1N332C000600	6.21
1N332C000700	20.04
1N332C000900	4.08
1N331DA07800	4.1
Total	71.26

Industrial and Employment Objective 9: Coordinate the designation of industrial and other land use activities in the Comprehensive Plan with the Transportation Element.

Finding: The Planning Commission finds the proposed Transportation System Plan amendments take into account the General Industrial land use designation assigned to the Oak Street. The amendments also recognize the need for at least one large industrial tract in the City. For these reasons the transportation element of the Comprehensive Plan is coordinated with the land use element including the designation of industrial land use activities in the Comprehensive Plan.

Industrial and Employment Objective 10: Access to industrial sites shall be from arterials or local industrial streets, oriented away from residential areas wherever feasible.

Finding: The Planning Commission finds access to the Oak Street area is currently provided from Highway 47 via Oak Street. Highway 47 is designated as a Major Arterial in the Forest Grove Comprehensive Plan. Future access also currently planned via an extension of 26th Avenue and an extension of 23rd Avenue/24th Avenue. 26th Avenue and 23rd/24th Avenue are designated as collector roadways in the Forest Grove Transportation System Plan. Both 26th Avenue and 23rd/24th Avenue serve residential areas west of the Oak Street area.

The proposed amendments would re-designate Oak Street from a collector roadway intersection with Highway 47 to a local private street with limited or no access to Oak Street. Access to the Oak Street area would be provided via the realigned 26th Avenue extension to the future Highway 47 at Martin Road roundabout. As such, access to the Oak Street area would be from a Major Arterial street (Highway 47) consistent with Industrial and Employment Objective 10. In addition, allowing access to the area from the Martin Road roundabout will orient traffic away from residential areas also consistent with Industrial and Employment Objective 10.

Oregon Highway Plan Findings

Policy 1H, Action 1H.2.c: Access Management and Connections

1. Limit the number of public approaches based on the roads function and maintenance of the capacity for regional and statewide transportation circulation. In most cases, connections will be limited only to state highways but in certain cases connections may be to local arterials.

Finding: The Planning Commission finds the applicant's narrative and accompanying transportation technical memorandum and intersection operations analysis goes into detail about possible impacts arising from the proposed Transportation System Plan amendments. The analysis indicates the proposed amendments will not have a significant effect state highway bypass and by limiting access into and out of the area at the Highway 47 and future Martin Road roundabout could improve operation of the bypass.

Metro Regional Framework Plan Findings

Finding: The Planning Commission finds the Metro Regional Framework Plan integrates Metro's land use planning policies and requirements. The Framework Plan includes policies for planning including transportation planning. The policies address intergovernmental coordination, local street design, regional pedestrian access and connectivity and bicycle connectivity. The policies aim to implement the Region 2040 growth concept including providing transportation facilities that support a balance of jobs and housing. Policy 2.13.1 states in part, "it is the policy of the Metro Council to plan local street systems to complement planned land uses and to reduce dependence on major streets for local circulation. The proposed transportation system plan amendments support Policy 2.13.1 by reducing the need to use Highway 47 for localized traffic circulation since 26th Avenue would be extended to the Highway 47/Martin Road roundabout providing east/west traffic circulation as envisioned in the current Transportation System Plan.

Finding: The Planning Commission finds the Metro Regional Framework Plan Transportation Chapter in Policy 2.22.1 states it is the policy of the Metro council to plan for a continuous regional network of safe and convenient bikeways connected to other transportation modes and local bikeway systems, consistent with regional design guidelines. The proposed Transportation System Plan amendments are consistent with Policy 2.22.1 since the Council Creek Regional Trail will continue through the Oak Street area following Laurel Street and the realigned 26th Avenue extension to Martin Road. Although the trail alignment will not be on Oak Street as envisioned in the Council Creek Regional Trail Master Plan and Forest Grove Transportation System Plan as amended by Ordinance 2016-02, a safe and convenient connection serving the Oak Street area will remain.

Metro Regional Transportation Functional Plan Findings

Finding: The Planning Commission finds the Metro Region 2040 Growth Concept, partially implemented through the Metro Regional Transportation Plan, has sixed desired outcomes. Outcomes include: equity, vibrant communities, economic prosperity, safe and reliable transportation, clean air and water and climate leadership. The outcome most applicable to the proposed amendments to the Forest Grove Transportation System Plan is safe and reliable transportation where people have safe and reliable transportation choices that enhance their quality of life.

Finding: The Planning Commission finds the Regional Transportation Functional Plan addresses transportation system design, development and update of transportation system plans, transportation project development, regional parking management, amendment of comprehensive plans, and compliance procedures. The portion of the Regional Transportation Functional Plan most applicable to the proposed amendments to the Forest Grove Transportation System Plan is development and update of transportation system plans. The provision requires that each city and county shall update its TSP to incorporate regional and state transportation needs identified in the 2035 RTP and its own transportation needs. This includes identification of facilities that exceed deficiency thresholds and operating standards in the Regional Transportation Functional Plan. The applicant's narrative and traffic analysis prepared by Kittelson and Associates demonstrates the proposed amendments to the Forest Grove Transportation System Plan will not result in any affected street or intersection operating below minimum acceptable standards.

Finding: The Planning Commission finds that Title 5 of the Regional Transportation Functional Plan in Section 3.08.510(A) that when a city or county proposes to amend its comprehensive plan or its components, it shall consider strategies in Section 3.08.220(A) as part of the analysis required by Oregon Administrative Rules Chapter 660-012-0060. The Forest Grove Transportation System Plan is a component of the Forest Grove Comprehensive Plan. The applicant prepared an analysis demonstrating compliance with Oregon Administrative Rules Chapter 660-012-0060. No additional analysis is required to demonstrate compliance with the Regional Transportation Function Plan since Section 3.08.510(E) states this section does not apply to city or county transportation projects that are financed locally and would be undertaken on local facilities. All roadway projects subject to the proposed Forest Grove Transportation System Plan amendments are local facilities and will be funded through local transportation system development charges or developer exactions.

Finding: The Planning Commission finds Title 6 of the Regional Transportation Functional Plan provides authority to Metro to review transportation system plan amendments. Metro was notified of the proposed amendments more than 35-days prior to the scheduled Planning Commission hearing.

Phil Ruder
Planning Commission Chair

Date