



## TUALATIN CITY COUNCIL MEETING

MONDAY, FEBRUARY 14, 2022

JUANITA POHL CENTER  
8513 SW TUALATIN ROAD  
TUALATIN, OR 97062

Mayor Frank Bubenik  
Council President Nancy Grimes  
Councilor Valerie Pratt                      Councilor Bridget Brooks  
Councilor Maria Reyes                      Councilor Cyndy Hillier  
Councilor Christen Sacco

---

To the extent possible, the public is encouraged to watch the meeting live on local cable channel 28, or on the City's website.

For those wishing to provide comment during the meeting, there is one opportunity on the agenda: Public Comment. Written statements may be sent in advance of the meeting to Deputy City Recorder Nicole Morris up until 4:30 pm on Monday, February 14. These statements will be included in the official meeting record, but not read during the meeting.

For those who would prefer to make verbal comment, there are two ways to do so: either by calling in using the number below or entering the meeting using the zoom link and writing your name in chat. As always, public comment is limited to three minutes per person.

Phone: +1 669 900 6833

Meeting ID: 861 2129 3664

Password: 18880

Link: <https://us02web.zoom.us/j/86121293664?pwd=SS9XZUZyT3FnMk5rbDVKN2pWbnZ6UT09>

---

### Work Session

- 1. 5:30 p.m. (20 min) – Boones Ferry Corridor Sidewalk and Bike Lane Project Update.** The Tualatin Moving Forward program team are working on preliminary design of a roadway improvement project including sidewalks and bike lanes along Boones Ferry Road from Tualatin-Sherwood Road south to Norwood Road. The program team has been reaching out to the community to listen and learn what they would like to see accomplished by this transportation project. Tonight's presentation will cover what we've heard about issues people experience in the corridor, preliminary design of a recommended project to address these issues, and how we intend to inform the community about the upcoming project.
- 2. 5:50 p.m. (45 min) – 2021 Economic Snapshot and Prosperity Planning.** Staff will provide a presentation of the Economic Snap Shot and future prosperity planning for the City. The Economic Snap Shot and staff report provide a detailed picture of Tualatin's local

economy at the year end of 2021. Staff will also provide current and planned work plans for future economic development work in the Leveton, Basalt Creek, and Core Areas.

- 3. 6:35 p.m. (25 min) – Council Meeting Agenda Review, Communications & Roundtable.** Council will review the agenda for the February 14<sup>th</sup> City Council meeting and brief the Council on issues of mutual interest.

---

## **7:00 P.M. CITY COUNCIL MEETING**

### **Call to Order**

### **Pledge of Allegiance**

### **Moment of silence for those who have lost their lives to COVID-19**

### **Announcements**

1. 2021 Employee of the Year: Tom Steiger

### **Public Comment**

*This section of the agenda allows anyone to address the Council regarding any issue not on the agenda, or to request to have an item removed from the consent agenda. The duration for each individual speaking is limited to 3 minutes. Matters requiring further investigation or detailed answers will be referred to City staff for follow-up and report at a future meeting.*

### **Consent Agenda**

*The Consent Agenda will be enacted with one vote. The Mayor will ask Councilors if there is anyone who wishes to remove any item from the Consent Agenda for discussion and consideration. If you wish to request an item to be removed from the consent agenda you should do so during the Citizen Comment section of the agenda.*

1. Consideration of Approval of the Work Session and Regular Meeting Minutes of January 24, 2022
2. Consideration of Approval of a New Liquor License Application for Bridge City Golf Inc dba Envision Golf
3. Consideration of **Resolution No. 5597-22** Authorizing the City Manager to Execute Deeds Acquiring Easements for the SW 65th / Nyberg Sanitary Sewer Trunk Main Rehabilitation Project
4. Consideration of **Resolution No. 5598-22** Authorizing the City Manager to Execute Deeds Acquiring Easements for the Blake Street to 115th Avenue Waterline Project
5. Consideration of **Resolution No. 5600-22** Authorizing the City Manager to Execute Deeds Granting Easements to Washington County for the Tualatin-Sherwood Road Widening Project
6. Consideration of **Resolution No. 5601-22** Authorizing Personnel Services Updates for Non-Represented Employees on Temporary Schedule A for FY 2021-22



- [7.](#) Consideration of **Resolution No. 5602-22** Authorizing the City Manager to Execute an Intergovernmental Agreement to Provide Municipal Court Assistance to the City Of Tigard
- [8.](#) Consideration of **Resolution No. 5604-22** Authorizing the City Manager to enter into an Intergovernmental Agreement (IGA) with the Oregon Department of Land Conservation and Development (DLCD) to Provide the City with Consultant Assistance for a Housing Implementation Plan

### **Special Reports**

- [1.](#) Department of Land Conservation and Development (DLCD) Climate Friendly and Equitable Communities Rule Making
- [2.](#) Library Strategic Planning

### **Public Hearings - Quasi-Judicial**

- [1.](#) Consideration of a Plan Map Amendment (PMA) to Rezone the Tualatin Heights Apartments Site Located at 9301 SW Sagert Street (Tax Map 2S123DC, Tax Lot 600) from the Medium Low Residential (RML) Zoning District to the Medium High Density Residential (RMH) Zoning District.

This item was continued to this date by the City Council at its January 24, 2022 meeting.

- [2.](#) Consideration of **Ordinance No. 1465-22** Requesting Annexation of 10.6 Acres of Land Located 11345 SW Herman Road (Tax Map 2S122D000550) into the City of Tualatin and Simultaneously Withdrawing the Territory from the Washington County Enhanced Sheriff Patrol District and Urban Roads Maintenance District (File No. ANN 21-0002)

### **Items Removed from Consent Agenda**

*Items removed from the Consent Agenda will be discussed individually at this time. The Mayor may impose a time limit on speakers addressing these issues.*

### **Council Communications**

### **Adjournment**

---

Meeting materials, including agendas, packets, public hearing and public comment guidelines, and Mayor and Councilor bios are available at [www.tualatinoregon.gov/council](http://www.tualatinoregon.gov/council).

Tualatin City Council meets are broadcast live, and recorded, by Tualatin Valley Community Television (TVCTV) Government Access Programming. For more information, contact TVCTV at 503.629.8534 or visit [www.tvctv.org/tualatin](http://www.tvctv.org/tualatin).

In compliance with the Americans with Disabilities Act, this meeting location is accessible to persons with disabilities. To request accommodations, please contact the City Manager's Office at 503.691.3011 36 hours in advance of the meeting.



*City of Tualatin*

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council  
**THROUGH:** Sherilyn Lombos, City Manager  
**FROM:** Mike McCarthy, Principal Transportation Engineer  
**DATE:** February 14, 2022

---

**SUBJECT:**

Tualatin Moving Forward Boones Ferry Corridor (Tualatin-Sherwood Rd to Norwood Rd) Sidewalk and Bike Lane Project Community Outreach and Conceptual Design Update

**RECOMMENDATION:**

Staff recommends Council receive this update on the Boones Ferry Corridor project and provide appropriate feedback.

**EXECUTIVE SUMMARY:**

Staff and the Tualatin Moving Forward program team are working on preliminary design of a roadway improvement project including sidewalks and bike lanes along Boones Ferry Road from Tualatin-Sherwood Road south to Norwood Road. The program team has been reaching out to the community to listen to the people and learn what they would like to see accomplished by this transportation project. The attached Powerpoint to be reviewed in the Work Session summarizes:

- What we've heard from the people about issues they experience in the corridor
- Preliminary design of a recommended project to address these issues.
- How we intend to inform the community about the upcoming project

**FINANCIAL IMPLICATIONS:**

Funds for design and construction of this project are available in the Transportation Project Fund (the Tualatin Moving Forward bond fund).

---

**ATTACHMENTS:**

- Powerpoint Presentation: [Boones Ferry Road Sidewalk and Bike Lane Project](#)



# **Boones Ferry Road Sidewalk and Bike Lane Project**

**City Council**  
**February 14, 2022**

# Defining the Project

**2017**

The idea came from the community

**2018**

Project was featured in Measure 34-282, approved by voters

**2020**

Community confirmed the project should focus on filling in the gaps for walking and cycling

**2021**

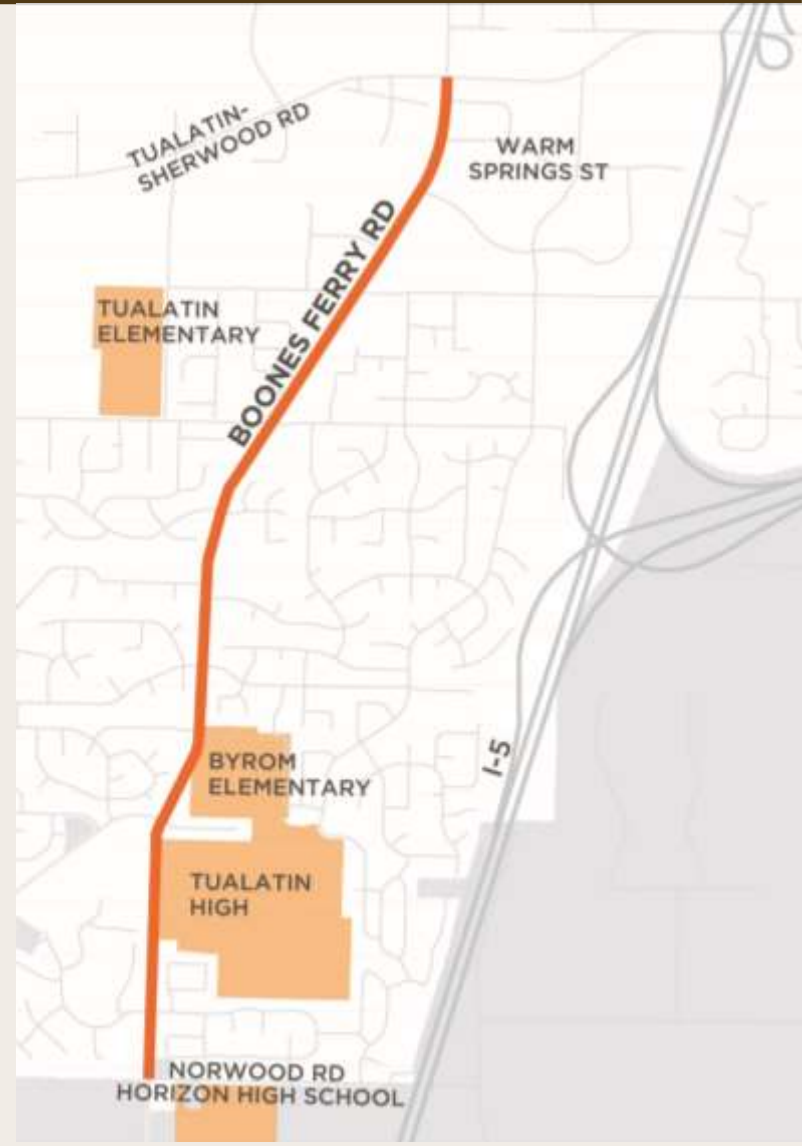
Community weighed in on specific needs and priorities

**2022**

Final design and phase one construction

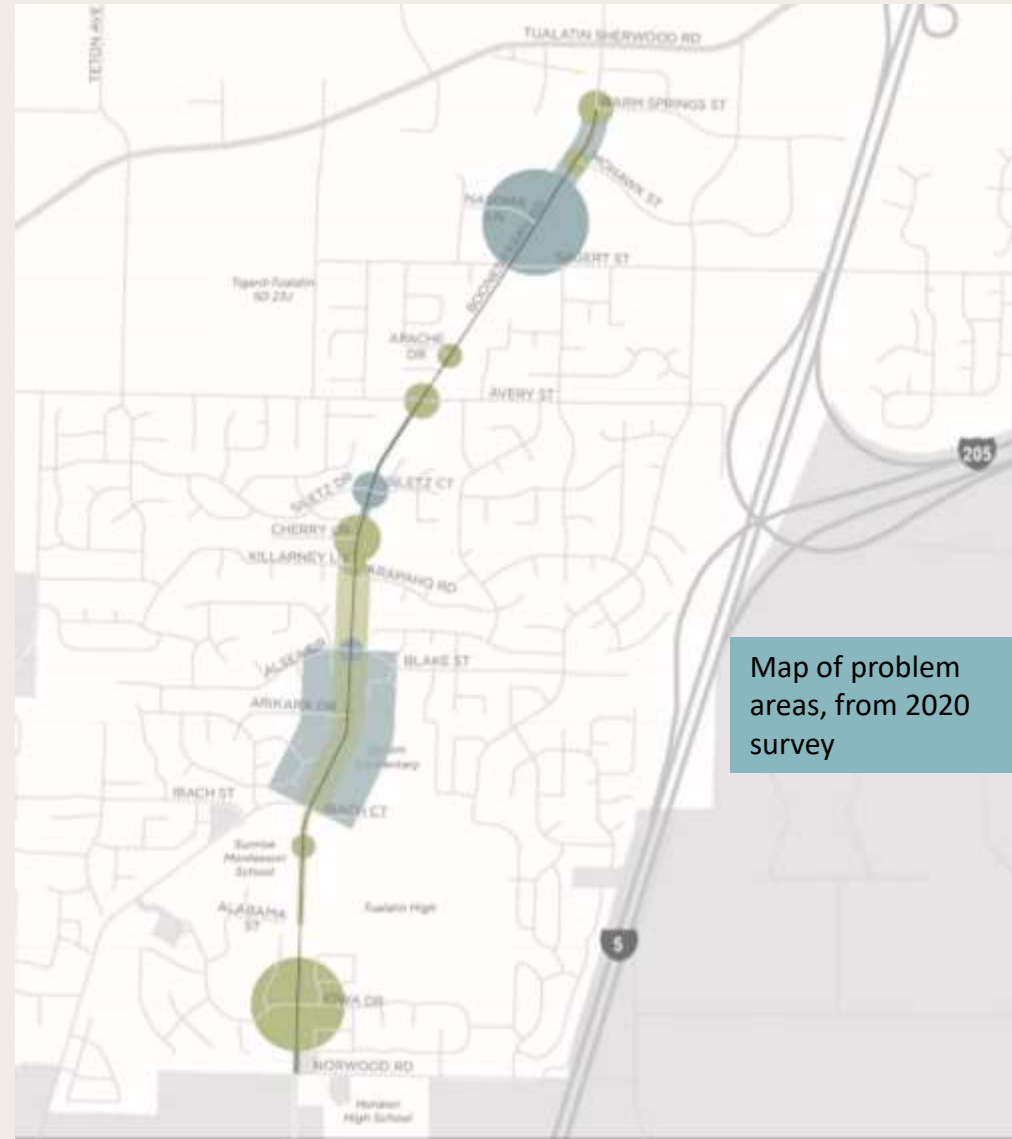
**2023**

Phase two construction



# What we heard

- Boones Ferry Rd is an important place in Tualatin: it connects neighborhoods, parks, schools, and cities.
- People want to invest in making it better and safer.
- Incomplete sidewalks and bike lanes throughout the corridor create problems and make the corridor less safe for all the people who walk, bike, and take transit.





# What we heard

People love the paths that wind through trees and away from the traffic, but many are in disrepair.



## MAP OF NEEDS

- LEGEND**
- Bike Lane Gap
  - Curb, Sidewalk, and Driveway Deficiencies
  - Sidewalk Gap
  - Path Not Navigable
  - Inaccessible Corner Ramps
  - ↔ Enhanced Crossing Gaps
  - TriMet Transit Stop
  - TriMet Transit Stop (Non-ADA Compliant)
  - School Bus Stop
- CONDITIONS OUTSIDE PROJECT BOUNDARY
- Bike Lane Gap
  - Curb, Sidewalk, and Driveway Deficiencies



# What we heard

Sidewalks are missing, severely damaged, or don't meet ADA requirements



## MAP OF NEEDS

- LEGEND**
- Bike Lane Gap
  - Curb, Sidewalk, and Driveway Deficiencies
  - Sidewalk Gap
  - Path Not Navigable
  - Inaccessible Corner Ramps
  - ↔ Enhanced Crossing Gaps
  - TriMet Transit Stop
  - TriMet Transit Stop (Non-ADA Compliant)
  - School Bus Stop
- CONDITIONS OUTSIDE PROJECT BOUNDARY
- Bike Lane Gap
  - Curb, Sidewalk, and Driveway Deficiencies





# What we heard

Bike lanes end unexpectedly, or are too narrow in many locations



## MAP OF NEEDS

- LEGEND**
- Bike Lane Gap
  - Curb, Sidewalk, and Driveway Deficiencies
  - Sidewalk Gap
  - Path Not Navigable
  - Inaccessible Corner Ramps
  - ↔ Enhanced Crossing Gaps
  - TriMet Transit Stop
  - TriMet Transit Stop (Non-ADA Compliant)
  - School Bus Stop
- CONDITIONS OUTSIDE PROJECT BOUNDARY
- Bike Lane Gap
  - Curb, Sidewalk, and Driveway Deficiencies



# What we heard

People want more safe, enhanced crosswalks



## MAP OF NEEDS

- LEGEND**
- Bike Lane Gap
  - Curb, Sidewalk, and Driveway Deficiencies
  - Sidewalk Gap
  - Path Not Navigable
  - Inaccessible Corner Ramps
  - ↔ Enhanced Crossing Gaps
  - TriMet Transit Stop
  - TriMet Transit Stop (Non-ADA Compliant)
  - School Bus Stop
- CONDITIONS OUTSIDE PROJECT BOUNDARY
- Bike Lane Gap
  - Curb, Sidewalk, and Driveway Deficiencies







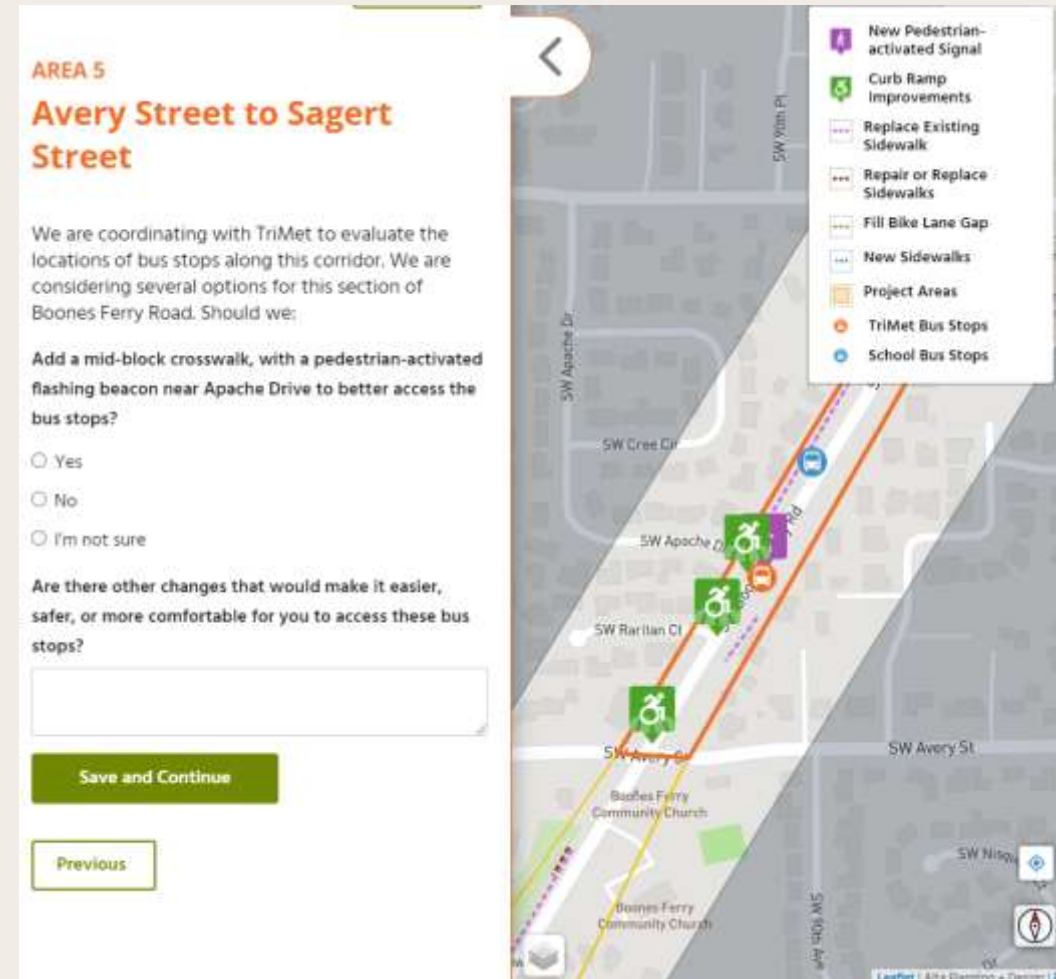
People are frustrated by the volume of trucks and cars, especially when they speed and don't stop at crosswalks.



SW Avery & Boones Ferry Road

We asked: **How should we prioritize the investment?** People weighed in:

- Attendees of in-person events: **76**
- Total project listserv subscribers: **190**
- Total number of survey respondents: **322**



**AREA 5**  
**Avery Street to Sagert Street**

We are coordinating with TriMet to evaluate the locations of bus stops along this corridor. We are considering several options for this section of Boones Ferry Road. Should we:

Add a mid-block crosswalk, with a pedestrian-activated flashing beacon near Apache Drive to better access the bus stops?

Yes  
 No  
 I'm not sure

Are there other changes that would make it easier, safer, or more comfortable for you to access these bus stops?

**Save and Continue**

**Previous**

**Legend:**

- New Pedestrian-activated Signal
- Curb Ramp Improvements
- Replace Existing Sidewalk
- Repair or Replace Sidewalks
- Fill Bike Lane Gap
- New Sidewalks
- Project Areas
- TriMet Bus Stops
- School Bus Stops



# We're an attractive risk!

Based on community input, we recommend using additional available program funding for this project

*Outcome: to complete the entire 3-mile corridor*



# The Investments

Announcing the project:

- \$7m investment in making Boones Ferry Rd a safe corridor for Tualatin.
- Improvements throughout the 3-mile-long corridor that, altogether, will create a safe, continuous experience.

## Planned Project

- Fill bike lane gap
- Replace existing sidewalk. Reconstruct driveway aprons if needed to meet ADA standards.
- Replace existing asphalt path with concrete sidewalk
- Interim improvement (re-stripe existing street to provide northbound bike lane)
- Possible right-turn improvements
- Bus stop improvements
- Bus stop location change
- Reconstruct corner ramps to meet standards for accessibility
- Install new pedestrian-activated flashing signal and crosswalk
- New curb extension

Red number = 2022 Construction  
Blue number = 2023 Construction

\*Throughout: Modify striping as needed to create continuous buffered bike lanes on Boones Ferry Road

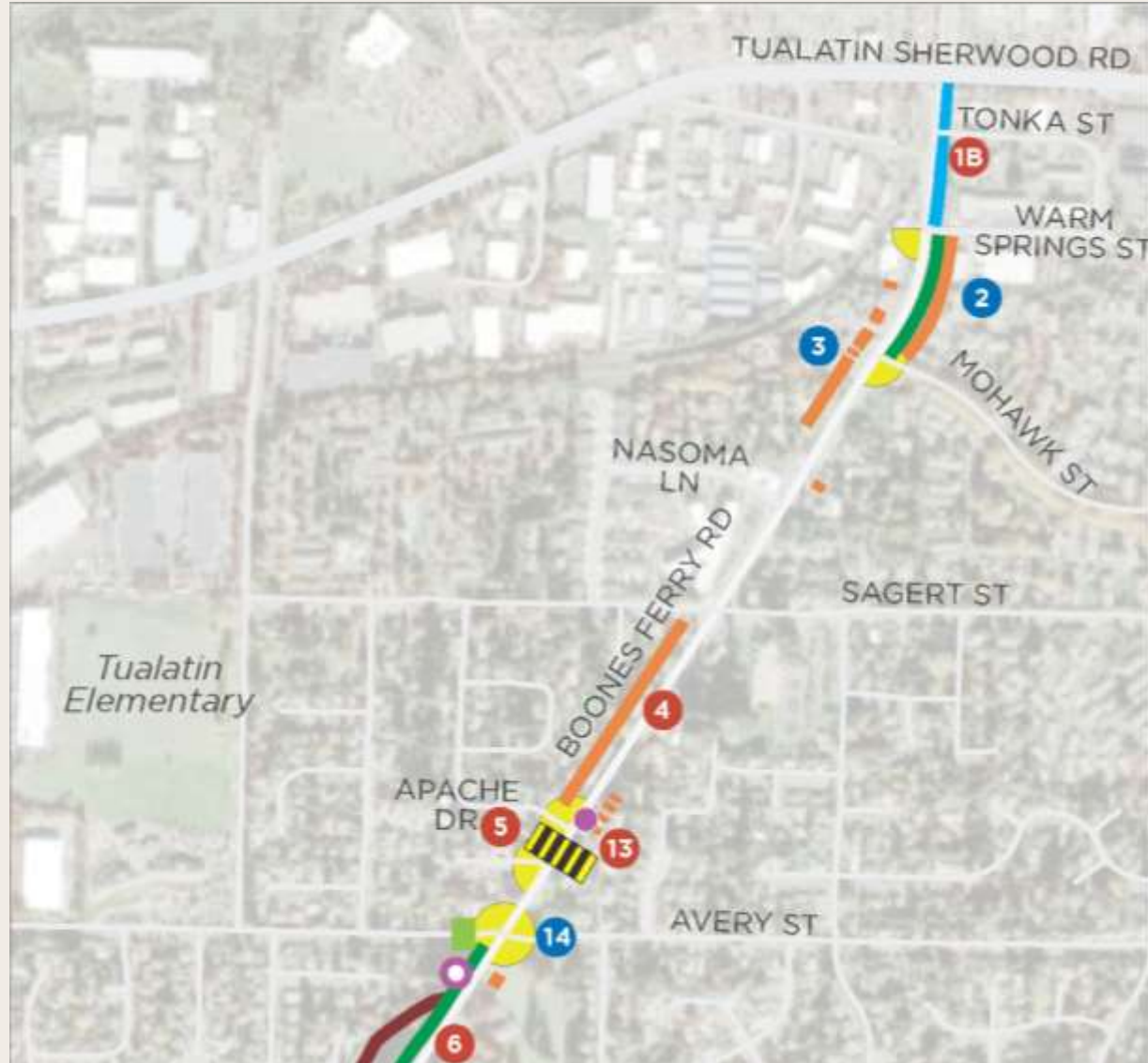




## Planned Project

- █ Fill bike lane gap
- █ Replace existing sidewalk. Reconstruct driveway aprons if needed to meet ADA standards.
- █ Replace existing asphalt path with concrete sidewalk
- █ Interim improvement (re-stripe existing street to provide northbound bike lane)
- █ Possible right-turn improvements
- Bus stop improvements
- Bus stop location change
- Reconstruct corner ramps to meet standards for accessibility
- ▨ Install new pedestrian-activated flashing signal and crosswalk
- ▭ New curb extension

Red number = 2022 Construction  
Blue number = 2023 Construction



## Planned Project

-  Fill bike lane gap
-  Replace existing sidewalk. Reconstruct driveway aprons if needed to meet ADA standards.
-  Replace existing asphalt path with concrete sidewalk
-  Interim improvement (re-stripe existing street to provide northbound bike lane)
-  Possible right-turn improvements
-  Bus stop improvements
-  Bus stop location change
-  Reconstruct corner ramps to meet standards for accessibility
-  Install new pedestrian-activated flashing signal and crosswalk
-  New curb extension

Red number = 2022 Construction  
Blue number = 2023 Construction





## The project will provide :

- 3,085 feet of new or replaced sidewalks
- 12,400 feet of new bike lanes
- 2 additional enhanced crosswalks
- 9 improved bus stops (to meet ADA)
- 3,700 feet of rehabilitated pathways
- 29 ADA-compliant corner ramps





## WE'RE FIXING THIS!

This location will be improved as a part of the Boones Ferry Road Sidewalk and Bike Lane Project.

## ¡ESTAMOS ARREGLANDO ESTO!

Esta ubicación será mejorada como parte del Proyecto de Aceras y Carriles para Bicicletas de Boones Ferry Road.

Visit [boonesferrycorridor.com](http://boonesferrycorridor.com) to learn more.

Visite [boonesferrycorridor.com](http://boonesferrycorridor.com) para obtener más información.





**WE'RE FIXING THIS!**  
This location will be improved as a part of the  
Boones Ferry Road Sidewalk and Bike Lane Project.

**¡ESTAMOS ARREGLANDO ESTO!**  
Esta ubicación será mejorada como parte del Proyecto de  
Aceras y Carriles para Bicicletas de Boones Ferry Road.

Visit [boonesferrycorridor.com](http://boonesferrycorridor.com) to learn more.  
Visite [boonesferrycorridor.com](http://boonesferrycorridor.com) para obtener más información.





**WE'RE FIXING THIS!**  
This location will be improved as a part of the Boones Ferry Road Sidewalk and Bike Lane Project.

**¡ESTAMOS ARREGLANDO ESTO!**  
Esta ubicación será mejorada como parte del Proyecto de Aceras y Carriles para Bicicletas de Boones Ferry Road.

Visit [boonesferrycorridor.com](http://boonesferrycorridor.com) to learn more.  
Visite [boonesferrycorridor.com](http://boonesferrycorridor.com) para obtener más información.





**WE'RE FIXING THIS!**  
This location will be improved as a part of the  
Boones Ferry Road Sidewalk and Bike Lane Project.

**¡ESTAMOS  
ARREGLANDO ESTO!**  
Esta ubicación será mejorada como parte del Proyecto de  
Aceras y Carriles para Bicicletas de Boones Ferry Road.

Visit [boonesferrycorridor.com](http://boonesferrycorridor.com) to learn more.  
Visite [boonesferrycorridor.com](http://boonesferrycorridor.com) para obtener más información.





## WE'RE FIXING THIS!

This location will be improved as a part of the Boones Ferry Road Sidewalk and Bike Lane Project.

## ¡ESTAMOS ARREGLANDO ESTO!

Esta ubicación será mejorada como parte del Proyecto de Aceras y Carriles para Bicicletas de Boones Ferry Road.

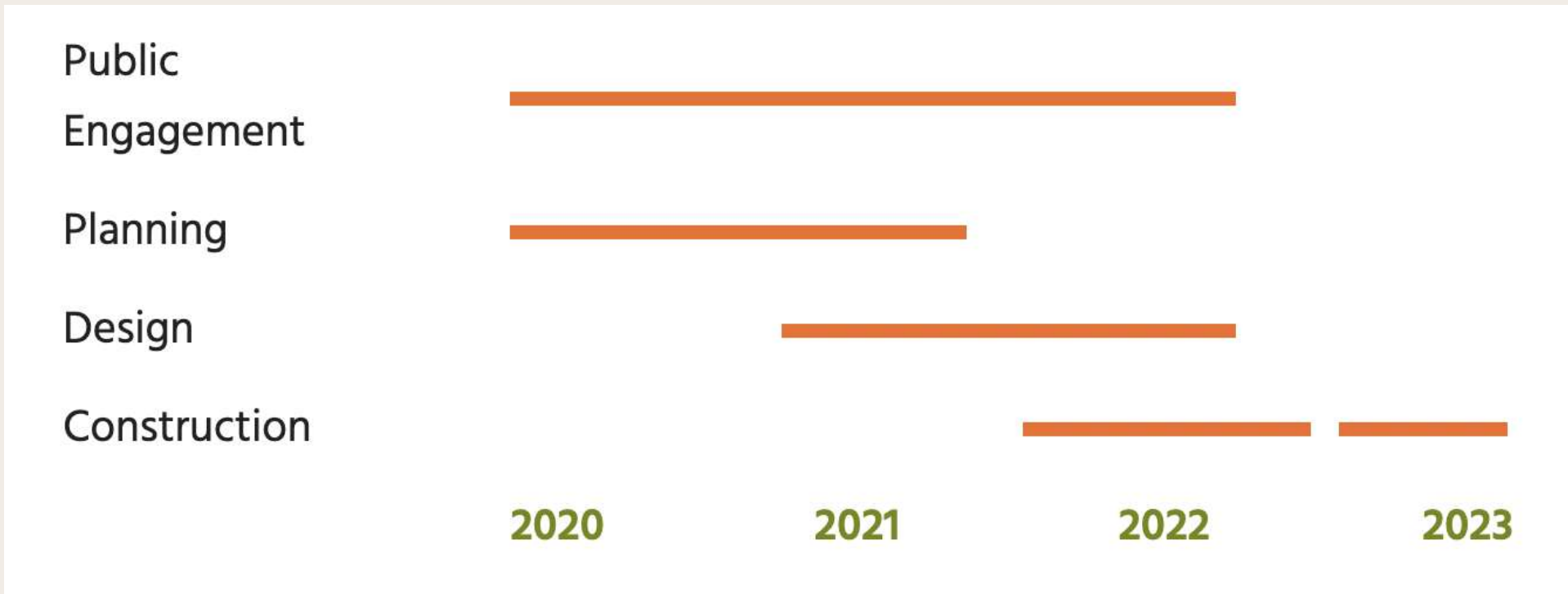
Visit [boonesferrycorridor.com](http://boonesferrycorridor.com) to learn more.

Visite [boonesferrycorridor.com](http://boonesferrycorridor.com) para obtener más información.



[www.boonesferryroad.com](http://www.boonesferryroad.com)

## Timeline



***Thank you!***



*City of Tualatin*

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council  
**THROUGH:** Sherilyn Lombos, City Manager  
**FROM:** Jonathan Taylor, Economic Development Manager  
**DATE:** 02/14/2022

---

**SUBJECT:**  
2021 Economic Snapshot and Prosperity Planning

### **EXECUTIVE SUMMARY:**

A presentation of the Economic Snap Shot and future prosperity planning for the City by the Economic Development Division. The Economic Snap Shot (attached) and staff report, provide a detailed picture of Tualatin's local economy at the year end of 2021. The data for the industry cluster update is from the Oregon Employment Department for the year 2020 (latest available). Staff will also provide current and planned work plans for future economic development work in the Leveton, Basalt Creek, and Core Areas.

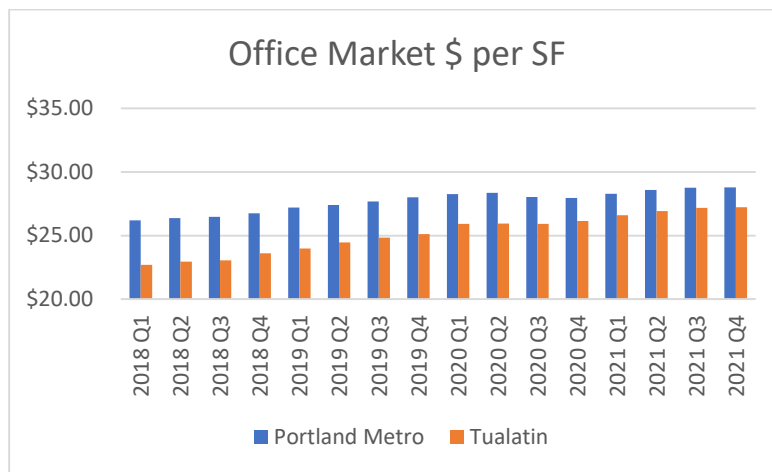
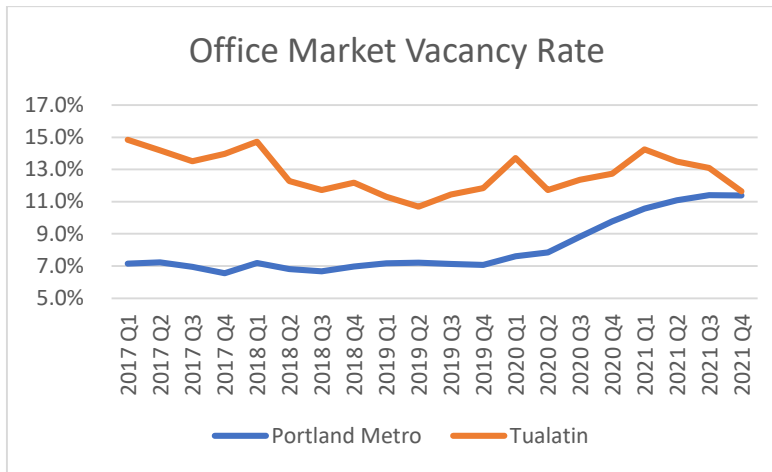
### **Economic Snap Shot**

#### *Office Market*

Tualatin's office market contains 1.3 million square foot of office space. The vacancy rate has remained essentially unchanged over the past year, at 11.7%. Rents have increased by 4.1% over the past 12 months compared to the 3.8% market average over the last decade.

There are no supply-side pressures on vacancy or rent in the near term, as nothing is under construction. This continues a prolonged hiatus of new development in our market. It has been more than five years since an office project was delivered.

Total Asset Value: \$339 million  
Q4 2021 Vacancy Rate: 11.7%  
Market Rent/SF: \$27.44  
Total Inventory: 1,331,249



## Industrial Market

Tualatin’s industrial market traditionally is a light industrial manufacturing submarket that has become one of the major industrial nodes within the Portland Metro Region. Inventory has ballooned by 18.8% over the last decade, with approximately 1.9 million SF delivered. Currently, there is approximately 330,000 SF of industrial product underway, set to expand existing inventory by 2.7%.

The Myslony Industrial Park will deliver two modern logistics buildings by mid-2022. California-based Phelan Development is overseeing the project. The 73,000-SF 11501 SW Amu St. delivered in 2020, is fully preleased, but with approximately 18,000 SF available for sublease. Speculative deliveries elevated submarket vacancies throughout much of 2019, aided by the completion of the 227,000-SF Majestic Tualatin Business Center, later leased by Amazon. Additionally, the 160,000-SF Tualatin Distribution Center delivered vacant in November 2018 and fully leased within six months, with MSI occupying 86,000 SF in Q1 2019 and Gensco moving into 73,000 SF in Q4 2019.

Throughout the past decade, Tualatin's vacancy rate has periodically exceeded the metro average due to the submarket's relatively busy development schedule. However, heavy leasing in recent quarters — driven by affordable rental rates and Tualatin's strategic location — has led to compressed vacancies of 1.5%. The larger metro rate currently equates to 5.0%. Trailing 12-month net absorption equates to 290,000 SF, versus the three-year average of 170,000 SF. In 21Q4,

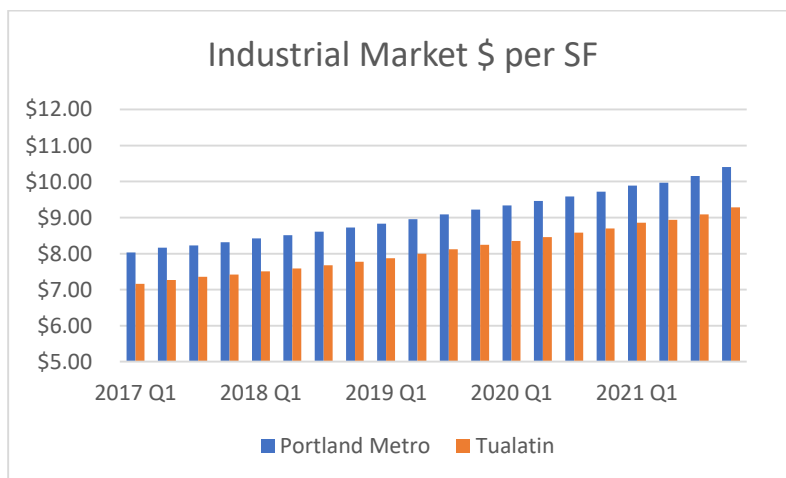
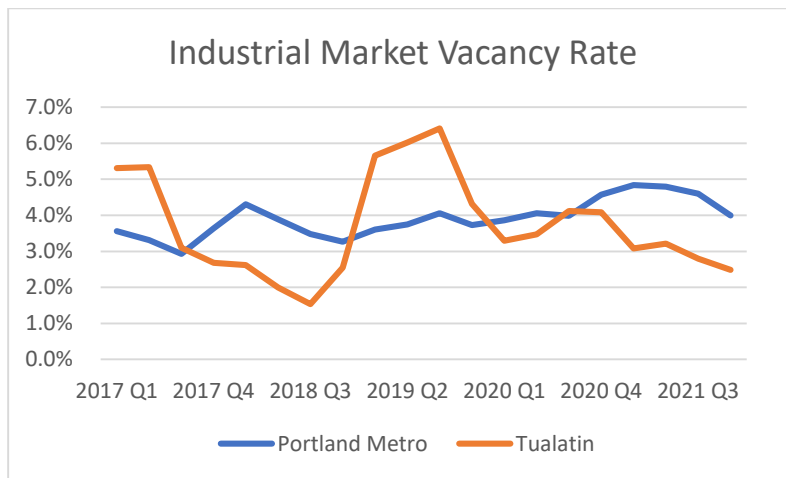


animal-health tech company Covetrus leased 40,000 SF of warehouse space at the Tualatin Corporate Center for use as a distribution center.

Increasing demand for space has subsequently pushed rents higher. Year-over-year rent growth turned in gains of 6.7%, comparable with metro gains over the same period. Submarket rents of \$9.30/SF are still a discount from the metro average of \$10.40/SF.

High traffic flow and increased activity resulting from a larger industrial presence prompted local government officials to expand and improve infrastructure. One such project was the southern expansion of SW 124th Avenue and Basalt Creek Parkway, which connects Grahams Ferry Road to SW Tualatin-Sherwood Road, the main east/west arterial in the city, on the north. The route also gives larger trucks an alternative option to get to Interstate 5's exit 286 at the northern end of Wilsonville.

Total Asset Value: \$2.1 billion  
 Q4 2021 Vacancy Rate: 2.5%  
 Market Rent/SF: \$9.29  
 Total Inventory: 12,209,079



## Retail Market Summary

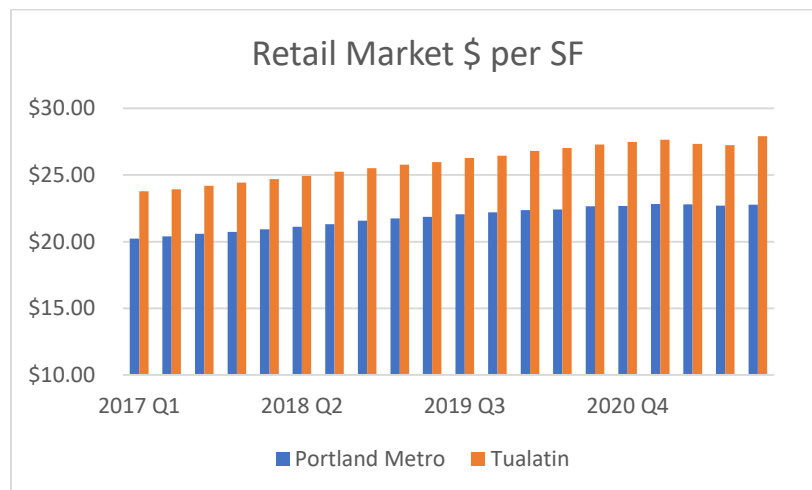
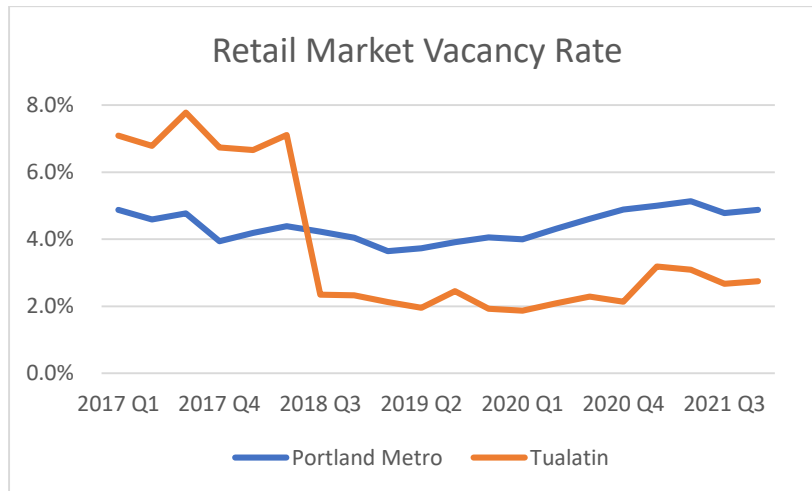
At the end of Q4 2021, vacancies for retail properties in Tualatin were under the five year average of 3.8%. Our vacancy rate comes in below the region's average, while retail rents have hardly budged over the past year. No new development has occurred in Tualatin since 2018, and no plans are currently underway.

Total Asset Value: \$305 million

Q4 2021 Vacancy Rate: 2.7%

Market Rent/SF: \$27.90

Total Inventory: 1,344,092



## **Business and Workforce Landscape**

### **Business Overview**

The City of Tualatin processed a total of 148 new business licenses in 2021 with a total of 985 jobs created as a result. The top employers of those new businesses are in the clusters of corporate and financial services and restaurant and retail.



Tualatin's ten largest employers represent 20% of the total workforce. The current top 10 employers are:

Lam Research Corporation	(Software and Technology Cluster)
Legacy Meridan Hospital	(Health and Wellness Cluster)
United Parcel Service	(Transportation and Logistics Cluster)
CES Group	(Advanced Manufacturing Cluster)
Campbell Soup Supply	(Advanced Manufacturing Cluster)
Pacific Motion	(Advanced Manufacturing Cluster)
Tac Pro	(Software and Technology Cluster)
<i>Allstar Labor and Staffing*</i>	
Ichor Systems	(Software and Technology Cluster)
<i>Fred Meyer*</i>	

*\*Not in industry clusters*

## **2021 Business Survey**

The Economic Development Division conducted a brief survey of all small businesses that received funding from the Economic Stabilization Programs in 2020. The survey was conducted in December and was sent to over 120 businesses, representing nearly 10% of businesses employing workers. The survey results indicated:

- 93% of those businesses are still in operation.
- 63% of those businesses reported revenue has increased or remained stable since 2019.
- 89% are still impacted by COVID-19.
- 68% have a positive economic outlook.

## **Workforce Overview**

As of 2020, there were a total of 30,491 employees working for a total of 1,681 registered businesses in Tualatin. This represents a 3% increase from 2016. 94% of those workers commute into Tualatin, a 1% increase since 2016. The top three locations of commuters' residences include:

- Portland 14.1%
- Tigard 5.7%
- Beaverton 5.2%

Roughly 11,000 of Tualatin residents commute out of our community. Top three locations where Tualatin residents commute to work:

- Portland 26.2%
- Tigard 12.6%
- Beaverton 6.5%

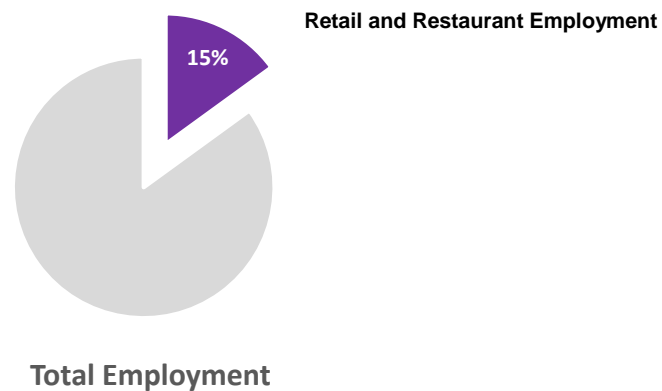
The average yearly salary for a Tualatin worker is \$66,233 – a 24% increase since 2016<sup>1</sup>. For reference, the estimated living wage for a worker in Washington County to “live comfortably” as a single person is \$39,228.

## Tualatin Industry Cluster Update

In 2018, the City of Tualatin completed an industry cluster. The analysis used established cluster definitions developed by the U.S. Cluster Mapping Project by the Economic Development Administration and Harvard University. The U.S. Cluster Mapping Project separates clusters into local and traded industries. A local industry cluster produces goods or services that meet the needs of the people within the region; while traded industry cluster’s products or services are primarily exported out of the region.

For more information regarding the industry cluster report, [click here](#).

The retail and restaurant cluster is a local traded cluster, therefore was not analyzed in the cluster analysis. However, due to the COVID-19 Pandemic, we ran a few numbers to compare where we have been to where we were at the end of 2020 – the year of the biggest impact on this industry.



### Top Five Largest Employers (Restaurant)

1. PF Changs
2. Jimmy Johns
3. G-Man
4. Dutch Brothers
5. Cracker Barrel

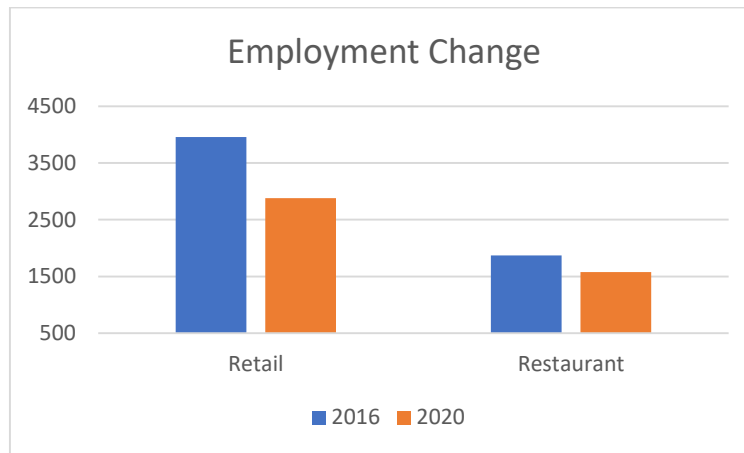
### Top Five Largest Employers (Retail)

1. Fred Meyer
2. Whole Foods
3. Cabelas
4. New Seasons
5. Safeway

---

<sup>1</sup> State of Oregon Employment Department, QCEW 2020

## Employment Change



The retail sector saw a 27% decrease in number of individuals employed between 2016 and 2020 (3,958 to 2,883), while the restaurant sector saw a 16% decrease (1,872 to 1,579.) While employment shrank in each sector, wages saw tremendous growth. Retail sectors' annual salary wage increased 37% between 2016 vs 2020 (\$26,852 to \$36,698) while restaurant sectors' annual salary increased 23% (\$18,996 to \$23,418).

## Investment Areas

The City has three identified employment areas that are defined by a unifying marker of transportation and/or zoning – 124<sup>th</sup> Corridor, Central Industrial, and I-5 Corridor. Each year the City tracks large scale investment projects over \$250,000 in each of these areas that are either completed, under construction, or planned. Completed denotes that the project was completed in the specific year; under construction is current projects actively in process; and planned are applications submitted to the City during the year in review. The following data is from applications on file with the City of Tualatin from January 1, 2021 – December 31, 2021.

### The City of Tualatin (total):

Completed: \$180,358,344 (1,247 Projects)  
Under Construction: \$79,771,973 (537 projects)  
Planned: \$54,009,151 (97 projects)

### 124<sup>th</sup> Corridor

Completed: \$114,011,403  
Under Construction: \$ 1,613,000  
Planned: \$36,000,000

### Central Industrial

Completed: \$16,509,352  
Under Construction: \$9,453,138  
Planned: \$11,867,901

### I-5 Corridor

Completed: \$9,651,817  
Under Construction: \$54,041,071  
Planned: \$3,015,000



## **Prosperity Planning – The Core Opportunity and Reinvestment Area (CORA)**

### *Why*

An effort to securely position our community for long-term economic prosperity post pandemic.

### *Brief Overview*

In 2018, City Council expressed interest in the redevelopment of the northern portion of the City including the Town Commons. In addition, the City was preparing for the potential construction of a terminus for the proposed South West Corridor light rail project.

Over the next three years, Council held a number of small group briefings, Council work sessions, and public input during various planning projects and determined eight key priorities for the proposed area: small business assistance, community identity, housing, transportation, blight remediation, developer assistance, climate change, and land acquisition.

### *The Need*

As our community continues to grow, development constraints present challenges for long-term prosperity for the area. The availability of land and transportation infrastructure is limited. In addition, the modernization and transition of our economic landscape will present opportunities and challenges for land use long term.

### *The Purpose*

To plan for long-term economic prosperity for the area utilizing a variety of funding tools to meet the needs in alignment with the community vision.

### *Timeline*

#### 2018-2021

Extensive work has been completed through various planning and economic development sessions. Work began with Tualatin 2040, a 20 year land supply analysis for economic and housing opportunities. Various other long-term planning efforts included the Parks and Recreation Master Plan, the Industry Cluster Analysis, and Tualatin Moving Forward.

#### 2022

##### January – February

City staff is currently working on establishing the final boundary to propose to City Council for consideration. Financial impacts on the City, and various taxing districts, will be analyzed with the proposed boundary.

##### January – July

Led by City Council, staff will propose area projects and bucket list concerns and opportunities for long-term prosperity. Multiple advisory groups will be established and consulted.

##### August – December

The City will confer with all regional partners in the preparation for the final adoption of this plan. The plan will be presented to the Tualatin Development Commission, the Tualatin Planning Commission, and the Tualatin City Council – with a scheduled public hearing. Anticipated adoption date is December 2022.

### **Next Steps**

Tonight, City Staff will answer any questions about the broad project overview and solicit any feedback on direction or areas of concern. On February 24, City Council will have their first work

session to approve the eight-priority definitions, top five areas for reinvestment, and key opportunities for exploration.

---

**ATTACHMENTS:**

- Tualatin's Economy PowerPoint
- 2019 Annual Report Document



2020 -2021



**ECONOMIC  
SNAP SHOT  
&  
PROSPERITY  
PLANNING**







# VISION

A thriving and diversified economy that includes living wage jobs, increased tourism, and sustained financial stability for the whole community.

Tualatin City Council 2030 Vision



# TUALATIN REAL ESTATE

## RETAIL MARKET

<b>1.3M</b> SF TOTAL INVENTORY	<b>0</b> SF UNDER CONSTR.
<b>2.7%↑</b> VACANCY RATE	<b>\$27.54↑</b> MARKET RENT/SF

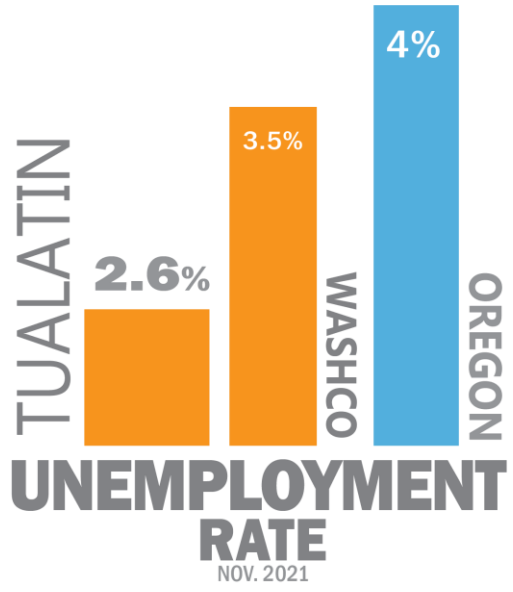
## INDUSTRIAL MARKET

<b>12.2M↑</b> SF TOTAL INVENTORY	<b>232K↑</b> SF UNDER CONSTR.
<b>2.5%↓</b> VACANCY RATE	<b>\$9.29↑</b> MARKET RENT/SF

## OFFICE MARKET

<b>1.3M</b> SF TOTAL INVENTORY	<b>0</b> SF UNDER CONSTR.
<b>11.7%↓</b> VACANCY RATE	<b>\$27.44↑</b> MARKET RENT/SF





**148**  
new business licenses

**985**  
new employment

# QUICK NUMBERS

**BUSINESS SURVEY**

**93%**  
still in business

**89%**  
still impacted by COVID-19

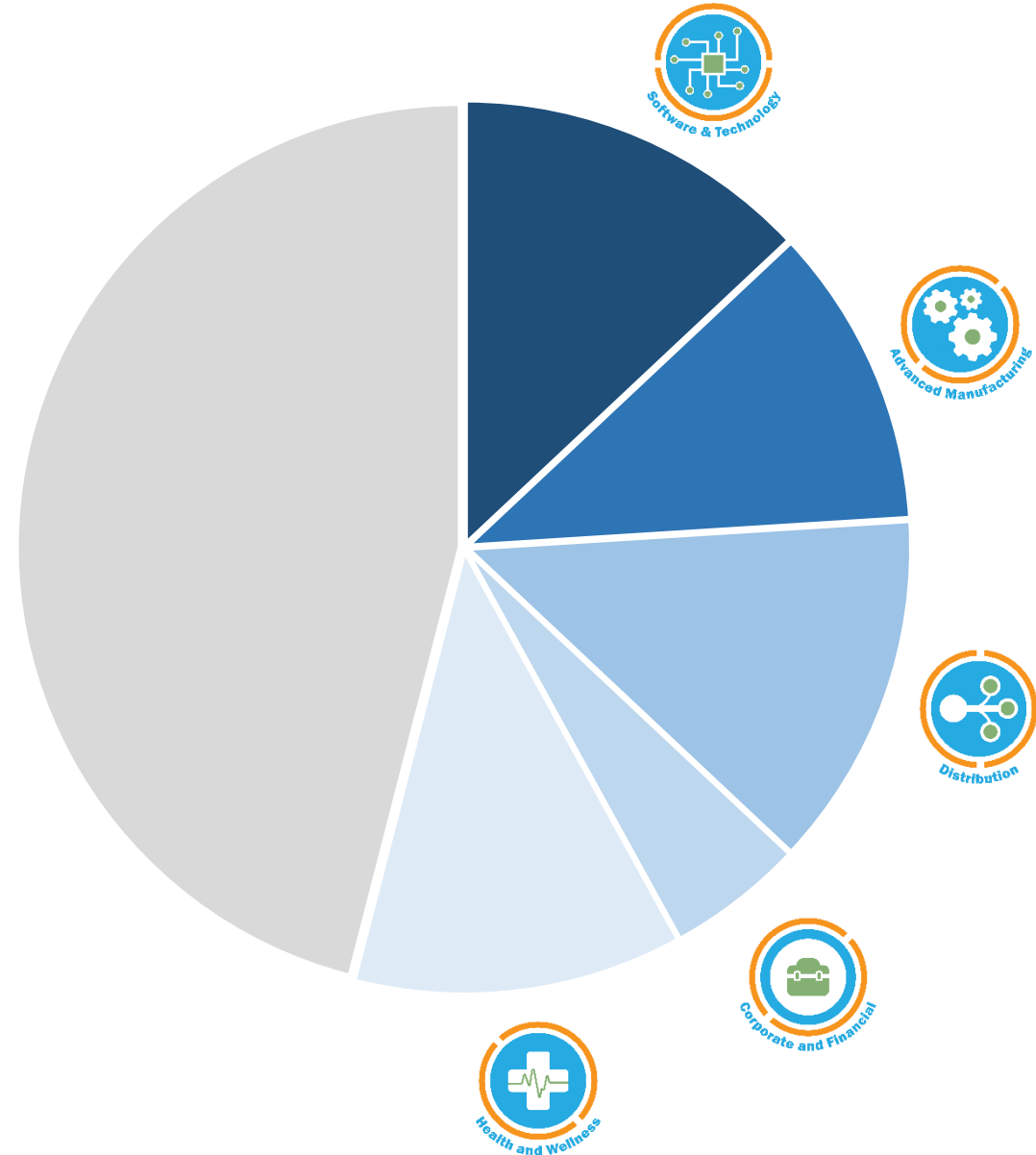
**68%**  
positive economic outlook





# INDUSTRY CLUSTER UPDATE

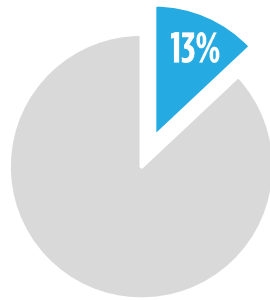
**Tualatin's Industry Clusters represent 54% of our total workforce. The average salary across traded clusters is \$76,000.**





## LARGEST EMPLOYERS

Lam Research  
TacPro  
Ichor Systems  
Dealer Spike  
JAE Oregon



CLUSTER EMPLOYMENT

# SOFTWARE & TECHNOLOGY



**3,991**

TOTAL EMPLOYMENT

**\$111k**

AVERAGE SALARY

## CLUSTER UPDATE

**40%** INCREASE IN EMPLOYMENT

**18%** INCREASE IN SALARY

**11%** DECREASE IN FIRMS





# TRANSPORTATION & LOGISTICS



CLUSTER EMPLOYMENT

## CLUSTER UPDATE

**5%** INCREASE IN EMPLOYMENT

**7%** INCREASE IN SALARY

**2%** DECREASE IN FIRMS

**3,486** TOTAL EMPLOYMENT

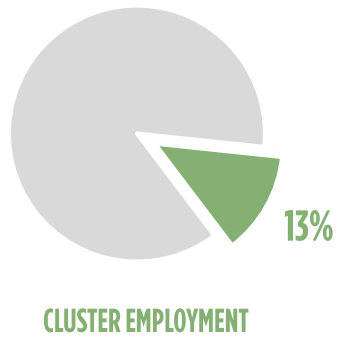
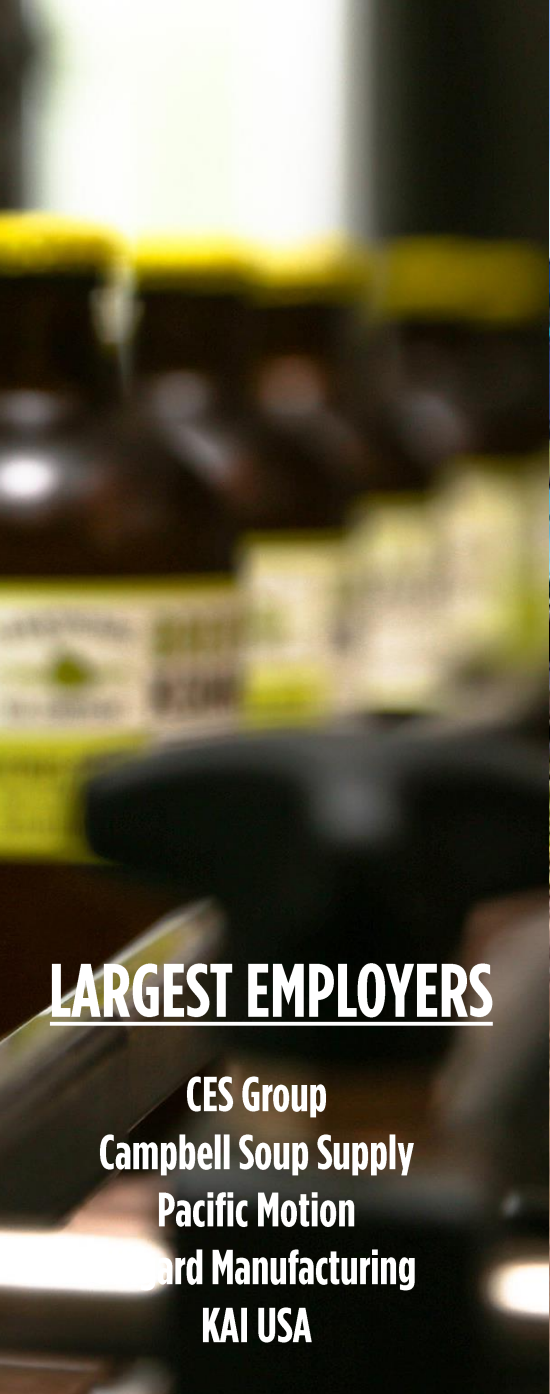
**\$63k** AVERAGE SALARY

## LARGEST EMPLOYERS

United Parcel Service  
DPI Specialty Foods  
Columbia Corrugated Box  
McClane Food Service  
FedEX







# ADVANCED MANUFACTURING



**3,940** TOTAL EMPLOYMENT

## CLUSTER UPDATE

**11%** DECREASE IN EMPLOYMENT

**15%** INCREASE IN SALARY

**Food processing is the fastest growing industry in Tualatin.**

**\$60k** AVERAGE SALARY

## LARGEST EMPLOYERS

- CES Group
- Campbell Soup Supply
- Pacific Motion
- Hard Manufacturing
- KAI USA





# CORPORATE & FINANCIAL



## CLUSTER UPDATE

**49%** INCREASE IN SALARY

**15%** INCREASE IN FIRMS

**Annual salary largest increase of any industry cluster.**

**1,502** TOTAL EMPLOYMENT

**\$84k** AVERAGE SALARY

## LARGEST EMPLOYERS

AKS Engineering  
Portland General Electric  
Enterprise Rent-a-Car  
Xenium Resources





**LARGEST EMPLOYERS**

Legacy Meridian  
Center for Autism  
Bay Club  
Kaiser



CLUSTER EMPLOYMENT

**3,676** TOTAL EMPLOYMENT

**\$66k** AVERAGE SALARY

**WELLNESS & HEALTH** 

**CLUSTER UPDATE**

**14%** INCREASE IN SALARY

**8%** INCREASE IN FIRMS

**THANK YOU TO OUR HEALTHCARE WORKERS!**





# INVESTMENT AREAS

## 124TH CORRIDOR

PRIVATE INVESTMENT: \$151,624,403  
PUBLIC INVESTMENT \$0

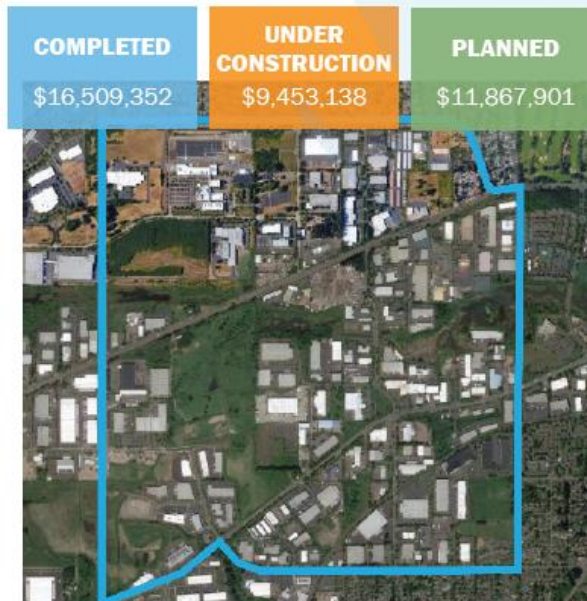
Centered around the newly expanded 124th Ave, the 124th Corridor extends along the western border of Tualatin, adjacent to the City of Sherwood. The area is exclusively zoned manufacturing with Light, general, and park designations. Total employment in this area is estimated 5,000.



## CENTRAL INDUSTRIAL

PRIVATE INVESTMENT: \$31,980,391  
PUBLIC INVESTMENT \$5,850,000

The primary employment area for the City of Tualatin, the central industrial area. Primarily zoned manufacturing with light, general, and park uses, the area also contains limited commercial and retail operations. Total employment in this area is estimated 15,000.



## I-5 CORRIDOR

PRIVATE INVESTMENT: \$65,750,285  
PUBLIC INVESTMENT \$957,603

Anchored by Interstate-5, this employment area provides Tualatin with direct access to interstate commerce. Primarily zoned commercial, The I-5 Corridor provides high-end retail destinations, Notable parks spaces, and outdoor recreation. The total employment in this area is estimated 6,000.







## ABOUT

The Southwest and Basalt Creek Development Area is a 717-acre investment area almost exclusively zoned commercial and industrial. The area encompasses major industrial lands along Tualatin-Sherwood Road, 124th Avenue, and Boones Ferry Road.

## PROSPERITY FOCUS

The Tualatin Development Commission has dedicated up to \$55.5 million dollars to identified infrastructure projects to encourage and promote greenfield land development.

## TIMELINE

The City of Tualatin intends to complete all identified projects by 2051.

**\$55**  
MILLION

**30**  
YEARS

**717**  
ACRES

### AREAS OF INVESTMENT



# THE SOUTHWEST BASALT CREEK DEVELOPMENT AREA





THE LEVETON  
&  
**TAX INCREMENT**  
DISTRICT



HERMAN ROAD IMPROVEMENTS CONCEPT PLAN



**THE DISTRICT**

Established in 1982, the Leveton Tax Increment Finance District is a successful 380-acre industrial development area home to advanced manufacturing. Through City efforts, the assessed value increased over \$255 million since 1982.

**THE PROJECT**

A multi-year project to expand Herman Road to add pedestrian access, bike lanes, remedy drainage issues, and add a center-turn lane at the industrial driveway of Herman Road. The anticipated project cost is \$3 million.

**TIMELINE**

**2020**

Conceptual Design and planning.

**FALL 2020 - PRESENT**

Complex design and stakeholder/property owner negotiations.

**SPRING 2023**

Estimated construction to begin.

**FALL 2023**

Estimated completion date.





## THE NEED

As our community continues to grow, the available land to accommodate demand is limited. From housing to commercial development, the area contains a select number of small greenfield parcels for development.

## THE PURPOSE

To utilize a variety of funding tools to meet the needs of the area in alignment with the community vision.

## EXAMPLE INVESTMENTS



Beautifully designed mixed-use development that expands housing options and affordability with quality of life amenities.



Enhancing multi-model and pedestrian access with integrated community design standards to enliven the entire area.

## TIMELINE

### 2018-2021

Extensive work has been completed through various planning sessions.

### JANUARY - FEBRUARY

During this portion, City Staff will work to establish the final proposed boundary, financial modeling, and proposed life of the plan.

### JANUARY - JULY

Led by City Council, City Staff to propose area projects and bucket list concerns for opportunity.

Outreach efforts may include advisory groups and a taskforce of property owners and vested stakeholders.

### AUGUST - DECEMBER

The City will consult with all regional partners in the preparation for the final adoption of this plan. The plan will be presented to the Tualatin Development Commission, the Tualatin Planning Commission, and the Tualatin City Council with a public hearing. Anticipated adoption date is December 2022.

## ABOUT

This proposed reinvestment area will consist of up to 500-acres of commercial, office, and residential land. Opportunities for reinvestment will be focused on eight priorities: land acquisitions, climate change, developer assistance, blight remediation, transportation, housing, small business development and community design.



THE CORE  
**OPPORTUNITY**  
REINVESTMENT AREA





**QUESTIONS**





2020-2021

# ECONOMIC SNAP SHOT & PROSPERITY PLANNING





# FOREWORD

The 2021 Economic Snapshot and Prosperity Planning Report includes the latest data from the year 2020 and 2021, the onset and height of the COVID-19 Pandemic. While our economy is still recovering from the pandemic, the economic landscape has improved. As we move forward, we will continue to update our economic snapshots with the most relevant data when available.

# CONTENTS

ECONOMIC DEVELOPMENT MESSAGE .....	1
TUALATIN REAL ESTATE MARKET .....	3
CLUSTER UPDATE .....	5
PROSPERITY PLANNING .....	13
REGIONAL RECOVERY .....	21



## ECONOMIC DEVELOPMENT MESSAGE

The last few years have challenged us all in different ways. For the City of Tualatin, the mission across all departments has been to take action to mitigate the economic impacts of the COVID-19 Pandemic to the best degree possible.

From the start of the crisis, the Economic Development Division's mission shifted to developing and implementing actions to address the immediate needs of our businesses - the most important being The Economic Stabilization Fund Program to help businesses affected by the COVID-19 Pandemic. To date, the City of Tualatin has distributed \$1.2 million dollars to over 120 businesses - 90% of those assisted are still in operation.

The City has begun to pivot from economic stabilization to economic recovery - one that benefits all Tualatin residents. In 2021, the City of Tualatin established its first investment area since 1989. This year, the City will consider an enhanced opportunity and investment area in our core with the purpose of securing our community's economic success over the next 30 years.

As we continue on this journey, the community can count on our unwavering commitment to making economic prosperity for all a top priority.



**Jonathan Taylor**  
Economic Development  
Manager

## MISSION

**To retain and cultivate growth of existing business, attract new industry, while creating and maintaining a positive business climate within our community.**

Economic Strategic Plan

## VISION

**A thriving and diversified economy that includes living wage jobs, increased tourism, and sustained financial stability for the whole community.**

Tualatin City Council 2030 Vision



## TUALATIN REAL ESTATE

Despite the two year impact of the COVID-19 Pandemic, Tualatin's industrial, commercial, and retail markets continue to be strong. Over the last year, Tualatin added 232K sq/ft of industrial space, providing more options to local industries for relocation and expansion.

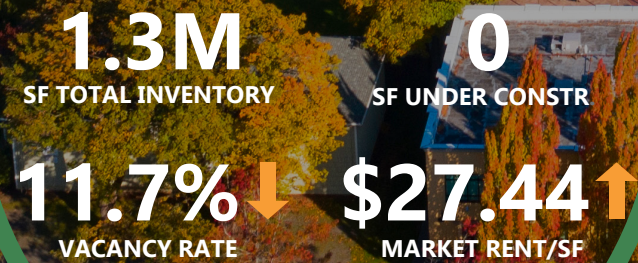
### INDUSTRIAL MARKET



### RETAIL MARKET



### OFFICE MARKET



SOURCE: COSTAR Q4 2022

↑ Denotes increase since 2019    ↓ Denotes decrease since 2019

# BUSINESS SURVEY

In 2021, the Economic Development division surveyed our small businesses that received financial assistance in 2020.

**93%** of businesses are operational.

**63%** of businesses reported revenue has increased or remained stable since 2019.

**89%** of businesses are still impacted by COVID-19

**68%** of businesses have a positive economic outlook.

## QUICK NUMBERS

**148**  
NEW BUSINESS LICENSES

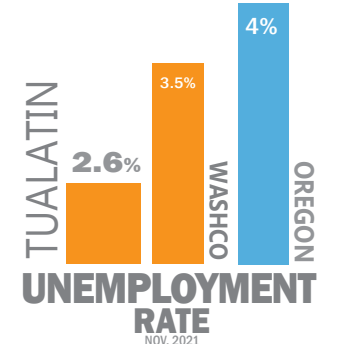
Total new business licenses filed with the City of Tualatin in 2021.

**985**

EMPLOYMENT

Total employment as a result of new business licenses filed in 2021.

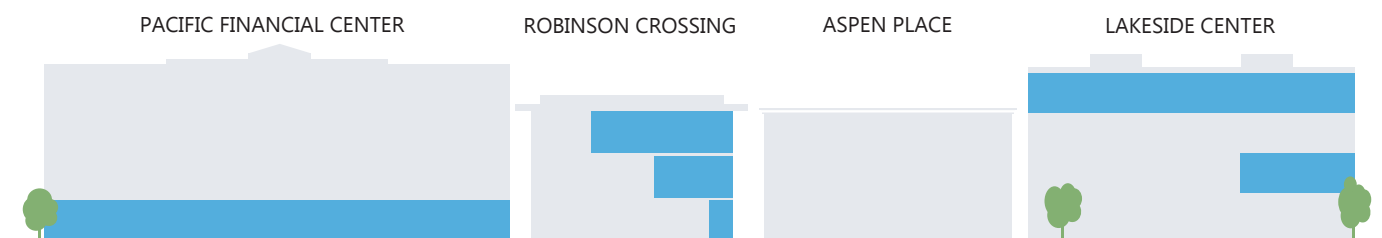
## NEW DEVELOPMENT



Source: Tualatin Business Licenses 2021

## MAJOR BUILDING VACANCY

■ DENOTES VACANCY





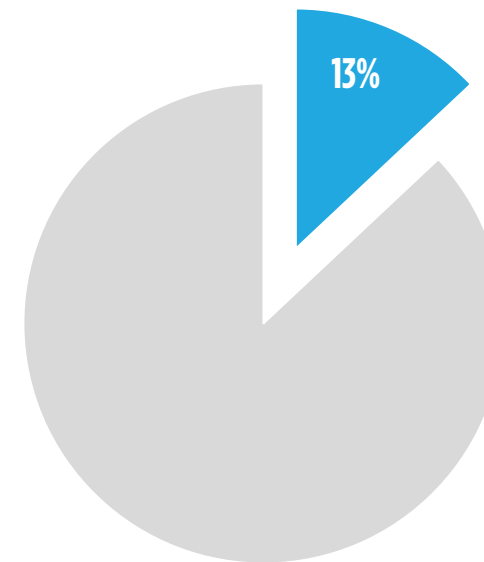
# SOFTWARE & TECHNOLOGY



## INDUSTRY OVERVIEW

Software and technology enterprises are high-knowledge, human-capital-based businesses that are expanding globally. This cluster includes companies that may develop, produce, or provide software, hardware, data management, internet-based services, and other information services. This industry is also involved with development of off-the-shelf software products to consumer programming, computer facilities management, computer systems design, and data processing. This cluster is Tualatin's **largest** employment sector.

## INDUSTRY CLUSTER EMPLOYMENT



## QUICK FACTS

**Total Employment:** 3,991  
**Average Salary:** \$111,000  
**Number of Firms:** 78

### Largest Employers:

- Lam Research
- TacPro
- Ichor Systems
- Dealer Spike
- JAE Oregon

## CLUSTER UPDATE

Of the five identified 2017 Industry Clusters, this cluster has seen the most growth in employment and average annual salary. Between 2016 and 2020, software and technology employment grew at a **tremendous rate of 40%**. Corresponding with that growth, average **annual salary increased by 18%**. The sector lost 11% of its firms since 2017. Reasons for this decrease could include limited industrial space for growth, acquisitions, and smaller firms unable to compete in the overall economy.

# INDUSTRY CLUSTER UPDATE







# TRANSPORTATION & LOGISTICS

Distribution

## INDUSTRY OVERVIEW

Tualatin's transportation and logistics sector is an integral part of Tualatin's and the Portland Metro's area economy, supporting all sectors. This sector includes a variety of industries: logistics, transportation, warehousing, aviation, and other related services. The sector is responsible for managing the flow of goods, services, and information between a point of origin and destination to meet customer demand.

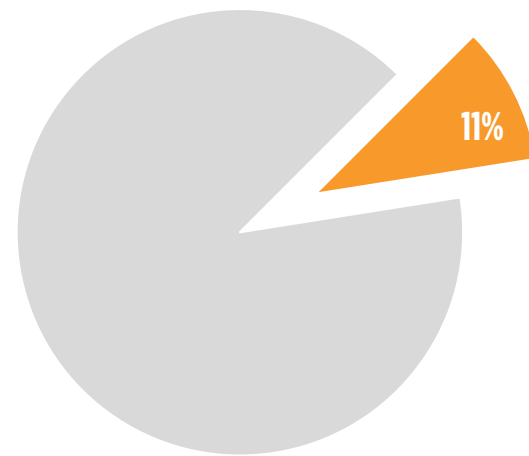
## QUICK FACTS

**Total Employment:** 3,486  
**Average Salary:** \$63,000  
**Number of Firms:** 213

### Largest Employers:

- United Parcel Service
- DPI Specialty Foods
- Columbia Corrugated Box
- Mclane Food Service
- FedEX

## INDUSTRY CLUSTER EMPLOYMENT



## CLUSTER UPDATE

This sector has continued to experience growth as suburban communities fulfill demand for warehousing and logistics to support the broader Portland Metro area. Tualatin's transportation and logistics cluster employment base grew 5% since 2017 with an **average salary increase of 7%**. As with most clusters, the total number of firms within this cluster decreased by 2%.

# ADVANCED MANUFACTURING

## INDUSTRY OVERVIEW

Advanced manufacturing is the integration of high-tech processes, machinery and materials, and includes companies that may utilize or develop innovative processes. A vital component to advanced manufacturing is a skilled workforce, where skills required of workers are often more advanced and broad than those in other industries. Examples of advanced manufacturing tools and techniques include computer aided design, simulations, robotics, laser and enhanced prototyping. Tualatin's advanced manufacturing super-cluster includes chemical and plastic materials, food processing, medical equipment, and metal products.

## INDUSTRY CLUSTER EMPLOYMENT



## QUICK FACTS

**Total Employment:** 3,940  
**Average Salary:** \$60,000  
**Number of Firms:** 93

### Largest Employers:

- CES Group
- Campbell Soup Supply
- Pacific Motion
- Milgard Manufacturing
- KAI USA

## CLUSTER UPDATE

Advanced manufacturing has been a pillar of the Portland Metro and Tualatin's economies for decades. As technologies change, so do the definitions and outputs for "advanced manufacturing." Over the last four years, the cluster has seen a decrease in employment of 11%. Major closures, company acquisitions, and expansions outside the city have led to this reduction. **The average annual salary increased 15%**. Food processing is the fastest growing industry in Tualatin.





# CORPORATE & FINANCIAL

## INDUSTRY OVERVIEW

Corporate and financial (business services) provide the top-tier management for local, regional, national, and international commerce. This sector represents the full spectrum of businesses focused on management of businesses, consulting services, securities and brokers, and marketing services.

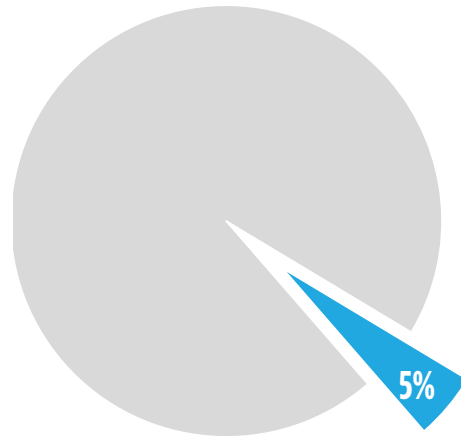
## QUICK FACTS

**Total Employment:** 1,502  
**Average Salary:** \$84,000  
**Number of Firms:** 196

### Largest Employers:

- AKS Engineering
- Portland General Electric
- Enterprise Rent-A-Car
- Xenium Resources

## INDUSTRY CLUSTER EMPLOYMENT



## CLUSTER UPDATE

As an emerging cluster, the corporate and financial sector is a non-concentrated industry in the region but is growing quickly. This sector has increased the number of firms by 15% but has lost 36% of its workforce since 2016. Yet, the average annual salary has **increased by 49%, the largest of any industry cluster**. The employment decrease can be attributed to workforce reductions by several firms within this cluster.

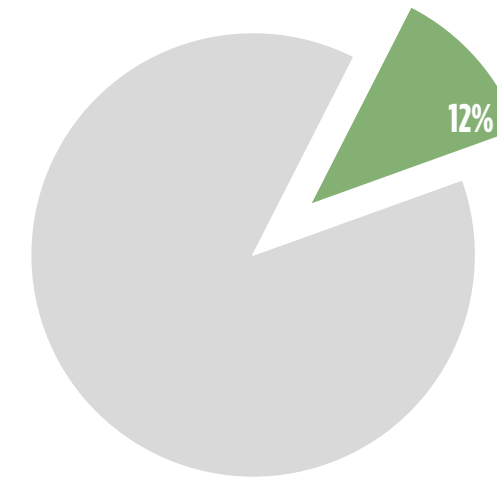


# HEALTH & WELLNESS

## INDUSTRY OVERVIEW

Extending beyond local healthcare delivery, this sector represents a continuum of businesses ranging from treating diseases to a multidimensional and holistic approach that focuses on complete physical and mental health, social well being, and disease prevention. Companies in this industry include physicians, dentists, chiropractors, optometrists, mental health practitioners, physical and speech therapists, and other health professionals. The industry also includes home health, wellness centers, fitness clubs, and medical labs.

## INDUSTRY CLUSTER EMPLOYMENT



## QUICK FACTS

**Total Employment:** 3,676  
**Average Salary:** \$66,000  
**Number of Firms:** 190

### Largest Employers:

- Legacy Meridian
- Center for Autism
- Bay Club
- Kaiser

## CLUSTER UPDATE

The City of Tualatin wants to **thank and acknowledge our healthcare workers** for their tireless efforts to treat individuals with COVID-19, and for continuing their normal course of care for thousands of existing patients.

This cluster has remained relatively unchanged since 2016. Unemployment has remained stable and the number of firms has increased by 8%. The average annual salary increased 14%.



# INVESTMENT AREAS

## Tualatin's Investment Areas

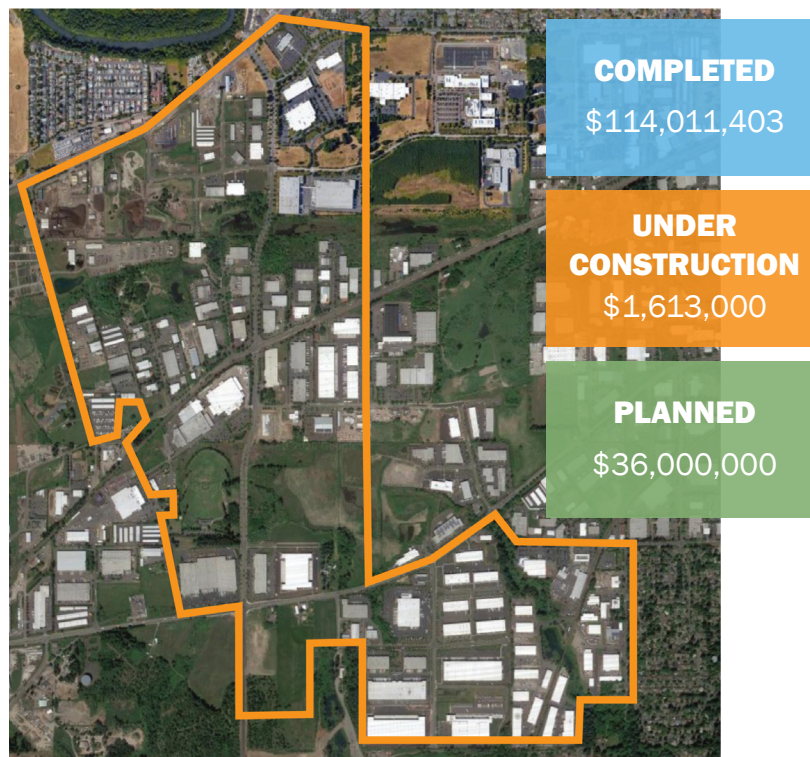
The following investment maps represent employment areas in Tualatin that are defined by a unifying marker of transportation or zoning with projects over \$250,000.

Each of these areas contain a diverse industry sector that provides located firms with direct access to the international airports and seaports, retail amenities, quality transportation systems, and a skilled workforce of nearly one million within a 30 minute commute.

### 124TH CORRIDOR

PRIVATE INVESTMENT: \$151,624,403  
PUBLIC INVESTMENT \$0

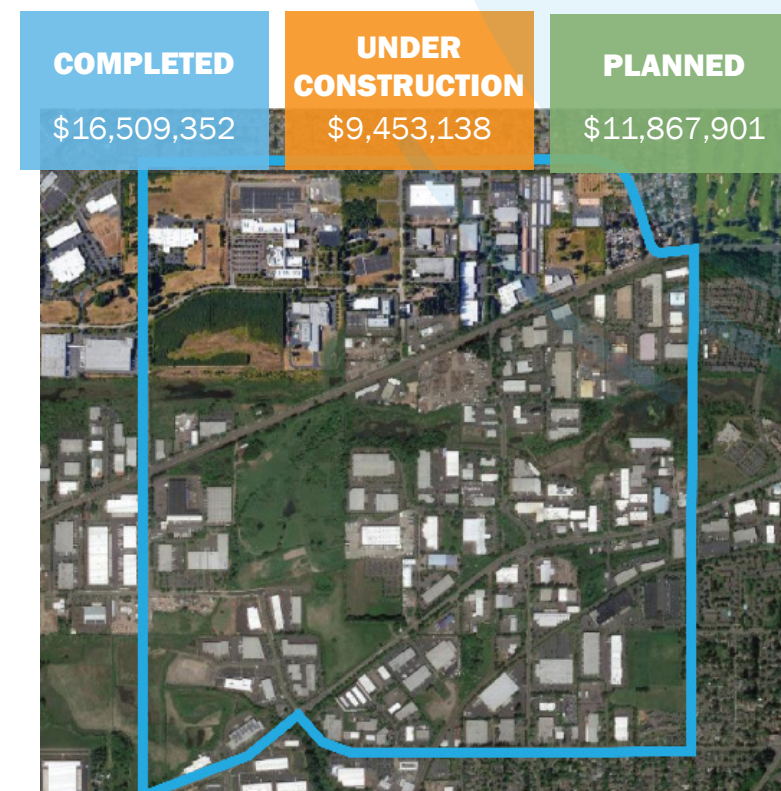
Centered around the newly expanded 124th Ave, the 124th Corridor extends along the western border of Tualatin, adjacent to the City of Sherwood. The area is exclusively zoned manufacturing with light, general, and park designations. Total employment in this area is estimated 5,000.



### CENTRAL INDUSTRIAL

PRIVATE INVESTMENT: \$31,980,391  
PUBLIC INVESTMENT \$5,850,000

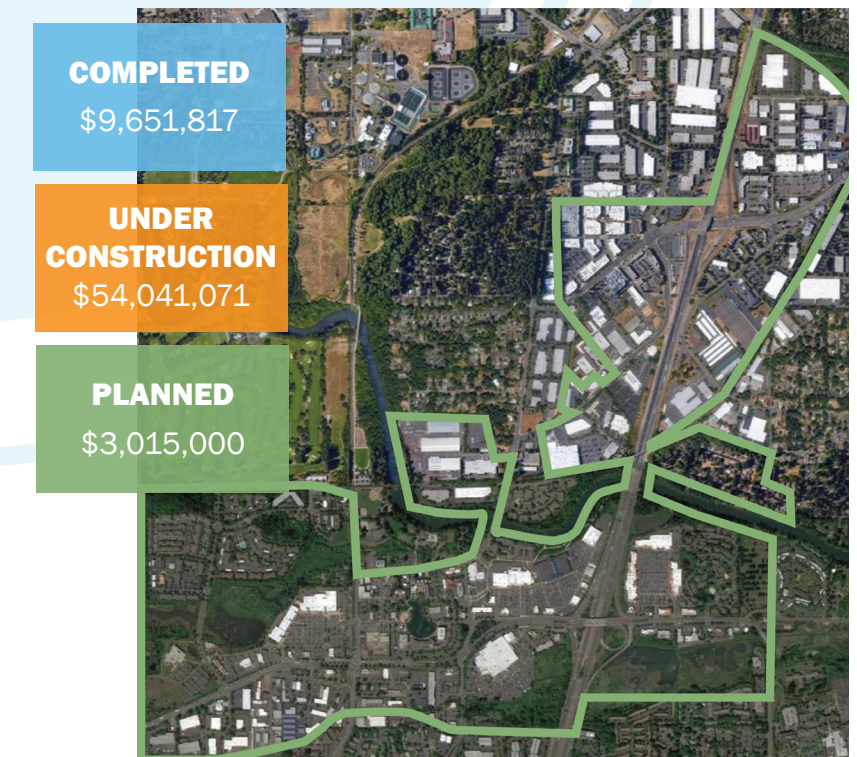
The primary employment area for the City of Tualatin, the central industrial area. Primarily zoned manufacturing with light, general, and park uses, the area also contains limited commercial and retail operations. Total employment in this area is estimated 15,000.



### I-5 CORRIDOR

PRIVATE INVESTMENT: \$65,750,285  
PUBLIC INVESTMENT \$957,603

Anchored by Interstate-5, this employment area provides Tualatin with direct access to interstate commerce. Primarily zoned commercial, The I-5 Corridor provides high-end retail destinations, notable parks spaces, and outdoor recreation. The total employment in this area is estimated 6,000.







# CITY OF TUALATIN PROSPERITY PLANNING



An effort to securely position our community for long-term economic prosperity post the COVID-19 Pandemic.





## ABOUT

The Southwest and Basalt Creek Development Area is a 717-acre investment area almost exclusively zoned commercial and industrial. The area encompasses major industrial lands along Tualatin-Sherwood Road, 124th Avenue, and Boones Ferry Road.

## PROSPERITY FOCUS

The Tualatin Development Commission has dedicated up to \$55.5 million dollars to identified infrastructure projects to encourage and promote greenfield land development.

## TIMELINE

The City of Tualatin intends to complete all identified projects by 2051.

**\$55**  
MILLION

**30**  
YEARS

**717**  
ACRES

### AREAS OF INVESTMENT



# THE SOUTHWEST BASALT CREEK DEVELOPMENT AREA

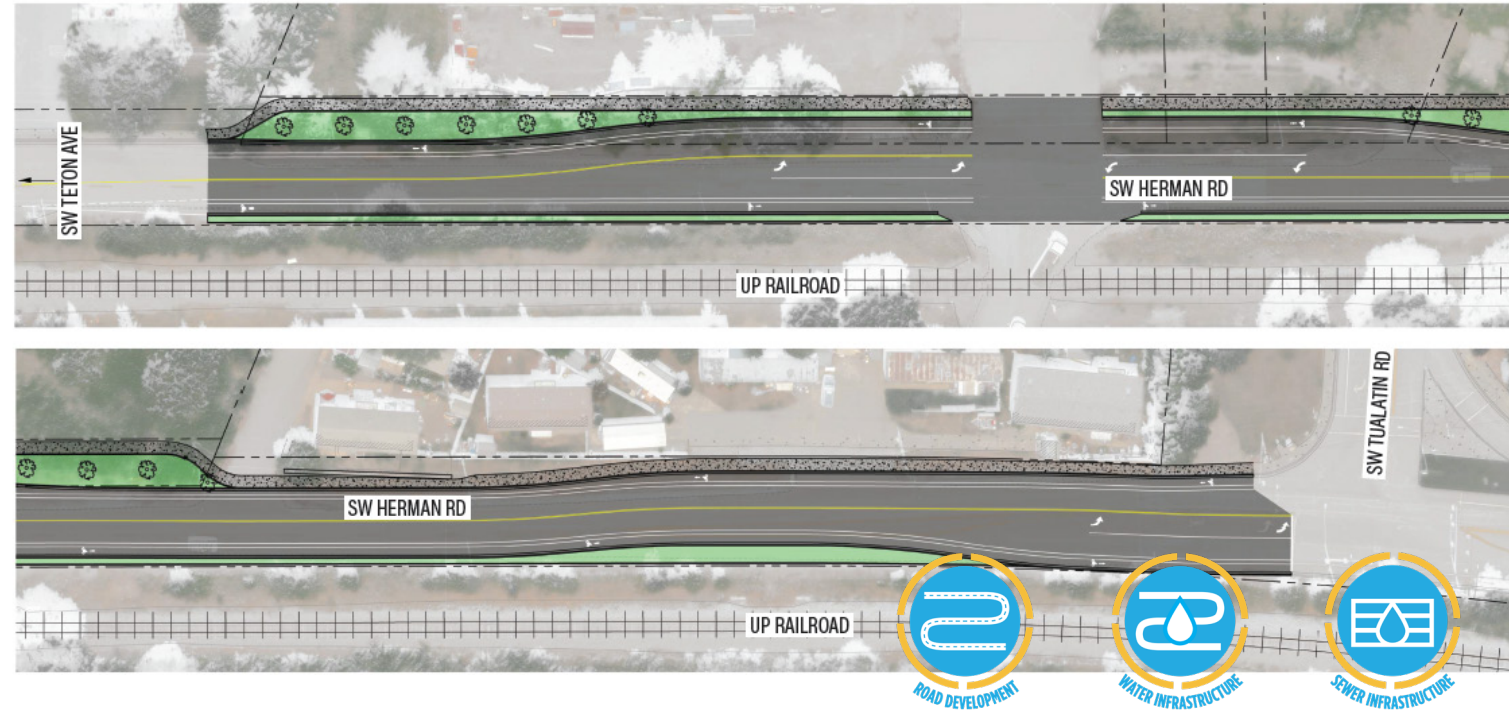




THE LEVETON  
**TAX INCREMENT**  
DISTRICT



HERMAN ROAD IMPROVEMENTS CONCEPT PLAN



**THE DISTRICT**

Established in 1982, the Leveton Tax Increment Finance District is a successful 380-acre industrial development area home to advanced manufacturing. Through City efforts, the assessed value increased over \$255 million since 1982.

**THE PROJECT**

A multi-year project to expand Herman Road to add pedestrian access, bike lanes, remedy drainage issues, and add a center-turn lane at the industrial driveway of Herman Road. The anticipated project cost is \$3 million.

**TIMELINE**

**2020**

Conceptual design and planning.

**FALL 2020 - PRESENT**

Complex design and stakeholder/property owner negotiations.

**SPRING 2023**

Estimated construction to begin.

**FALL 2023**

Estimated completion date.





# THE NEED

As our community continues to grow, the available land to accommodate demand is limited. From housing to commercial development, the area contains a select number of small greenfield parcels for development.

# THE PURPOSE

To utilize a variety of funding tools to meet the needs of the area in alignment with the community vision.

# EXAMPLE INVESTMENTS



Lake Oswego

Beautifully designed mixed-use development that expands housing options and affordability with quality of life amenities.



Minneapolis

Enhancing multi-modal and pedestrian access with integrated community design standards to enliven the entire area.

# TIMELINE

<p><b>2018-2021</b></p> <p>Extensive work has been completed through various planning sessions.</p>	<p><b>JANUARY - FEBRUARY</b></p> <p>During this portion, City Staff will work to establish the final proposed boundary, financial modeling, and proposed life of the plan.</p>	<p><b>JANUARY -JULY</b></p> <p>Led by City Council, City Staff to propose area projects and bucket list concerns for opportunity.</p> <p>Outreach efforts may include advisory groups and a taskforce of property owners and vested stakeholders.</p>	<p><b>AUGUST - DECEMBER</b></p> <p>The City will consult with all regional partners in the preparation for the final adoption of this plan. The plan will be presented to the Tualatin Development Commission, the Tualatin Planning Commission, and the Tualatin City Council with a public hearing. Anticipated adoption date is December 2022.</p>
---	--	---	---



THE CORE  
**OPPORTUNITY**  
REINVESTMENT AREA







**ABOUT**

In April 2020, the region came together to draft a broad economic recovery plan for the post-COVID-19 economy under the leadership of Greater Portland Inc. and Metro Oregon.

Greater Portland  
**ECONOMIC RECOVERY PLAN**



- 1 HELP SMALL BUSINESSES RECOVER & GROW
- 2 ADVANCE ECONOMIC MOBILITY FOR INDIVIDUALS
- 3 SUPPORT FAMILIES & CHILDREN

REGION-FOCUSED ADAPTABLE FRAMEWORK  
SUPPORTS SMALL BUSINESS RECOVERY AND  
EMPLOYMENT IN RESPONSE TO COVID-19

**OUR VISION**

As a community, the Greater Portland region will recover from the COVID-19 pandemic stronger, more resilient, and more equitable with an urgent focus on building opportunities for Black, Indigenous, and People of Color (BIPOC) and their businesses, as they have been hit hardest.

The guiding values set the foundation for how the region will implement the vision of the Greater Portland Economic Recovery Plan.

**GUIDING VALUES**

-  **REMOVE BARRIERS AND BUILD TRUST**  
To advance racial equity for underserved and under-resourced populations
-  **WORK TOGETHER**  
Through regional collaboration and communication to strengthen all of our communities
-  **TAKE URGENT ACTION**  
For businesses and people in need
-  **LEAD WITH HEALTH**  
Prioritize public health
-  **INVEST STRATEGICALLY**  
Data will inform priorities for action

**TARGET IMPACT AREAS**

- 1 Help small businesses recover and grow
- 2 Advance economic mobility for individuals
- 3 Support families and children

\*Images are from the Economic Recovery Plan Report





# Proclamation

## *Declaring TOM STEIGER as Tualatin's "2021 Employee of the Year"*

WHEREAS, the Employee of the Year program is designed to recognize the work and actions which bring credit to the City and improve our ability to deliver excellent service to Tualatin's customers; and

WHEREAS, Tom Steiger moved from Michigan to join the City of Tualatin as the Parks Maintenance Manager in May of 2011; and

WHEREAS, in February 2021 when Tualatin was hit with a historic and devastating ice storm, Tom immediately jumped into action and took the lead on the response that lasted many weeks and months. Tom went above and beyond in his response, removing countless damaged trees and limbs around the City, coordinating crews, engaging volunteers, and modeling excellent customer service; he took the initiative to ensure inter-departmental communication and cooperation throughout it all; and

WHEREAS, during the closure and limited use of many parks in the early days of the pandemic, Tom and his team jumped into action, showing great ability to problem-solve through uncertain times. Tom consistently demonstrated how well he handles pressure and constantly changing conditions, always remaining flexible and solution-oriented; and

WHEREAS, through all of the challenges of 2021, Tom lived out the values of team work and respect; he was thoughtful, positive, and went above and beyond to be supportive. He was an inspirational co-worker who maintained a "can do" attitude and was always willing to explore the best case scenario no matter what the disaster; and

WHEREAS, Tom consistently demonstrates Tualatin's core values of TEAMWORK, RESPECT, having a ONE CITY mindset, EMPOWERMENT, PROBLEM SOLVING, CUSTOMER SERVICE and being NON-BUREAUCRATIC in a multitude of ways every day.

NOW, THEREFORE, BE IT PROCLAIMED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, Oregon that:

Tom Steiger is named the "2021 City of Tualatin Employee of the Year."

INTRODUCED AND ADOPTED this 14<sup>th</sup> day of February, 2022.

CITY OF TUALATIN, OREGON

BY \_\_\_\_\_  
Mayor

ATTEST:

BY \_\_\_\_\_  
City Recorder



*City of Tualatin*

**CITY OF TUALATIN**  
**Staff Report**

**TO:** Honorable Mayor and Members of the City Council  
**THROUGH:** Sherilyn Lombos, City Manager  
**FROM:** Nicole Morris, Deputy City Recorder  
**DATE:** February 14, 2022

---

**SUBJECT:**

Consideration of Approval of the Work Session and Regular Meeting Minutes of January 24, 2022.

**RECOMMENDATION:**

Staff respectfully recommends the Council adopt the attached minutes.

---

**ATTACHMENTS:**

- City Council Work Session Meeting Minutes of January 24, 2022
- City Council Regular Meeting Minutes of January 24, 2022





## OFFICIAL MINUTES OF THE TUALATIN CITY COUNCIL WORK SESSION MEETING FOR JANUARY 24, 2022

Present: Mayor Frank Bubenik, Council President Nancy Grimes, Councilor Bridget Brooks, Councilor Maria Reyes, Councilor Valerie Pratt, Councilor Cyndy Hillier, Councilor Christen Sacco

---

### **Work Session**

Mayor Bubenik called the meeting to order at 5:00 p.m.

#### **1. *Ridwell – Informational Presentation & Discussion.***

Management Analyst Lindsay Marshall introduced Ridwell Staff Scott Bauer and Caleb Weaver to present services provided by Ridwell. Mr. Weaver stated Ridwell is a service that picks up “hard to recycle” items from residents. He explained their business model which includes bi-weekly pickup of items that are not part of a curbside program.

Councilor Pratt asked the cost of transportation, the carbon emissions from the vehicles, and how it is balanced by the recycling that is done. Mr. Weaver stated any bit of recycling has positive impacts on the environment. He stated their business model is not based on earning money from the recycling of products but from the service and the relationship with the recycling vendors.

Councilor Pratt asked how they can serve people in apartment style living. Mr. Weaver stated they serve individuals in multi-family units and work with apartment complexes to provide services.

Councilor Pratt expressed concerns with the city having an exclusive franchise agreement with our trash haulers and how a partnership with Ridwell would affect that. Mr. Weaver stated the garbage hauler is not providing the same service and would not be competing with land fill and recycling items that they provide service for.

Councilor Reyes asked for clarification about how their service works. Mr. Weaver stated they are a subscription based service that offers a pickup bi-weekly when opted into.

Councilor Brooks asked how their additional donations work. Mr. Weaver stated they identify an organization and make them a featured category in their app for donation pickup.

Councilor Brooks stated she is liking the convenience of the home pickup in helping with sustainability efforts. She stated her biggest concern is around regulation and making sure the items they are told are being recycled are done so responsibly. Mr. Weaver stated they work with Metro and DEQ to make sure they are meeting all state and local requirements.

Councilor Sacco stated she is in favor of ideas like this that offer new ways to reuse and recycle. She wants to make sure everything is up to code and regulated. Councilor Sacco asked about any potential costs to the city and how many employees they have. Mr. Weaver stated they are happy to look at permit fees and franchise fees as part of their service. He stated they have 50 employees in the Metro area.

Council President Grimes watch to ensure there is proper licensing and oversight in place. She would like to see a franchise agreement put in place.

Mayor Bubenik stated we will need to wait to have a new City Attorney in place to proceed. He would also like to see if Metro and DEQ approve Ridwell's permit before making any decisions. He stated he is supportive of their business.

City Manager Lombos stated she would concurred the city needs to wait until the city is fully staffed and watch what happens in the region.

## **2. Parks Funding.**

Parks and Recreation Director Ross Hoover and Parks Planning Manager Rich Mueller introduced Consultants Clark Worth and John Horvick. Consultant Worth presented the Tualatin Parks funding opinion research results. He stated the research goes back to January 2020 and they have since held stakeholder interviews and focus groups in November 2021. Consultant Worth presented community survey results from January 2020 and noted 80% of respondents stated they would like to see some kind of funding source for parks on the ballot. Highlights from the stakeholder interviews included notes about deficiencies in parks, funding priorities, and the utility fee not being enough. Consultant Worth stated the general consensus was to put together an affordable bond measure and a grassroots campaign that offers something for everyone. Consultant Horvick spoke to focus group research stating traffic was the leading issue mentioned and noted parks was not mentioned at all. He stated most participants are satisfied with City services, including parks being well maintained and adequate. Consultant Horvick stated participants were not initially supportive of a bond measure and pointed to other higher priorities. He stated support improved when voters were assured the funding measure includes their priorities and stated an acceptable price point for homeowners appears between \$75 to \$200 per year. Consultant Worth stated money allocated to parks goals would include interconnected trails, parks maintenance, and expanded access. He stated the importance of park investments would be connect trails, upgrades to existing parks, natural areas, river access, playground equipment, and large lawns for multiple use. Consultant Worth stated least popular projects included dog parks, buying land, improved/expanded playfields, and implementation of the Parks Master Plan. He spoke to what the success formula would have to be to receive enough "yes" votes including it being community-driven, something for everyone, inclusion of voter priority projects, and the right funding ask. Consultant Worth spoke to potential community outreach. He shared the 2022 election calendar and a potential timeline for preparing the measure. Director Hoover stated this discussion has been held at the Tualatin Parks Advisory Board and they are supportive.

Councilor Pratt asked how many people they estimate use the parks in Tualatin. Consultant Worth stated 25-40% of the population uses the parks.

Councilor Pratt asked if the ballot measure did not have enough funding to fund all the priorities in the master plan how would that be prioritized. Consultant Worth stated those are decisions that would be have to be made by the Council.

Councilor Hillier asked if there was evidence about what trails would need to be expanded to make them valuable. Consultant Horvick stated the research shows if there are better connections existed they would be in favor of funding.



Councilor Brooks stated parks are a place for the community to connect. She asked how many years the bond potentially could be. Consultant Worth stated the time frame is still to be determined.

Councilor Brooks asked if there was anything that particular stuck out during this research. Consultant Horvick stated the City has a relatively high level of satisfaction and confidence in leadership which works in their favor.

Councilor Sacco stated 2.5% of the resident were surveyed and asked if that is enough representation to see what the majority of voters would say. She asked about statistics of ballot measures passing in the spring instead of the fall. Consultant Horvick stated the right mix of representation was in the focus groups so it represents the population well. He stated there is not much difference about when an item is on a ballot but more about what is on the ballot with it.

Councilor Reyes asked how people are picked for the telephone survey. Consultant Horvick stated they start with a list of registered voters and then match it against the city's utility list. They then look at the sample of voters against their demographics to make sure they fit a well representative sample of the community.

Mayor Bubenik asked if they separated the parks fee from the additional bond measure. Consultant Horvick stated the conversations assumed both.

Council consensus was reached to continue to researching the measure and potentially crafting a ballot measure.

### **3. Council Meeting Agenda Review, Communications & Roundtable.**

City Manager Lombos introduced Interim City Attorney Chad Jacobs.

Councilor Pratt stated she attended the C4 committee and I-5 Tolling subcommittee meeting.

Councilor Brooks stated she attended an executive board meeting for the Regional Water Consortium and the Tualatin Arts Advisory Committee meeting.

Council President Grimes thanked fellow Councilors who are working diligently on the tolling project.

Mayor Bubenik attended the Oregon Transportation Commission meeting and Congresswoman Bonamici's Townhall.

### **Adjournment**

Mayor Bubenik adjourned the meeting at 6:54 p.m.

Sherilyn Lombos, City Manager

\_\_\_\_\_ / Nicole Morris, Recording Secretary

\_\_\_\_\_ / Frank Bubenik, Mayor



## OFFICIAL MINUTES OF THE TUALATIN CITY COUNCIL MEETING FOR JANUARY 24, 2022

Present: Mayor Frank Bubenik, Council President Nancy Grimes, Councilor Bridget Brooks, Councilor Maria Reyes, Councilor Valerie Pratt, Councilor Cyndy Hillier, Councilor Christen Sacco

---

### **Call to Order**

Mayor Bubneik called the meeting to order at 7:00 p.m.

### **Pledge of Allegiance**

### **Moment of silence for those who have lost their lives to COVID-19**

### **Announcements**

#### 1. Equity Committee Planning Group Recruitment

Engagement Coordinator Betsy Ruef stated the city will begin recruiting for a temporary city committee to help create the structure of the new Equity Committee. She stated anyone interested can find information on how to apply on the city's website.

#### 2. New Employee- Librarian I Alec Chunn

Library Director Jerianne Thompson introduced Librarian I Alec Chunn. The Council welcomed him.

#### 3. New Employee- Management Analyst II Cody Field

Community Development Director Kim McMillian introduced Analyst II Cody Field. The Council welcomed him.

#### 4. New Employee- Building Official Suzanne Tyler

Community Development Director Kim McMillian introduced Building Official Suzanne Tyler. The Council welcomed her.

#### 5. New Employee- City Engineer Heidi Springer

Community Development Director Kim McMillian introduced City Engineer Heidi Springer. The Council welcomed her.

### **Public Comment**

Republic Services Municipal Relationship Manager KJ Lewis stated they are working to reduce waste in the community. She noted they are working on how to provide the benefit of "hard to recycle" products in an equitable and sustainable manner in the community.



## Consent Agenda

Motion to adopt the consent agenda made by Council President Grimes, Seconded by Councilor Pratt.

Voting Yea: Mayor Bubenik, Council President Grimes, Councilor Brooks, Councilor Reyes, Councilor Pratt, Councilor Hillier, Councilor Sacco

MOTION PASSED

1. Consideration of Approval of the Work Session and Regular Meeting Minutes of January 10, 2022
2. Consideration of **Resolution No. 5589-22** Authorizing the City Manager to Execute an Intergovernmental Agreement with Washington County, in support of the Countywide Transit Study Project
3. Consideration of **Resolution No. 5592-22** Awarding a Contract for the Tualatin River Greenway Trail Extension Construction Documents and Professional Services to Alta Planning + Design, Inc.
4. Consideration of **Resolution No. 5594-22** Authorizing an Amendment to a Services Agreement with Murraysmith, Inc. for the Tualatin Moving Forward Bond Program and Authorizing the City Manager to Execute the Amendment
5. Consideration of **Resolution No. 5596-22** Authorizing the City Manager to Execute a Collective Bargaining Agreement with the American Federation of State, County & Municipal Employees (AFSCME) Local 422
6. Consideration of the System Development Charge Annual Reports for Fiscal Year 2020-21

## Public Hearings - *Quasi-Judicial*

1. Consideration of Approval of a Plan Map Amendment (PMA-21-0001) and Adoption of **Ordinance No. 1464-22** to Rezone the Tualatin Heights Apartments Site Located at 9301 SW Sagert Street (Tax Map 2S123DC, Tax Lot 600) from the Medium Low Residential (RML) Zoning District to the Medium High Density Residential (RMH) Zoning District

Mayor Bubenik opened the hearing in accordance with ORS 197.763(5) and (6) and ORS 197.793 (3)(b).

Mayor Bubenik declared he was approached by residents of Tualatin Heights apartments during the public meetings phase of the process with concerns about parking. He noted it was an informational meeting regarding the change in density.

Assistant Community Development Director Steve Koper and Associate Planner Keith Leonard presented the Tualatin Heights Apartments Plan Map Amendment (PMA 21-0001). Planner Leonard stated Angelo Planning Group is requesting to rezone the property from Medium low Density Residential (RML) to Medium High Density Residential (RMH). He noted development would be required to go through the Architectural Review Application process. Planner Leonard shared a map highlighting the property with the existing and proposed zoning. He additionally shared the conceptual redevelopment plan that includes two new buildings. Planner Leonard shared amendment criteria and stated the amendment is in the public interest and meets all Oregon Statewide planning goals and administrative rules. He noted there is a deficit of 109

RMH units in the city. Director Koper stated the Planning Commission has recommended approval of the PMA. He noted they did express concerns regarding the parking and the potential need for a parking district in the area.

Applicant Representative Frank Angelo, Angelo Planning Group, stated the existing site has 220 multifamily units. He stated the proposed amendment will make more efficient use of the site and provide additional multi-family housing to meet needs in Tualatin. The proposal would provide an additional 116 units on the site. Mr. Angelo shared the existing site plan and conceptual site plan. He spoke to the need for multi-family housing in Tualatin due to the deficit of RMH units. Mr. Angelo stated they prepared an on-street and off-street parking assessment that arose due to neighborhood concerns. Consultant Matt Hughart spoke to the traffic impact study that was done and stated the study found that no off-site improvements are needed due to the rezone. He shared the parking study summary noting the facility has adequate on-site parking. Mr. Angelo shared a parking policy comparison that was done with other apartment facilities within a mile radius. He noted charging for an additional space other than the one assigned space is comparable to other facilities.

## PUBLIC COMMENT

Scott Bauer stated he is a resident of the complex. He noted there are only six guest spots for 220 units in the complex. Mr. Bauer stated residents are less likely to pay for additional spaces so they street park. He expressed additional concerns with the garbage facilities and their current capacity. Mr. Bauer stated the proposed additional units doesn't allow for additional capacity for two car families.

Jim Kiel spoke in opposition of the application. He stated parking in the neighborhood has increased because of the apartment complex. Mr. Kiel stated it creates a lot of issues in the area including blocking of driveways and trouble with garbage service.

Alisa Wilson-Coleman spoke in opposition of the application. She spoke to concern with the current lack of parking and the stress new units will put on the current apartment community.

Nicole Tribble expressed concerns with not hearing from the neighborhood residents. She shared concerns with the traffic study being done in July instead of when school is in session and traffic is at its heaviest.

## APPLICANT REBUTTAL

Mr. Angelo stated this is not a development proposal as that would be done at a later time in the Architectural Review process.

Mr. Angelo stated recycling and waste management would be dealt with during the Architectural Review process. He stated there is no timeframe currently for development.

Mr. Angelo spoke to a potential entrance off of 195<sup>th</sup>, he stated that it will only be used for a fire entrance.

Mr. Angelo stated there are currently 457 parking spaces on site and the city standards only require 350 spaces. He stated if additional housing units are added they would add additional parking spaces. Mr. Angelo stated the conceptual plan shows 540 spaces with the city requiring 475 spaces.



Consultant Hughart stated the traffic study was done in July because that is when it was requested. He acknowledged traffic patterns are different in the summer time. Consultant Hughart stated they looked at highest demand times for the complex at 5am which is not impacted by school being present.

John McGrew stated they are just looking at zoning currently but ultimately it will come down to economics for the owner. He stated the addition hasn't been approved at this time.

Mayor Bubenik asked city staff to explain the residential zone parking program. Director Koper stated the residential zone program is initiated by citizens. He stated the zone is reviewed by staff and the city provides permits and signage if approved. Mayor Bubenik stated it is an easy process for residents to go through.

## COUNCIL QUESTIONS

Councilor Brooks asked if there are service delivery days that can be posted for no parking times. Director Koper spoke to different parking zones throughout the city. He noted those zones are typically resident driven by request. Councilor Brooks asked if there are costs to residents to receive the permits. Director Koper stated there is no cost to residents. Councilor Brooks asked if apartment residents would be able to get permits. Director Koper stated they would not be included.

Councilor Brooks asked about traffic concerns in the area with already failing intersections in the area. Director Koper stated the intersection failing is based off a 10-15 year timeframe and is irrespective of the rezoning of the area as it would fail without it.

Councilor Brooks asked why parking is allowed in front of the homes and not in front of the apartments. Director Koper stated it is not feasible to allow parking on both sides of the street.

Councilor Brooks asked how many spaces are available in the complex. Mr. Hughart stated there are 450 total spaces and 360 spaces are being used.

Councilor Pratt asked if spaces for new units will need to be added or can they use existing spaces. Director Koper stated once it goes under Architectural Review they will have to come into compliance with new minimum parking standards. He stated the concept plans are just to show that the units can fit but don't correlate to the amount of required spaces.

Councilor Sacco asked about the current RMH housing deficit. She asked if the new apartments going in at Stafford Hills will fill the current deficit. Director Koper stated that property was included in the housing needs analysis as available housing units so it doesn't affect the deficit numbers.

Councilor Sacco stated based on the numbers for parking at the complex she feels it will be worse with the new buildings. She asked what influence the Council has at the Architectural Review process and what influence they have moving forward. Director Koper stated a future Architectural Review application would be at the board or staff level so the council wouldn't have direct influence on the application.

Councilor Hillier expressed concerns with parking, quality of the living experience, and greenspace for the residents of the complex.

Councilor Brooks asked if the City has oversight over the garbage pickup in the area. Police Chief Bill Steele stated there are no laws currently in place about blocking garbage cans or mail boxes.

Councilor Pratt asked since this meets the criteria does the Council have to approve it. City Attorney Chad Jacobs stated the Council has to judge the application against the criteria. He stated if it doesn't meet what is in the city's best interest then they would need to articulate that as the reason to deny the application.

Mayor Bubenik asked if Council can attach conditions to the zoning change that could be related to parking. Attorney Jacobs stated it would be difficult to oppose criteria attached to parking tonight. He stated it would be better to impose them during the Architectural Review process.

## COUNCIL DELIBERATIONS

Councilor Reyes stated she would rather have more units available for living then worry about the parking.

Councilor Brooks stated the housing needs analysis is a goal and wants to have more housing available but at the same time wants to ensure parking issues are addressed.

Councilor Sacco stated we are in a housing crisis and have a lack of affordable housing and she has to balance that with the quality of life for those who already live in the complex. She wants to ensure they do what is in the public's interest.

Councilor Pratt expressed concerns with the affordability of the housing, the effects on the neighborhood, livability in the area, and access to parks.

Council President Grimes spoke to her concerns about the change being in the public's best interest. She stated known concerns in the neighborhood related to parking and access are of great concern for her. She would like to see a more detailed plan for the development in order to understand the affordability of the potential housing. Council President Grimes also acknowledged the lack of public transit in the area.

Mayor Bubenik encouraged the applicant to consider a robust parking management plan for the complex. He stated the homeowners in the neighborhood can fix the parking issue by coming to Council and requesting a permitted parking zone for their neighborhood. Mayor Bubenik expressed concerns with the limited public transit in the area. He stated HB 2001 purpose is to increase density and remove arbitrary standards from development. He noted this is going to create higher density and more cars in the suburbs. Mayor Bubenik stated he would approve this application as it meets criteria.

Councilor Pratt expressed concerns with this being for the public good. Attorney Jacobs stated you have to have clear criteria. He stated what is in the best interest of the public is a difficult standard to determine what is clear and not clear. Attorney Jacobs stated if the council is going to define that this is not in best interest of the public you have to define clear reasons of why it is not as a Council. He stated an appeal would go before LUBA and they apply some deference to what the Council determines what is in the best interest of the public but it has to be clear.

Director Koper stated this is a Quasi-Judicial hearing and so sufficiency of the evidence on record is important. He stated there is testimony tonight on record that gives some weight to it



being in the best interest of the public or not. Director Koper stated there would have to be concurrence amongst Council for the decision to be made.

Attorney Jacobs stated the record can be left open to allow for additional submission of comments that could help the Council make a decision one way or the other.

Councilor Sacco asked when defining the public interest who the public is. Attorney Jacobs stated it would be anyone in your jurisdiction.

Council President Grimes asked if conditions could be applied since it is just a zoning change request and since the city doesn't know what the development will look like. Director Koper stated the Council would have to look at the development code and determine if those standards are acceptable in this situation or require something above and beyond the minimums.

Council Hiller asked if setting conditions would set a precedent for future developments in Tualatin and allow the Council to change the code. Director Koper stated it doesn't directly set a precedent it would just be an application based condition for approval.

Councilor Pratt stated she is in favor of continuance of this hearing so the residents of the neighborhood can be accurately noticed and heard from.

Council Presidents Grimes spoke in favor of leaving the record open so the residents have additional time to be noticed and heard.

Motion to reopen the record for Plan Map Amendment (PMA-21-0001) and adoption of Ordinance No. 1464-22 to rezone the Tualatin Heights Apartments site located at 9301 SW Sagert Street (Tax Map 2S123DC, Tax Lot 600) from the Medium Low Residential (RML) Zoning District to the Medium High Density Residential (RMH) Zoning District made by Councilor Brooks, Seconded by Council President Grimes.

Voting Yea: Mayor Bubenik, Council President Grimes, Councilor Brooks, Councilor Reyes, Councilor Pratt, Councilor Hillier, Councilor Sacco

MOTION PASSED

Motion to continue the hearing to February 14, 2022 made by Councilor Brooks, Seconded by Council President Grimes.

Voting Yea: Mayor Bubenik, Council President Grimes, Councilor Brooks, Councilor Reyes, Councilor Pratt, Councilor Hillier, Councilor Sacco

MOTION PASSED

## **General Business**

1. Consideration of **Resolution No. 5593-22** Accepting the City of Tualatin Basalt Creek Parks and Recreation Plan

Parks Planning and Development Manager Rich Mueller, MIG Consultant Rachel Edmonds, and MIG Consultant Brice Maryman presented the Basalt Creek Parks and Recreation Plan. Consultant Edmonds presented a brief recap of the presentation made at the January 10, 2022 meeting. Director Hoover recapped community concerns as presented in length at the January 10<sup>th</sup> meeting. Director Hoover stated the resolution presented tonight is an acceptance step that

provides time for community members to continue to provide feedback and input. He stated it also gives direction to staff to start planning for future acquisition.

#### PUBLIC COMMENT

None.

#### COUNCIL DELIBERATIONS

None.

Motion to adopt Resolution No. 5593-22 accepting the City of Tualatin Basalt Creek Parks and Recreation Plan made by Councilor Pratt, Seconded by Councilor Brooks.

Voting Yea: Mayor Bubenik, Council President Grimes, Councilor Brooks, Councilor Reyes, Councilor Pratt, Councilor Hillier, Councilor Sacco

#### MOTION PASSED

#### 2. Consideration of **Resolution No. 5595-22** Establishing Recommendations for the I-205 Tolling Project

Mayor Bubenik stated this was requested by Councilor Pratt at the last meeting. He stated he used this as a basis for his letter to the Oregon Transportation Commission.

Councilor Pratt stated West Linn and Lake Oswego passed similar resolutions.

Councilor Reyes asked for a brief history on the tolling project. Mayor Bubenik stated HB 2017 gave ODOT direction to look at the Metro region as a potential area that could use tolling to pay for interstates. He stated this is due to the lack of funds from the gas tax. Mayor Bubenik stated ODOT has been looking at how tolling could be implemented in the region and conducting outreach. He stated people are criticizing the lack of a communication plan and impacts of diversion into city side streets. Mayor Bubenik stated the City Council is concerned with diversion, equity, and the lack of east/west transit.

City Manager Lombos stated there are two projects going on right now but the Regional Mobility Congestion Pricing Concept is being highlighted. She stated there is current advocacy to pay for the Abernathy Bridge in another way outside of tolling and finish the region mobility pricing project first. She stated ODOT has stated there are not sufficient funds right now but region leaders don't agree.

Councilor Pratt stated more information can be found at [www.oregon.gov/odot/tolling](http://www.oregon.gov/odot/tolling). She stated questions and concerns can be submitted there. Mayor Bubenik stated questions can be submitted to their state representatives as well.

Councilor Pratt stated the resolution asks ODOT to address how funds will be used from tolling after the Abernathy Bridge is completed.

Councilor Brooks stated Tualatin already has traffic concerns and is concerned with the potential grid lock tolling will cause in Tualatin. She wants ODOT to make sure infrastructure is reinforced throughout the region before tolling begins and creates further impacts. Councilor Brooks stated she is opposed to tolling.



Motion to adopt Resolution No. 5595-22 establishing recommendations for the I-205 Tolling Project made by Councilor Pratt, Seconded by Council President Grimes.  
Voting Yea: Mayor Bubenik, Council President Grimes, Councilor Brooks, Councilor Reyes, Councilor Pratt, Councilor Hillier, Councilor Sacco  
MOTION PASSED

**Adjournment**

Mayor Bubenik adjourned the meeting at 10:23 p.m.

Sherilyn Lombos, City Manager

\_\_\_\_\_ / Nicole Morris, Recording Secretary

\_\_\_\_\_ / Frank Bubenik, Mayor



*City of Tualatin*

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council  
**THROUGH:** Sherilyn Lombos, City Manager  
**FROM:** Nicole Morris, Deputy City Recorder  
**DATE:** 2/14/2022

---

**SUBJECT:**

Consideration of Approval of a New Liquor License Application for Bridge City Golf Inc dba Envision Golf

**RECOMMENDATION:**

Staff respectfully recommends the Council approve endorsement of the liquor license application for Bridge City Golf Inc dba Envision Golf.

**EXECUTIVE SUMMARY:**

Bridge City Golf Inc dba Envision Golf has submitted a new application under the liquor license category of full on-premises. This would permit them to sell and serve distilled spirits, malt beverages, wine, and cider for consumption at their location. The business is located at 18039 SW Lower Boones Ferry Road. The application is in accordance with provisions of Ordinance No. 680-85 which establishes procedures for liquor license applicants. Applicants are required to fill out a City application form, from which a review by the Police Department is conducted, according to standards and criteria established in Section 6 of the ordinance. The Police Department has reviewed the new liquor license application and recommended approval. According to the provisions of Section 5 of Ordinance No. 680-85 a member of the Council or the public may request a public hearing on any of the liquor license requests. If such a public hearing request is made, a hearing will be scheduled and held on the license. It is important that any request for such a hearing include reasons for said hearing.

**FINANCIAL IMPLICATIONS:**

A fee has been paid by the applicant.

---

**ATTACHMENTS:**

- Application
- Vicinity Map





# CITY OF TUALATIN

## LIQUOR LICENSE APPLICATION

Return Completed form to:  
City of Tualatin  
Attn: Finance  
18880 SW Martinazzi Ave  
Tualatin, OR 97062

Date 1/10/2022

**IMPORTANT:** *This is a three-page form. You are required to complete all sections of the form.* If a question does not apply, please indicate N/A. Please include full names (last, first middle) and full dates of birth (month/day/year). Incomplete forms shall receive an unfavorable recommendation.

**Thank you for your assistance and cooperation.**

### SECTION 1: TYPE OF APPLICATION

- Original (New) Application - \$100.00 Application Fee.
- Change in Previous Application - \$75.00 Application Fee.
- Renewal of Previous License - \$35.00 Application Fee. Applicant must possess current business license. License # \_\_\_\_\_
- Temporary License - \$35.00 Application Fee.

### SECTION 2: DESCRIPTION OF BUSINESS

Name of business (dba): Bridge City Golf Inc., dba Envision Golf

Business address 18039 SW Lower Boones Ferry Road City Tualatin State OR Zip Code 97224

Mailing address same address City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone # 503 388 9770 Fax # \_\_\_\_\_

Email marcel.newsome@envisiongolf.com

Name(s) of business manager(s) First Marcel Middle A Last Newsome

(attach additional pages if necessary)

Type of business Indoor Golf Entertainment serving food and alcohol

Type of food served A full light prep mediterranean kitchen with sandwiches, wraps, pita pizzas, salads

Type of entertainment (dancing, live music, exotic dancers, etc.) 10 golf simulators and a golf shop

Days and hours of operation 8:30 am to 11:00 pm

Food service hours: Breakfast 8:30 am Lunch 11:30 to close Dinner 11:30 to close

Restaurant seating capacity 55 visitors Outside or patio seating capacity n/a

How late will you have outside seating? n/a How late will you sell alcohol? 11:30

How many full-time employees do you have? 3 Part-time employees? 4

**SECTION 3: DESCRIPTION OF LIQUOR LICENSE**

Name of Individual, Partnership, Corporation, LLC, or Other applicants Bridge City Golf Inc

Type of liquor license (refer to OLCC form) Full on-Premises Sales, Commercial

Form of entity holding license (check one and answer all related applicable questions):

**INDIVIDUAL:** If this box is checked, provide full name, date of birth, and residence address.  
Full name \_\_\_\_\_ Date of birth \_\_\_\_\_  
Residence address \_\_\_\_\_

**PARTNERSHIP:** If this box is checked, provide full name, date of birth and residence address for each partner. If more than two partners exist, use additional pages. If partners are not individuals, also provide for each partner a description of the partner's legal form and the information required by the section corresponding to the partner's form.  
Full name \_\_\_\_\_ Date of birth \_\_\_\_\_  
Residence address \_\_\_\_\_  
Full name \_\_\_\_\_ Date of birth \_\_\_\_\_  
Residence address \_\_\_\_\_

**CORPORATION:** If this box is checked, complete (a) through (c).  
(a) Name and business address of registered agent.  
Full name Bridge City Golf Inc  
Business address 18039 SW Lower Boones Ferry Road, Tualatin, OR 97224

(b) Does any shareholder own more than 50% of the outstanding shares of the corporation? If yes, provide the shareholder's full name, date of birth, and residence address.  
Full name Martha Holley Newsome \_\_\_\_\_  
\_\_\_\_\_

(c) Are there more than 35 shareholders of this corporation? Yes \_\_\_ No xx. If 35 or fewer shareholders, identify the corporation's president, treasurer, and secretary by full name, date of birth, and residence address.  
Full name of president: Marcel A Newsome Date of birth: \_\_\_\_\_  
\_\_\_\_\_  
Full name of treasurer: Marcel A Newsome Date of birth: \_\_\_\_\_  
\_\_\_\_\_  
Full name of secretary: Martha Holley Newsome Date of birth: \_\_\_\_\_  
\_\_\_\_\_

**LIMITED LIABILITY COMPANY:** If this box is checked, provide full name, date of birth, and residence address of each member. If there are more than two members, use additional pages to complete this question. If members are not individuals, also provide for each member a description of the member's legal form and the information required by the section corresponding to the member's form.  
Full name: \_\_\_\_\_ Date of birth: \_\_\_\_\_  
Residence address: \_\_\_\_\_



Full name: \_\_\_\_\_ Date of birth: \_\_\_\_\_  
Residence address: \_\_\_\_\_

**OTHER:** If this box is checked, use a separate page to describe the entity, and identify with reasonable particularity every entity with an interest in the liquor license.

**SECTION 4: APPLICANT SIGNATURE**

A false answer or omission of any requested information on any page of this form shall result in an unfavorable recommendation.

\_\_\_\_\_  
Signature of Applicant 1/10/2022  
Date

For City Use Only

Sources Checked:

- DMV by B       LEADS by B       TuPD Records by B  
 Public Records by B

- Number of alcohol-related incidents during past year for location.  
 Number of Tualatin arrest/suspect contacts for \_\_\_\_\_

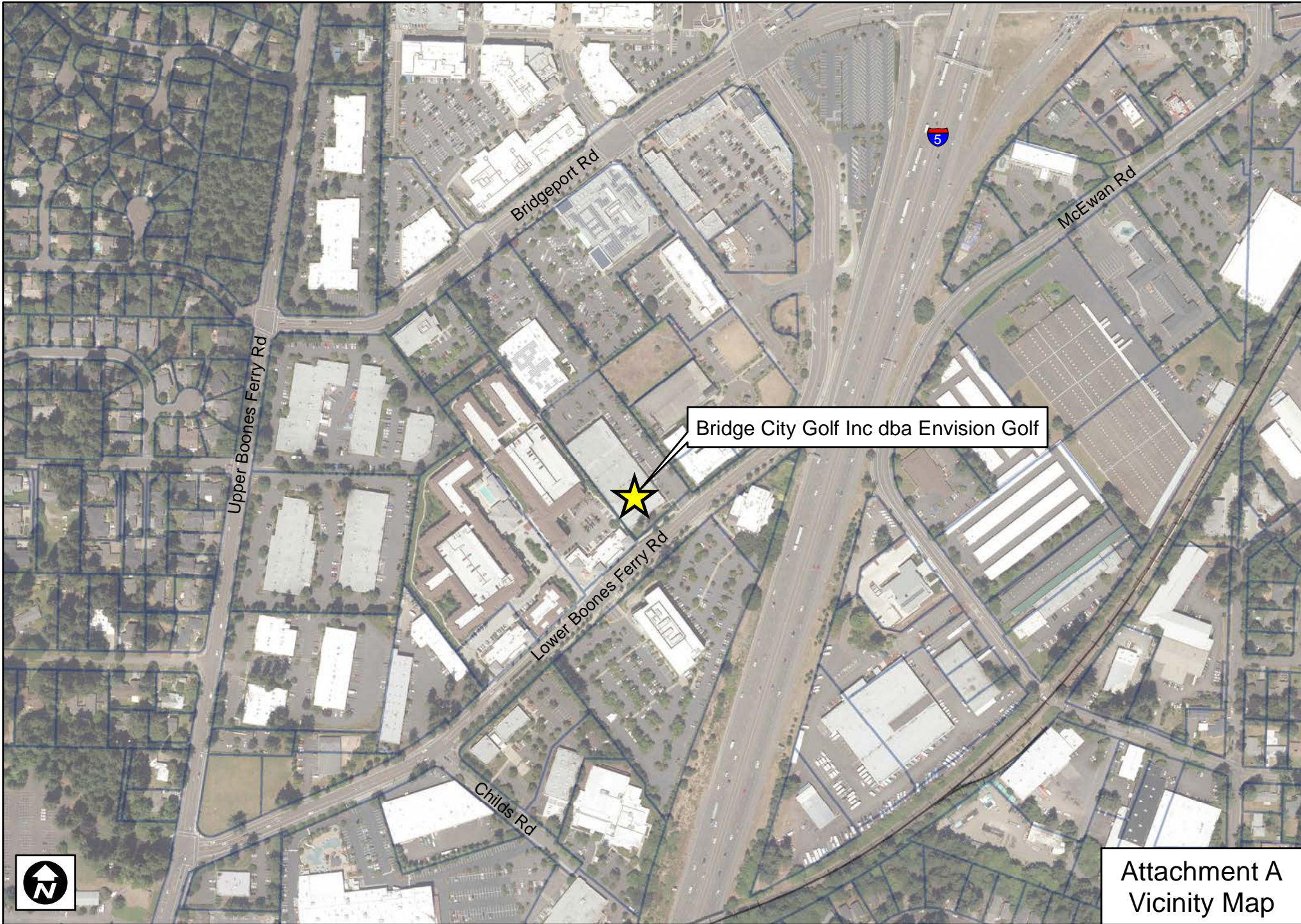
**It is recommended that this application be:**

- Granted**  
 **Denied**  
Cause of unfavorable recommendation: \_\_\_\_\_

\_\_\_\_\_  
Signature 1-27-22  
Date

Bill Steele  
Chief of Police  
Tualatin Police Department





Bridge City Golf Inc dba Envision Golf



Attachment A  
Vicinity Map





City of Tualatin

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council

**THROUGH:** Sherilyn Lombos, City Manager

**FROM:** Casey Ferguson, Project Engineer  
Heidi Springer, City Engineer

**DATE:** February 14, 2022

---

### **SUBJECT:**

Consideration of Resolution No. 5597-22, Authorizing the City Manager to Execute Deeds Acquiring Easements for the SW 65th / Nyberg Sanitary Sewer Trunk Main Rehabilitation Project.

### **RECOMMENDATION:**

Staff recommends the Council consider the resolution.

### **EXECUTIVE SUMMARY:**

Resolution No 5597-22 authorizes the City Manager to execute legal documents to acquire the easements needed to construct and maintain the SW 65th / Nyberg Sanitary Sewer Trunk Main Rehabilitation Project.

The majority of the project is to be constructed with existing easements. However, in order to have space for construction, and access for future maintenance of the project, **the City must acquire easements from private property owners surrounding the project area.**

In 2011 the City experienced a SSO (Sanitary Sewer Overflow) in the Nyberg wetlands due to a blockage in this sewer line. Investigation revealed that a structural defect allowed a tree root to penetrate the line and collect F.O.G (fats-oil-and grease), resulting in the blockage. As a result, the City's Street/Sewer/Storm Division has been monitoring and maintaining this section every 6-months. Since the monitoring began, City staff has identified three separate issues with this section of sewer line: 1) A depression in the sewer line, 2) tree root intrusion, and 3) stormwater erosion that has exposed a portion of the sanitary line and adjacent manhole. The proposed easements allow permanent repair and maintenance of approximately 800 lineal feet of aging/damaged 18-inch diameter concrete sanitary sewer trunk main.

Easements are proposed on four properties. Two property owners donated the easements. A third property owner requested the City cover their attorney's review fee. The fourth property owner will encounter more disruption to their operation and the City has requested an additional permanent utility easement area. The City's offering price to the fourth property owner, TMV, LLC, was based on an appraisal performed by Oregon Valuation Group and recommendations from Universal Field Services, Inc. However, negotiation with the fourth property owner is on-going and not part of this resolution for consideration. Acquisitions on each property are as follows:

**ANI-Kal, LLC (Tax Lots 1100 and 1200)**

- Properties consist of parking spaces and drive isles.
- The City is requesting temporary access easements (Tax Lot 1100: 1,967 sf, Tax Lot 1200: 2,018 sf), and temporary construction easement (Tax Lot 1100: 5,683 sf).
- **Acquisition amount \$0.00**, Easement Donation.

**Rolling Hills – 277, LLC (Tax Lots 700 and 800)**

- Properties include drive isles, parking spaces, and multi-unit apartment complexes.
- The City is requesting temporary access easements (Tax Lot 700: 1,543 sf, Tax Lot 800: 254 sf), and a temporary construction easement (Tax Lot 700: 90 sf, Tax Lot 800: 2,138 sf), permanent utility easement (Tax Lot 800: 150 sf), and permanent access easement (Tax Lot 800: 9,669 sf).
- **Acquisition amount \$750**, Attorney's review fee only.

**The Wetlands Conservancy, Inc. (Tax Lots 600 and 900)**

- Properties include an existing 20-foot wide sewer easement, 20-foot wide water easement, wetland, and associated buffer.
- The City is requesting temporary construction easements (Tax Lot 600: 321 sf, Tax Lot 900: 2,230 sf), permanent utility easements (Tax Lot 600: 717 sf, Tax Lot 900: 627 sf), and permanent access easement (Tax Lot 900: 266 sf)
- **Acquisition amount \$0.00**, Easement Donation.

**TMV, LLC (Tax Lot 1000)**

- Property includes an existing 20-foot wide sewer easement, parking spaces, and a medical clinic.
- Additional permanent utility easement area is requested to realign, repair, and maintain the sewer line. The City is requesting a temporary construction easement (12,746 sf), and permanent utility easement (2,717 sf).
- This property is not part of this resolution for consideration, as negotiations continue.

**FINANCIAL IMPLICATIONS:**

The total acquisition cost is \$750.00. Clean Water Services has agreed to incur all costs associated with this sanitary sewer improvement through an Intergovernmental Agreement executed March 23, 2020.

---

**ATTACHMENTS:**

- Resolution No. 5597-22
- Deeds with exhibits showing the area to be acquired on each property



RESOLUTION NO. 5597-22

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE DEEDS ACQUIRING EASEMENTS FOR THE SW 65TH / NYBERG SANITARY SEWER TRUNK MAIN REHABILITATION PROJECT.

WHEREAS, the SW 65th / Nyberg Sanitary Sewer Trunk Main Rehabilitation Project is a fully funded project through an Intergovernmental Agreement with Clean Water Services;

WHEREAS, the City has identified the need to acquire certain easements in order to facilitate the rehabilitation of the SW 65th / Nyberg Sanitary Sewer Trunk Main project;

WHEREAS, the City has negotiated transactions with willing property owners to acquire permanent waterline, storm drainage line, stormwater, sanitary sewer line, access easements, and temporary construction easements; and

WHEREAS, Clean Water Services has agreed, through an Intergovernmental Agreement executed March 23, 2020, to incur the cost associated with this sanitary sewer improvement.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that:

**Section 1.** The City Manager is authorized to acquire and execute deeds for the following properties:

- A. Tax Lot 2S124DA00700 – Rolling Hills – 277, LLC
  - Temporary Construction Easement for \$0.00
- B. Tax Lot 2S124DA00800 – Rolling Hills – 277, LLC
  - Permanent Utility and Access Easements for \$750.00
- C. Tax Lot 2S124DA00600 – The Wetlands Conservancy, Inc.
  - Permanent Utility and Temporary Construction Easements for \$0.00
- D. Tax Lot 2S124DA00900 – The Wetlands Conservancy, Inc.
  - Permanent Utility and Access Easements, and Temporary Construction Easement for \$0.00
- E. Tax Lot 2S124DA01100 – ANI-Kal, LLC
  - Temporary Access Easement for \$0.00
- F. Tax Lot 2S124DA01200 – ANI-Kal, LLC
  - Temporary Access and Construction Easements for \$0.00

**Section 2.** The City Manager is hereby authorized to execute all documents necessary to acquire easements identified in Section 1.

**Section 3.** This resolution is effective upon adoption.

Adopted by the City Council this 14<sup>th</sup> day of February, 2022.

ATTEST:

CITY OF TUALATIN, OREGON

BY \_\_\_\_\_  
City Recorder

BY \_\_\_\_\_  
Mayor



After recording return to:  
City of Tualatin, Oregon  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062-7092



**CITY OF TUALATIN, OREGON  
WATERLINE, STORM DRAINAGE LINE, STORMWATER,  
SANITARY SEWER LINE, AND ACCESS EASEMENT**

Rolling Hills - 277, LLC, an Oregon limited liability company ("GRANTOR"), grants to the City of Tualatin (the "CITY"), its successors and assigns, the permanent right to design, construct, reconstruct, operate and maintain a Waterline, Storm Drainage Line, Stormwater, Sanitary Sewer Line, and Access Easement on the following described land:

*See attached legal description and drawing,  
incorporated by reference*

TO HAVE AND TO HOLD, the described EASEMENT unto the CITY, its successors and assigns, runs with the land.

GRANTOR reserves the right to use the surface of the land for walkways, landscaping, parking, and other uses undertaken by the GRANTOR that are not inconsistent and do not interfere with the use of the subject EASEMENT area by the CITY. No building or utility shall be placed upon, under or within the property subject to this easement during its term without the written permission of the CITY.

Except as otherwise provided, upon completion of construction by CITY on the EASEMENT, the CITY shall restore the property's disturbed surface to the condition reasonably similar to the previous state and shall indemnify and hold the GRANTOR harmless against all loss, costs, or damage arising out of the exercise of the rights granted. Nothing in this easement shall be construed as requiring the CITY, its successors or assigns, to maintain landscaping, walkways, parking or other surface or subsurface improvement made or constructed by or on behalf of the GRANTOR, its heirs, successors or assigns.

The true and actual consideration paid for this transfer is for mutual benefit of both parties and other good and valuable consideration, the receipt of which is acknowledged by

the GRANTOR.

The GRANTOR covenants to the CITY, and its successors and assigns, that GRANTOR is lawfully seized in fee simple of the granted premises, subject to all encumbrances of record as exist on 10<sup>th</sup> day of AUGUST, 2021, and recorded liens, and that GRANTOR, and the GRANTOR'S heirs and personal representatives, shall warrant and forever defend the premises to the CITY, its agents, successors, and assigns against the lawful claims and demands of all persons claiming by, though, or under the GRANTOR.

Executed this 10<sup>th</sup> day of AUGUST, 2021.

Rolling Hills – 277, LLC, an Oregon limited liability company  
By Randall Realty Corp, an Oregon corporation, its manager

By Ronald L. Koos  
Ronald L. Koos, Vice President

(STATE OF OREGON )ss  
(County of ~~Washington~~ )  
MULTNOMAH

This instrument was acknowledged before me this 10<sup>th</sup> day of AUGUST, 2021, by Ronald L. Koos, Vice President of Randall Realty Corp, an Oregon corporation, which is the Manager of Rolling Hills – 277, LLC, an Oregon limited liability company.

Before me: Emmaline Marie Klinger  
Notary Public for Oregon

My commission expires: August 21, 2023



CITY OF TUALATIN, OREGON

By: \_\_\_\_\_  
City Manager

The City Manager of the City of Tualatin, being duly authorized and directed by the Council of the City of Tualatin, pursuant to TMC 1-3-030, approves and accepts the foregoing document on behalf of the City of Tualatin. Dated this \_\_\_ day of \_\_\_\_\_ 20\_\_.

\_\_\_\_\_  
City Manager



AKS ENGINEERING & FORESTRY, LLC  
12965 SW Herman Road, Suite 100, Tualatin, OR 97062  
P: (503) 563-6151 | www.aks-eng.com

AKS Job #5511-08

OFFICES IN: BEND, OR - KEIZER, OR - TUALATIN, OR - VANCOUVER, WA

## EXHIBIT A

### Permanent Utility Easement Description

A tract of land located in the Southeast One-Quarter of Section 24, Township 2 South, Range 1 West, Willamette Meridian, City of Tualatin, Washington County, Oregon, and being more particularly described as follows:

Commencing at the northeast corner of the plat "Stoneridge", Washington County Plat Records, also being on the south line of Document Number 2010-086932, Washington County Deed Records; thence along said south line, South  $88^{\circ}57'45''$  East 632.71 feet to the west right-of-way line of 65th Avenue (60.00 feet from centerline); thence along said west right-of-way line, North  $01^{\circ}49'55''$  East 402.01 feet to the south line of Document Number 2000-052082, Washington County Deed Records; thence along said south line, North  $87^{\circ}45'07''$  West 149.99 feet to the southwest corner of said deed; thence along the west line of said deed and the northerly extension thereof, North  $01^{\circ}49'25''$  East 87.73 feet to the northeast corner of said Document Number 2010-086932; thence along the northerly line of said deed the following three (3) courses: North  $88^{\circ}10'35''$  West 130.00 feet; South  $74^{\circ}06'45''$  West 288.59 feet; North  $88^{\circ}10'35''$  West 228.00 feet to the Point of Beginning; thence leaving said north line, South  $01^{\circ}50'06''$  West 10.00 feet; thence North  $88^{\circ}09'54''$  West 15.00 feet to the west line of said deed; thence along said west line, North  $01^{\circ}50'06''$  East 10.00 feet to the northwest corner of said deed; thence along the north line of said deed, South  $88^{\circ}10'35''$  East 15.00 feet to the Point of Beginning.

The above described tract of land contains 150 square feet, more or less.

Bearings for this description are based on State Plane Grid bearing, Oregon State Plane, North Zone 3601, NAD83(2011) Epoch: 2010.0000. Distances shown are International Foot ground values.

10/23/2020

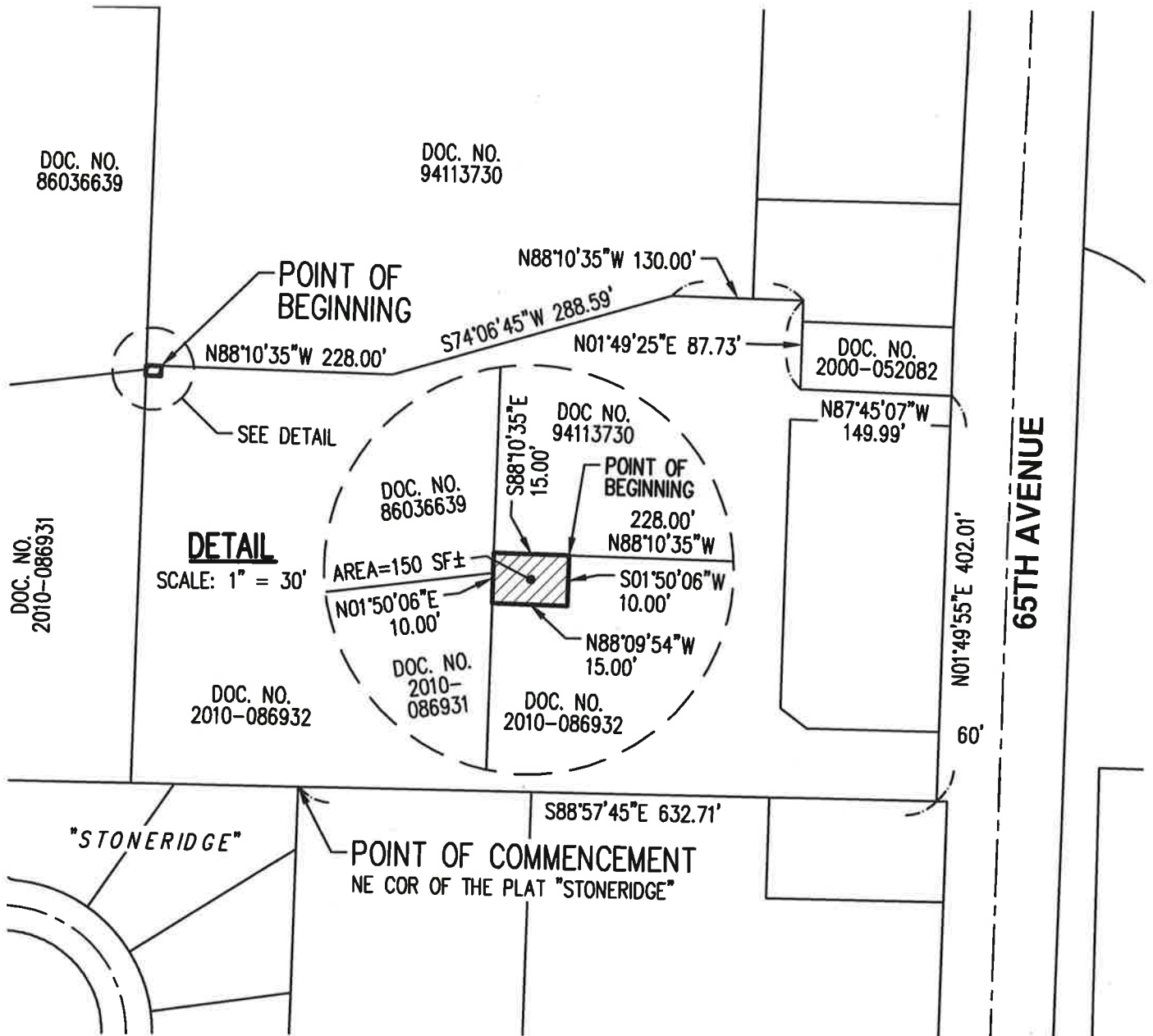


RENEWS: 6/30/22



# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 24,  
TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CITY OF TUALATIN, WASHINGTON COUNTY, OREGON



10/23/2020

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*Nick White*

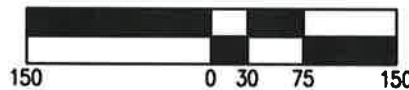
OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

RENEWS: 6/30/22

## PREPARED FOR

CITY OF TUALATIN  
18880 SW MARTINAZZI AVENUE, SUITE 200  
TUALATIN, OR 97062

SCALE: 1" = 150 FEET



## PERMANENT UTILITY EASEMENT MAP

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



EXHIBIT  
**B**

DRWN: WCB  
CHKD: NSW  
AKS JOB:  
5511-08

After recording return to:  
City of Tualatin, Oregon  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062-7092



**CITY OF TUALATIN, OREGON  
PERMANENT ACCESS EASEMENT**

The Wetlands Conservancy, an Oregon non-profit corporation which acquired title as The Wetlands Conservancy, Inc., a nonprofit corporation of the State of Oregon("GRANTOR"), grants to the City of Tualatin (the "CITY"), its successors and assigns, the permanent right to design, construct, reconstruct, operate and maintain a Permanent Access Easement on the following described land:

*See attached legal description and drawing,  
incorporated by reference*

TO HAVE AND TO HOLD, the described EASEMENT unto the CITY, its successors and assigns, runs with the land.

GRANTOR reserves the right to use the surface of the land for walkways, landscaping, parking, and other uses undertaken by the GRANTOR that are not inconsistent and do not interfere with the use of the subject EASEMENT area by the CITY. No building or utility shall be placed upon, under or within the property subject to this easement during its term without the written permission of the CITY.

Except as otherwise provided, upon completion of construction by CITY on the EASEMENT, the CITY shall restore the property's disturbed surface to the condition reasonably similar to the previous state, and shall indemnify and hold the GRANTOR harmless against all loss, costs, or damage arising out of the exercise of the rights granted. Nothing in this easement shall be construed as requiring the CITY, its successors or assigns, to maintain landscaping, walkways, parking or other surface or subsurface improvement made or constructed by or on behalf of the GRANTOR, its heirs, successors or assigns.

The true and actual consideration paid for this transfer consists of or includes other property or other value given or promised, the receipt of which is acknowledged by the

GRANTOR.

The GRANTOR covenants to the CITY, and its successors and assigns, that GRANTOR is lawfully seized in fee simple of the granted premises, free from all encumbrances list any exceptions and that GRANTOR, and the GRANTOR'S heirs and personal representatives, shall warrant and forever defend the premises to the CITY, its agents, successors, and assigns against the lawful claims and demands of all persons claiming by, through, or under the GRANTOR.

Executed this 26 day of February, 2021.

[Signature]  
Signature

\_\_\_\_\_  
Signature

Katie Ryan  
Name (print or type)

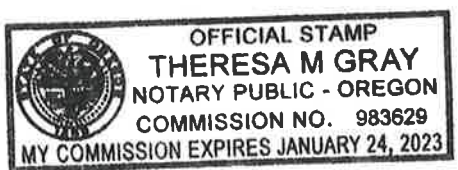
\_\_\_\_\_  
Name (print or type)

Executive Director  
Title

\_\_\_\_\_  
Title

(STATE OF OREGON )ss  
(County of Washington )

On this 26<sup>th</sup> day of February, 2021, before me, the undersigned, a Notary Public, personally appeared Kathleen Ryan and acknowledged the foregoing instrument to be their voluntary act and deed.



Before me: [Signature]  
Notary Public for Oregon

My commission expires: Jan 24 2023

CITY OF TUALATIN, OREGON

By: \_\_\_\_\_  
City Manager

The City Manager of the City of Tualatin, being duly authorized and directed by the Council of the City of Tualatin, pursuant to TMC 1-3-030, approves and accepts the foregoing document on behalf of the City of Tualatin. Dated this \_\_\_ day of \_\_\_\_\_ 20\_\_.

\_\_\_\_\_  
City Manager





AKS ENGINEERING & FORESTRY, LLC  
12965 SW Herman Road, Suite 100, Tualatin, OR 97062  
P: (503) 563-6151 | www.aks-eng.com

AKS Job #5511-08

OFFICES IN: BEND, OR - KEIZER, OR - TUALATIN, OR - VANCOUVER, WA

## EXHIBIT A

### Permanent Access Easement Description

A tract of land located in the Southeast One-Quarter of Section 24, Township 2 South, Range 1 West, Willamette Meridian, City of Tualatin, Washington County, Oregon, and being more particularly described as follows:

Commencing at the northeast corner of the plat "Stoneridge", Washington County Plat Records, also being on the south line of Document Number 2010-086932, Washington County Deed Records; thence along said south line, South 88°57'45" East 632.71 feet to the west right-of-way line of 65th Avenue (60.00 feet from centerline); thence along said west right-of-way line, North 01°49'55" East 402.01 feet to the south line of Document Number 2000-052082, Washington County Deed Records; thence along said south line, North 87°45'07" West 149.99 feet to the southwest corner of said deed; thence along the west line of said deed and the northerly extension thereof, North 01°49'25" East 87.73 feet to the northeast corner of said Document Number 2010-086932; thence along the northerly line of said deed, North 88°10'35" West 130.00 feet; thence continuing along said northerly line, South 74°06'45" West 31.07 feet; thence leaving said northerly line, North 15°53'15" West 6.93 feet to the Point of Beginning; thence South 74°19'49" West 10.02 feet; thence North 18°53'07" West 27.00 feet; thence North 78°18'38" East 10.08 feet; thence South 18°53'07" East 26.30 feet to the Point of Beginning.

The above described tract of land contains 266 square feet, more or less.

Bearings for this description are based on State Plane Grid bearing, Oregon State Plane, North Zone 3601, NAD83(2011) Epoch: 2010.0000. Distances shown are International Foot ground values.

10/23/2020

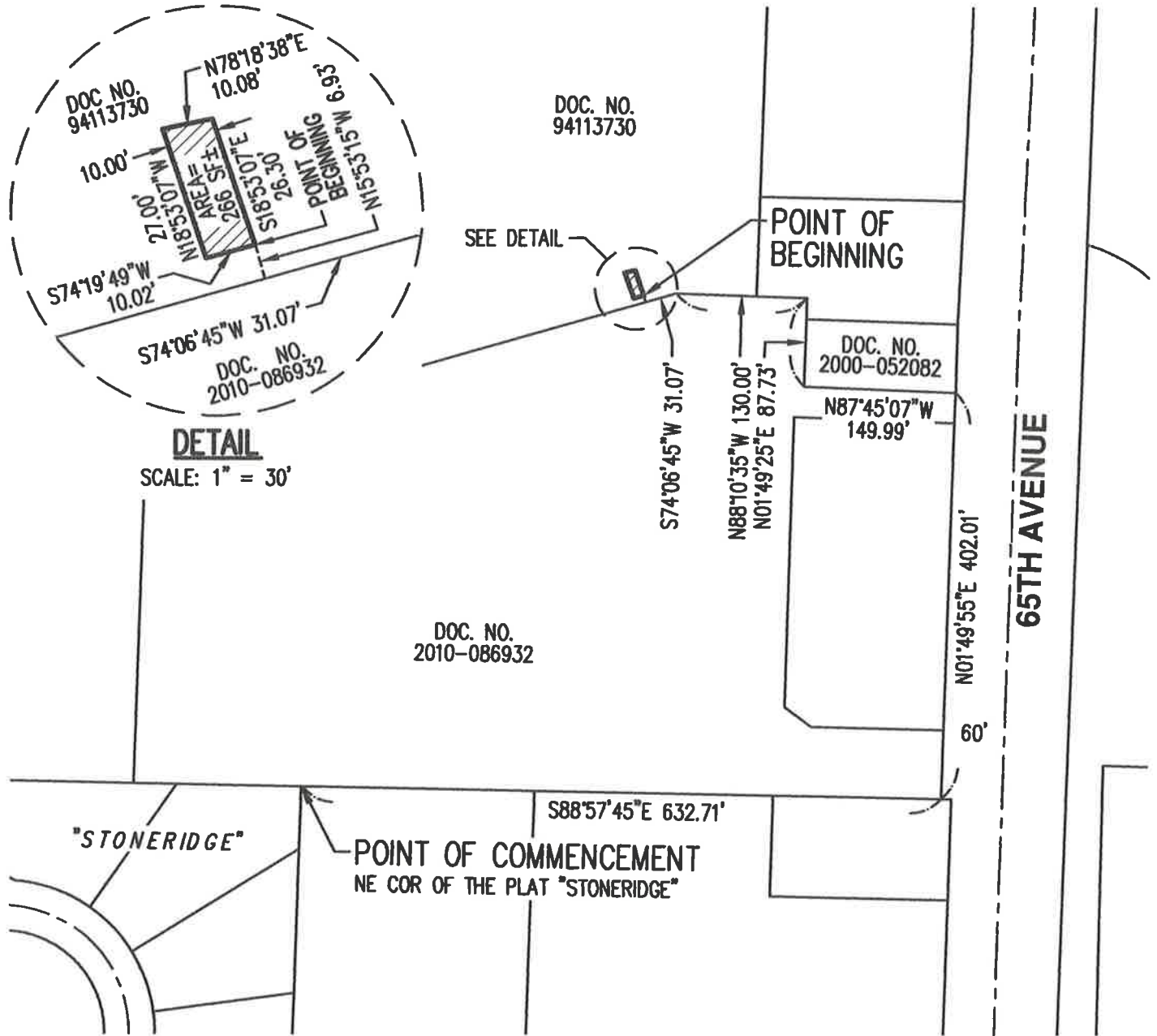
REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

RENEWS: 6/30/22

# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 24,  
TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CITY OF TUALATIN, WASHINGTON COUNTY, OREGON



10/23/2020

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*Nick White*

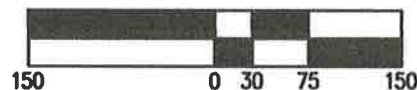
OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

RENEWS: 6/30/22

## PREPARED FOR

CITY OF TUALATIN  
18880 SW MARTINAZZI AVENUE, SUITE 200  
TUALATIN, OR 97062

SCALE: 1" = 150 FEET



### PERMANENT ACCESS EASEMENT MAP

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



EXHIBIT  
**B**

DRWN: WCB  
CHKD: NSW  
AKS JOB:

5511-08

After recording return to:  
City of Tualatin, Oregon  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062-7092



**CITY OF TUALATIN, OREGON  
NON-EXCLUSIVE TEMPORARY CONSTRUCTION &  
ACCESS EASEMENTS**

ANI-KAL, LLC, an Oregon limited liability company (“GRANTOR”), hereby grants to the City of Tualatin (“the CITY”), its successors and assigns, a temporary construction EASEMENT, and right-of-entry for the purpose of constructing the 65th and Nyberg Trunk Line project on real property located in Washington County, State of Oregon, that is more particularly described as follows:

*See Attached Exhibit Map*

This EASEMENT shall become effective from the date of signature and shall continue TWO YEARS for the purpose above described. The true and actual consideration paid for this transfer consists of or includes other property or other value given or promised, the receipt of which is acknowledged by the GRANTOR.

Subject to the limitations and conditions of the Oregon Constitution and Oregon Revised Statutes (“ORS”) 30.260 to 30.300, the CITY agrees to indemnify GRANTOR from all claims made for injury to person or property caused by the CITY’s negligence during the actual use by the CITY of the property for any of the above-described purposes.

[Continued on next page for formatting purposes]



The CITY shall have the right at any time during the EASEMENT period to enter upon the above-described real property for the purpose mentioned above. The CITY shall repair any damage to the property caused by The CITY's use for the purpose described above and shall restore the property to the condition reasonably similar to the previous state.

EXECUTED this 14<sup>th</sup> day of JANUARY, 2021.

ANIL KRISHNAMURTHY, OPERATIONS MANAGER

Name (print or type) ANI-KAL, LLC

Name (print or type)

Signature *Anil Krishnamurthy*

Signature

Date 1/14/2021

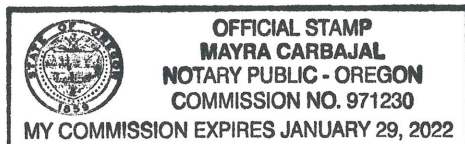
Date

(STATE OF OREGON )ss  
(County of Washington )

On this 14 day of January, 2021, before me, the undersigned, a Notary Public, personally appeared Anil Krishnamurthy and acknowledged the foregoing instrument to be their voluntary act and deed.

Before me: *Mayra Carbajal*  
Notary Public for Oregon

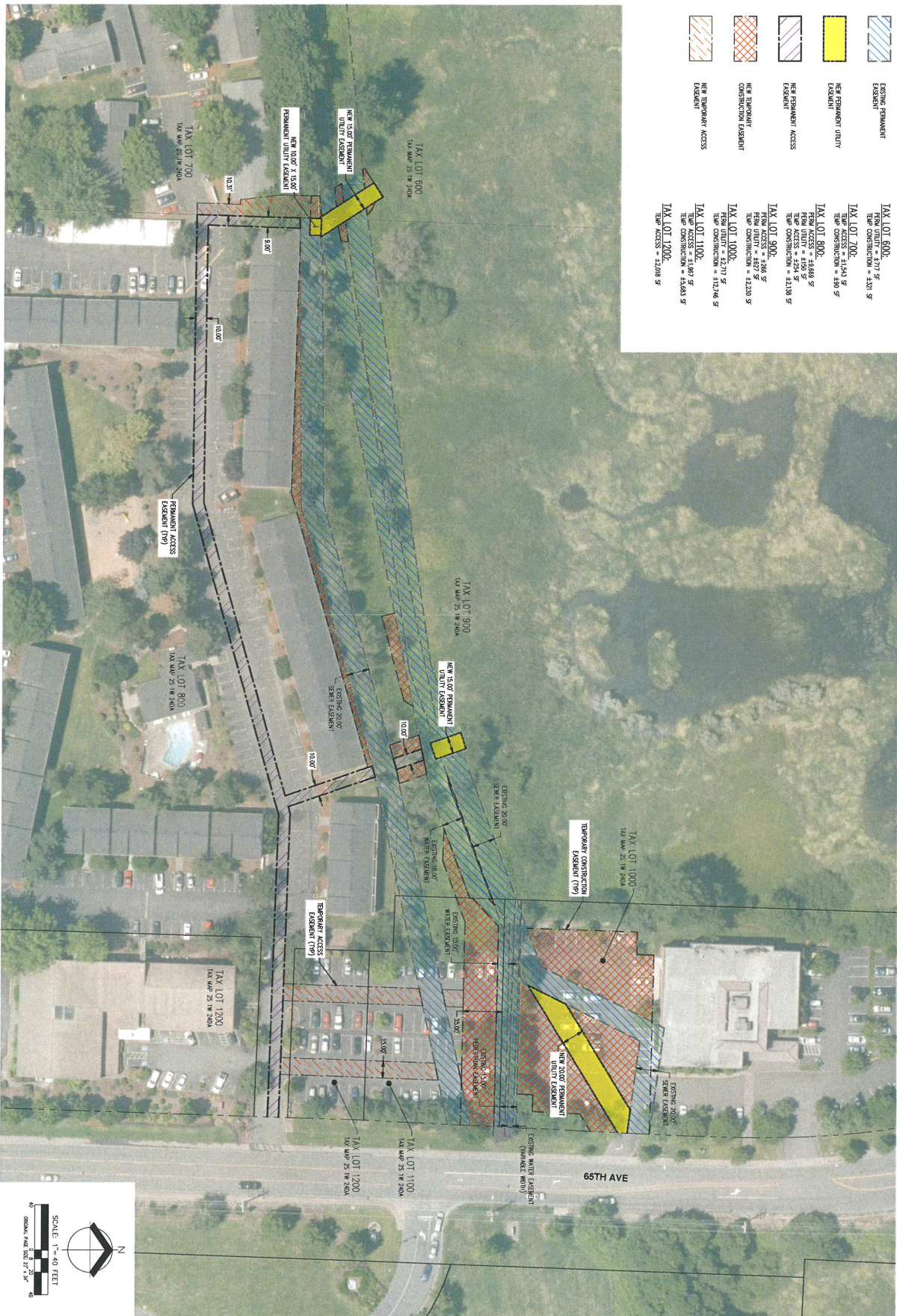
My commission expires: 1/29/22



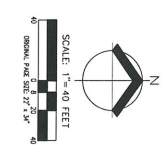
ACCEPTED BY THE CITY OF TUALATIN,  
OREGON

By: \_\_\_\_\_  
City Manager





	EXISTING PERMANENT EASEMENT	TAX LOT 600: TEMP CONSTRUCTION = 2,201 SF
	NEW PERMANENT UTILITY EASEMENT	TAX LOT 700: TEMP ACCESS = 1,543 SF TEMP CONSTRUCTION = 430 SF
	NEW PERMANENT UTILITY EASEMENT	TAX LOT 800: TEMP ACCESS = 1,543 SF TEMP CONSTRUCTION = 430 SF
	NEW TEMPORARY CONSTRUCTION EASEMENT	TAX LOT 900: TEMP ACCESS = 1,543 SF TEMP CONSTRUCTION = 430 SF
	EXISTING PERMANENT UTILITY EASEMENT	TAX LOT 1000: TEMP ACCESS = 1,543 SF TEMP CONSTRUCTION = 430 SF
	EXISTING PERMANENT UTILITY EASEMENT	TAX LOT 1100: TEMP ACCESS = 1,543 SF TEMP CONSTRUCTION = 430 SF
	EXISTING PERMANENT UTILITY EASEMENT	TAX LOT 1200: TEMP ACCESS = 1,543 SF TEMP CONSTRUCTION = 430 SF



PROJECT NO.	5311-08
DATE	10/23/2020
DESIGNED BY	JJM
DRAWN BY	JJM
CHECKED BY	JJM
DATE	10/23/2020
SCALE	1" = 40 FEET
SHEET	1 OF 1

**EASEMENT EXHIBIT**

**NYBERG TRUNK LINE SEWER REHABILITATION**

**TUALATIN OREGON**

TAX LOTS 600, 700, 800, 900, 1000, 1100, AND 1200  
TAX MAP 2S 1W 24DA

**AKS**  
AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97162  
503.563.6151  
WWW.AKS-ENG.COM

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



After recording return to:  
City of Tualatin, Oregon  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062-7092



**CITY OF TUALATIN, OREGON  
PERMANENT ACCESS EASEMENT**

Rolling Hills - 277, LLC, an Oregon limited liability company ("GRANTOR"), grants to the City of Tualatin (the "CITY"), its successors and assigns, the permanent right to design, construct, reconstruct, operate and maintain a Permanent Access Easement on the following described land:

*See attached legal description and drawing,  
incorporated by reference*

TO HAVE AND TO HOLD, the described EASEMENT unto the CITY, its successors and assigns, runs with the land.

GRANTOR reserves the right to use the surface of the land for walkways, landscaping, parking, and other uses undertaken by the GRANTOR that are not inconsistent and do not interfere with the use of the subject EASEMENT area by the CITY. No building or utility shall be placed upon, under or within the property subject to this easement during its term without the written permission of the CITY.

Except as otherwise provided, upon completion of construction by CITY on the EASEMENT, the CITY shall restore the property's disturbed surface to the condition reasonably similar to the previous state, and shall indemnify and hold the GRANTOR harmless against all loss, costs, or damage arising out of the exercise of the rights granted. Nothing in this easement shall be construed as requiring the CITY, its successors or assigns, to maintain landscaping, walkways, parking or other surface or subsurface improvement made or constructed by or on behalf of the GRANTOR, its heirs, successors or assigns.

The true and actual consideration paid for this transfer is for mutual benefit of both parties and other good and valuable consideration, the receipt of which is acknowledged by



the GRANTOR.

The GRANTOR covenants to the CITY, and its successors and assigns, that GRANTOR is lawfully seized in fee simple of the granted premises, subject to all encumbrances of record as exist on 10<sup>th</sup> day of AUGUST, 2021, and recorded liens, and that GRANTOR, and the GRANTOR'S heirs and personal representatives, shall warrant and forever defend the premises to the CITY, its agents, successors, and assigns against the lawful claims and demands of all persons claiming by, though, or under the GRANTOR.

Executed this 10<sup>th</sup> day of AUGUST, 2021.

Rolling Hills – 277, LLC, an Oregon limited liability company  
By Randall Realty Corp, an Oregon corporation, its manager

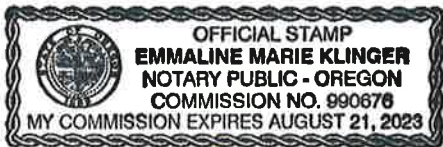
By Ronald L. Koos  
Ronald L. Koos, Vice President

(STATE OF OREGON )ss  
(County of Washington )  
MULTNOMAH

This instrument was acknowledged before me this 10<sup>th</sup> day of AUGUST, 2021, by Ronald L. Koos, Vice President of Randall Realty Corp, an Oregon corporation, which is the Manager of Rolling Hills – 277, LLC, an Oregon limited liability company.

Before me: Emmaline Marie Klinger  
Notary Public for Oregon

My commission expires: August 21, 2023



CITY OF TUALATIN, OREGON

By: \_\_\_\_\_  
City Manager

The City Manager of the City of Tualatin, being duly authorized and directed by the Council of the City of Tualatin, pursuant to TMC 1-3-030, approves and accepts the foregoing document on behalf of the City of Tualatin. Dated this \_\_\_ day of \_\_\_\_\_ 20\_\_.

\_\_\_\_\_  
City Manager



AKS ENGINEERING & FORESTRY, LLC  
12965 SW Herman Road, Suite 100, Tualatin, OR 97062  
P: (503) 563-6151 | www.aks-eng.com

AKS Job #5511-08

OFFICES IN: BEND, OR - KEIZER, OR - TUALATIN, OR - VANCOUVER, WA

## EXHIBIT A

### Permanent Access Easement Description

A tract of land located in the Southeast One-Quarter of Section 24, Township 2 South, Range 1 West, Willamette Meridian, City of Tualatin, Washington County, Oregon, and being more particularly described as follows:

Commencing at the northeast corner of the plat "Stoneridge", Washington County Plat Records, also being on the south line of Document Number 2010-086932, Washington County Deed Records; thence along said south line, South 88°57'45" East 632.71 feet to the west right-of-way line of 65<sup>th</sup> Avenue (60.00 feet from centerline); thence along said west right-of-way line, North 01°49'55" East 383.97 feet to the Point of Beginning; thence leaving said west right-of-way, North 88°03'14" West 267.93 feet; thence South 74°13'36" West 286.70 feet; thence North 89°26'02" West 256.76 feet to the west line of said Document Number 2010-086932; thence along said west line, North 01°50'06" East 91.70 feet; thence leaving said west line, North 89°27'29" East 9.01 feet to a line which is parallel with and 9.00 feet easterly of, when measured at right angles to, said west line; thence along said parallel line, South 01°50'06" West 81.87 feet; thence leaving said parallel line, South 89°26'02" East 246.10 feet; thence North 74°13'36" East 270.35 feet; thence North 18°53'07" West 81.98 feet; thence North 74°19'49" East 8.47 feet; thence North 77°49'34" East 1.55 feet; thence South 18°53'07" East 81.87 feet; thence North 74°13'36" East 6.46 feet; thence South 88°03'14" East 269.47 feet to said west right-of-way line of 65<sup>th</sup> Avenue; thence along said west right-of-way line, South 01°49'54" West 10.00 feet to the Point of Beginning.

The above described tract of land contains 9,670 square feet, more or less.

Bearings for this description are based on State Plane Grid bearing, Oregon State Plane, North Zone 3601, NAD83(2011) Epoch: 2010.0000. Distances shown are International Foot ground values.

10/13/2020

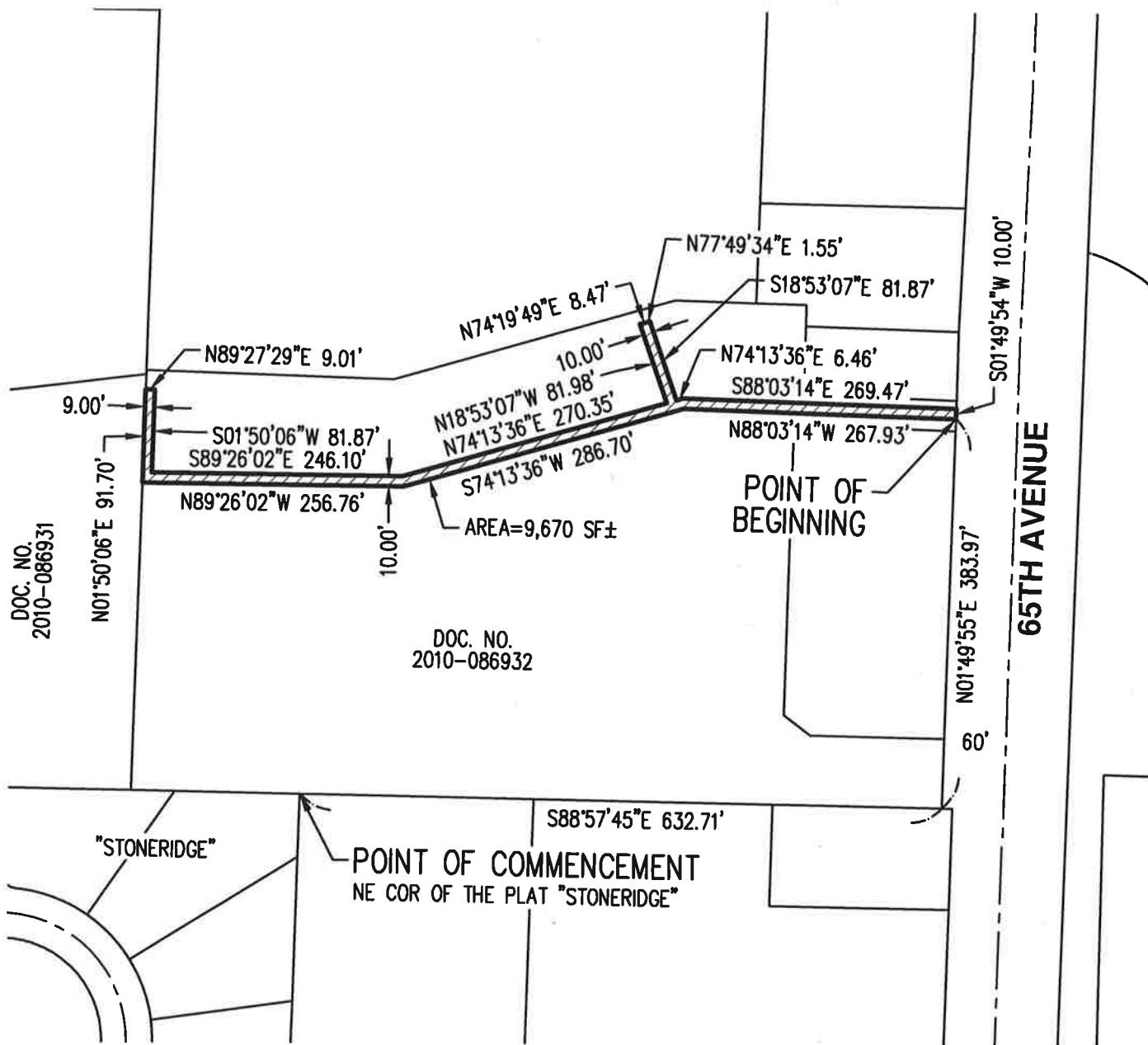
REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

RENEWS: 6/30/22

# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 24,  
TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CITY OF TUALATIN, WASHINGTON COUNTY, OREGON



10/13/2020

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*Nick White*

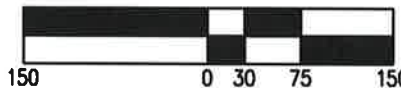
OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

RENEWS: 6/30/22

## PREPARED FOR

CITY OF TUALATIN  
18880 SW MARTINAZZI AVENUE, SUITE 200  
TUALATIN, OR 97062

SCALE: 1" = 150 FEET



### PERMANENT ACCESS EASEMENT MAP

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



EXHIBIT  
**B**

DRWN: WCB  
CHKD: NSW  
AKS JOB:  
5511-08



After recording return to:  
City of Tualatin, Oregon  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062-7092



**CITY OF TUALATIN, OREGON  
WATERLINE, STORM DRAINAGE LINE, STORMWATER,  
SANITARY SEWER LINE, AND ACCESS EASEMENT**

The Wetlands Conservancy, an Oregon non-profit corporation which acquired title as The Wetlands Conservancy, Inc., a nonprofit corporation of the State of Oregon ("GRANTOR"), grants to the City of Tualatin (the "CITY"), its successors and assigns, the permanent right to design, construct, reconstruct, operate and maintain a Waterline, Storm Drainage Line, Stormwater, Sanitary Sewer Line, and Access Easement on the following described land:

*See attached legal descriptions and drawings,  
incorporated by reference*

TO HAVE AND TO HOLD, the described EASEMENT unto the CITY, its successors and assigns, runs with the land.

GRANTOR reserves the right to use the surface of the land for walkways, landscaping, parking, and other uses undertaken by the GRANTOR that are not inconsistent and do not interfere with the use of the subject EASEMENT area by the CITY. No building or utility shall be placed upon, under or within the property subject to this easement during its term without the written permission of the CITY.

Except as otherwise provided, upon completion of construction by CITY on the EASEMENT, the CITY shall restore the property's disturbed surface to the condition reasonably similar to the previous state, and shall indemnify and hold the GRANTOR harmless against all loss, costs, or damage arising out of the exercise of the rights granted. Nothing in this easement shall be construed as requiring the CITY, its successors or assigns, to maintain landscaping, walkways, parking or other surface or subsurface improvement made or constructed by or on behalf of the GRANTOR, its heirs, successors or assigns. The true and actual consideration paid for this transfer consists of or includes other property or other value given or promised, the receipt of which is acknowledged by the

GRANTOR.

The GRANTOR covenants to the CITY, and its successors and assigns, that GRANTOR is lawfully seized in fee simple of the granted premises, free from all encumbrances list any exceptions and that GRANTOR, and the GRANTOR'S heirs and personal representatives, shall warrant and forever defend the premises to the CITY, its agents, successors, and assigns against the lawful claims and demands of all persons claiming by, through, or under the GRANTOR.

Executed this 5 day of March, 2021.

The Wetlands Conservancy,  
an Oregon non-profit corporation

  
\_\_\_\_\_  
Katie Ryan, Executive Director



(STATE OF OREGON )ss  
(County of Washington )

On this 5<sup>th</sup> day of March, 2021, before me, the undersigned, a Notary Public, personally appeared Katie Ryan as Executive Director of The Wetlands Conservancy, an Oregon non-profit corporation and acknowledged the foregoing instrument to be their voluntary act and deed.

Before me:   
Notary Public for Oregon

My commission expires: Jan 24 2023

CITY OF TUALATIN, OREGON

By: \_\_\_\_\_  
City Manager

The City Manager of the City of Tualatin, being duly authorized and directed by the Council of the City of Tualatin, pursuant to TMC 1-3-030, approves and accepts the foregoing document on behalf of the City of Tualatin. Dated this \_\_\_ day of \_\_\_\_\_ 20\_\_.

\_\_\_\_\_  
City Manager



AKS ENGINEERING & FORESTRY, LLC  
12965 SW Herman Road, Suite 100, Tualatin, OR 97062  
P: (503) 563-6151 | www.aks-eng.com

AKS Job #5511-08

OFFICES IN: BEND, OR · KEIZER, OR · TUALATIN, OR · VANCOUVER, WA

## EXHIBIT A

### Permanent Utility Easement Description

A tract of land located in the Southeast One-Quarter of Section 24, Township 2 South, Range 1 West, Willamette Meridian, City of Tualatin, Washington County, Oregon, and being more particularly described as follows:

Commencing at the northeast corner of the plat "Stoneridge", Washington County Plat Records, also being on the south line of Document Number 2010-086932, Washington County Deed Records; thence along said south line, South 88°57'45" East 632.71 feet to the west right-of-way line of 65th Avenue (60.00 feet from centerline); thence along said west right-of-way line, North 01°49'55" East 402.01 feet to the south line of Document Number 2000-052082, Washington County Deed Records; thence along said south line, North 87°45'07" West 149.99 feet to the southwest corner of said deed; thence along the west line of said deed and the northerly extension thereof, North 01°49'25" East 87.73 feet to the northeast corner of said Document Number 2010-086932; thence along the northerly line of said deed the following three (3) courses: North 88°10'35" West 130.00 feet; South 74°06'45" West 288.59 feet; North 88°10'35" West 243.00 feet to the northwest corner of said deed, also being on the east line of Document Number 86036639, Washington County Deed Records, and the Point of Beginning; thence along said east line, South 01°50'06" West 2.68 feet; thence leaving said east line, North 32°43'34" West 58.66 feet; thence North 57°16'26" East 15.00 feet; thence South 32°43'34" East 36.89 feet to said east line; thence along said east line, South 01°50'06" West 23.76v feet to the Point of Beginning.

The above described tract of land contains 717 square feet, more or less.

Bearings for this description are based on State Plane Grid bearing, Oregon State Plane, North Zone 3601, NAD83(2011) Epoch: 2010.0000. Distances shown are International Foot ground values.

10/23/2020

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

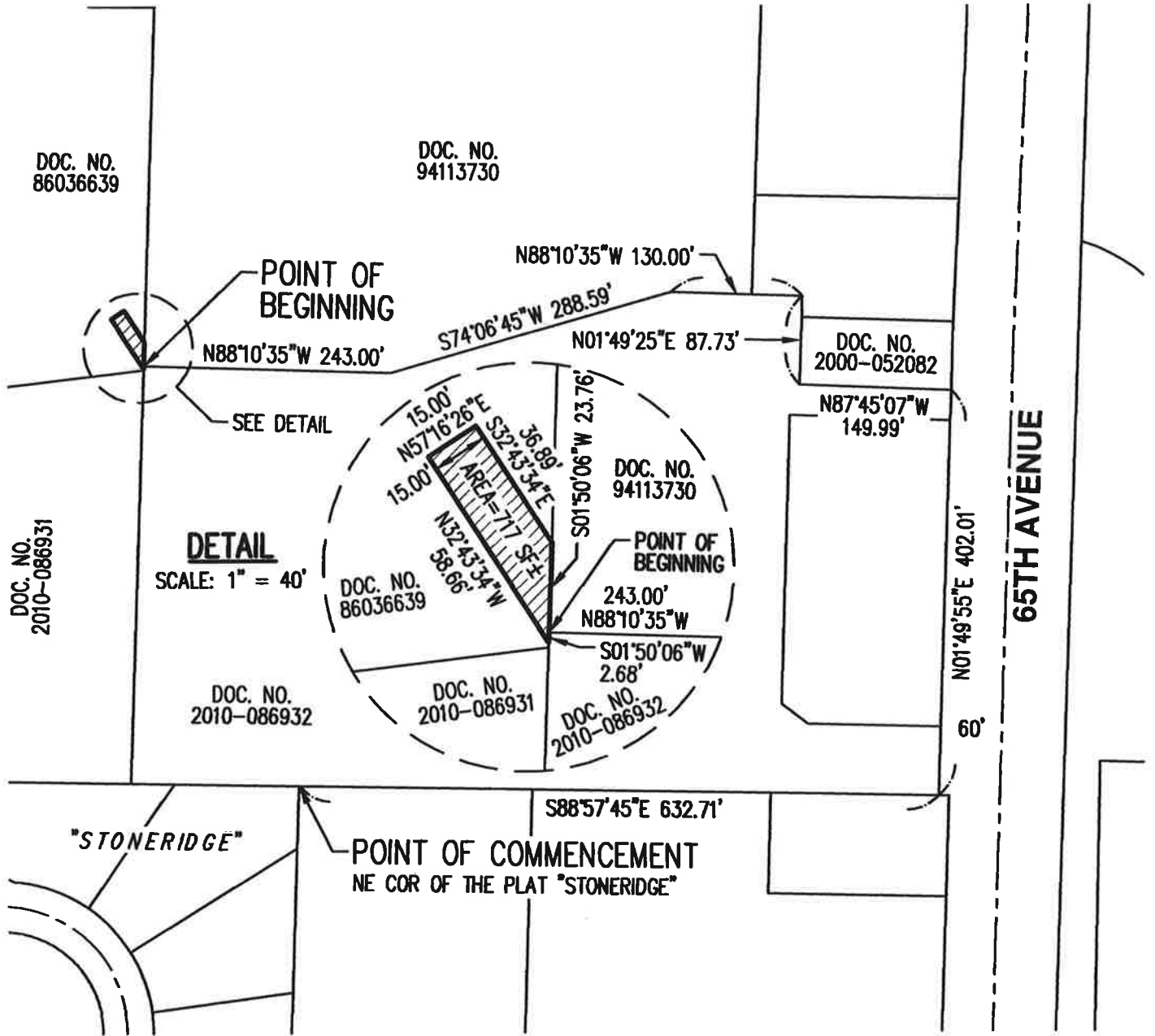
OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

RENEWS: 6/30/22



# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 24,  
TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CITY OF TUALATIN, WASHINGTON COUNTY, OREGON



10/23/2020

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*Nick White*

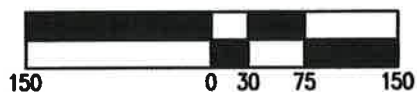
OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

RENEWS: 6/30/22

PREPARED FOR

CITY OF TUALATIN  
18880 SW MARTINAZZI AVENUE, SUITE 200  
TUALATIN, OR 97062

SCALE: 1" = 150 FEET



PERMANENT UTILITY EASEMENT MAP

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

**AKS**

EXHIBIT  
**B**

DRWN: WCB  
CHKD: NSW  
AKS JOB:  
5511-08



AKS ENGINEERING & FORESTRY, LLC  
12965 SW Herman Road, Suite 100, Tualatin, OR 97062  
P: (503) 563-6151 | www.aks-eng.com

AKS Job #5511-08

OFFICES IN: BEND, OR - KEIZER, OR - TUALATIN, OR - VANCOUVER, WA

## EXHIBIT A

### Permanent Utility Easement Description

Two tracts of land located in the Southeast One-Quarter of Section 24, Township 2 South, Range 1 West, Willamette Meridian, City of Tualatin, Washington County, Oregon, and being more particularly described as follows:

Commencing at the northeast corner of the plat "Stoneridge", Washington County Plat Records, also being on the south line of Document Number 2010-086932, Washington County Deed Records; thence along said south line, South 88°57'45" East 632.71 feet to the west right-of-way line of 65th Avenue (60.00 feet from centerline); thence along said west right-of-way line, North 01°49'55" East 402.01 feet to the south line of Document Number 2000-052082, Washington County Deed Records; thence along said south line, North 87°45'07" West 149.99 feet to the southwest corner of said deed; thence along the west line of said deed and the northerly extension thereof, North 01°49'25" East 87.73 feet to the northeast corner of said Document Number 2010-086932; thence along the northerly line of said deed, North 88°10'35" West 130.00 feet; thence continuing along said northerly line, South 74°06'45" West 30.49 feet to Reference Point 'A'; thence leaving said northerly line, North 15°53'15" West 43.57 feet to the Point of Beginning; thence South 71°06'53" West 15.00 feet; thence North 18°53'07" West 28.83 feet; thence North 71°06'53" East 15.00 feet; thence South 18°53'07" East 28.83 feet to the Point of Beginning.

Together with;

Commencing at the aforementioned Reference Point 'A', also being on the northerly line of said Document Number 2010-086932; thence along said northerly line, South 74°06'45" West 258.10 feet; thence continuing along said northerly line, North 88°10'35" West 226.63 feet to the Point of Beginning; thence continuing along said northerly line, North 88°10'35" West 16.37 feet to the southwest corner of Document Number 94113730, Washington County Deed Records; thence along the west line of said deed, North 01°50'06" East 23.76 feet; thence leaving said west line, South 32°43'34" East 28.85 feet to the Point of Beginning.

The above described tracts of land contain 627 square feet, more or less.

Bearings for this description are based on State Plane Grid bearing, Oregon State Plane, North Zone 3601, NAD83(2011) Epoch: 2010.0000. Distances shown are International Foot ground values.

10/23/2020

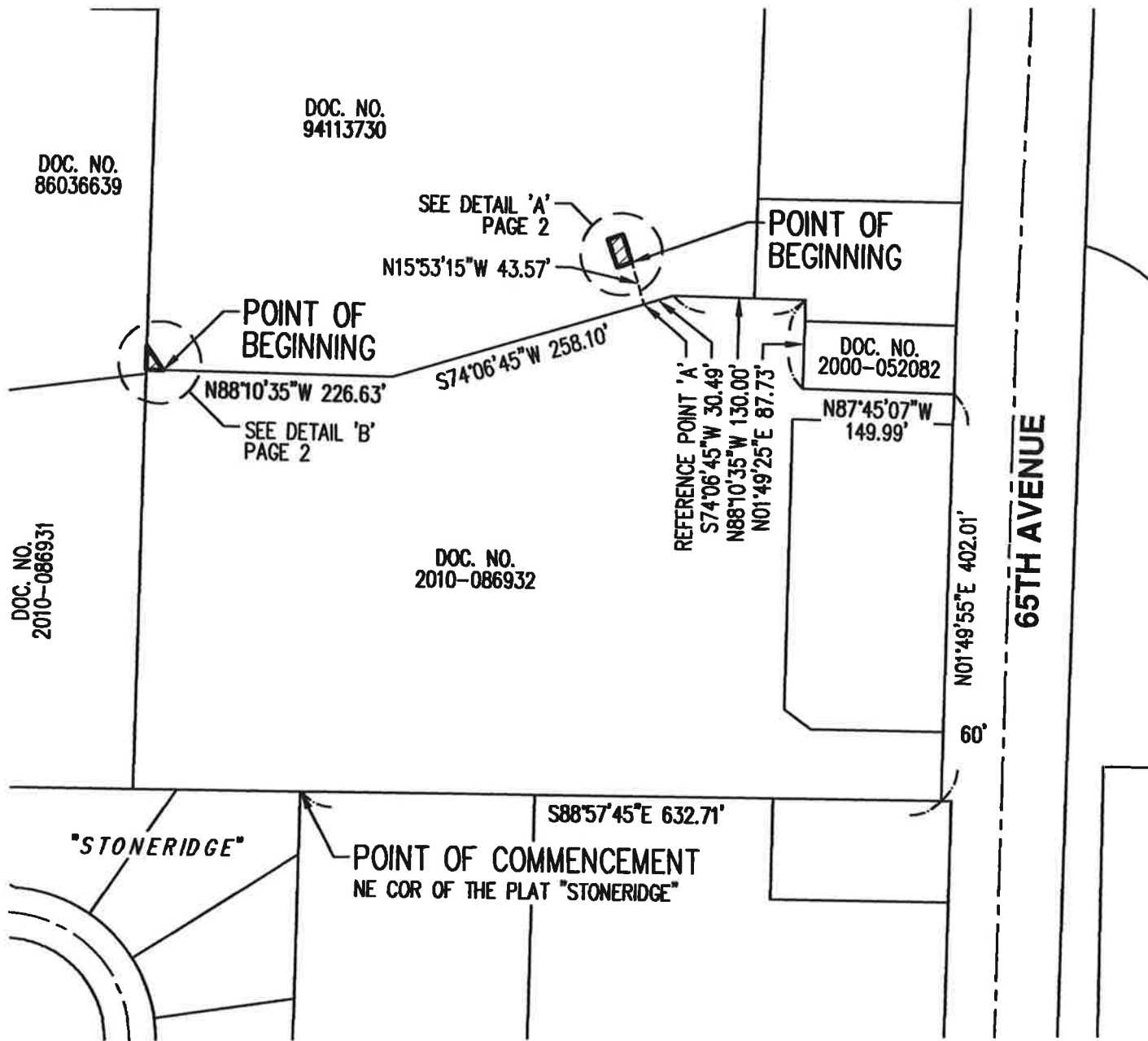
REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

RENEWS: 6/30/22

# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 24,  
TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CITY OF TUALATIN, WASHINGTON COUNTY, OREGON



10/23/2020

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*Nick White*

OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

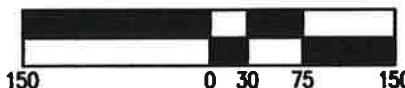
RENEWS: 6/30/22

### PREPARED FOR

CITY OF TUALATIN  
18880 SW MARTINAZZI AVENUE, SUITE 200  
TUALATIN, OR 97062

TOTAL AREA=627 SF±

SCALE: 1"=150 FEET



### PERMANENT UTILITY EASEMENT MAP

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



EXHIBIT  
B

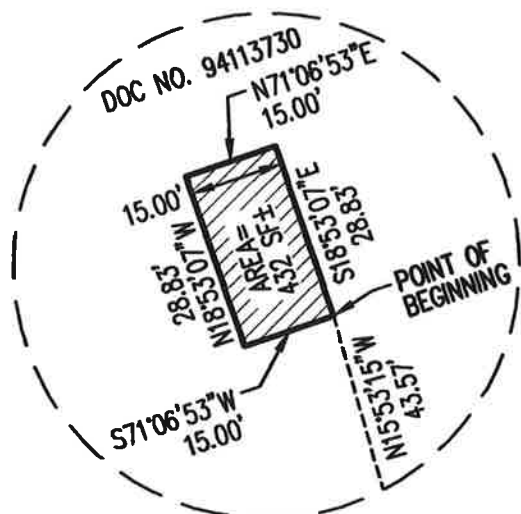
DRWN: WCB  
CHKD: NSW

AKS JOB:  
5511-08

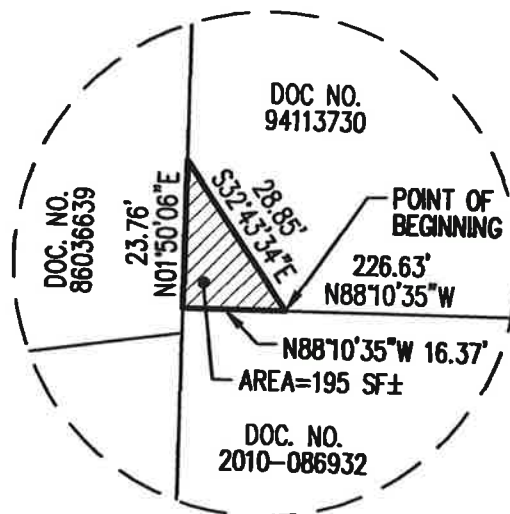


# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 24,  
TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CITY OF TUALATIN, WASHINGTON COUNTY, OREGON



**DETAIL 'A'**



**DETAIL 'B'**

10/23/2020

**REGISTERED  
PROFESSIONAL  
LAND SURVEYOR**

*Nick White*

OREGON  
JANUARY 9, 2007  
NICK WHITE  
70652LS

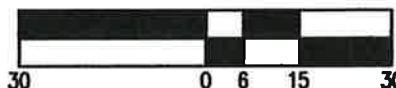
RENEWS: 6/30/22

**PREPARED FOR**

CITY OF TUALATIN  
18880 SW MARTINAZZI AVENUE, SUITE 200  
TUALATIN, OR 97062

TOTAL AREA=627 SF±

SCALE: 1"= 30 FEET



**PERMANENT UTILITY EASEMENT MAP**

**EXHIBIT  
B**

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



DRWN: WCB  
CHKD: NSW  
AKS JOB:  
5511-08

After recording return to:  
City of Tualatin, Oregon  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062-7092



**CITY OF TUALATIN, OREGON  
NON-EXCLUSIVE TEMPORARY CONSTRUCTION EASEMENT**

The Wetlands Conservancy, an Oregon non-profit corporation which acquired title as The Wetlands Conservancy, Inc., a nonprofit corporation of the State of Oregon ("GRANTOR"), hereby grants to the City of Tualatin ("the CITY"), its successors and assigns, a temporary construction EASEMENT, and right-of-entry for the purpose of constructing the 65th and Nyberg Trunk Line project on real property located in Washington County, State of Oregon, that is more particularly described as follows:

*See Attached Exhibits A and B*

This EASEMENT shall become effective from the date of signature and shall continue TWO YEARS for the purpose above described. The true and actual consideration paid for this transfer consists of or includes other property or other value given or promised, the receipt of which is acknowledged by the GRANTOR.

Subject to the limitations and conditions of the Oregon Constitution and Oregon Revised Statutes ("ORS") 30.260 to 30.300, the CITY agrees to indemnify GRANTOR from all claims made for injury to person or property caused by the CITY's negligence during the actual use by the CITY of the property for any of the above-described purposes.

[Continued on next page for formatting purposes]

The CITY shall have the right at any time during the EASEMENT period to enter upon the above-described real property for the purpose mentioned above. The CITY shall repair any damage to the property caused by The CITY's use for the purpose described above and shall restore the property to the condition reasonably similar to the previous state.

EXECUTED this 26 day of February, 2021

[Signature]  
Name (print or type)

Katie Ryan  
Name (print or type)

Signature

[Signature]  
Signature

Date

2/26/21  
Date

(STATE OF OREGON )ss  
(County of Washington )

On this 26<sup>th</sup> day of February, 2021, before me, the undersigned, a Notary Public, personally appeared Kathleen Ryan and acknowledged the foregoing instrument to be their voluntary act and deed.

Before me: [Signature]  
Notary Public for Oregon  
My commission expires: Jan 24 2023



ACCEPTED BY THE CITY OF TUALATIN,  
OREGON

By: \_\_\_\_\_  
City Manager





1 OF 1  
SHEET

DATE PLOTTED	JAN 20 2020
DATE PRINTED	JAN 20 2020
DATE	JAN 20 2020
SCALE	1" = 30'
PROJECT	NYBERG TRUNK LINE SEWER REHABILITATION
CLIENT	TUALATIN
LOCATION	LOT 800, 806, 1200, 1100, AND 1000

### EASEMENT EXHIBIT THE WETLANDS CONSERVANCY

**NYBERG TRUNK LINE  
SEWER REHABILITATION**  
TUALATIN  
OREGON  
TAX LOTS 800, 806, 1200, 1100, AND 1000  
TAX MAP 25 1W 230A

AKS ENGINEERING & FORESTRY, LLC  
12565 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503-563-8151  
WWW.AKS-ENG.COM

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

After recording return to:  
City of Tualatin, Oregon  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062-7092



**CITY OF TUALATIN, OREGON  
NON-EXCLUSIVE TEMPORARY CONSTRUCTION EASEMENT**

Rolling Hills - 277, LLC, an Oregon limited liability company (“GRANTOR”), hereby grants to the City of Tualatin (“the CITY”), its successors and assigns, a temporary construction EASEMENT, and right-of-entry for the purpose of constructing the 65th and Nyberg Trunk Line project on real property located in Washington County, State of Oregon, that is more particularly described as follows:

*See Attached Exhibit Map*

This EASEMENT shall become effective from the date of signature and shall continue TWO YEARS for the purpose above described.

The true and actual consideration paid for this transfer is for mutual benefit of both parties and other good and valuable consideration, the receipt of which is acknowledged by the GRANTOR.

Subject to the limitations and conditions of the Oregon Constitution and Oregon Revised Statutes (“ORS”) 30.260 to 30.300, the CITY agrees to indemnify GRANTOR from all claims made for injury to person or property caused by the CITY’s negligence during the actual use by the CITY of the property for any of the above-described purposes.

[Continued on next page for formatting purposes]

The CITY shall have the right at any time during the EASEMENT period to enter upon the above-described real property for the purpose mentioned above. The CITY shall repair any damage to the property caused by The CITY's use for the purpose described above and shall restore the property to the condition reasonably similar to the previous state.

EXECUTED this 10<sup>th</sup> day of August, 2021.

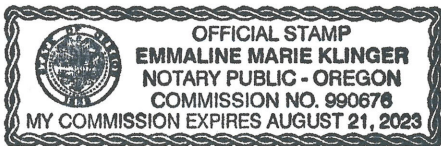
Rolling Hills – 277, LLC, an Oregon limited liability company  
By Randall Realty Corp, an Oregon corporation, its manager

By Ronald L. Koos  
Ronald L. Koos, Vice President

(STATE OF OREGON )ss  
(County of Washington )  
MULTNOMAH

This instrument was acknowledged before me this 10<sup>th</sup> day of August, 2021, by Ronald L. Koos, Vice President of Randall Realty Corp, an Oregon corporation, which is the Manager of Rolling Hills – 277, LLC, an Oregon limited liability company.

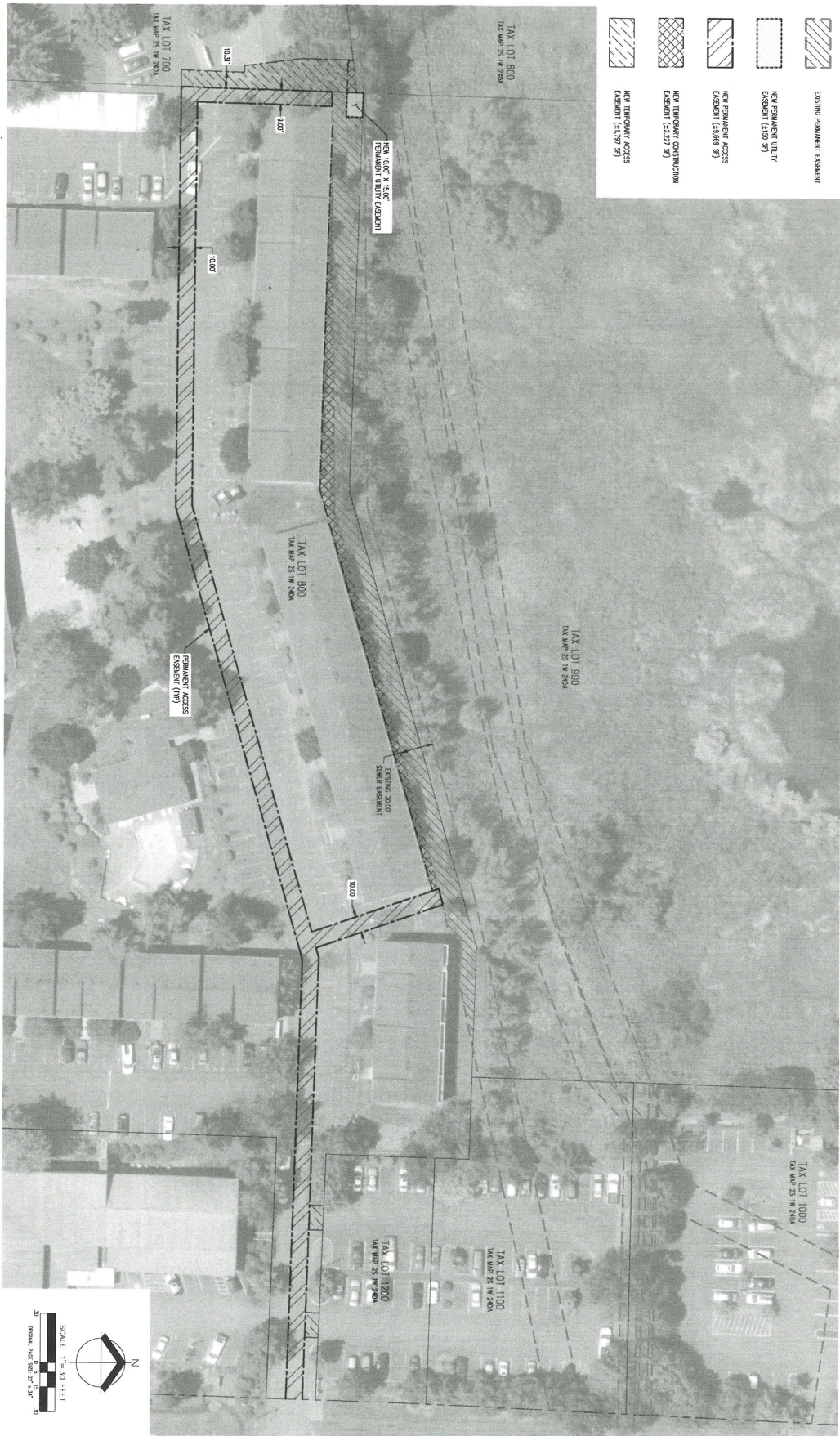
Before me: Emmaline Marie Klinger  
Notary Public for Oregon  
My commission expires: August 21, 2023








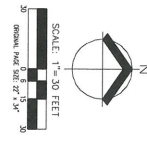
ACCEPTED BY THE CITY OF TUALATIN,  
OREGON

By: \_\_\_\_\_  
City Manager





-  EXISTING PERMANENT EASEMENT
-  NEW PERMANENT UTILITY EASEMENT (150' X 150')
-  NEW PERMANENT ACCESS EASEMENT (148' X 50')
-  NEW TEMPORARY CONSTRUCTION EASEMENT (122' X 50')
-  NEW TEMPORARY ACCESS EASEMENT (143' X 50')



1 OF 1  
SHEET

DESIGNED BY:	JAM
DRAWN BY:	DB
CHECKED BY:	JAM
DATE:	05/23/2020

### EASEMENT EXHIBIT ROLLING HILLS APARTMENTS

### NYBERG TRUNK LINE SEWER REHABILITATION

TUALATIN OREGON  
TAX LOTS 600, 700, 800, 900, 1000, 1100, AND 1200  
TAX MAP 25 1W 24DA

AKS ENGINEERING & FORESTRY, LLC  
12955 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151  
WWW.AKS-ENG.COM



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





City of Tualatin

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council

**THROUGH:** Sherilyn Lombos, City Manager

**FROM:** Casey Ferguson, Project Engineer  
Heidi Springer, City Engineer

**DATE:** February 14, 2022

---

### **SUBJECT:**

Consideration of Resolution No. 5598-22, Authorizing the City Manager to Execute Deeds Acquiring Easements for the Blake Street to 115th Avenue Waterline Project.

### **RECOMMENDATION:**

Staff recommends the Council adopt the resolution.

### **EXECUTIVE SUMMARY:**

Resolution No. 5598-22 authorizes the City Manager to execute legal documents to acquire the easements needed to construct and maintain the Blake Street to 115th Avenue Waterline Project.

The City's Water Division identified this waterline extension as a way to improve water supply and fire flow protection in the 115th Avenue industrial area. This waterline improvement was verified as a solution through hydraulic modeling by Murraysmith, Inc. during the Water Master Plan update.

The project consists of installing approximately 1,300 lineal feet of 12-inch ductile iron pipe, one (1) landscape irrigation meter, one (1) air release valve, one (1) 12-inch gate valve, and surface restoration. The majority of the project, approximately 900 lineal feet, will be constructed within the unimproved SW Blake Street right-of-way (ROW) from the SW 115th Avenue connection to the existing water system. From the eastern end of the unimproved SW Blake Street ROW, approximately 400 lineal feet will be installed in the proposed easements along Tigard Sand & Gravel's north property line.

In order to have space for construction, and access for future maintenance of the waterline, the City needs to acquire two (2) easements as follows:

#### **Tigard Sand & Gravel, LLC (Tax Lot 2S127C02700)**

- Property includes an existing 30-foot by 60-foot Public Waterline Easement located in the NE corner. The existing easement contains a 12-inch waterline stub as a connection point to the existing water system.
- The City is requesting a Water Quality Preservation and Storm and Surface Water Drainage Easement (1,685 sq. ft.), a Permanent Waterline, Storm Drainage Line, Stormwater, Sanitary Sewer Line, and Access Easement (6,979 sq. ft.).
- **Acquisition amount \$1,100**; which includes \$122.00 for Water Quality Preservation and Storm and Surface Water Drainage Easement, \$978.00 for Permanent Waterline, Storm Drainage Line, Stormwater, Sanitary Sewer Line, and Access Easement.

The City's offering price was based on an appraisal performed by Oregon Valuation Group and recommendations from Universal Field Services, Inc.

**FINANCIAL IMPLICATIONS:**

The total acquisition cost is \$1,100. The purchase of these easements, along with the cost of design, and construction is funded through the Water Operating Fund.

---

**ATTACHMENTS:**

- Resolution No. 5598-22
- Deeds with exhibits showing the areas to be acquired on the property



RESOLUTION NO. 5598-22

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE DEEDS ACQUIRING EASEMENTS FOR THE BLAKE STREET TO 115TH AVENUE WATERLINE PROJECT.

WHEREAS, the Blake Street to 115th Avenue Waterline Project is funded through the Water Operating Fund;

WHEREAS, the City's Water Division identified this waterline extension as a way to improve water supply and fire flow protection in the 115th Avenue industrial area. This waterline improvement was verified as a solution through hydraulic modeling by Murraysmith, Inc. during the Water Master Plan update;

WHEREAS, the City has identified the need to acquire certain easements in order to facilitate the construction of the Blake Street to 115th Avenue Waterline Project; and

WHEREAS, the City has negotiated transactions with the willing property owner to acquire permanent waterline, storm drainage line, stormwater, sanitary sewer line, access, and water quality preservation easements.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that:

**Section 1.** The City Manager is authorized to acquire and execute deeds for the following property:

Tax Lot 2S127C02700 – Tigard Sand & Gravel, LLC

- Water Quality Preservation and Storm and Surface Water Drainage Easement for \$122.00
- Waterline, Storm Drainage Line, Stormwater, Sanitary Sewer Line, and Access Easement for \$978.00

**Section 2.** The City Manager is hereby authorized to execute all documents necessary to acquire easements identified in Section 1.

**Section 3.** This resolution is effective upon adoption.

Adopted by the City Council this 14<sup>th</sup> day of February, 2022.

CITY OF TUALATIN, OREGON

ATTEST:

BY \_\_\_\_\_  
Mayor

BY \_\_\_\_\_  
City Recorder



After recording return to  
City of Tualatin, Oregon  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062-7092



**CITY OF TUALATIN, OREGON  
WATERLINE, STORM DRAINAGE LINE, STORMWATER,  
SANITARY SEWER LINE, AND ACCESS EASEMENT**

Rogers Northwest, Inc., an Oregon Corporation, successor by merger to Rogers Construction, Inc., an Oregon Corporation, successor by merger to Tigard Sand and Gravel, an Oregon Corporation ("GRANTOR"), grants to the City of Tualatin (the "CITY"), its successors and assigns, the permanent right to design, construct, reconstruct, operate and maintain a Waterline, Storm Drainage Line, Stormwater, Sanitary Sewer Line, and Access Easement on the following described land:

*See attached legal description and drawing,  
incorporated by reference*

TO HAVE AND TO HOLD, the described EASEMENT unto the CITY, its successors and assigns, runs with the land.

GRANTOR reserves the right to use the surface of the land for walkways, landscaping, parking, and other uses undertaken by the GRANTOR that are not inconsistent and do not interfere with the use of the subject EASEMENT area by the CITY. No building or utility shall be placed upon, under or within the property subject to this easement during its term without the written permission of the CITY.

Except as otherwise provided, upon completion of construction by CITY on the EASEMENT, the CITY shall restore the property's disturbed surface to the condition reasonably similar to the previous state, and shall indemnify and hold the GRANTOR harmless against all loss, costs, or damage arising out of the exercise of the rights granted. Nothing in this easement shall be construed as requiring the CITY, its successors or assigns, to maintain landscaping, walkways, parking or other surface or subsurface improvement made or constructed by or on behalf of the GRANTOR, its heirs, successors or assigns.



The true and actual consideration paid for this transfer consists of \$978.00 or includes other property or other value given or promised, the receipt of which is acknowledged by the GRANTOR.

The GRANTOR covenants to the CITY, and its successors and assigns, that GRANTOR is lawfully seized in fee simple of the granted premises, free from all encumbrances list any exceptions and that GRANTOR, and the GRANTOR'S heirs and personal representatives, shall warrant and forever defend the premises to the CITY, its agents, successors, and assigns against the lawful claims and demands of all persons claiming by, through, or under the GRANTOR.

Executed this 26 day of October, 2020.

AJ Urbanek  
Signature

R L Metcalf  
Signature

Anthony J Urbanek  
Name (print or type)

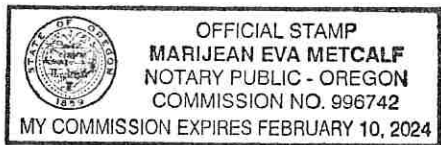
Roger L Metcalf  
Name (print or type)

President  
Title

Vice Pres  
Title

(STATE OF OREGON )ss  
(County of Washington )

On this 26<sup>th</sup> day of October, 2020, before me, the undersigned, a Notary Public, personally appeared AJ Urbanek, Roger Metcalf and acknowledged the foregoing instrument to be their voluntary act and deed.



Before me: Marijean Metcalf  
Notary Public for Oregon

My commission expires: 02/10/2024

CITY OF TUALATIN, OREGON

By: \_\_\_\_\_  
City Manager

The City Manager of the City of Tualatin, being duly authorized and directed by the Council of the City of Tualatin, pursuant to TMC 1-3-030, approves and accepts the foregoing document on behalf of the City of Tualatin. Dated this \_\_\_ day of \_\_\_\_\_, 20\_\_.

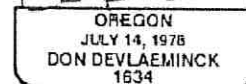
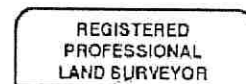
\_\_\_\_\_  
City Manager

**EXHIBIT "A"**  
**PUBLIC EASEMENT FOR WATERLINE, STORM DRAINAGE LINE, STORMWATER, SANITARY  
SEWER LINE AND ACCESS**  
(SHEET 1 OF 2)

A 20 FOOT WIDE STRIP OF LAND SITUATED IN THE SOUTHEAST ONE-QUARTER OF SECTION 27, TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

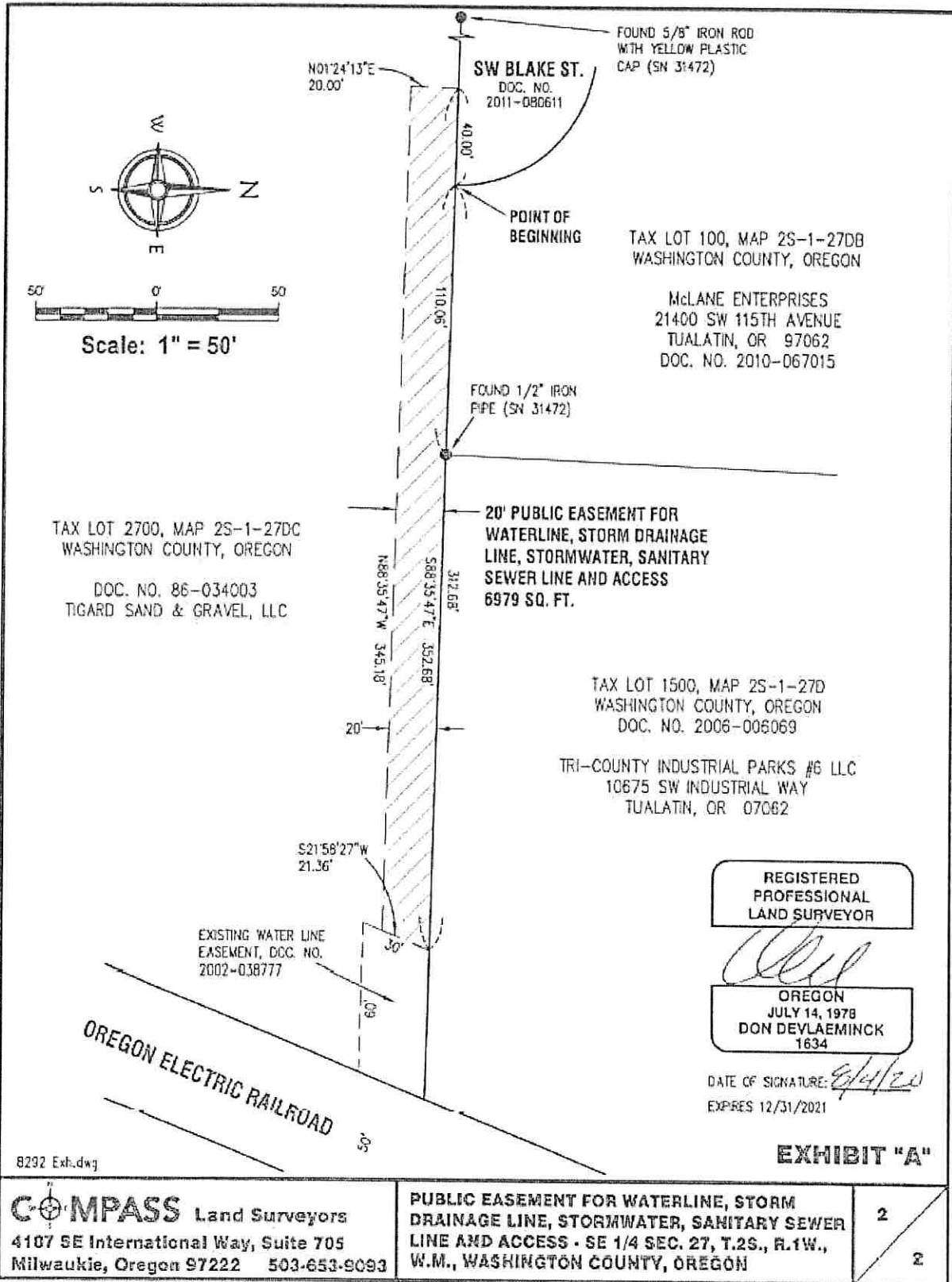
BEGINNING AT THE MOST EASTERLY CORNER OF THAT TRACT OF LAND GRANTED TO THE CITY OF TUALATIN BY DEED OF DEDICATION RECORDED AS DOCUMENT NUMBER 2011-080611, WASHINGTON COUNTY DEED RECORDS; THENCE ALONG THE SOUTH LINE OF THAT TRACT OF LAND DESCRIBED IN DEED TO McLANE FOODSERVICE, INC. BY WARRANTY DEED RECORDED AS DOCUMENT NUMBER 2010-067015, WASHINGTON COUNTY DEED RECORDS, AND ALONG THE SOUTH LINE OF THAT TRACT OF LAND CONVEYED TO TRI-COUNTY INDUSTRIAL PARKS #6 LLC BY QUITCLAIM DEED RECORDED AS DOCUMENT NUMBER 2006-006069, WASHINGTON COUNTY DEED RECORDS, SOUTH 88°35'47" EAST 312.68 FEET TO THE NORTHWEST CORNER OF THAT TRACT OF LAND DESCRIBED IN WATER LINE EASEMENT GRANTED TO THE CITY OF TUALATIN BY DOCUMENT NUMBER 2002-038777, WASHINGTON COUNTY DEED RECORDS; THENCE ALONG THE WEST LINE OF SAID WATER LINE EASEMENT SOUTH 21°58'27" WEST 21.36 FEET; THENCE LEAVING SAID WEST LINE NORTH 88°35'47" WEST 345.18 FEET; THENCE NORTH 01°24'13" EAST 20.00 FEET TO THE SOUTH RIGHT OF WAY LINE OF THE AFOREMENTIONED TRACT OF LAND GRANTED TO THE CITY OF TUALATIN BY DEED OF DEDICATION RECORDED AS DOCUMENT NUMBER 2011-080611; THENCE ALONG SAID SOUTH RIGHT OF WAY LINE SOUTH 88°35' 47" EAST 40.00 FEET TO THE POINT OF BEGINNING.

BASIS OF BEARINGS: OREGON STATE PLANE  
COORDINATE SYSTEM OF 1983, NORTH ZONE.



DATE OF SIGNATURE: 8/4/20  
EXPIRES: 12/31/2021

**Parcel 1 Exhibit A**



Parcel 1 Exhibit A



**RETURN TO:** Clean Water Services  
Mail Stop 10  
2550 SW Hillsboro Highway  
Hillsboro, OR 97123

Project:  
Tax Lot No.: 2S127C002700  
Square Feet: 1,685

**EASEMENT FOR WATER QUALITY PRESERVATION AND  
STORM AND SURFACE WATER DRAINAGE**

GRANTOR'S NAME: Rogers Northwest, Inc. an Oregon Corporation, successor by merger to Rogers Construction, Inc., an Oregon Corporation, successor by merger to Tigard Sand & Gravel Co., Inc., an Oregon Corporation

ADDRESS: 21455 SW 120<sup>th</sup> Ave., Tualatin, OR 97062

GRANTOR, owner of the property described herein, has the authority and does hereby grant, convey and warrant unto Clean Water Services, GRANTEE, a non-exclusive perpetual easement in gross to use the real property described in Exhibit A attached hereto and by this reference incorporated herein (Easement Area) for water quality preservation and storm and surface water drainage. This easement includes the right to construct and perpetually maintain storm and surface water drainage and water quality facilities (including vegetation) through, under, and along the Easement Area. This easement includes the right to access the above described easement over and across the land of the GRANTOR for the purpose of maintenance of the easement and facilities therein. This easement shall run with the land and shall be binding upon and shall inure to the benefit of the parties hereto, their heirs, successors and assigns. GRANTEE shall not have any responsibility for pre-existing environmental contamination or for environmental contamination caused by GRANTOR or any third party of the Easement Area.

Any temporary easement granted hereby is automatically extinguished upon acceptance of the completed public facilities in the adjacent permanent easement.

The consideration for this grant is **\$122.00.**

Additional terms and conditions set forth below are hereby agreed to and binding upon the parties to this easement:

1. No structure shall be erected on the Easement Area without the written consent of the GRANTEE.
2. One purpose of this easement shall be to preserve water quality by maintaining native vegetation and habitat conditions within the Easement Area. GRANTOR agrees that any vegetation planted by GRANTEE within the Easement Area shall not be removed, destroyed, mowed, altered or sprayed with biocides. GRANTOR may make additional plantings of Oregon native species within the Easement Area and may prune planted vegetation with approval of GRANTEE.
3. GRANTOR agrees that there shall be no filling, excavating or dredging; no removal of topsoil,

sand, gravel, rock, minerals or other materials, nor any dumping of ashes, trash, garbage, or of any other material, and no changing of the grade or topography of the Easement Area in any manner unless authorized by GRANTEE.

4. GRANTOR agrees that there shall be no damming, dredging or other activities that may be detrimental to water quality within the Easement Area. The scope of this easement includes GRANTEE'S right to remove any barrier to natural creek flow within the Easement Area that may cause flooding of structures subject to the terms of necessary federal, state and local permits. GRANTOR agrees that any activities within the Easement Area which are, in the opinion of the GRANTEE, inconsistent with preserving the natural condition of the Easement Area are prohibited and may be subject to enforcement action.
5. GRANTEE shall take action to enforce the terms of this easement. Enforcement shall include abatement of any prohibited condition or activity within the Easement Area by all means provided under Clean Water Services' Ordinances and Resolution and Orders, and federal and state laws.
6. GRANTEE and its contractors shall confine construction operations to within the Easement Area or make special arrangements with GRANTOR if additional area or access is required.
7. During the time that work is in progress, GRANTEE and GRANTEE'S contractor shall make every effort to maintain the site in a neat and orderly condition. All refuse, excess fill material, etc., shall be removed as soon as practicable. Should the site not be maintained in satisfactory condition, GRANTEE may cause the work to stop until the cleanup portion of the work has been done to the satisfaction of GRANTOR and GRANTEE.

INDIVIDUAL GRANTORS SIGN BELOW

CORPORATE, LLC, PARTNERSHIP, TRUST OR  
OTHER LEGAL ENTITY SIGN BELOW

\_\_\_\_\_  
Grantor (Individual)

Rogers Northwest, Inc. an Oregon Corporation

\_\_\_\_\_  
Date

By: AJ Urbanele  
(Sign here for entity)

\_\_\_\_\_  
Grantor ( Individual)

Title: President

\_\_\_\_\_  
Date

Date: 10-26-20

ACCEPTED

APPROVED AS TO FORM

By: \_\_\_\_\_  
Chief Executive Officer or Designee  
Clean Water Services

\_\_\_\_\_  
District Counsel

**NOTARIZE DOCUMENT BELOW**

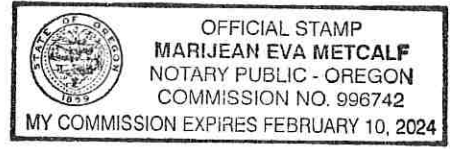
STATE OF Oregon )

County of Washington )

This instrument was acknowledged before me on October 26, 2020 (date)

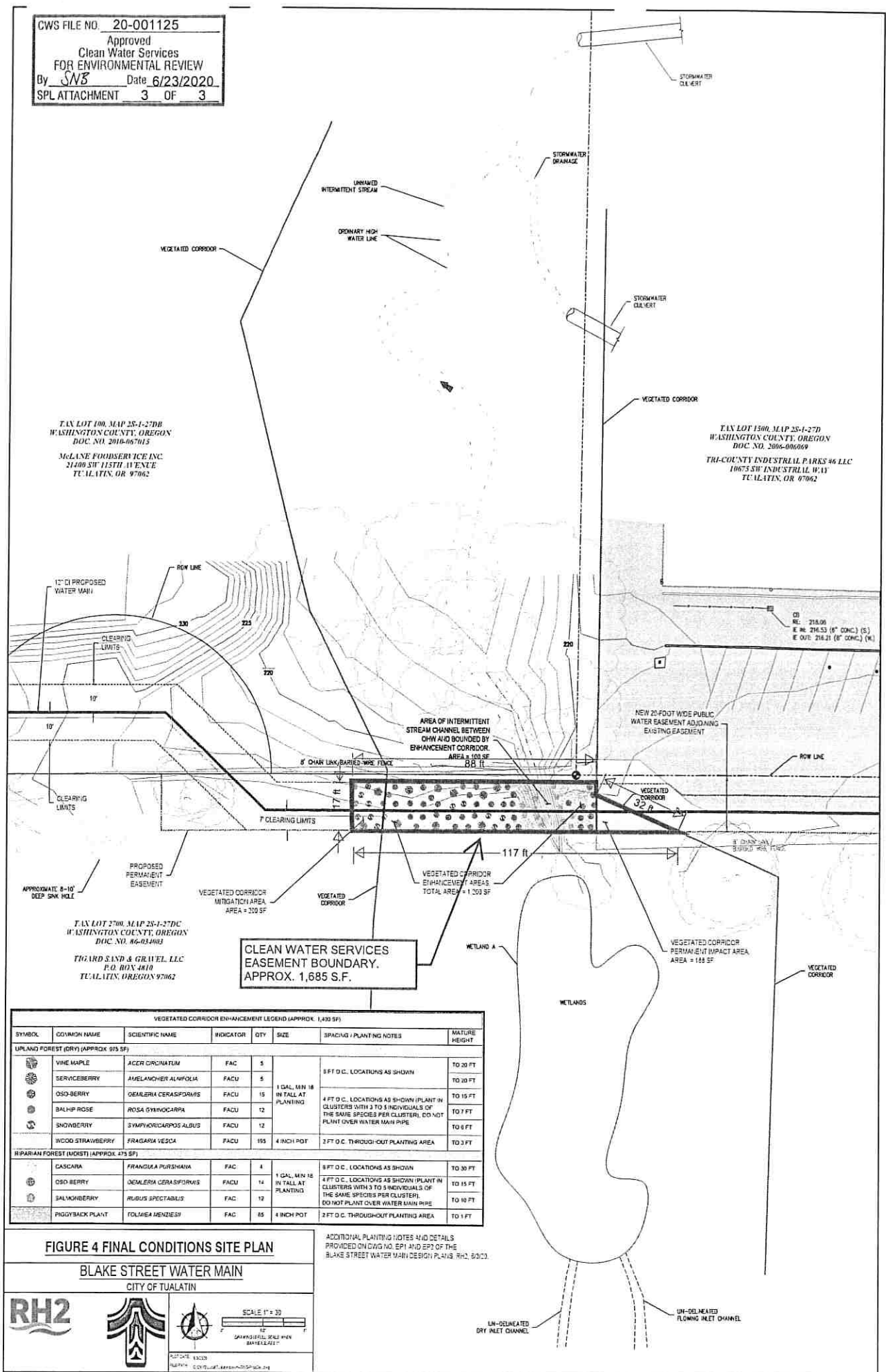
by Art Urbank as  
pres of Rogers Northwest, Inc. an Oregon Corporation

Marijean Metcalf  
Notary Public





CWS FILE NO. 20-001125  
 Approved  
 Clean Water Services  
 FOR ENVIRONMENTAL REVIEW  
 By JVS Date 6/23/2020  
 SPL ATTACHMENT 3 OF 3



TAX LOT 100, MAP 25-1-270B  
 WASHINGTON COUNTY, OREGON  
 DOC. NO. 2010-067015  
 McLANE FOODSERVICE INC  
 21400 SW 115TH AVENUE  
 TUALATIN, OR 97062

TAX LOT 1300, MAP 25-1-27D  
 WASHINGTON COUNTY, OREGON  
 DOC. NO. 2006-086009  
 TRI-COUNTY INDUSTRIAL PARKS #6 LLC  
 10675 SW INDUSTRIAL W. #11  
 TUALATIN, OR 97062

TAX LOT 3700, MAP 25-1-37DC  
 WASHINGTON COUNTY, OREGON  
 DOC. NO. 86-034003  
 THORNTON & GRAY, LLC  
 P.O. BOX 4810  
 TUALATIN, OREGON 97062

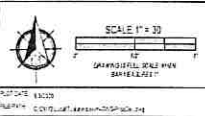
CLEAN WATER SERVICES  
 EASEMENT BOUNDARY.  
 APPROX. 1,685 S.F.

VEGETATED CORRIDOR ENHANCEMENT LEGEND (APPROX. 1,400 SF)							
SYMBOL	COMMON NAME	SCIENTIFIC NAME	INDICATOR	QTY	SIZE	SPACING / PLANTING NOTES	MATURE HEIGHT
<b>UPLAND FOREST (DRY) (APPROX 975 SF)</b>							
🌳	VINE MAPLE	ACCRA CIRCUMATUM	FAC	5		8 FT O.C. LOCATIONS AS SHOWN	TO 20 FT
🌳	SERVICEBERRY	AMELANCHER ALNIFOLIA	FACU	5	1 GAL. MIN 18 IN TALL AT PLANTING		TO 30 FT
🌳	OSO-BERRY	OMALERA CERASIFORMIS	FACU	15	1 GAL. MIN 18 IN TALL AT PLANTING	4 FT O.C. LOCATIONS AS SHOWN (PLANT IN CLUSTERS WITH 3 TO 4 INDIVIDUALS OF THE SAME SPECIES PER CLUSTER). DO NOT PLANT OVER WATER MAIN PIPE.	TO 15 FT
🌳	BALM-ROSE	ROSA GYMNOCARPA	FACU	12			TO 7 FT
🌳	SNOWBERRY	SYMPHYCARPOS ALBUS	FACU	12			TO 6 FT
🌳	WOOD STRAWBERRY	FRAGARIA VESCA	FACU	150	4 INCH POT	3 FT O.C. THROUGH-OUT PLANTING AREA	TO 3 FT
<b>RIPARIAN FOREST (MOIST) (APPROX 475 SF)</b>							
🌳	CASCARA	FRANKIA PURSHIANA	FAC	4		8 FT O.C. LOCATIONS AS SHOWN	TO 30 FT
🌳	OSO-BERRY	OMALERA CERASIFORMIS	FACU	14	1 GAL. MIN 18 IN TALL AT PLANTING	4 FT O.C. LOCATIONS AS SHOWN (PLANT IN CLUSTERS WITH 3 TO 4 INDIVIDUALS OF THE SAME SPECIES PER CLUSTER). DO NOT PLANT OVER WATER MAIN PIPE.	TO 15 FT
🌳	BALM-BERRY	RUBUS SPECTABILIS	FAC	12			TO 10 FT
🌳	PIGGYBACK PLANT	FOLMIA MENZIESII	FAC	85	4 INCH POT	2 FT O.C. THROUGH-OUT PLANTING AREA	TO 1 FT

FIGURE 4 FINAL CONDITIONS SITE PLAN

BLAKE STREET WATER MAIN

CITY OF TUALATIN



ADDITIONAL PLANTING NOTES AND DETAILS PROVIDED ON DWG NO. EPI AND EPD OF THE BLAKE STREET WATER MAIN DESIGN PLANS (R#2, 50/2).

UN-DEGRADED DRY INLET CHANNEL UN-DEGRADED FLOWING INLET CHANNEL



City of Tualatin

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council

**THROUGH:** Sherilyn Lombos, City Manager

**FROM:** Casey Ferguson, Project Engineer  
Heidi Springer, City Engineer

**DATE:** February 14, 2022

---

**SUBJECT:**

Consideration of Resolution No. 5600-22, Authorizing the City Manager to Execute Deeds Granting Easements to Washington County for the Tualatin-Sherwood Road Widening Project.

**RECOMMENDATION:**

Staff recommends the Council consider the resolution.

**EXECUTIVE SUMMARY:**

Resolution No. 5600-22 authorizes the City Manager to execute legal documents to grant Washington County easements needed to construct and maintain the utilities associated with the Tualatin-Sherwood Road Widening Project. Easements are proposed on the City's A2 Reservoir site located at 20940 SW Dahlke Lane in the City of Sherwood. The City's water operations will not be impacted by the utilities or granting of this easement along the site's frontage.

Washington County is designing a project to widen Tualatin-Sherwood Road from SW Teton Avenue to SW Langer Farms Parkway in the City of Sherwood. This project is planned to include two travel lanes in each direction, a center turn lane, storm drainage, planter strips, and a path for walking and cycling on each side.

In order to have space for construction, and access for future maintenance of the utilities, the County needs to acquire two (2) easements as follows:

**City of Tualatin (Tax Lot 2S128D01000)**

- Property includes the City's A2 Reservoir site located at 20940 SW Dahlke Lane in the City of Sherwood. The City's water operations will not be impacted by the granting of this easement along the site's frontage.
  - The County is requesting a Permanent Utility and Slope Easement (2,337 sq. ft.), and a Permanent Slope Easement (2,615 sq. ft.).
  - There is no consideration of dollars in this action however the County will pay the City \$7,656.42 (\$3,838.52 for the permanent utility and slope easement, and \$3,817.90 for the permanent slope easement) in the form of a credit which will be documented in a forthcoming Intergovernmental Agreement with Washington County for the Tualatin-Sherwood Road Widening Project.
-

**FINANCIAL IMPLICATIONS:**

The granting of these easements will generate funds for the City of Tualatin in the form of a credit in the forthcoming Intergovernmental Agreement. The total compensation amount to the City is \$7,656.42.

---

**ATTACHMENTS:**

- Resolution No. 5600-22
- Deeds with exhibits showing the areas to be granted on the City of Tualatin property



RESOLUTION NO. 5600-22

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE DEEDS GRANTING EASEMENTS TO WASHINGTON COUNTY FOR THE TUALATIN-SHERWOOD ROAD WIDENING PROJECT.

WHEREAS, Washington County (County) is widening Tualatin-Sherwood Road (TSR) from SW Teton Avenue to SW Langer Farms Parkway in the City of Sherwood. This project is planned to include two travel lanes in each direction, a center turn lane, storm drainage, planter strips, and a path for walking and cycling on each side;

WHEREAS, the County has identified the need to acquire certain easements for utilities from the City of Tualatin (City) in order to facilitate the construction of the TSR Widening Project; and

WHEREAS, the County has negotiated a transaction with the City to acquire a permanent utility and slope easement, and a permanent slope easement. The property proposed is to be acquired for the price of \$0.00 and other considerations is more particularly described in the forthcoming Intergovernmental Agreement with the County for the TSR Widening Project.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that:

**Section 1.** The City Manager is authorized to accept funds from the County for the TSR Widening Project and to execute deeds for the following property:

Tax Lot 2S128D01000 – City of Tualatin

- Permanent Utility and Slope Easement for \$3,838.52
- Permanent Slope Easement for \$3,817.90

**Section 2.** The City Manager is hereby authorized to accept funds from the County and execute all documents necessary to grant easements identified in Section 1.

**Section 3.** This resolution is effective upon adoption.

Adopted by the City Council this 14<sup>th</sup> day of February, 2022.

CITY OF TUALATIN, OREGON

BY \_\_\_\_\_  
Mayor

ATTEST:

BY \_\_\_\_\_  
City Recorder

**After recording, please return to:**

*Washington County  
LUT, Right-of-Way Section  
1400 SW Walnut St. Mail Stop #18  
Hillsboro, OR 97123-5625*

Until a change is requested all  
tax statements shall be sent to:  
*No Change*

## **DEDICATION DEED**

**THE CITY OF TUALATIN**, an Oregon municipal corporation, Grantor, grants to WASHINGTON COUNTY, a political subdivision of the State of Oregon, Grantee, on behalf of the public, for the use of the public forever, the following easements in that certain real property situated in the County of Washington and State of Oregon, described on the attached Exhibit "A," and shown on the attached Exhibit "B."

The true consideration for this conveyance is **\$ None**.

### **PARCEL 1 - SLOPE EASEMENT**

Including the right to construct and maintain slopes necessitated by the construction, operation, and maintenance of the public road, all public facilities, and improvements in the adjacent right-of-way. Grantee shall never be required to remove the slope materials placed by it on said property, nor shall Grantee be subject to any damages to Grantor by reasons of any change of grade of the roadway abutting on said property.

### **AND - PUBLIC UTILITIES EASEMENT**

Including the right to install, maintain, and repair public utilities over, under, and across the property described.

### **PARCEL 2 - SLOPE EASEMENT**

Including the right to construct and maintain slopes necessitated by the construction, operation, and maintenance of the public road, all public facilities, and improvements in the adjacent right-of-way. Grantee shall never be required to remove the slope materials placed by it on said property, nor shall Grantee be subject to any damages to Grantor by reasons of any change of grade of the roadway abutting on said property.

This document is intended to grant easements on the property described, not to convey fee title or any interest in the underlying property except as expressly stated herein. The easements granted shall not prevent Grantors from the use of said property; provided, however, that such use shall not be permitted to interfere with the rights herein granted. Grantor shall not be permitted to endanger the lateral support of any facilities constructed within the easements granted herein.

Grantor hereby covenants to and with Grantee that it is the owner of said property, which is free from all encumbrances, except for easements, conditions and restrictions of record, and will warrant and defend the easement rights herein granted from all lawful claims whatsoever, except as stated herein.

IN WITNESS WHEREOF, the above named Grantor, by and through its \_\_\_\_\_, has caused this instrument to be duly signed.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

THE CITY OF TUALATIN  
an Oregon municipal corporation

By: \_\_\_\_\_

Title: \_\_\_\_\_

STATE OF OREGON        )  
                                  ) ss.  
County of Washington    )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_ (name and title of position) of

The City Of Tualatin an Oregon municipal corporation, on behalf of the municipal corporation.

\_\_\_\_\_  
*Notary Public*

**Accepted on behalf of Washington County, Oregon.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

*Approved As To Form:*

Cortney D. Duke-Driessen  
Sr. Assistant County Counsel  
Dated & Signed: September 4, 2013





## EXHIBIT "A"

SW Tualatin-Sherwood Road  
SW Langer Farms Parkway to SW Teton Avenue  
September 30, 2021

Project 100361  
File No. 32  
Tax Map 2S128D  
Tax Lot 01000

### PARCEL 1 (PERMANENT SLOPE AND UTILITY EASEMENT)

A parcel of land lying in the Southwest one-quarter of the Northeast one-quarter of Section 28, Township 2 South, Range 1 West, Willamette Meridian, Washington County, Oregon, and being a portion of that property described in that Circuit Court, Amended General Judgment to the City of Tualatin, an Oregon municipal corporation, City of, recorded July 19, 2004 as Document Number C031936CV of Washington County Records; said parcel being that portion of said property included in a strip of land, 61.00 feet in width lying on the Southerly side of the centerline of SW Tualatin-Sherwood Road, which centerline is described as follows:

### CENTERLINE DESCRIPTION OF A PORTION OF SW TUALATIN-SHERWOOD ROAD

A road centerline situated in the Northeast, Southeast, Northwest, and Southwest one-quarters of Section 29, the Northeast, Northwest, and Southwest one-quarters of Section 28, the Northeast and Northwest one-quarters of section 27, the Southeast one-quarter of Section 22, and the Southwest one-quarter of Section 23, all in Township 2 South, Range 1 West, Willamette Meridian, Washington County, Oregon, being more particularly described as follows:

Beginning at a point on the centerline of SW Tualatin-Sherwood Road (County Road No. 2737), being a punch mark in the rim of a monument box, at centerline station 43+17.71, and being a point of tangency, which bears South 08°28'04" West a distance of 2661.43 feet from a found 2 inch brass cap, stamped "1988, 20/29, 2S1, Wash. Co. Surveyor", in monument box, at the North one-quarter corner of Section 29, per USBT Book 5, Pages 143-147, Washington County Survey Records; thence South 86°30'30" East a distance of 639.11 feet to a point of curvature at centerline station 49+56.82, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence along the arc of a 4000.00 foot radius curve to the left, through a central angle of 03°20'07" (the long chord of which bears South 88°10'34" East 232.82 feet) an arc distance of 232.86 feet to a point of tangency at centerline station 51+89.68, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence South 89°50'37" East a distance of 2031.24 feet to a point of curvature at centerline station 72+20.92, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence along the arc of a



4000.00 foot radius curve to the right, through a central angle of  $01^{\circ}05'30''$  (the long chord of which bears South  $89^{\circ}17'52''$  East 76.21 feet) an arc distance of 76.21 feet to a point of tangency at centerline station 72+97.13, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box, also which bears North  $19^{\circ}19'46''$  East a distance of 15.36 feet from a found 2 inch brass cap, stamped "T2S, R1W, 29/28, 1992, WASH. CO. SURVEYOR", in monument box, at the East one-quarter corner of Section 29, per USBT Book 7, Page 21, Washington County Survey Records; thence South  $88^{\circ}45'08''$  East a distance of 1251.95 feet to a point of curvature at centerline station 85+49.08, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence along the arc of a 4000.00 foot radius curve to the left, through a central angle of  $07^{\circ}33'27''$  (the long chord of which bears North  $87^{\circ}28'09''$  East 527.24 feet) an arc distance of 527.62 feet to a point of tangency at centerline station 90+76.70, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence North  $83^{\circ}41'25''$  East a distance of 4734.13 feet to a point of curvature at centerline station 138+10.83, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence along the arc of a 4000.00 foot radius curve to the left, through a central angle of  $29^{\circ}28'00''$  (the long chord of which bears North  $68^{\circ}57'25''$  East 2034.56 feet) an arc distance of 2057.16 feet to a point of tangency at centerline station 158+67.99, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence North  $54^{\circ}13'25''$  East a distance of 3139.10 feet to a point of curvature at centerline station 190+07.09, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence along the arc of a 1700.00 foot radius curve to the right, through a central angle of  $32^{\circ}26'33''$  (the long chord of which bears North  $70^{\circ}26'42''$  East 949.78 feet) an arc distance of 962.58 feet to a point of tangency at centerline station 199+69.67, and being a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific" in monument box; thence North  $86^{\circ}39'58''$  East a distance of 328.52 feet to a 5/8" iron rod with yellow plastic cap stamped "W&H Pacific", in monument box, at centerline station 202+98.19, which bears North  $45^{\circ}21'30''$  West a distance of 1563.57 feet from a found 2 inch brass cap, stamped "1/4, 23/26, T2S, R1W, 2005, Wash. Co. Surveyor", in monument box, at the South one-quarter corner of Section 23, per USBT 2005-001, Washington County Survey Records.

This parcel of land contains 2,337 square feet, more or less, excepting therefrom the existing right-of-way of SW Tualatin-Sherwood Road.

#### **PARCEL 2 (PERMANENT SLOPE EASEMENT)**

A parcel of land lying in the Southwest one-quarter of the Northeast one-quarter of Section 28, Township 2 South, Range 1 West, Willamette Meridian, Washington County, Oregon, and being a portion of that property described in that Circuit Court, Amended General Judgment to the City of Tualatin, an Oregon municipal corporation, City of, recorded July 19, 2004 as Document Number C031936CV of Washington County Records; said parcel being that portion of said property included in a strip of land, 73.00 feet in width lying on the



Southerly side of the centerline of SW Tualatin-Sherwood Road, which centerline is described in Parcel 1.

**EXCEPT therefrom** that portion lying within the above-described Parcel 1 (Permanent Slope and Utility Easement).

This parcel of land contains 2,615 square feet, more or less, excepting therefrom the existing right-of-way of SW Tualatin-Sherwood Road.

The bearings of this description were established on Record of Survey No. 33760, Washington County Survey Records.

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

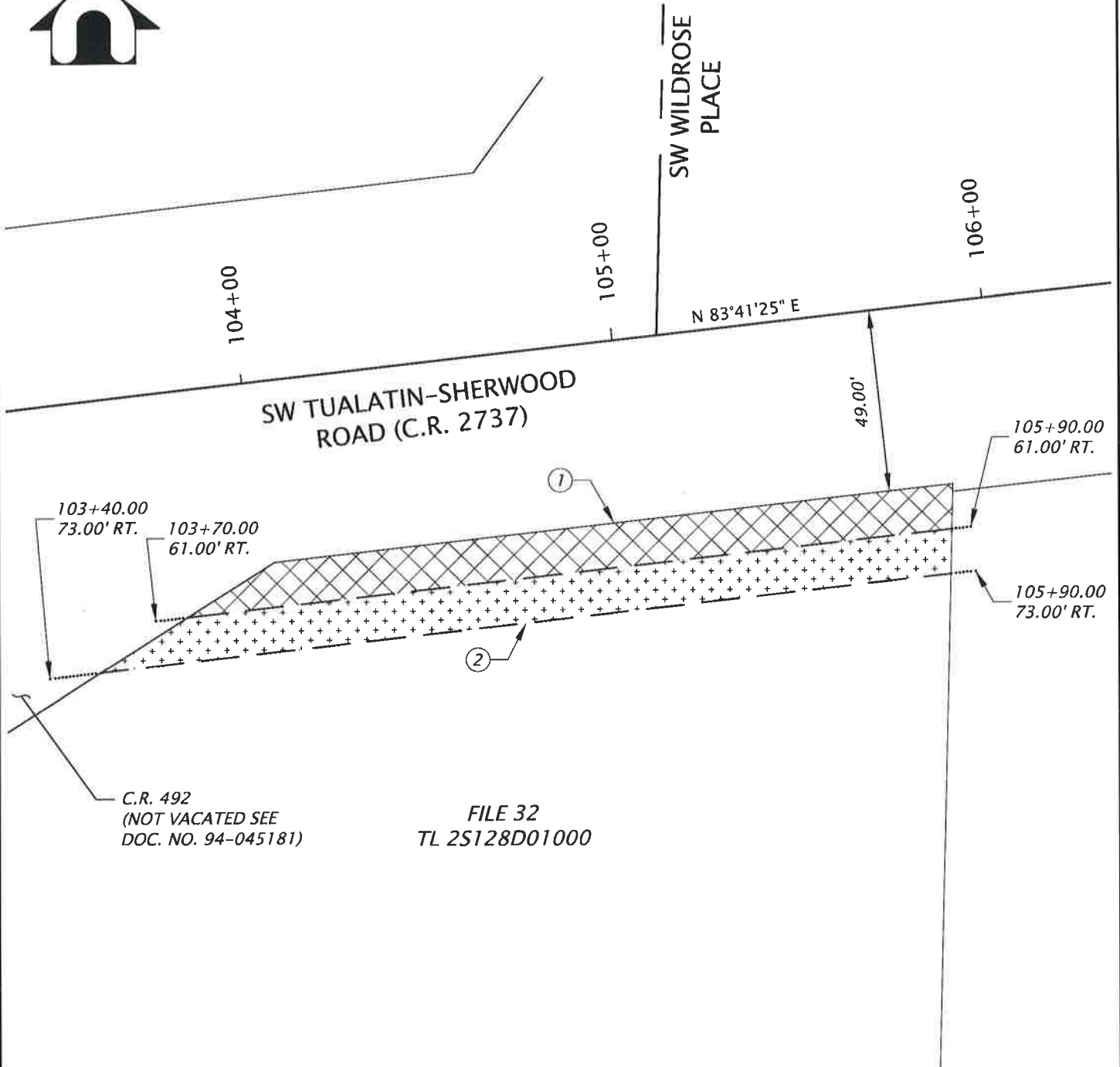
DIGITALLY SIGNED 2021.09.30  
17:18:56-07'00'

OREGON  
MAY 10, 2011  
STEPHEN C. WILLIAMS  
84070

RENEWS: 06-30-22



EXHIBIT "B"



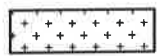
C.R. 492  
(NOT VACATED SEE  
DOC. NO. 94-045181)

FILE 32  
TL 2S128D01000

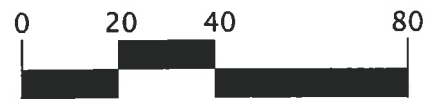
LEGEND:



① PERMANENT SLOPE AND UTILITY EASEMENT  
2,337 SQ. FT. ± (0.054 AC. ±)



② PERMANENT SLOPE EASEMENT  
2,615 SQ. FT. ± (0.060 AC. ±)



SW TUALATIN-SHERWOOD ROAD  
SW LANGER FARMS PARKWAY TO SW TETON AVENUE

FILE NO: 32	SUBMITTAL DATE: SEPT. 30, 2021	REV'D:
TAX LOT: 01000	ADDRESS: 20940 SW DAHLE LANE	
TAX MAP: 2S128D		



**DAVID EVANS  
AND ASSOCIATES INC.**

2100 S River Parkway, Suite 100  
Portland Oregon 97201  
Phone: 503.223.6663



*City of Tualatin*

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council  
**THROUGH:** Sherilyn Lombos, City Manager  
**FROM:** Stacy Ruthrauff, Human Resources Director  
**DATE:** February 14, 2022

---

**SUBJECT:**

Consideration of **Resolution No. 5601-22** Authorizing Personnel Services Updates for Non-Represented Employees on Temporary Schedule A for FY 2021-22.

**RECOMMENDATION:**

Staff recommends the City Council adopt the attached resolution authorizing non-represented Temporary Schedule A personnel services updates.

**EXECUTIVE SUMMARY:**

Cost of living increases for Temporary Schedule A positions historically track with the Cost Of Living Adjustments (COLA) approved for AFSCME positions. The AFSCME contract was just ratified on January 24, 2022 and the salaries now need to be aligned. The attached resolution updates Temporary Schedule A positions effective February 19, 2022.

**FINANCIAL IMPLICATIONS:**

Provisions of the non-represented employee salary schedule adjustment were incorporated in the current budget year.

---

**ATTACHMENTS:**

- Resolution 5601-22
- Exhibit A – Temp Schedule A

RESOLUTION NO. 5601-22

A RESOLUTION AUTHORIZING PERSONNEL SERVICES UPDATES FOR NON-REPRESENTED EMPLOYEES ON TEMPORARY SCHEDULE A FOR FISCAL YEAR 2021-22

WHEREAS, the Council of the City of Tualatin is the authority in setting the compensation and benefits for City employees; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that:

**Section 1.** Effective February 19, 2022, the Salary Schedules for Temporary Schedule A employees shall be updated as provided in attached Exhibit A.

Adopted by the City Council this 14<sup>th</sup> day of February, 2022.

CITY OF TUALATIN, OREGON

BY \_\_\_\_\_  
Mayor

APPROVED AS TO FORM

ATTEST:

BY \_\_\_\_\_  
City Attorney

BY \_\_\_\_\_  
City Recorder



**TEMPORARY EMPLOYEES - SCHEDULE A**  
**FY 2021/22 Salary Schedule\***  
**Effective 2/19/2022**

EXHIBIT A

<b>Grade</b>	<b>TITLE</b>	<b>RATE</b>	<b>MINIMUM REGULAR WAGE</b>	<b>MAXIMUM REGULAR WAGE</b>
<b>T4</b>	TEMP PARKING ENFORCE OFF	Hourly	16.67	21.10
<b>T6</b>	TEMP LIBRARY ASST TEMP OFFICE ASST I	Hourly	18.86	23.91
<b>T7</b>	TEMP OPERATIONS MAINT TECH	Hourly	19.79	25.08
<b>T8</b>	TEMP OFFICE ASSISTANT II	Hourly	20.79	26.35
<b>T9</b>	TEMP POLICE SERVICES TECH TEMP PUBLIC SERVICE ASST TEMP SPECIAL EVENTS COORD TEMP UTILITY TECH I	Hourly	21.85	27.69
<b>T11</b>	TEMP FINANCE/ACCTG TECH TEMP OFFICE COORD TEMP PROP EVIDENCE TECH TEMP REC PROG SPEC	Hourly	24.64	31.23
<b>T12</b>	TEMP FLEET TECH I TEMP VOLUNTEER COORD	Hourly	25.86	32.76
<b>T13</b>	TEMP LIBRARIAN I	Hourly	27.16	34.40
<b>T14</b>	TEMP LIBRARIAN II	Hourly	28.83	36.48
<b>T16</b>	TEMP BLDG CONST INSPT II	Hourly	32.12	40.70



*City of Tualatin*

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council  
**THROUGH:** Sherilyn Lombos, City Manager  
**FROM:** Don Hudson, Assistant City Manager/Finance Director  
**DATE:** February 14, 2022

---

**SUBJECT:**

Consideration of Resolution No. 5602-22, Authorizing the City Manager to Execute an Intergovernmental Agreement to Provide Municipal Court Assistance to the City Of Tigard

**RECOMMENDATION:**

Staff recommends that the City Council approve the attached resolution

**EXECUTIVE SUMMARY:**

The City of Tigard has had recent turnover in management and senior clerk levels of their municipal court and they are seeking someone with expertise in management and administration of a municipal court to assist them with a review of their operation. The Tigard Municipal Court Judge has reached out to Cortney Kammerer, Tualatin's Court Administrator, with the desire to utilize Cortney's expertise to review their operation and make recommendations for updates to their standard operating procedures. Staff feels that Cortney's expertise and experience would be beneficial to Tigard's municipal court operations and can be accomplished on an appropriate schedule that will not conflict with her responsibilities to the Tualatin Municipal Court.

The attached Intergovernmental Agreement describes the proposed scope of work and agreement between the two cities.

**ATTACHMENTS:**

- Resolution No. 5602-22
- Intergovernmental Agreement with City of Tigard

RESOLUTION NO. 5602-22

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN INTERGOVERNMENTAL AGREEMENT TO PROVIDE MUNICIPAL COURT ASSISTANCE TO THE CITY OF TIGARD

WHEREAS, ORS 190.110 et seq., authorizes the City to enter into Intergovernmental Agreements with other government entities;

WHEREAS, the Tigard Municipal Court is seeking assistance with standard operating and workflow procedures;

WHEREAS, the Tualatin Municipal Court has staff with the expertise in management and administration of a municipal court; and

WHEREAS, the City of Tigard wishes to utilize Tualatin's expertise to make recommendations for the operation of their municipal court;

NOW THEREFORE, BE IT RESOLVED BY THE CITY OF TUALATIN, that:

**Section 1.** The City Manager, or designee, is authorized to execute an Intergovernmental Agreement (IGA) with the City of Tigard, which is attached as Attachment A.

**Section 2.** This resolution is effective upon adoption.

ADOPTED by the City Council this 14<sup>th</sup> day of February, 2022.

CITY OF TUALATIN, OREGON

BY \_\_\_\_\_  
Mayor

ATTEST:

BY \_\_\_\_\_  
City Recorder

APPROVED AS TO FORM

BY \_\_\_\_\_  
City Attorney



## INTERGOVERNMENTAL AGREEMENT

This intergovernmental agreement (“Agreement”) is entered into by and between the City of Tigard, an Oregon municipal corporation (“Tigard”), and the City of Tualatin, an Oregon municipal corporation (“Tualatin”), jointly referred to as the Parties.

### Recitals

1. Tualatin has an employee with expertise in management and administration of a municipal court and Tigard is in need of such experience.
2. Tualatin agrees to share its employee with Tigard to make recommendations regarding Tigard’s municipal court, subject to the terms and conditions in this Agreement.

### Agreement

The Parties agree as follows:

- A. Responsibilities of the Parties.
  1. Tualatin Responsibilities. As further set forth in Exhibit A, Tualatin will provide an employee to Tigard to make recommendations regarding the Tigard Municipal Court.
  2. Tigard Responsibilities. As further set forth in Exhibit A, Tigard will provide the Tualatin employee with access, supplies and support necessary to adequately perform the functions under this Agreement.
- B. Compensation. Tualatin will provide a monthly invoice to Tigard that shows charges incurred by employee at the applicable hourly rate of \$60.
- C. Term of Agreement. This Agreement is effective February 3, 2022 and will continue until June 30, 2022 unless otherwise amended or terminated.
- D. Dispute Resolution. The Parties will attempt to informally resolve any dispute concerning any Party’s performance or decisions under this Agreement, or regarding the terms, conditions or meaning of this Agreement. The Parties agree that in the event of an impasse in the resolution of any dispute, the issue will be submitted to the City Manager for each Party for recommendation or resolution. If resolution cannot be reached, a neutral third party may be used if the Parties agree to facilitate these negotiations.
- E. Modification of Agreement. No waiver, consent, modification or change of terms of this Agreement shall be binding unless in writing and signed by both Parties.
- F. Termination.
  1. Termination for Convenience. This Agreement may be terminated, with or without cause and at any time, by a Party providing 10 days’ written notice of intent to the other Party.

2. Termination for Cause. Termination for cause. Either party may terminate this Agreement, in whole or in part, immediately upon notice, or at such later date as may be established in such a notice, to the other party upon the occurrence of the following events: One party commits any material breach or default of any covenant, warranty, obligation, certification or agreement under this Agreement, fails to perform the work or services under this Agreement within the time specified herein or any extension thereof, or so fails to pursue the work or services as to endanger the performance under this Agreement in accordance with its terms.
- G. Indemnification. This Agreement is for the benefit of the Parties only. Except as provided in Exhibit A, each Party agrees to indemnify and hold harmless the other Party, and its officers, employees, and agents, from and against all claims, demands and causes of actions and suits of any kind or nature for personal injury, death or damage to property on account of or arising out of services performed, the omissions of services or in any way resulting from the negligent or wrongful acts or omissions of the indemnifying party and its officers, employees and agents. To the extent applicable, the above indemnification is subject to and shall not exceed the limits of liability of the Oregon Tort Claims Act (ORS 30.260 through 30.300). In addition, each Party shall be solely responsible for any contract claims, delay damages or similar items arising from or caused by the action or inaction of the Parties under this Agreement.
- H. Notice. Except as otherwise expressly provided in this Agreement, any communications between the parties or notices to be given must be given in writing by personal delivery or mailing with postage prepaid to Tigard or Tualatin at the address set forth below. Any communication or notice so addressed and mailed will be deemed to be given five (5) days after mailing. Any communication or notice by personal delivery will be deemed to be given when actually delivered.
- For the City of Tigard**  
Emily Oberdorfer, Municipal Court Judge  
13125 SW Hall Blvd.  
Tigard, OR 97223  
503-718-2640  
[judgeeo@tigard-or.gov](mailto:judgeeo@tigard-or.gov)
- For the City of Tualatin**  
Don Hudson, Assistant City Manager  
18880 SW Martinazzi Avenue  
Tualatin, OR 97062  
503-691-3050  
[dhudson@tualatin.gov](mailto:dhudson@tualatin.gov)
- I. Independent Contractor. Except as provided in Exhibit A, each party is an independent contractor with regard to each other party and agrees that the performing party has no control over the work or the manner in which it is performed. Except as provided in Exhibit A, nothing herein is intended, nor may it be construed, to create between the parties any relationship of

principal and agent, partnership, joint venture or any similar relationship, and each party hereby specifically disclaims any such relationship

- J. Insurance. Each Party agrees to maintain insurance levels or self-insurance in accordance with ORS 30.282, for the duration of this Agreement at levels necessary to protect against public body liability as specified in ORS 30.269 through 30.274.
- K. Compliance with Law. Each Party agrees to comply with all applicable local, state, and federal ordinances, statutes, laws, and regulations.
- L. Counterparts. This Agreement may be executed in two or more counterparts, each of which constitutes an original, but all of which together will constitute one and the same instrument.

CITY OF TIGARD	CITY OF TUALATIN
Signed: <i>Emily Tritsch</i>	Signed: _____
Name: Emily Tritsch	Name: _____
Its: Assistant City Manager	Its: _____
Date: Feb 2, 2022	Date: _____



EXHIBIT A

**TIGARD MUNICIPAL COURT OPERATIONS REVIEW  
SERVICES TO BE PROVIDED**

**PROJECT INTRODUCTION**

The Tigard Municipal Court has almost tripled the number of citations issued since implementing photo radar and red light. The Court is dedicated to processing cases quickly and accurately as well as providing thoughtful customer service and creating a respectful and well-functioning work environment. To help us meet those goals we need to review and update standard operating procedures (SOP) which guide our in-office procedures and to review workflow to determine assignments and rotations fairly. We are seeking assistance from the Tualatin Municipal Court with this process.

**SCOPE OF WORK**

1. Standard Operating Procedure Review:

Cortney Kammerer, Tualatin Municipal Court Administrator (“Employee”), will be assigned by Tualatin to review and become familiar with Tigard Municipal Court’s current SOPs. This will include meeting with the clerks and judge. Output: Recommended changes and updates to procedures while ensuring retention requirements and other statutory guidelines are met.

2. Workflow Review

Employee will become familiar with specific job tasks of current Court Clerks. Output: Recommended workflow and recommended task distribution, including appropriate combining of tasks assigned to an individual Court Clerk. A recommended rotation of tasks will be included.

3. Training Guidance

Output: An outline of what should be included in a procedures manual aid in getting future clerks quickly and accurately trained, and provide guidance to current staff when being assigned a new task

4. Background check

Employee has CJIS and LEDs clearance.

5. Timeline

- a. Employee will coordinate with the Tigard Municipal Court Judge on timelines and estimated hours to complete each task.

- b. Employee will coordinate a schedule with the Judge that will work for both parties, recognizing that her primary responsibility is to the Tualatin Municipal Court and its operation.

**EMPLOYEE AS AGENT OF TIGARD**

Tigard designates Employee as an agent of the City of Tigard when acting in any capacity pursuant to this Agreement. As an agent of the City of Tigard, the Employee will have the full protections of the Oregon Tort Claims Act, including but not limited to the defense and indemnification provisions of that law. Tigard agrees to defend and indemnify Employee when acting pursuant to this Agreement as it relates to other claims not covered by the Oregon Tort Claims Act, including but not limited to any administrative proceedings or contractual disputes with third parties.



City of Tualatin

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council  
**THROUGH:** Sherilyn Lombos, City Manager  
**FROM:** Steve Koper, AICP, Assistant Community Development Director  
**DATE:** February 14, 2022

---

### **SUBJECT:**

Resolution 5604-22 – Authorizing the City Manager to enter into an Intergovernmental Agreement (IGA) with the Oregon Department of Land Conservation and Development (DLCD) to provide the City with consultant assistance for a Housing Implementation Plan.

### **RECOMMENDATION:**

Approval of Resolution 5604-22

### **EXECUTIVE SUMMARY:**

Following the adoption of House Bills 2001 and 2003 in 2019, the DLCD received legislative appropriations to assist cities in updating their comprehensive plans and land use regulations to promote housing availability and affordability. The City applied for and was approved by DLCD to receive direct funding for a consultant to assist the City in creating a Housing Implementation Plan, which is a continuation of work under the City's previously adopted Housing Production Strategy. DLCD requests that the City to enter into an IGA (Exhibit A), which generally outlines the anticipated work products resulting from the consultant assistance as well as the City staff's expected participation in the creation of said work products.

### **OUTCOMES OF DECISION:**

Approval of Resolution 5604-22 will enable the City Manager to enter into the above referenced IGA (Exhibit A) and for the project to commence.

### **ALTERNATIVES TO RECOMMENDATION:**

Denial and/or deferred approval of Resolution 5604-22 would delay commencement of the project, which could negatively impact timelines and completion of anticipated work products.

### **FINANCIAL IMPLICATIONS:**

No direct financial expenditures will be incurred. As outlined in the IGA (Exhibit A), the City's Community Development staff is expected to participate in creation of a Housing Implementation Plan.

---

### **ATTACHMENTS:**

-Exhibit A – Resolution 5604-22 – DLCD IGA



RESOLUTION NO. 5604-22

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN INTERGOVERNMENTAL AGREEMENT WITH THE OREGON DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT FOR ASSISTANCE WITH A HOUSING IMPLEMENTATION PLAN

WHEREAS, ORS 190.110 et seq., authorizes the City to enter into Intergovernmental Agreements with other government entities;

WHEREAS, the State of Oregon, acting through its Department of Land Conservation and Development (DLCD), received legislative appropriations to assist cities in updating their comprehensive plans and land use regulations to promote housing availability and affordability;

WHEREAS, DLCD is providing direct funding for a consultant to assist the City in creating a Housing Implementation Plan;

WHEREAS, the City wishes to enter into the intergovernmental agreement.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that:

**Section 1.** The City Manager is authorized to execute an Intergovernmental Agreement (IGA) with DLCD, which is attached as Exhibit A, for assistance with a Housing Implementation Plan.

**Section 2.** This resolution is effective upon adoption.

Adopted by the City Council this 14<sup>th</sup> day of February 2022.

CITY OF TUALATIN, OREGON

BY \_\_\_\_\_  
Mayor

ATTEST:

BY \_\_\_\_\_  
City Recorder

# **INTERGOVERNMENTAL AGREEMENT**

## **City of Tualatin**

This Agreement is between the State of Oregon acting by and through its **Department of Land Conservation and Development (“DLCD”)** and **City of Tualatin (“City”)**, each a “Party” and, together, the “Parties.”

### **I. AUTHORITY**

This Agreement is authorized by ORS 190.110.

### **II. EFFECTIVE DATE**

This Agreement is effective on the date of the last signature {"Effective Date"}, and terminates on **June 30, 2023**, unless terminated earlier.

### **III. BACKGROUND**

During the 2019 legislative session, the legislature appropriated funds to the Department of Land Conservation and Development (Agency) for the purpose of allowing the Agency to assist participating cities and counties (collectively, local governments) implement House Bills 2001 and 2003. This assistance will be provided, in part, through the Housing Needs Technical Assistance and Housing Code Technical Assistance Projects (Projects), which are important elements of House Bill 2001 and House Bill 2003 (2019) (HB 2001, HB 2003).

DLCD will provide technical assistance (via a Consultant) to a city or county for the purpose of increasing the supply and affordability of housing within designated urban growth boundaries. Technical assistance will be provided to adopt housing strategies that help ensure that cities can satisfy their future housing needs. DLCD will hire Consultants to work directly with the city or county.

DLCD has received a special appropriation of funds for the 2021-2023 biennium to assist local governments to help them better understand their housing needs and to develop strategies and actions to facilitate the development of their needed housing. Agency will hire Contractor to provide services directly to local governments including Housing Needs Analysis (HNA), Housing Implementation Plans (HIP), Housing Production Strategies (HPS), or other strategy to promote housing availability and affordability. The Housing Needs Technical Assistance Project (Project) is financed with State of Oregon General Funds. State funds are paid under this Agreement by DLCD to **ECONorthwest** (Consultant), who will assist the City/County as described in the Scope of Work below. No funds will be given to the City for tasks outlined in this IGA or any expenses incurred by the City as a result of this Project.

### **IV. PROJECT OBJECTIVE AND MAJOR DELIVERABLES**

#### **Housing Implementation Plan (HIP)**

The primary objective of this project is to prepare a plan identifying or implementing the most promising actions a local government can take to address its’ identified housing needs, especially to meet subsidized housing needs.

Cities with HNAs less than five years old may develop an action plan to implement one or more of the housing strategies identified in the HNA. A housing strategy may include changes to zoning, programs to manage short-term or vacation rentals, incentives for affordable housing, SDC waivers, or other regulatory or non-regulatory tools.

## **V. ROLES AND RESPONSIBILITIES**

**City:** Overall management of the Project will be the responsibility of the City. The City will appoint a Project Manager to be the principal contact person representing the City on all matters dealing with the Project.

Specific project management duties of the City will include:

- a. Coordinating project schedule and deliverables with Consultant;
- b. Coordinating City staff;
- c. Ensuring the timely completion of tasks and delivery of supporting data/information to Consultant;
- d. Reviewing and editing Consultant work;
- e. Appointing a project advisory committee with representation from the community;
- f. Noticing, scheduling, and managing advisory committee meetings and public official work sessions and public hearings, if any. Activities include preparing and distributing meeting notices, agendas, and summaries; and assisting the Consultant with meeting facilitation.

**DLCD:** DLCD will provide financial, administrative, and technical assistance to the Project. DLCD will participate in advisory committees. Additional technical assistance may be provided as requested by the City or Consultant. DLCD will review Consultant's work, invoices, and progress reports. Additionally, DLCD will review the Consultant's performance and deliverables with the City prior to paying invoices received by the Consultant. DLCD will assist in the mediation of Consultant/City conflicts, or issues with the project or deliverables.

## **VI. COMPENSATION AND COSTS**

Each Party shall assume its own costs of carrying out the tasks and responsibilities assigned to it under this Agreement. Under no circumstances is the Local Government responsible for payment of costs incurred under the contract between DLCD and the chosen Consultant.

## **VII. KEY CONTACTS**

### **City**

Steve Koper  
Assistant Community Development Director  
City of Tualatin  
10699 SW Herman Road  
Tualatin, OR 97062

skoper@tualatin.gov  
503-691-3028

### **Department of Land Conservation and Development**

#### *Project Manager:*

Anne Debbaut  
C/O Portland State University

anne.debbaut@dlcd.oregon.gov  
503-804-0902



Market Center Building  
1600 SW Fourth Ave. Suite 109  
Portland, OR 97201

*Housing Team Technical Representative:*

Samuel Garcia  
635 Capitol St. NE Suite 150  
Salem, OR 97301

samuel.d.garcia@dlcd.oregon.gov  
971-375-5970

**Consultant**

Beth Goodman, Project Director  
ECONorthwest  
222 SW Columbia – Suite 1600  
Portland, OR 97201

goodman@econw.com  
541-505-7203

A Party may designate a new authorized representative by written notice to the other Party.

**VIII. TERMINATION**

- a) This Agreement may be terminated at any time by mutual written agreement of the Parties.
- b) This Agreement may be terminated by DLCD upon 45 days advance written notice and by Local Government upon 45 days advance written notice.

**IX. NON-APPROPRIATION**

DLCD's obligation to perform its duties under this Agreement is conditioned upon DLCD receiving funding, appropriations, limitations, allotments, or other expenditure authority sufficient to allow DLCD, in the exercise of its reasonable administrative discretion, to meet its obligations under this Agreement. Nothing in this Agreement may be construed as permitting any violation of Article XI, Section 7 of the Oregon Constitution or any law limiting the activities, liabilities, or monetary obligations of DLCD.

**X. SCOPE OF WORK**

This Project for the City of Tualatin (referred to as City in this Scope) is composed of the tasks outlined below. All Consultant work must be completed no later than June 30, 2023.

The goal of the project is to create an Equitable Housing Funding Plan for Tualatin. The Consultant will work with the City and a project advisory committee to prepare a Strategic Equitable Housing Funding Plan by following the tasks and deliverables specified in this scope.

**EXPECTED OUTCOMES:**

The big picture aim of this work is to achieve more affordable, fair, and equitable housing outcomes by ensuring that equitable housing, housing services and housing related resources are funded at a reasonable level given the needs. The desired outcomes of the project are:

- **Reduction of financial and regulatory impediments:** This project aims to identify the funding amounts needed in a 5-year Equitable Housing Funding Plan. This housing implementation project is part of a process intended to support and lead to the reduction of financial impediments.
- **Creation of financial and regulatory incentives:** The project is expected to increase decisionmaker understanding toward equitable housing funding.

**Access resources available to increase the availability and affordability of needed housing:** The project has a significant focus on understanding, evaluating, targeting, and accessing housing funding resources.

### **TASK 1: PROJECT KICKOFF**

The purpose of the project kick-off is for the City and the Consultant to collaborate to develop a process that will meet the objectives of this forward thinking. The Consultant will contact the City via a conference call (or in person) to ask preliminary questions, establish project expectations, and familiarize itself with city-specific concerns. The Consultant will verify the major tasks and actions required for the completion of the tasks. The level of detail required for the proposed schedule should be determined by mutual agreement.

The City and Consultant will plan for up to 5 meetings with a project advisory committee. The committee will be a mixture of Tualatin residents, stakeholders knowledgeable about housing production, and city decision makers. These meetings will occur in Task 2 and 3.

#### ***Task 1 City Deliverables:***

- 1.1 Provide input into process to conduct an equitable and participatory funding process and a diverse advisory body; and
- 1.2 Provide meeting space (if meeting in person).

*Timeline:* February 2022

### **TASK 2: ANALYSIS FOR STRATEGIC EQUITABLE HOUSING FUNDING PLAN**

The Consultant will work with the City to do the following:

- Estimate or project approximate potential revenues needed from funding sources identified in the HPS, such as 1.c CET. This project will likely result in a funding gap that we need to identify additional funding sources to fill. This discussion may include the role that 1.d Urban Renewal could play in affordable housing funding, as well as funds from item 1.e Evaluate Financial Resources for Local Contributions to Affordable Housing Development, which will need additional work to identify those sources.
- Estimate or project potential funding needs from the incentives identified in the HPS. These included: 1.a Low-Income Housing Property Tax Exemption; 1.b Changes to Systems Development Charges; 4.a Incentives to Preserve Low-Cost Rentals for Below-Market-Rate Privately Owned Rental Housing; 4.b Multi-Unit Property Tax Exemption to Slow Rental Cost

Increases; 6.a Multi-Unit Property Tax Exemption program; 8.a Establishing Local Housing Rehabilitation Program.

- The project may include additional funding sources or incentives not currently specified in the HPS, but additionally that may be identified based on discussions throughout the project.

The Consultant will facilitate four meetings with the project advisory committee. The Consultant will participate in the public workshop to get feedback from the broader public about the preliminary results of the Funding Plan. The Consultant will prepare and present the draft funding plan to the Tualatin Planning Commission and City Council in coordination with the City.

***Task 2 City Deliverables:***

- 2.1 Comments, analysis, and materials for the advisory committee meetings;
- 2.2 Attend, schedule and distribute advisory committee meeting notices and agendas;
- 2.3 Attend, schedule and distribute public workshop notices and agendas; and
- 2.4 Planning Commission and City Council meeting notices and agendas.

*Timeline:* March 2022 to September 2022

**TASK 3: DRAFT STRATEGIC EQUITABLE HOUSING FUNDING PLAN**

The Consultant will develop the Strategic Equitable Funding Plan based on the analysis developed in Task 3 and feedback the project advisory committee.

The Consultant will incorporate feedback from the City and project advisory committee into the Funding Plan and present the Funding Plan to the project advisory committee for final feedback.

The Consultant will develop the presentation and present the draft funding plan to the Tualatin Planning Commission and City Council in coordination with the City.

***Task 4 City Deliverables:***

- 3.1 Consolidated comments on Draft Strategic Equitable Housing Funding Plan;
- 3.2 Attend, schedule, and distribute project advisory committee meeting notice and agenda; and
- 3.3 Review and provide comment on the draft presentation and attend and participate in presenting the draft funding plan to the Tualatin Planning Commission and the City Council.

*Timeline:* September 2022 to December 2022.

**TASK 4: FINAL STRATEGIC EQUITABLE HOUSING FUNDING PLAN**

The Consultant will update the funding plan based on feedback and comments on the draft action plan in Task 3.



The Consultant present the draft funding plan to the Tualatin Planning Commission and City Council in coordination with the City.

**Task 4 City Deliverables:**

4.1 Planning Commission and City Council meeting notices and agendas.

*Timeline:* January 2023 to March 2023.

**XI. OTHER CONSIDERATIONS**

Except as provided herein, nothing in this agreement shall be construed as obligating the other party to expend funds or obligate future payment of money authorized by law and administratively available for this work.

**SIGNATURE BLOCK**

**City Official**

\_\_\_\_\_  
Authorized to sign on behalf of the City

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

**Department of Land Conservation & Development**

\_\_\_\_\_  
Jim Rue, Director

\_\_\_\_\_  
Date



City of Tualatin

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council

**THROUGH:** Sherilyn Lombos, City Manager

**FROM:** Cody Field, Management Analyst II  
Steve Koper, Assistant Community Development Director

**DATE:** February 14, 2022

---

**SUBJECT:**

Department of Land Conservation and Development (DLCD) Climate Friendly and Equitable Communities rule making.

**EXECUTIVE SUMMARY:**

What is Climate Friendly and Equitable Communities, also known as CFEC? CFEC resulted from Governor Kate Brown's Executive Order on Climate Action (20-04), issued on March 10, 2020, which directed state agencies to reduce climate pollution. The Land Conservation and Development Commission (LCDC) and its agency, the Department of Land Conservation and Development (DLCD), are responsible for implementation of the Statewide Planning Goals and Oregon's land use planning program, through its Oregon Administrative Rules (OARs). In response to the Executive Order, and with direction from LCDC, in September of 2020, DLCD staff kicked off the CFEC rulemaking to create draft Transportation Planning Rules and related administrative rules intended to meet the Executive Order.

Community Development staff have been tracking the development of the draft rules for the last several months, reviewing current iterations of the draft rules, and attending regional transportation meetings to stay apprised of any critical developments and gain crucial insight from our regional partners.

Purpose of Division 12 – Transportation Planning Rules

Three specific actions from a multi-agency initiative called [\*Every Mile Counts\*](#) undergird the DLCD's Climate Friendly Equitable Communities (CFEC) rulemaking process: "parking reform, amendments to transportation and housing rules, and regional scenario planning for greenhouse gas reductions."<sup>1</sup> DLCD is collaborating on the *Every Mile Counts* work plan in collaboration with the Oregon Department of Transportation, Department of Environmental Quality, and the Department of Energy.

---

<sup>1</sup> Oregon Department of Land Conservation and Development, Agency Update on Climate Executive Order Implementation Plans (March 1, 2021): p. 2. Accessed from: <https://www.oregon.gov/gov/Documents/DLCD-March-1-2021.pdf>

The transportation planning rules (including parking reforms) are outlined in OAR 660, Division 12. The primary purpose has been adjusted to focus on challenges today and in the future including the following priorities:

- Meeting the State’s climate pollution reduction goals.
- Shifting focus to ensure quality options for other transportation modes (transit, pedestrian, and bicycle accessibility and connectivity)
- Renewing the emphasis on safety, acknowledging that the state is falling short in this regard.
- To remedy the impacts of redlining, displacement, exclusionary zoning, and harm caused by public infrastructure, while also centering the voices of underserved communities.
- Planning and developing transportation facilities in coordination with urban and rural development.

### Timeline:

The Department of Land Conservation and Development (DLCD) initiated CFEC rulemaking at its September 2020 meeting. The final revision of the draft rules was released for the Rulemaking Advisory Committee meeting on January 20, 2022. The LCDC aims to adopt final Transportation Planning Rules and associated administrative rules at its May 2022 meeting. The rulemaking process will proceed as follows:

- The rules will be submitted to the Secretary of State near the end of February 2022 and will be published on March 1, 2022.
- LCDC will hold its first public hearing on either March 31, 2022 or April 1, 2022. **This will be the first opportunity to provide feedback in a formal setting.**
- The final public hearing will be held on either May 19, 2022 or May 20, 2022, at which point DLCD anticipates that the rules will be adopted by the LCDC.
- Upon adoption, the following deadlines will apply:
  - Electric Charging requirements will be effective as of March 2023.
  - Metro must update its Regional Functional Plan by 2024 to comply with CFEC rules.
  - Metro cities must comply with the Regional Functional Plan by Dec. 31, 2025
  - The parking requirements, as currently written, are scheduled to begin before 2025; however, staff is seeking clarity on these deadlines.

### What we know about the current draft rules:

#### *Rule Adoption:*

The rules will be adopted by LCDC after the final public hearing in May 2022.

#### *Adoption of Climate Friendly Areas or Metro Region 2040 Centers<sup>2</sup>:*

Metro would be required to update the Regional Functional Plan by December 31, 2024, requiring local governments to adopt Region 2040 Centers and land use regulations described in the functional plan. Local jurisdictions must comply with Metro’s requirements by December 31, 2025. Tualatin has a 2040 Center shown in Figure 1, below, that is not currently locally adopted.

---

<sup>2</sup> Oregon Metro, 2040 Growth Concept, Accessed from: <https://www.oregonmetro.gov/2040-growth-concept>



## 2040 Growth Concept Map

Last update: September, 2020



Figure 1. Tualatin's Town Center Boundary (Metro 2040 Growth Concept Map)

### Parking Regulations:

**Note:** These rules do apply to cities and counties in the Portland Metro area, unless and until Metro proposes an alternate approach which is subsequently approved by LCDC.

The parking reforms outlined in rules 0400 – 0450 encourage local jurisdictions to eliminate minimum parking requirements (usually per square foot for employment uses or per unit for residential uses). The developer would be free to include the amount of parking they see fit. Ultimately, these rules provide a choice between eliminating all parking mandates and providing additional climate-friendly alternatives. The requirements also include provisions regarding preferential employee parking for carpools and vanpools and encourages conversion of underused parking areas for other uses.

Developments that include more than a  $\frac{1}{4}$  acre of surface parking are required to install solar panels or pay \$1,500 per parking space into a city fund or a fund at the Oregon Department of Energy dedicated to solar or wind energy development. Additionally, tree canopy must cover at least 50% of the parking lot at maturity. **(Rule 405)**

Cities and counties shall adopt regulations requiring installation of sufficient electrical capacity and conduit to support Electric Vehicle charging in new residential, mixed-use, and commercial development with five or more parking spaces **(Rule 410)**

Parking Maximums will apply to cities in the Metro region with populations over 25,000 under the rules that apply to Climate Friendly Areas, Metro Region 2040 Centers and town centers, as well as transit corridors, and near transit station communities. **(Rule 0415)**.

Finally, local Jurisdictions must implement one of the three parking approaches by March 31, 2023.

Option 1: Adopt land use regulations that **do not** include parking mandates. **(Rule 420)**

Option 2: Implement a "fair parking policy" approach. **(Rule 0445 (1)(a))**

Option 3: Implement a “reduced parking management” approach. **(Rule 0445 (1)(b))**

What we don't know about the current draft rules:

DLCD is continuing to communicate with its rulemaking committee, workgroups, and local jurisdictions to fine tune Division 12 of the draft rules. There will likely be substantive revisions to the rules between now and the end of February when the rules are submitted to the Secretary of State.

*Transportation Planning:*

**Rule 140, Subsection 7** provides flexibility to Metro to develop alternative regional requirements as long as the alternative requirements are approved by the LCDC. Upon approval, the alternatives will be adopted by Metro into the Regional Functional Transportation Plan. Cities and counties in the Metro Region will comply with the alternatives adopted by Metro, rather than the rules in Division 12. Metro is currently in conversation with DLCD regarding Regional Functional Plan updates. At this point, staff does not have a sense of what Metro will decide in terms of transportation planning or parking regulations.

**Rule 830** establishes an extensive list of requirements for cities and counties that include projects which add vehicular capacity in a Transportation System Plan (TSP) update. DLCD is fine tuning the list of exemptions based on feedback it has received throughout the rulemaking process. These requirements will likely change over the next month to encompass more exemptions.

Many jurisdictions have raised concerns over the need for resources to effectively implement TSP updates. DLCD is developing a plan to provide guidance, technical support, and funding directly to communities to assist with TSP updates. DLCD have not provided any specific information on what these resources include.

Potential Concerns for Tualatin:

- The draft rules appear to contain overly prescriptive limitations on local transportation projects which would add capacity to the transportation system, regardless of size of the project.
- The draft rules are structured to encourage elimination of any minimum parking requirement in the area of applicability or adoption of overly prescriptive alternatives, both of which may have new financial impact on new development or redevelopment, particularly on businesses.
- The draft rules lack sufficient clarity on how the proposed Transportation Planning Rules would be implemented by local jurisdictions.
- It is unknown what impact the rules, which are not slated to be effective until 2025, would have on previous plans adopted between now and 2025. Examples included: an updated Transportation System Plan, urban renewal plans and so forth.

Potential Actions for Council Consideration:

- Provide written or verbal testimony to the LCDC at one of the official public hearings.
- Sign on with one or more regional jurisdictions who are already planning to provide comment.
- Do not provide testimony and allow staff to continue monitoring the process.

**ATTACHMENTS:**

- DLCD CFEC Presentation to City Council Feb. 14, 2022

# *Tualatin*

Department of Land  
Conservation and Development  
Climate-Friendly and Equitable Communities  
Rulemaking

**City Council Meeting**

**February 14<sup>th</sup>, 2022**



CITY OF

**TUALATIN** OREGON



# Presentation Overview

- What is Climate Friendly and Equitable Communities?
- Updates to Transportation Planning Rules
- Parking Regulations for New Land Use
- What We Know So Far
- What's Still Under Consideration
- Current Timeline
- Potential Concerns for Tualatin
- Potential Actions for Council Consideration
- Questions?



# What is Climate Friendly and Equitable Communities?

- CFEC came out of Governor Brown's Executive Order 20-04, issued on March 10, 2020
  - The Order establishes science-based reduction goals and directs state agencies to develop rules to help Oregon reduce and regulate greenhouse gas emissions.
  - Specific to state *transportation planning rules* and *land use regulations*, the Department of Land Conservation and Development (DLCD), initiated the Climate-Friendly and Equitable Communities rulemaking process to meet its directive.
  - Cities and counties in Oregon are required to have Comprehensive Plans and Development Codes that comply with state regulations, which will ultimately need to be updated to comply with these new and updated rules.



# Updates to Transportation Planning Rules

Purpose of the CFEC updates:

- Meeting the State's climate pollution reduction goals.
- Shifting focus to ensure quality options for other transportation modes (transit, pedestrian, and bicycle accessibility and connectivity)
- Renewing the emphasis on safety, acknowledging that the state is falling short in this regard.
- To remedy the impacts of redlining, displacement, exclusionary zoning, and harm caused by public infrastructure, while also centering the voices of underserved communities.
- Planning and developing transportation facilities in coordination with urban and rural development.

# Parking Regulations for New Land

## Uses:

- Parking Rules (OAR 660, Division 12, Rules 400-450), will apply to jurisdictions in the Metro area.
- Cities must select a parking reform approach and adopt land use regulations no later than March 31, 2023:

**1**

Repeal  
Parking  
Mandates

**2**

Reduce parking  
mandates for  
certain **types** of  
development  
and in key **areas**  
  
And adopt fair  
parking **policies**

**3**

Further reduce  
parking  
mandates for  
**types** of  
development  
and in more  
**areas**





# Parking Regulations for New Land

## Uses Cont'd:

Mandatory regulations for development:

- Installation of solar panels OR payment of \$1,500 per parking space.
- Installation of sufficient capacity for electric vehicle charging (applies to new development)
- Parking maximums in Region 2040 town centers, transit corridors, near transit station communities



# What We Know So Far:

- The rules will be adopted by LCDC in May 2022.
- Requirements for the Portland Metro Region:
  - Metro must adopt Region 2040 Centers & Land Use regulations in 2024
  - Local Government Compliance by Dec. 31, 2025
  - **Tualatin has yet to adopt its 2040 Town Center.**



# What's Still Under Consideration:

- Note: additional revisions are likely between now and the end of February.
- Transportation planning rules apply differently in the Metro Region. Rule 140 provides flexibility for Metro to implement alternative requirements. This rule may change as Metro provides feedback.
- Transportation System Plan (TSP) updates which add capacity require an extensive review process. The exception list, particularly aimed at exempting small projects, is still in process.
- TSP updates will require funding and technical support. DLCD has been asked for a commitment to provide technical assistance funding to implement the new and updated rules.

# Current Timeline

- End of February: DLCDD will submit the draft rules to the Secretary of State.
- March 1, 2022 – Draft rules are published
- March 31 or April 1 – First public hearing
- May 19 or May 20 – Final Public Hearing and Adoption, after which:
  - Parking & Electric vehicle charging requirements – March 2023
  - Metro update to Regional Functional Plan – December 2024
  - Cities and county compliance – December 31, 2025



# Potential Concerns for Tualatin:

- The draft rules appear to contain overly prescriptive limitations on local transportation projects which would add capacity to the transportation system, regardless of size of the project.
- The draft rules are structured to encourage elimination of any minimum parking requirement in the area of applicability or adoption of overly prescriptive alternatives, both of which may have new financial impact on new development or redevelopment, particularly on businesses.
- The draft rules lack sufficient clarity on how the proposed Transportation Planning Rules would be implemented by local jurisdictions.
- It is unknown what impact the rules, which are not slated to be effective until 2025, would have on previous plans adopted between now and 2025. Examples included: an updated Transportation System Plan, urban renewal plans and so forth.
- Cost of implementation of the rules (staff time and consultants).

# Potential Actions for Council Consideration:

- (A) Provide written or verbal testimony to the LCDC at one of the official public hearings;
- (B) Sign on with one or more regional jurisdictions who are already planning to provide comment;
- (C) Combination of (A) and (B); or
- (D) Do not provide testimony and allow staff to continue monitoring the process.



QUESTIONS?





*City of Tualatin*

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council  
**THROUGH:** Sherilyn Lombos, City Manager  
**FROM:** Jerianne Thompson, Library Director  
**DATE:** February 2, 2022

---

**SUBJECT:**  
Library Strategic Planning

### **EXECUTIVE SUMMARY:**

Since Fall 2021, the Tualatin Public Library has been engaged in a process to update its strategic plan. The Library's last strategic planning process was conducted in 2016, with a refresh to the strategic plan in 2019. The new plan will identify strategic priorities for the next three years, as well as goals and action items to support each priority area.

Community input was gathered through a series of public engagement opportunities:

- A user survey, with 265 respondents
- Nine community stakeholder interviews
- Four focus groups, with 21 participants, including one conducted in Spanish
- Discussion at multiple Tualatin Library Advisory Committee (TLAC) meetings

After reviewing the results of this engagement with staff and TLAC, the following themes were identified:

- Return to in-person programs
- Improve marketing, awareness
- Support community connection
- Increase bilingual staff and communications
- Support learning, personal development
- Create opportunities for fun

Based on those themes, staff is proposing new strategic priorities for the Library, which will guide the Library's work for 2022-2025:

- Foster Community Connection
- Encourage Learning & Exploration
- Promote Discovery & Access
- Support Community Inclusion

Following adoption of these strategic priorities, the next steps in the strategic planning process will be to identify goals and action items for FY2022-23.

---



**ATTACHMENTS:**

- Presentation



# Tualatin Public Library

Strategic Planning



**Empowering and enriching our community through learning, discovery, and interaction**





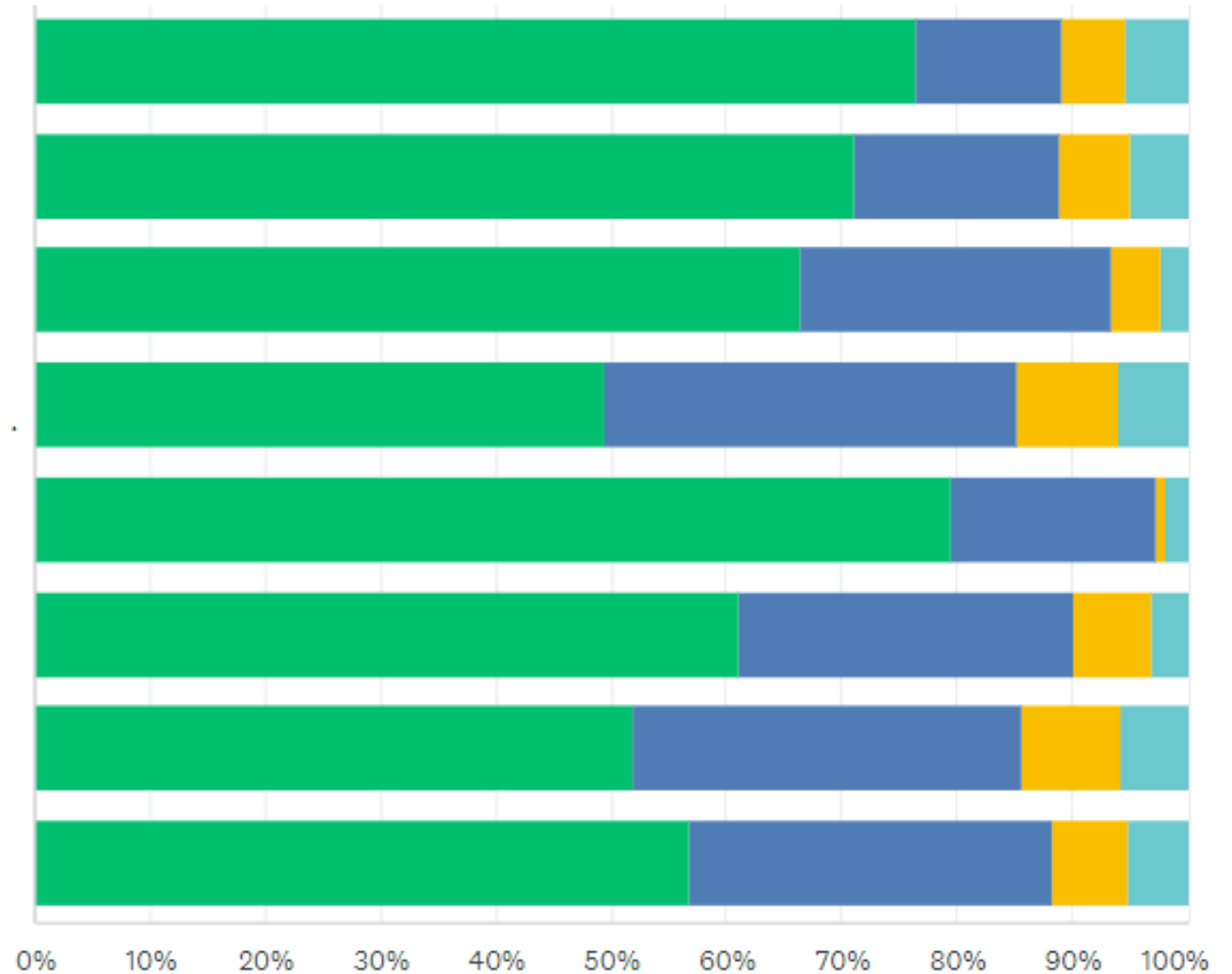
# Values

- **Collaboration:** We succeed through cooperation and empowered teamwork.
- **Compassion:** We operate with kindness, empathy, and understanding.
- **Inclusion:** We believe public libraries are for everyone and strive to foster a sense of community.
- **Service:** We place an emphasis on friendly customer service and user experiences.



# User Survey

- Supporting childhood reading
  - Supporting the educational success of youth
- Supporting lifelong learning for adults
  - Offering entertainment and enrichment for families
- Connecting readers to books
- Building a sense of community
- Providing technology/wifi and help with technology
  - Offering a place for study, homework, or research



# Stakeholder Interviews

- Students need homework, reading, math support
- Isolation, need for socialization = big issues for older adults
- Also a concern for the houseless / low income families



- Latino residents don't know about library services & resources
- Small business owners need training support
- Access to technology important for students, workforce, houseless

# Focus Groups

## STRENGTHS

---

Staff  
Convenience  
Broad Access  
Community Outreach

Awareness of Services  
Marketing Programs  
In-Person Events  
Parking

---

## IMPROVE

## LIBRARY'S ROLE

---

Connection  
Supporting Learning  
Encouraging Reading  
Community Hub

More Programs  
More Makerspace  
Weekend Activities

---

## THE FUTURE

# Latino Focus Group

## STRENGTHS

---

Spanish Signage  
Meeting Space  
Spanish Collection

Communication  
Marketing  
Spanish Programs

---

## IMPROVE

## LIBRARY'S ROLE

---

Educate Community  
Provide Information  
A Place to Belong

Language Learning  
Council Access  
Communication

---

## ISSUES





# Community Engagement Themes

- Return to in-person programs
- Improve marketing / awareness
- Support community connection
- Increase bilingual staff & communications
- Support learning, personal development
- Create opportunities for fun



# Draft Strategic Priorities 2022-2025

Foster Community Connection

Encourage Learning & Exploration

Promote Discovery & Access

Support Community Inclusion





Questions?





*City of Tualatin*

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council

**THROUGH:** Sherilyn Lombos, City Manager  
Steve Koper, AICP, Assistant Community Development Director

**FROM:** Keith Leonard, AICP, Associate Planner

**DATE:** February 14, 2022

---

### **SUBJECT:**

Consideration of a Plan Map Amendment (PMA) to rezone the Tualatin Heights Apartments site located at 9301 SW Sagert Street (Tax Map 2S123DC, Tax Lot 600) from the Medium Low Residential (RML) Zoning District to the Medium High Density Residential (RMH) Zoning District. This item was continued to this date by the City Council at its January 24, 2022 meeting.

### **RECOMMENDATION:**

The Tualatin Planning Commission unanimously voted at their December 16, 2021 meeting to forward a recommendation of approval of PMA 21-0001 to City Council. Based on the Findings and Analysis (Exhibit 3), staff recommends that the proposal is consistent with the Comprehensive Plan.

### **EXECUTIVE SUMMARY:**

The proposal was submitted by Frank Angelo of Angelo Planning Group on behalf of the property owner United Dominion Realty. The request is for a “rezone” (Plan Map Amendment) from Medium Low Density Residential (RML) (a maximum of 10 dwelling units per acre) to Medium High Density Residential (RMH) (a maximum of 15 dwelling units per acre) for the Tualatin Heights Apartments site. The site is 22.4 acres located at 9301 SW Sagert Street which is presently development with an existing 220 unit multi-family complex. No development is proposed as part of this application. Future development would require submittal and approval of a separate Architectural Review application.

The Findings (Exhibit 3) include a review of the proposal and application materials against the applicable criteria and standards, which include: Statewide Planning Goals, Oregon Administrative Rules, Metro Code, and the Tualatin Comprehensive Plan and Development Code, and have found the proposed Plan Map Amendment to be consistent with these requirements. The specific approval criteria for a Plan Amendment are found at Tualatin Development Code (TDC) Section 33.070(5), and include other applicable criteria and standards that must be met.

The applicant’s responses to these criteria and standards are included within their Narrative (Exhibit A). The applicant has also included a Conceptual Site Plan (Exhibit B) that demonstrates how future development of the site might be accomplished. The applicant’s Conceptual Parking Plan and Parking Study (Exhibit B & C) are intended to demonstrate that peak parking demand of the existing and conceptual development scenarios do not provide significant adverse off-site impacts.



**OUTCOMES OF DECISION:**

Council approval of PMA 21-0001 and adoption of Ordinance No. 1464-22 would implement the proposed rezone, and apply the Medium High Density (RMH) Zoning District to the site.

**ALTERNATIVES TO RECOMMENDATION:**

Alternatively, Council may:

- Propose modifications to the proposed Plan Map Amendment;
- Continue the discussion to a future hearing date; or
- Vote to deny the proposed Plan Amendment.

---

**ATTACHMENTS AND EXHIBITS:**

- Attachment 1: City Council Presentation
- Attachment 2: Ordinance No. 1464-22
  - Exhibit 1: Legal Description
  - Exhibit 2: Existing and Proposed Comprehensive Plan Map 10-1
  - Exhibit 3: Analysis and Findings
  - Exhibit A: Applicant's Land Use Application and Supporting Documents
  - Exhibit B: Applicant's Conceptual Site and Parking Plans
  - Exhibit C: Applicant's Parking Studies
  - Exhibit D: Applicant's Transportation Planning Rule (TPR) Analysis
  - Exhibit E: DKS Review of Applicant's TPR Analysis
  - Exhibit F: Public Comments
  - Exhibit G: Affidavit of Mailing
  - Exhibit H: Newspaper Notice

# Tualatin Heights Apartments Plan Map Amendment (PMA 21-0001)

Tualatin City Council  
February 14, 2022  
(Continued Hearing from January 24, 2022)



# PROPOSAL

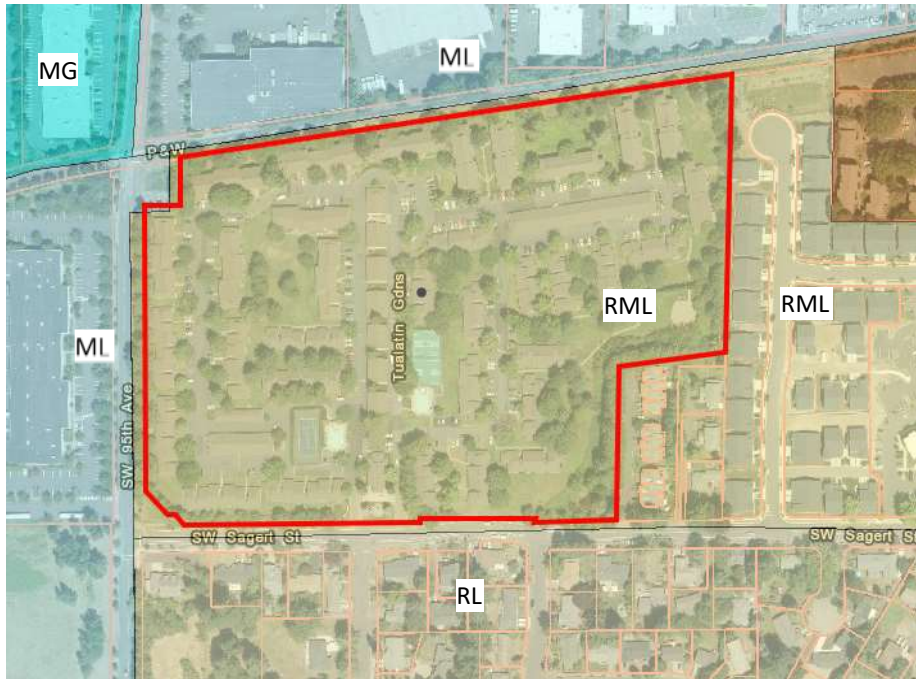
The applicant is requesting to rezone the property from Medium Low Density Residential (RML) to Medium High Density Residential (RMH), which is a Plan Map Amendment.

Future development would required submittal and approval of an Architectural Review Application, and would include an additional Traffic Impact Assessment at that time.





# EXISTING/PROPOSED ZONING



Existing



Proposed





# WHERE ARE WE IN THE PROCESS?



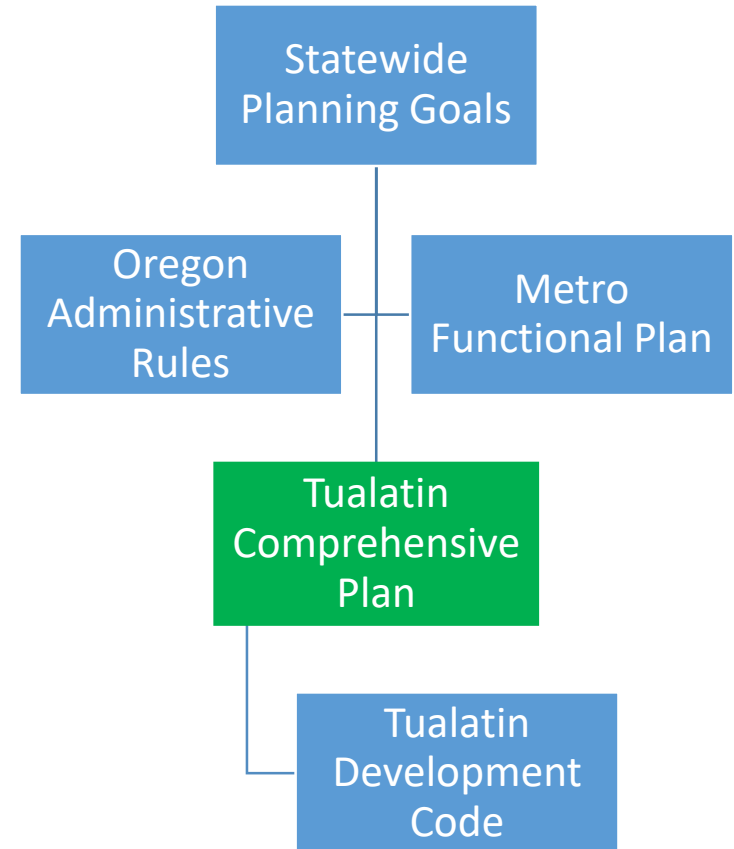
# IS THE PROPOSAL CONSISTENT WITH THE COMPREHENSIVE PLAN?

## Staff role:

- Make findings based on evidence in record
- Make analysis according to the criteria

## Council role:

- Decide whether the proposed change in zoning to Medium High Density Residential is consistent with the Comprehensive Plan





# PLAN AMENDMENT CRITERIA

- *TDC 33.070 (a) Granting the Amendment is in the Public interest*
  - The proposed change in zoning is in the public interest in that it facilitates the opportunity for the construction of new dwelling units
  - The proposed change satisfies a need identified in the Housing Needs Analysis, which was created with extensive public, Planning Commission and City Council input
  - A zoning change that is consistent with the Housing Needs Analysis is in the public interest



# NEED FOR RMH ZONED LAND

**Exhibit 4. Comparison of capacity of existing residential land with demand for new dwelling units and land surplus or deficit, Tualatin City Limits and Basalt Creek, 2020 to 2040**

Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note: DU is dwelling unit.

Residential Plan Designations	Capacity (Dwelling Units)	Demand for New Housing	Remaining Capacity (Supply minus Demand)	Land Surplus or (Deficit) Gross Acres
Low Density	523	466	57	10
Medium Low Density	386	71	315	27
Medium High Density	13	122	(109)	(7)
High Density	285	254	31	2
High Density High-Rise	-	101	(101)	(4)

# PLAN AMENDMENT CRITERIA

- *TDC 33.070 (b) The Amendment Conforms with Tualatin Community Plan*
  - Response: the proposed zone change meets Chapter 3 of the Comprehensive Plan and is consistent with other Chapters of the Comprehensive Plan.
    - Evaluate opportunities to increase development densities to address deficiencies identified in the Housing Needs Analysis within Tualatin's existing zones
    - Evaluate opportunities to rezone land to provide additional opportunities for multifamily housing development



# COMPREHENSIVE PLAN VS. DEVELOPMENT CODE

Comprehensive Plan Considerations	Development Code Considerations
High level goals and policies	Measurable and specific standards
How Tualatin complies with State and Metro regulations	How the Comprehensive Plan goals and policies are implemented
Example of Goal and Policy	Example of Implementation
<p>Goal: Ensure that a 20-year land supply is designated and has urban services planned to support the housing types and densities identified in the Housing Needs Analysis.</p>	<p>Implementation: Zone areas of the City RMH the purpose of which is to provide areas of the City suitable for townhouses, garden apartments and condominiums.</p>
<p>Policy to meet Goal: Provide zoning for multifamily development, which may be located in areas adjacent to transit.</p>	<p>Implementation: Allow multifamily as a permitted use subject to clear and objective development standards (setbacks, minimum parking, etc.).</p>



# ARCHITECTURAL REVIEW

## CRITERIA FOR FUTURE REVIEW

- Chapter 42 RMH Standards (setbacks, height)
- Chapter 73A Site Design Standards (outdoor area requirements, internal vehicle and pedestrian circulation)
- Chapter 73B Landscaping Standards (minimum percent site landscaping, standards for type of landscaping)
- Chapter 73C Parking Standards (number of spaces, parking lot landscaping)
- Chapter 73D Waste and Recyclables (sign off from Republic Services, screening, minimum adequacy standards)
- Chapters 74 and 75 (traffic study at time of development, minimum access standards)



# RECOMMENDATION

- *The Planning Commission has recommended approval of the proposed Plan Map Amendment (PMA 21-0001).*
- *Based on the Findings & Analysis, staff recommends that the proposed rezone is consistent with the Comprehensive Plan.*
- *Council approval of PMA 21-0001 and adoption of Ordinance 1464-22 would apply the proposed Medium High Density (RMH) Zoning District to the site.*



CITY OF

**TUALATIN** OREGON

ORDINANCE NO. 1464-22

AN ORDINANCE AMENDING TUALATIN COMPREHENSIVE PLAN MAP 10-1 TO APPLY THE MEDIUM HIGH DENSITY RESIDENTIAL (RMH) ZONING DISTRICT TO A PARCEL LOCATED AT TAX MAP 2S123DC, TAX LOT 600 (PMA 21-0001)

WHEREAS, upon the application of Angelo Planning Group, and with support of the property owner, a public hearing was held before the City Council on January 24, 2022 and a second public hearing was held on February 14, 2022, to consider a Plan Map Amendment to amend the Tualatin Comprehensive Plan Map 10-1 (PMA 21-0001);

WHEREAS, the City provided notice of proposed amendments to the Oregon Department of Land Conservation and Development, as provided in ORS 197.610;

WHEREAS, the City provided notice of the public hearing, as required by TDC 32.240;

WHEREAS, at the public hearing, the Council heard and considered the testimony and evidence presented by City staff, and those appearing at the public hearing, and approved the proposed amendments;

WHEREAS, the Council wishes to amend the Tualatin Comprehensive Plan Map 10-1; and

WHEREAS, the Council finds the proposed amendments to be in the best interest of the residents and inhabitants of the City and the public that the public interest will be served by adopting the amendments at this time, and that the amendments conform to the Tualatin Community Plan and Tualatin Development Code.

THE CITY OF TUALATIN ORDAINS AS FOLLOWS:

**Section 1.** Comprehensive Plan Map 10-1 is amended as follows:

The Medium High Density Residential (RMH) Zoning District is applied to the area established in Exhibit 1 (Legal Description).

**Section 2.** Based on Section 1, the City's Comprehensive Plan Map 10-1 is amended as set forth in Exhibit 2 (Amended Comprehensive Plan Map 10-1), which is attached and incorporated by reference.

**Section 3. Findings.** The Council adopts the Findings as set forth in Exhibit 3 (Findings), which are attached and incorporated by reference. In support of the Findings, Council adopts those materials referenced in the Findings, and which are attached as Exhibits A through H, which are attached and incorporated by reference.

**Section 4. Effective Date.** As provided in the Tualatin Charter, this ordinance is effective 30 days from the date of adoption.

ADOPTED by the City Council this 14<sup>th</sup> day of February, 2022.

CITY OF TUALATIN, OREGON

BY \_\_\_\_\_  
Mayor

ATTEST:

BY \_\_\_\_\_  
City Recorder



A TRACT OF LAND IN SECTION 23, TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF TUALATIN, IN WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

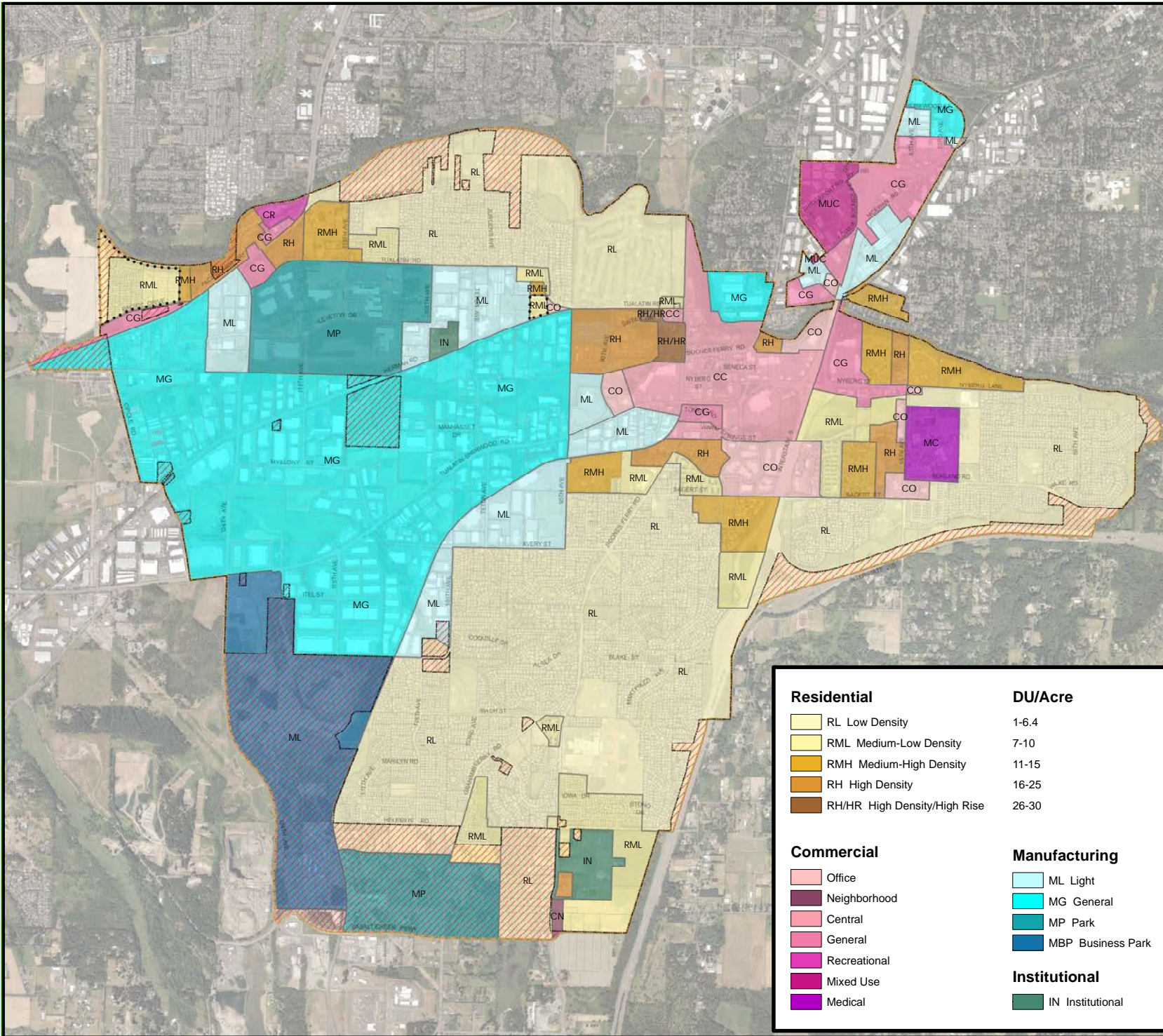
BEGINNING AT THE SOUTHWEST CORNER OF THAT TRACT OF LAND CONVEYED TO CLIFFORD G. KING, ET UX, BY DEED RECORDED AUGUST 13, 1964, IN BOOK 519, PAGE 362, WASHINGTON COUNTY DEED RECORDS, SAID POINT BEING 1624.78 FEET (1,624.5 FEET BY DEED) SOUTH 89°29'45" WEST ALONG THE SOUTH LINE OF SAID SECTION 23 FROM THE SOUTHEAST CORNER THEREOF; THENCE NORTH 01°11'00" EAST, A DISTANCE OF 30.00 FEET TO THE NORTH LINE OF S.W. SAGERT ROAD AND THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT; THENCE NORTH 01°11'00" EAST, A DISTANCE OF 326.84 FEET TO AN IRON ROD AT THE SOUTHWEST CORNER OF THAT TRACT CONVEYED TO THE ROBERT RANDALL COMPANY BY DEED RECORDED AS RECORDER'S FEE NO. 81006269, WASHINGTON COUNTY DEED RECORDS; THENCE ALONG THE SOUTHERLY LINE OF SAID ROBERT RANDALL COMPANY TRACT NORTH 82°44'44" EAST, A DISTANCE OF 231.06 FEET TO AN IRON ROD; THENCE NORTH 01°09'42" EAST, A DISTANCE OF 584.40 FEET TO AN IRON ROD SET ON THE SOUTH RIGHT OF WAY LINE OF THE S.P. & S. RAILROAD (BURLINGTON NORTHERN); THENCE SOUTH 81°30'52" WEST, A DISTANCE OF 1,194.87 FEET ALONG THE SOUTH LINE TO AN IRON ROD; THENCE SOUTH 00°07'32" WEST, A DISTANCE OF 100.00 FEET TO AN IRON ROD; THENCE NORTH 89°52'28" WEST, A DISTANCE OF 85.01 FEET TO AN IRON ROD; THENCE SOUTH 00°14'57" EAST, A DISTANCE OF 595.31 FEET TO AN IRON ROD; THENCE SOUTH 44°17'29" EAST, A DISTANCE OF 78.34 FEET; THENCE NORTH 89°29'45", A DISTANCE OF 15.66 FEET; THENCE SOUTH 44°17'29" EAST, A DISTANCE OF 29.37 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF SW SAGERT ROAD; THENCE NORTH 89°29'45" EAST, A DISTANCE OF 505.98 FEET; THENCE NORTH 00°30'15" WEST, A DISTANCE OF 6.00 FEET; THENCE NORTH 89°29'45" EAST, A DISTANCE OF 246.00 FEET; THENCE SOUTH 00°30'15" EAST, A DISTANCE OF 6.00 FEET TO A POINT ON THE NORTH LINE OF SW SAGERT ROAD; THENCE NORTH 89°29'45" EAST, A DISTANCE OF 173.80 FEET TO THE PLACE OF BEGINNING.

**PROPOSED  
Comprehensive Plan Map  
-Planning Districts-  
Map 10-1**

**NOTES:**

1. All plan designation boundaries are intended to follow property lines, center lines of streets, or can be scaled pursuant to the scale of this map. If mapping errors occur, the City Council shall be the sole arbitration body to decide the location of boundaries.
2. Specific requirements for each Planning District are found within the Tualatin Development Code.
3. The Wetland Protection District and the Greenway and Riverbank Protection District locations are described in the Tualatin Development Code. Maps of the districts are available from the Planning Department.
4. Properties within the Tualatin Urban Renewal Area boundary are subject to the Tualatin Urban Renewal Plan which may contain specifications and requirements that are more restrictive than those found within the Planning District standards.

- Planning Area Boundary
- City Boundary
- In Planning Area/  
Outside of City
- Manufactured Dwelling  
Park Permitted



Residential		DU/Acre	
	RL Low Density	1-6.4	
	RML Medium-Low Density	7-10	
	RMH Medium-High Density	11-15	
	RH High Density	16-25	
	RH/HR High Density/High Rise	26-30	
Commercial		Manufacturing	
	Office		ML Light
	Neighborhood		MG General
	Central		MP Park
	General		MBP Business Park
	Recreational		IN Institutional
	Mixed Use		
	Medical		



**RF 1:38,000**

Effective: TBD



February 14, 2022  
**Analysis and Findings for  
 Tualatin Height Apartments Rezone Map Amendment**

---

Case #:	PMA 21-0001
Project:	Tualatin Heights Rezone Map Amendment
Applicant:	Andrew Lavaux of United Dominion Realty, Inc.

---

**TABLE OF CONTENTS**

**I. INTRODUCTION ..... 2**

    A. Applicable Criteria..... 2

    B. Project Description ..... 2

**II. PLANNING FINDINGS..... 3**

    A. Statewide Planning Goals ..... 3

    B. Oregon Administrative Rules ..... 7

    C. Metro Code ..... 10

    D. Comprehensive Plan ..... 10

    E. Development Code ..... 11

**Exhibits:**

- Exhibit 1: Legal Description
- Exhibit 2: Existing and Proposed Comprehensive Plan Map 10-1
- Exhibit 3: Analysis and Findings
- Exhibit A: Applicant’s Land Use Application and Supporting Documents
- Exhibit B: Applicant’s Conceptual Site and Parking Plans
- Exhibit C: Applicant’s Parking Studies
- Exhibit D: Applicant’s Transportation Planning Rule (TPR) Analysis
- Exhibit E: DKS Review of Applicant’s TPR Analysis
- Exhibit F: Public Comments
- Exhibit G: Affidavit of Mailing
- Exhibit H: Newspaper Notice







- Land Use – Railroad, light industrial and commercial use

South:

- Zoning - Low Density Residential (RL)
- Land Use – Single Family Residential

East:

- Zoning – Light Manufacturing (ML), General Manufacturing (MG)
- Land Use – SW 95<sup>th</sup> Avenue, Industrial

West:

- Zoning – Medium-Low Density Residential (RML)
- Land Use – Single Family Residential, SW 90<sup>th</sup> Place

#### **D. Public Comments**

The application for PMA 21-0001 was submitted on September 16, 2021 and public notice for the City Council hearing of this application was mailed on December 29, 2021 to all property owners within 1,000 feet of the subject property, with additional notice delivered by email. The Planning Commission conducted a meeting on December 16, 2021 to review the proposed rezoning and will provide feedback and a recommendation to the City Council. City Staff received emailed comments from an emailer named Tim G. on December 15<sup>th</sup> and a corrected email the morning of December 16, 2021. As of the drafting of this report one additional public comments has been received. All public comments can be found in Exhibit F. The following are summaries of comments city staff has received.

Tim G – Comments focused on the lack of parking and expressed concern that additional units will cause spill over parking into the abutting residential areas and streets.

Gerry Preston – Comments focused on concerns regarding on-street parking, over traffic and public safety at the intersection of SW 93<sup>rd</sup> Avenue and SW Sagert Street. Mr. Preston also provides suggested solutions.

corsage.vogues\_0l@icloud.com (no name provided) – Comments focused on not liking new buildings being constructed and that the new buildings would be an eyesore. The loss of greenspaces was noted as an issue. Parking and traffic were also mentioned as issues.

Lindsay Marshall – Comments focused on concerns involving parking and the applicants parking study.

Additional comments received following the completion of this staff report and through the scheduled City Council hearing will be added to the record.

## **II. FINDINGS**

### **A. Oregon Statewide Planning Goals**

#### **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.**

#### **Finding:**

The Planning Commission reviewed the proposed amendment at a public meeting on December 16, 2021. The Planning Commission is the City's acknowledged Committee for Citizen Involvement (CCI), in compliance with Goal 1. After deliberation and careful consideration of the proposed rezoning, the Planning Commission made recommendations and unanimously voted to forward a recommendation to approve to the City Council. Planning Commission Chair Beers will provide the Commission's recommendation.

Further, the City has followed its acknowledged public notice procedures for quasi-judicial Comprehensive Plan Amendments, found in TDC 32.240, which includes mailed notice of the City Council hearing to surrounding property owners, publishing notice of the City Council hearing in the Tualatin Times, notice of the hearing to the Department of Land Conservation and Development at least 35 days prior to the first hearing, notice to affected government entities, and publicly posting notice of the hearing. Postcard land use application notices were sent to property owners on December 29, 2021 and again on January 26, 2022 (Exhibit G). The Tualatin Times published the City Council public hearing notice on January 6, 2022 (Exhibit H). The proposed amendment was considered at a City Council at a public hearing conducted on January 24, 2022. The City Council kept the record open and continued the hearing from January 24, 2022 to February 14, 2022.

The proposed amendments conform to Goal 1.

### **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.**

#### **Finding:**

The City of Tualatin's Comprehensive Plan and Development Code provide an acknowledged and established land use planning process and policy framework which serve as the basis for all decisions and actions related to use of land, including requirements to assure that an adequate factual basis is provided for those decisions and actions. The proposed amendment has been processed in accordance with these procedures.

The proposed amendments conform to Goal 2.

### **Goal 5 – Open Spaces, Scenic and Historic Area, and Natural Resource**

Goal 5 establishes a process for each resource to be inventoried and evaluated. OAR 660-015-0000(5) and OAR 660.023 (Procedures and Requirements for Complying with Goal 5)

#### **Finding:**

The proposed amendment does not modify the City's existing open space and natural resources requirements or include any text changes or changes to the regulations for those Goal 5 resources regulated by TDC Chapter 71 (Wetlands Protection District) and TDC Chapter 72 (Natural Resource Protection Overlay District). All redevelopment will be reviewed under the Architectural Review (AR) process to ensure that any new construction will be reviewed consistent with these requirements.

The proposed amendment conforms to Goal 5.

### **Goal 6 – Air, Water and Land Resources Quality**

#### **Finding:**

The Oregon Department of Environmental Quality (DEQ) regulates air, water and land with Clean Water Act (CWA) Section 401 Water Quality, Water Quality Certificate, State 303(d) listed waters, Hazardous Wastes, Clean Air Act (CAA), and Section 402 NPDES Construction and Stormwater Permits. The Oregon Department of State Lands and the U.S. Army Corps of Engineers regulate jurisdictional wetlands and CWA Section 404 water of the state and the country respectively. Clean Water Services (CWS) coordinates storm water management, water quality and stream enhancement projects throughout the city. Future development will still need to comply with these state, national and regional regulations and protections for air, water and land resources. Tualatin has an acknowledged Comprehensive Plan that complies with

this goal. All development will be required to be reviewed consistent with these requirements.

The proposed amendment conforms to Goal 6.

### **Goal 7 – Areas Subject to Natural Disasters and Hazards**

#### **Finding:**

Tualatin has an acknowledged Comprehensive Plan that complies with this goal. The proposed amendment does not modify the City's natural hazards requirements or existing goals and policies associated with Goal 7 established by the Comprehensive Plan. Future development would be required to be consistent with the applicable requirements of the Tualatin Development Code.

The proposed amendment conforms to Goal 7.

### **Goal 8 – Recreation 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.**

#### **Finding:**

The proposed amendment does not affect policies associated with recreational needs. Any change to the existing recreational facilities will be reviewed as part of an Architectural Review and compliance with the TDC recreational facilities requirements.

The proposed amendment conforms to Goal 8.

### **Goal 9 – Economy of the State**

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

#### **Finding:**

The proposed amendment does not affect policies, lands, or opportunities associated with Goal 9 established by the Comprehensive Plan.

The proposed amendment conforms to Goal 9.

### **Goal 10 – Housing**

**To provide for the housing needs of citizens of the state.**

#### **Finding:**

The proposed amendment would change the site's zoning designation from RML to RMH and allow development at a higher density (up to 15 units per acre). The current maximum density is 10 units per acre.

As shown below, Tualatin's 2019 HNA indicates a deficit of land zoned Medium High Density as opposed to a surplus of land zoned Medium Low Density. Therefore, the proposed amendment is consistent with Tualatin's land capacity needs.

**Exhibit 4. Comparison of capacity of existing residential land with demand for new dwelling units and land surplus or deficit, Tualatin City Limits and Basalt Creek, 2020 to 2040**

Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note: DU is dwelling unit.

Residential Plan Designations	Capacity (Dwelling Units)	Demand for New Housing	Remaining Capacity (Supply minus Demand)	Land Surplus or (Deficit) Gross Acres
Low Density	523	466	57	10
Medium Low Density	386	71	315	27
Medium High Density	13	122	(109)	(7)
High Density	285	254	31	2
High Density High-Rise	-	101	(101)	(4)

As illustrated above the proposed amendment would help provide for the housing needs of the citizens of the state by providing for opportunity for additional dwellings units and helping to meet Tualatin’s land capacity needs. Compliance with Goal 10 for cities within the Portland Metropolitan Urban Growth Boundary, like Tualatin, is also analyzed later in the report for compliance with OAR Chapter 660 Division 7. Findings addressing this OAR are found below.

The proposed amendment conforms to Goal 10.

**Goal 11 – Public Facilities and Services**

**Finding:**

The proposed amendment does not affect policies related to public facilities and services including water, sewer, and emergency services.

The proposed amendment conforms to Goal 11.

**Goal 12 – Transportation**

**Finding:**

The requirements of Goal 12 are addressed by compliance with Oregon Administrative Rule (OAR) Section 660-012-0060, also known as the Transportation Planning Rule or TPR. The proposed amendment’s compliance with the TPR is addressed below under the applicable OAR Section.

The proposed amendment conforms to Goal 12 and satisfies the applicable OAR requirements.

**Goal 13 – Energy**

**Findings:**

The proposed amendment does not include any changes that are related to or intended to impact Tualatin’s land use regulations pertaining to energy consumption.

The proposed amendment conforms to Goal 13.

**Goal 14 – Urbanization**

**Finding:**

The subject property is within the Urban Growth Boundary. The proposal does not contain any proposed modification to the Urban Growth Boundary or development outside of the Urban Growth Boundary.



The proposal is consistent with Goal 14.

## **B. Oregon Administrative Rules**

### **OAR 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;**

**(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.**

#### **Finding:**

The applicant has proposed an amendment to the Comprehensive Plan and Zoning Map designation of the subject property as Tualatin is a single-map Comprehensive Plan/Zoning Map jurisdiction. The applicant has included a Transportation Planning Rule analysis (Exhibit D) that identifies that the proposed amendment would impact an existing transportation facility. Specifically, the applicant identifies the intersection of SW Sagert Street and SW Boones Ferry Road as failing within the 20 year long-range planning horizon. Staff notes that the applicant's TPR analysis, which was reviewed and concurred with by DKS Associates, indicates that this intersection would ultimately fail, with or without the proposed Plan Map Amendment, unless a northbound right turn lane is constructed on SW Boones Ferry Road south of SW Sagert Street as mitigation measures. Section (2) below addresses implementation of the identified mitigation measure.

The proposed rezoning is consistent with these requirements.

**(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.**

**(d) Providing other measures as a condition of development or through a development agreement or similar funding method, including, but not limited to, transportation system management measures or minor transportation improvements. Local governments shall, as part of the amendment, specify when measures or improvements provided pursuant to this subsection will be provided.**

**(e) Providing improvements that would benefit modes other than the significantly affected mode, improvements to facilities other than the significantly affected facility, or improvements at other locations, if:**

**(A) The provider of the significantly affected facility provides a written statement that the system-wide benefits are sufficient to balance the significant effect, even though the improvements would not result in consistency for all performance standards;**

**(B) The providers of facilities being improved at other locations provide written statements of approval; and**

**(C) The local jurisdictions where facilities are being improved provide written statements of approval.**

**(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 function, capacity and performance standards of the facility where:**

**(a) In the absence of the amendment, planned transportation facilities, improvements and services as set forth in section (4) of this rule would not be adequate to achieve consistency with the identified function, capacity or performance standard for that facility by the end of the planning period identified in the adopted TSP;**

**(b) Development resulting from the amendment will, at a minimum, mitigate the impacts of the amendment in a manner that avoids further degradation to the performance of the facility by the time of the development through one or a combination of transportation improvements or measures; [...]**

**(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).**

[...]

**Finding:**

The applicant has proposed an amendment to the Comprehensive Plan and Zoning Map designation of the subject property as Tualatin is a single-map Comprehensive Plan/Zoning Map jurisdiction. The applicant has included a Transportation Planning Rule analysis (Exhibit D) that identifies that the proposed amendment would impact an existing transportation facility. Specifically, the applicant identifies the intersection of SW Sagert Street and SW Boones Ferry Road as failing within the 20 year long-range planning horizon. However, this intersection would ultimately fail, with or without the proposed Plan Map Amendment, unless a northbound right turn lane is constructed on SW Boones Ferry Road south of SW Sagert Street as mitigation measures.

On behalf of the City of Tualatin, DKS Associates evaluated the applicant's TPR analysis and mitigation recommendation (Exhibit E). DKS agreed with the applicant's TPR analysis findings and that construction of a northbound right turn lane south of SW Sagert Street would be adequate mitigation measures to address

the failing intersection of SW Boones Ferry Road and SW Sagert Street. Given that the baseline condition without the proposed rezone would result in the identified impact, the City proposes to mitigate for this impact by adding the identified intersection improvement to its Capital Improvement Program (CIP) and ultimately construct the improvement.

The proposed rezoning is consistent with these requirements.

### **C. Metro Chapter 3.07, Urban Growth Management Functional Plan**

**The following Chapters and Titles of Metro Code are applicable to the proposed amendments:**

#### **Chapter 3.07, Urban Growth Management Functional Plan**

##### **Title 7 – Housing Choice**

**This voluntary section of the functional plan will ensure that all cities and counties in the region are providing opportunities for affordable housing for households of all income levels.**

##### **Finding:**

The proposed amendment would provide opportunities greater diversity of housing types, and, as addressed above under Goal 10, would specifically provide land capacity of a zoning designation identified as a deficit by Tualatin’s most recent housing capacity analysis. The proposed amendment is consistent with Title 7.

### **D. Tualatin Comprehensive Plan**

#### **Chapter 3 – Housing & Residential Growth:**

**GOAL 3.1 HOUSING SUPPLY. Ensure that a 20-year land supply is designated and has urban services planned to support the housing types and densities identified in the Housing Needs Analysis.**

**POLICY 3.1.1 DENSITY. Maintain a citywide residential density of at least eight (8) dwelling units per net acre.**

**POLICY 3.1.2 ZONING FOR MULTIFAMILY. Provide zoning for multifamily development, which may be located in areas adjacent to transit.**

**POLICY 3.1.5 FUNCTIONAL PLANNING. Consider the development-ready residential land supply as part of ongoing functional planning efforts to provide necessary urban services in support of residential development.**

##### **Finding:**

As discussed above, the proposed amendment would rezone the site to RMH which is a zoning designation for which there is a presently identified deficit in Tualatin’s most recent housing capacity analysis. The density for the RMH zone is greater than 8 dwelling units per acre, and the district itself would provide zoning for multifamily development. Lastly, the amendment would apply to a site that is “development ready” and would be enabled to redevelop as a result of the proposed amendment. This Goal and these Policies are met.

#### **Strategic Actions**

**Evaluate opportunities to increase development densities to address deficiencies identified in the Housing Needs Analysis within Tualatin’s existing zones.**

**Evaluate opportunities to rezone land to provide additional opportunities for multifamily housing development**

##### **Finding:**

The proposed amendment would support increasing development density of a specific deficiency of RMH zoned land identified in the Housing Needs Analysis. The proposed amendment would also rezone land



with the purpose of providing additional opportunities for multifamily housing development. These Strategic Actions are met.

**GOAL 3.7 RESIDENTIAL GROWTH AND THE ENVIRONMENT. Plan for housing and residential growth to minimize and mitigate for environmental impacts.**

**POLICY 3.7.1 ENVIRONMENTAL PROTECTION. Housing and residential growth policies will be evaluated for consistency with the environmental protection goals and policies of Chapter 7 (Parks, Open Space, and the Environment).**

**Finding:**

The proposed amendment would plan for housing and residential growth in an area of the City that is already development, and thus minimizes the impacts as compared to adding density to Greenfield areas within the City and therefore is consistent with the environmental protection goals and policies of Chapter 7. This Goal and Policy are met.

**Chapter 10 – Land Use Designations and Zoning**

**Medium-Low Density Residential Planning District (RML) This district supports household living uses with a variety of housing types at moderately low densities. This district is primarily oriented toward middle housing types including attached dwellings, multi-family development, and manufactured dwelling parks. Medium-High Density Residential Planning District (RMH) This district supports a variety of housing types at moderate densities. This district is primarily oriented toward multifamily development and attached homes.**

**Finding:**

A comparison of the existing (RML) and proposed (RMH) zoning designations finds that the proposed amendment would not be inconsistent with the purpose for the RMH zoning designation. The proposed amendment would support multi-family units at a moderate density. These Policies are met.

**E. Tualatin Development Code**

**Chapter 32: Procedures**

**TDC 32.010. - Purpose and Applicability.**

**(2) Applicability of Review Procedures. All land use and development permit applications and decisions, will be made by using the procedures contained in this Chapter. The procedure "type" assigned to each application governs the decision-making process for that permit or application. There are five types of permit/application procedures as described in subsections (a) through (e) below. Table 32-1 lists the City's land use and development applications and corresponding review procedure(s).**

**(d)**

**Type IV-A Procedure (Quasi-Judicial Review—City Council Public Hearing). Type IV-A procedure is used when the standards and criteria require discretion, interpretation, or policy or legal judgment and is the procedure used for site-specific land use actions initiated by an applicant. Type IV-A decisions are made by the City Council and require public notice and a public hearing. Appeals of Type IV-A decisions are heard by the Land Use Board of Appeals (LUBA). (3)**

**Determination of Review Type. Unless specified in Table 32-1, the City Manager will determine whether a permit or application is processed as Type I, II, III, IV-A or IV-B based on the descriptions above. Questions regarding the appropriate procedure will be resolved in favor of the review type providing the widest notice and opportunity to participate. An applicant may choose to elevate a Type I or II application to a higher numbered review type, provided the applicant pays the appropriate fee for the selected review type.**

**Table 32-1—Applications Types and Review Procedures**

Application/Action	Procedure Type	Decision Body*	Appeal Body*	Pre-Application Conference Required	Neighborhood/Developer Mtg Required	Applicable Code Chapter
<b>Plan Amendments</b>						
• Map or Text Amendments for a specific property	IV-A	CC	LUBA	Yes	Yes	TDC <a href="#">33.070</a>

\* City Council (CC); Planning Commission (PC); Architectural Review Board (ARB); City Manager or designee (CM); Land Use Board of Appeals (LUBA).

**Finding:**

The proposed application is a quasi-judicial Plan Map Amendment in that it would apply to a single property rather than broadly across the City. Accordingly, the proposed application is being processed in accordance with the Type IV-A procedures. These criteria are met.

**TDC 32.030. - Time to Process Applications.**

(1) **Time Limit—120-day Rule.** The City must take final action on all Type II, Type III, and Type IV-A land use applications, as provided by ORS 227.178, including resolution of all local appeals, within 120 days after the application has been deemed complete under TDC 32.160, unless the applicant provides written request or consent to an extension in compliance with ORS 227.178. (Note: The 120-day rule does not apply to Type IV-B (Legislative Land Use) decisions.)

(3) **Time Periods.** "Days" means calendar days unless otherwise specified. In computing time periods prescribed or allowed by this Chapter, the day of the act or event from which the designated period of time begins is not included. The last day of the period is included, unless it is a Saturday, Sunday, or a legal holiday, in which case the period runs until the end of the next day that is not on a weekend or City recognized legal holiday.

**Finding:**

Because the proposed amendment is an amendment to the City’s Comprehensive Plan, the 120-day rule portion of ORS 227.178 is not applicable. To the extent applicable, these criteria are met.

**TDC 32.110. - Pre-Application Conference.**

(1) **Purpose of Pre-Application Conferences.** Pre-application conferences are intended to familiarize applicants with the requirements of the TDC; to provide applicants with an opportunity discuss proposed projects in detail with City staff; and to identify approval criteria, standards, and procedures prior to filing a land use application. The pre-application conference is intended to be a tool to assist applicants in navigating the land use process, but is not intended to be an exhaustive review that identifies or resolves all potential issues, and does not bind or preclude the City from enforcing any applicable regulations or from applying regulations in a manner differently than may have been indicated at the time of the pre-application conference.

(2) **When Mandatory.** Pre-application conferences are mandatory for all land use actions identified as requiring a pre-application conference in Table 32-1. An applicant may voluntarily request a pre-application conference for any land use action even if it is not required.

(3) **Timing of Pre-Application Conference.** A pre-application conference must be held with City staff before an applicant submits an application and before an applicant conducts a Neighborhood/Developer

meeting.

**(4) Application Requirements for Pre-Application Conference.**

**(a) Application Form.** Pre-application conference requests must be made on forms provided by the City Manager.

[...]

**Finding:**

Table 32-1 requires applicant's for all map amendments to have a pre-application conference. On April 7, 2021, the applicant attended the required pre-application meeting. This criterion is met.

**TDC 32.120. - Neighborhood/Developer Meetings.**

**(1) Purpose.** The purpose of this meeting is to provide a means for the applicant and surrounding property owners to meet to review a development proposal and identify issues regarding the proposal so they can be considered prior to the application submittal. The meeting is intended to allow the developer and neighbors to share information and concerns regarding the project. The applicant may consider whether to incorporate solutions to these issues prior to application submittal.

**(2) When Mandatory.** Neighborhood/developer meetings are mandatory for all land use actions identified in Table 32-1 as requiring a neighborhood/developer meeting. An applicant may voluntarily conduct a neighborhood/developer meeting even if it is not required and may conduct more than one neighborhood/developer meeting at their election.

**(3) Timing.** A neighborhood/developer meeting must be held after a pre-application meeting with City staff, but before submittal of an application.

**(4) Time and Location.** Required neighborhood/developer meetings must be held within the city limits of the City of Tualatin at the following times:

**(a)** If scheduled on a weekday, the meeting must begin no earlier than 6:00 p.m.

**(b)** If scheduled on a weekend, the meeting must begin between 10:00 a.m. and 6:00 p.m.

**(5) Notice Requirements.**

**(a)** The applicant must provide notice of the meeting at least 14 calendar days and no more than 28 calendar days before the meeting. The notice must be by first class mail providing the date, time, and location of the meeting, as well as a brief description of the proposal and its location. The applicant must keep a copy of the notice to be submitted with their land use application.

**(b)** The applicant must mail notice of a neighborhood/developer meeting to the following persons:

**(i)** All property owners within 1,000 feet measured from the boundaries of the subject property;

**(ii)** All property owners within a platted residential subdivision that is located within 1,000 feet of the boundaries of the subject property. The notice area includes the entire subdivision and not just those lots within 1,000 feet. If the residential subdivision is one of two or more individually platted phases sharing a single subdivision name, the notice area need not include the additional phases; and

**(iii)** All designated representatives of recognized Citizen Involvement Organizations as established in TMC Chapter 11-9.

**(c)** The City will provide the applicant with labels for mailing for a fee.

**(d)** Failure of a property owner to receive notice does not invalidate the neighborhood/developer meeting proceedings.

**(6) Neighborhood/Developer Sign Posting Requirements.** The applicant must provide and post on the subject property, at least 14 calendar days before the meeting. The sign must conform to the design and placement standards established by the City for signs notifying the public of land use actions in TDC 32.150.

**(7) Neighborhood/Developer Meeting Requirements.** The applicant must have a sign-in sheet for all attendees to provide their name, address, telephone number, and email address and keep a copy of the sign-in sheet to provide with their land use application. The applicant must prepare meeting notes identifying the persons attending, those commenting and the substance of the comments expressed, and the major points that were discussed. The applicant must keep a copy of the meeting notes for submittal

**with their land use application.**

**Finding:**

The Neighborhood/Developer Meeting for the proposed application was held on Tuesday, June 8, 2021 at 6:00 PM. Due to COVID-19, the meeting was virtually hosted on GoToMeeting. Documentation demonstrating compliance with these criteria is included within Exhibits A. These criteria are met.

**TDC 32.240. - Type IV-A Procedure (Quasi-Judicial Review—City Council Public Hearing).**

**Type IV-A decisions are quasi-judicial decisions made by the City Council after a public hearing. A hearing under these procedures provides a forum to apply standards to a specific set of facts to determine whether the facts conform to the applicable criteria and the resulting determination will directly affect only a small number of identifiable persons. Except as otherwise provided, the procedures set out in this section must be followed when the subject matter of the evidentiary hearing would result in a quasi-judicial decision. City Council decisions may be appealed to the state Land Use Board of Appeals pursuant to ORS 197.805—197.860.**

[...]

**Finding:**

The first evidentiary public hearing before the City Council was held on January 24, 2022 and will follow the Quasi-Judicial review process. At this meeting the City Council voted to keep the record open and continued the hearing to February 14, 2022.

**(3) Written Notice of Public Hearing—Type IV-A. Once the application has been deemed complete, the City must mail by regular first class mail Notice of a Public Hearing to the following individuals and agencies no fewer than 20 days before the hearing.**

**(a) Recipients:**

**(i) The applicant and, the owners of the subject property;**

**(ii) All property owners within 1,000 feet measured from the boundaries of the subject property;**

**(iii) All property owners within a platted residential subdivision that is located within 1,000 feet of the boundaries of the subject property. The notice area includes the entire subdivision and not just those lots within 1,000 feet. If the residential subdivision is one of two or more individually platted phases sharing a single subdivision name, the notice area need not include the additional phases;**

**(iv) All recognized neighborhood associations within 1,000 feet from the boundaries of the subject property;**

**(v) All designated representatives of recognized Citizen Involvement Organizations as established in TMC Chapter 11-9;**

**(vi) Any person who submits a written request to receive a notice;**

**(vii) Any governmental agency that is entitled to notice under an intergovernmental agreement entered into with the City and any other affected agencies, including but not limited to: school districts; fire district; where the project either adjoins or directly affects a state highway, the Oregon Department of Transportation; and where the project site would access a County road or otherwise be subject to review by the County, then the County; and Clean Water Services; Tri Met; and, ODOT Rail Division and the railroad company if a railroad-highway grade crossing provides or will provide the only access to the subject property. The failure of another agency to respond with written comments on a pending application does not invalidate an action or permit approval made by the City under this Code;**

**(viii) Utility companies (as applicable); and,**

**(ix) Members of the City Council.**

**(b) The Notice of a Public Hearing, at a minimum, must contain all of the following information:**

**(i) The names of the applicant(s), any representative(s) thereof, and the owner(s) of the subject property;**

**(ii) The street address if assigned, if no street address has been assigned then Township, Range, Section,**



**Tax Lot or Tax Lot ID;**

- (iii) The type of application and a concise description of the nature of the land use action;**
  - (iv) A list of the approval criteria by TDC section for the decision and other ordinances or regulations that apply to the application at issue;**
  - (v) Brief summary of the local decision making process for the land use decision being made and a general explanation of the requirements for submission of testimony and the procedure for conduct of hearings;**
  - (vi) The date, time and location of the hearing;**
  - (vii) Disclosure statement indicating that if any person fails to address the relevant approval criteria with enough detail, he or she may not be able to appeal to the Land Use Board of Appeals on that issue, and that only comments on the relevant approval criteria are considered relevant evidence;**
  - (viii) The name of a City representative to contact and the telephone number where additional information may be obtained;**
  - (ix) Statement that the application and all documents and evidence submitted to the City are in the public record and available for review, and that copies can be obtained at a reasonable cost from the City; and**
  - (x) Statement that a copy of the staff report will be available for inspection at no cost at least seven days prior to the hearing and will be provided at reasonable cost.**
- (c) Failure of a person or agency to receive a notice, does not invalidate any proceeding in connection with the application, provided the City can demonstrate by affidavit that required notice was given.**
- (4) Additional Notice Requirements for Certain Type IV-A Application Types. The following additional notice requirements apply to Type IV-A Hearings where the City Council will be considering the application or removal of a Historic Landmark Designation or a Plan Text or Map Amendment for a particular property or discrete set of properties.**
- (a) The City Manager will notify in writing the Oregon Department of Land Conservation and Development (DLCD) in accordance with the minimum number of days required by ORS Chapter 197.**
  - (b) At least 14 calendar days before the scheduled City Council public hearing date, public notice must be provided by publication in a newspaper of general circulation in the City.**
  - (c) At least 14 calendar days before the scheduled City Council public hearing date, public notice must be posted in two public and conspicuous places within the City.**

**Finding:**

As discussed in response to the previous criterion, the proposed amendments are quasi-judicial in nature and have been processed consistent with the Type IV-A review requirements. The above referenced requirements will be addressed relative to date of the City Council public hearing on February 14, 2022. These criteria can be met.

**(5) Conduct of the Hearing—Type IV-A.**

**The Mayor (or Mayor Pro Tem) must follow the order of proceedings set forth below. These procedures are intended to provide all interested persons a reasonable opportunity to participate in the hearing process and to provide for a full and impartial hearing on the application before the body. Questions concerning the propriety or the conduct of a hearing will be addressed to the chair with a request for a ruling. Rulings from the Mayor must, to the extent possible, carry out the stated intention of these procedures. A ruling given by the Mayor on such question may be modified or reversed by a majority of those members of the decision body present and eligible to vote on the application before the body. The procedures to be followed by the Mayor in the conduct of the hearing are as follows:**

- (a) At the commencement of the hearing, the Mayor (or designee) must state to those in attendance all of the following information and instructions:**
  - (i) The applicable approval criteria by Code Chapter that apply to the application;**

(ii) Testimony and evidence must concern the approval criteria described in the staff report, or other criteria in the comprehensive plan or land use regulations that the person testifying believes to apply to the decision;

(iii) Failure to raise an issue with sufficient detail to give the City Council and the parties an opportunity to respond to the issue, may preclude appeal to the state Land Use Board of Appeals on that issue;

(iv) At the conclusion of the initial evidentiary hearing, the City Council must deliberate and make a decision based on the facts and arguments in the public record; and

(v) Any participant may ask the City Council for an opportunity to present additional relevant evidence or testimony that is within the scope of the hearing; if the City Council grants the request, it will schedule a date to continue the hearing as provided in TDC 32.240(5)(e), or leave the record open for additional written evidence or testimony as provided TDC 32.240(5)(f).

(b) The public is entitled to an impartial decision body as free from potential conflicts of interest and pre-hearing ex parte (outside the hearing) contacts as reasonably possible. Where questions related to ex parte contact are concerned, members of the City Council must follow the guidance for disclosure of ex parte contacts contained in ORS 227.180. Where a real conflict of interest arises, that member or members of the City Council must not participate in the hearing, except where state law provides otherwise. Where the appearance of a conflict of interest is likely, that member or members of the City Council must individually disclose their relationship to the applicant in the public hearing and state whether they are capable of rendering a fair and impartial decision. If they are unable to render a fair and impartial decision, they must be excused from the proceedings.

(c) Presenting and receiving evidence.

(i) The City Council may set reasonable time limits for oral presentations and may limit or exclude cumulative, repetitious, irrelevant, or personally derogatory testimony or evidence;

(ii) No oral testimony will be accepted after the close of the public hearing. Written testimony may be received after the close of the public hearing only as provided by this section; and

(iii) Members of the City Council may visit the property and the surrounding area, and may use information obtained during the site visit to support their decision, if the information relied upon is disclosed at the beginning of the hearing and an opportunity is provided to dispute the evidence.

(d) The City Council, in making its decision, must consider only facts and arguments in the public hearing record; except that it may take notice of facts not in the hearing record (e.g., local, state, or federal regulations; previous City decisions; case law; staff reports). Upon announcing its intention to take notice of such facts in its deliberations, it must allow persons who previously participated in the hearing to request the hearing record be reopened, as necessary, to present evidence concerning the newly presented facts.

(e) If the City Council decides to continue the hearing, the hearing must be continued to a date that is at least seven days after the date of the first evidentiary hearing (e.g., next regularly scheduled meeting). An opportunity must be provided at the continued hearing for persons to present and respond to new written evidence and oral testimony. If new written evidence is submitted at the continued hearing, any person may request, before the conclusion of the hearing, that the record be left open for at least seven days, so that he or she can submit additional written evidence or arguments in response to the new written evidence. In the interest of time, after the close of the hearing, the decision body may limit additional testimony to arguments and not accept additional evidence.

(f) If the City Council leaves the record open for additional written testimony, the record must be left open for at least seven days after the hearing. Any participant may ask the decision body in writing for an opportunity to respond to new evidence (i.e., information not disclosed during the public hearing) submitted when the record was left open. If such a request is filed, the decision body must reopen the record, as follows:

(i) When the record is reopened to admit new evidence or arguments (testimony), any person may raise new issues that relate to that new evidence or testimony;

- (ii) An extension of the hearing or record granted pursuant to this section is subject to the limitations of TDC 32.030(1) (ORS 227.178—120-day rule), unless the applicant waives his or her right to a final decision being made within 120 days of filing a complete application; and
  - (iii) If requested by the applicant, the City Council must grant the applicant at least seven days after the record is closed to all other persons to submit final written arguments, but not evidence, provided the applicant may expressly waive this right.
- (6) Notice of Adoption of a Type IV-A Decision. Notice of Adoption must be provided to the property owner, applicant, and any person who provided testimony at the hearing or in writing. The Type IV-A Notice of Adoption must contain all of the following information:
- (a) A description of the applicant's proposal and the City's decision on the proposal, which may be a summary, provided it references the specifics of the proposal and conditions of approval in the public record;
  - (b) The address or other geographic description of the property proposed for development, including a map of the property in relation to the surrounding area;
  - (c) A statement that a copy of the decision and complete case file, including findings, conclusions, and conditions of approval, if any, is available for review and how copies can be obtained;
  - (d) The date the decision becomes final; and
  - (e) The notice must include an explanation of rights to appeal a City Council decisions to the state Land Use Board of Appeals pursuant to ORS 197.805—197.860.
- (7) Effective Date of a Type IV-A Decision.
- (a) The written order is the final decision on the application.
  - (b) The date of the order is the date it is mailed by the Mayor (or designee) certifying its approval by the decision body.
  - (c) Appeal of a IV-A City Council decision is to the State Land Use Board of Appeals pursuant to ORS 197.805—197.860.

**Finding:**

The City Council hearing will be conducted according to these requirements. A notice of decision will be mailed and effective consistent with the above provisions. These criteria can be met.

**Chapter 33: Applications and Approval Criteria**  
**Section 33.070 Plan Amendments**

[...]

**(2) Applicability.** [...] Legislative amendments may only be initiated by the City Council.

**(3) Procedure Type.**

**(a) Map or text amendment applications which are quasi-judicial in nature (e.g. for a specific property or a limited number of properties) is subject to Type IV-A Review in accordance with TDC Chapter 32.**

**Finding:**

The proposed amendment is quasi-judicial in nature and has been processed according to the Type IV-A procedures, discussed above. These criteria have been or will be satisfied.

**(5) Approval Criteria.**

**(a) Granting the amendment is in the public interest.**

**Finding:**

The proposed amendment will allow the applicant to change the site zoning from RML to RMH. As previously noted, the City's most recent housing capacity analysis in 2019 found that there is a deficit of land zoned RMH and conversely there is a surplus of land zoned RML.

**Exhibit 4. Comparison of capacity of existing residential land with demand for new dwelling units and land surplus or deficit, Tualatin City Limits and Basalt Creek, 2020 to 2040**

Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note: DU is dwelling unit.

Residential Plan Designations	Capacity (Dwelling Units)	Demand for New Housing	Remaining Capacity (Supply minus Demand)	Land Surplus or (Deficit) Gross Acres
Low Density	523	466	57	10
Medium Low Density	386	71	315	27
Medium High Density	13	122	(109)	(7)
High Density	285	254	31	2
High Density High-Rise	-	101	(101)	(4)

In addition, as discussed in Section D, addressing compliance with the Comprehensive Plan, the proposed amendment would address several existing Comprehensive Plan Goals, Policies, and Strategic Actions. Both the housing capacity analysis and Comprehensive Plan were developed with significant public input and review. Therefore, granting the proposed amendment is in the public interest. This criterion is met.

**(b) The public interest is best protected by granting the amendment at this time.**

**Finding:**

Because the proposed amendment would address deficiencies previously identified in the City’s housing capacity analysis from 2019, as well as Comprehensive Plan Goals, Policies, and Strategic Actions, granting the proposed amendment as soon as practicable would protect the public interest. As previously noted, these policies were developed with substantial and recent public input and therefore directly reflect the public interest. Lastly, the cost of housing continues to rise and multiple-family dwellings tend to be less expensive to rent, and therefore, to the extent that the proposed amendment would facilitate development of additional units of multi-family housing, the public interest would also be served by granting the amendment at this time. This criterion is met.

**(c) The proposed amendment is in conformity with the applicable objectives of the Tualatin Community Plan.**

**Finding:**

The proposed amendments are in conformity with the applicable objectives of the Tualatin Community Plan, also known as the Comprehensive Plan, as discussed above in Section D. This criterion is met.

**(d) The following factors were consciously considered:**

- (i) The various characteristics of the areas in the City;**
- (ii) The suitability of the areas for particular land uses and improvements in the areas;**

**Finding:**

The proposed amendment is limited to a single site and therefore the various characteristics of areas of the City are not applicable. The applicant has within their application materials addressed the suitability of this particular geographic area for the proposed land use which would be multi-family units in addition to those existing, within a previously developed area of the City. Staff concurs with the applicant assessment that this area is suitable for land uses and improvements that would be allowed, if the proposed amendment is granted. These criteria are met.

**(iii) Trends in land improvement and development;**



**Finding:**

As noted previously, the proposed amendment is consistent with the findings and conclusions of Tualatin's most recent housing capacity analysis as well as Goals, Policies, and Strategic Actions, which were developed based on this analysis. As these findings and conclusions were developed in 2019, they represent the most recent available evidence that identify trends in land improvement and development. Therefore, the proposed amendment is consistent with trends in land improvement and development. This criterion is met.

**(iv) Property values;**

**Finding:**

The proposed amendment is not anticipated to adversely impact property values. Staff is not aware of any evidence within the City's most recent housing capacity analysis that identify that implementation of policy recommendations would have such an impact. This criterion is met.

**(v) The needs of economic enterprises and the future development of the area; needed right-of-way and access for and to particular sites in the area;**

**Finding:**

The proposed amendment does not directly impact the needs of economic enterprises as they are not applicable in fully developed residential areas. There is existing right-of-way and access to the site that does not obstruct or conflict with surrounding sites. To the north of the subject property there is an existing railroad right-of-way which, as noted by the applicant, creates a buffer to the north and eliminates the potential for any additional access points north of the subject property. This criterion is met.

**(vi) Natural resources of the City and the protection and conservation of said resources;**

**(vii) Prospective requirements for the development of natural resources in the City;**

**Finding:**

The proposed amendment does not impact natural resource protection nor application of requirements to future development, which would fully apply to any new development. These criteria are met.

**(viii) The public need for healthful, safe, esthetic surroundings and conditions;**

**Finding:**

The proposed amendment does not impact regulations governing public need for healthful, safe, or aesthetic surroundings and conditions. The subject property is developed with an existing multi-family project. Any future development must go through an Architectural Review and any future development will be reviewed and required to comply with TDC requirements. This criterion is met.

**(e) If the amendment involves residential uses, then the appropriate school district or districts must be able to reasonably accommodate additional residential capacity by means determined by any affected school district.**

**Finding:**

Exhibit A of the applicant's submittal evaluated the impact to Tualatin-Tigard School District. This analysis was provided by the applicant to the school district. Additionally, an email notification of the upcoming public hearing and request for feedback was sent to the School District on January 4, 2022. As of the date of writing of this report, the City of Tualatin has not received any response from the school district. This criterion is met.

**(f) Granting the amendment is consistent with the applicable State of Oregon Planning Goals and applicable Oregon Administrative Rules, including compliance with the Transportation Planning Rule TPR (OAR 660-012-0060).**

**Finding:**

As discussed above in Sections A and B, granting the proposed amendment is consistent with Statewide Planning Goals and their implementing Oregon Administrative Rules. Specific to the Transportation Planning Rule (TPR), because the applicant has proposed an amendment to an existing zoning designation, and a deficiency has been identified, staff recommends that per Section 2(d) of the OAR that the applicant be required to provide a condition of development, development agreement, or similar funding method, including, but not limited to, transportation system management measures or minor transportation improvements, and that as part of the amendment, the improvements provided pursuant to this subsection will be provided prior to approval of an Architectural Review application to add additional dwelling units to the site. Specifically, the applicant identifies the intersection of SW Sagert Street and SW Boones Ferry Road as failing within the 20 year long-range planning horizon. However, this intersection would ultimately fail, with or without the proposed Plan Map Amendment, unless a northbound right turn lane is constructed on SW Boones Ferry Road south of SW Sagert Street as mitigation measures.

On behalf of the City of Tualatin, DKS Associates evaluated the applicant's TPR analysis and mitigation recommendation (Exhibit E). DKS agreed with the applicant's TPR analysis findings and that construction of a northbound right turn lane south of SW Sagert Street would be adequate mitigation measures to address the failing intersection of SW Boones Ferry Road and SW Sagert Street. The proposed mitigation measure would provide a roadway capacity improvement. The capacity improvement is not in the planned improvements but was studied in the 2015 Tualatin Transportation System Plan update. The mitigation would result in the intersection operations meeting standards. Given that the intersection is projected to fail with or without the proposed rezoning being approved, the City will consider updating the Capital Improvement Program (CIP) to include the intersection of SW Sagert Street and SW Boones Ferry Road. The proposed rezoning is consistent with these requirements.

The proposed rezoning is consistent with these requirements. This criterion is met.

**(g) Granting the amendment is consistent with the Metropolitan Service District's Urban Growth Management Functional Plan.**

**Finding:**

The proposed amendment will not adversely impact the City's compliance with Titles 1-14 of the Metro Urban Growth Management Functional Plan as discussed in Section II-C of these findings. Therefore, these requirements were consciously considered. This criterion is met.

**(h) Granting the amendment is consistent with Level of Service F for the p.m. peak hour and E for the one-half hour before and after the p.m. peak hour for the Town Center 2040 Design Type (TDC Map 9-4), and E/E for the rest of the 2040 Design Types in the City's planning area.**

**Finding:**

The applicant provided a TPR analysis that evaluated transportation level of services. As discussed above under subsection (d), this criterion is met.

**(i) Granting the amendment is consistent with the objectives and policies regarding potable water, sanitary sewer, and surface water management pursuant to TDC 12.020, water management issues are adequately addressed during development or redevelopment anticipated to follow the granting of a**

**plan amendment.**

[...]

**Finding:**

The proposed amendment does not impact objectives and policies regarding the above referenced utilities. Utilities will be closely evaluated at the time the applicant submits an application for Architectural Review. This criterion is met.

## Land Use Application

Project Information		
Project Title: <a href="#">Tualatin Heights Apartments Plan Map Amendment</a>		
Brief Description: Request to amend the site 's plan designation from Residential Medium Low (RML) to Medium-High Density (RMH), increasing the density to 15 dwelling units per acre for a maximum of 336 units.		
Property Information		
Address: <a href="#">9301 SW Sagert Street, Tualatin, Oregon, 97062</a>		
Assessor's Map Number and Tax Lots: <a href="#">2S123DC00600</a>		
Applicant/Primary Contact		
Name: <a href="#">Frank Angelo</a>	Company Name: <a href="#">Angelo Planning Group</a>	
Address: <a href="#">921 SW Washington St, STE 468</a>		
City: <a href="#">Portland</a>	State: <a href="#">OR</a>	ZIP: <a href="#">97205</a>
Phone: <a href="#">(503) 227-3664</a>	Email: <a href="mailto:fangelo@angeloplanning.com">fangelo@angeloplanning.com</a>	
Property Owner		
Name: <a href="#">United Dominion Realty, L.P.</a>		
Address: <a href="#">c/o UDR, Inc., 1745 Shea Center Dr., Suite 200</a>		
City: <a href="#">Highlands Ranch</a>	State: <a href="#">CO</a>	ZIP: <a href="#">80129</a>
Phone: <a href="#">720-283-6120</a>	Email:	
Property Owner's Signature: <small>UNITED DOMINION REALTY, L.P., a Delaware limited partnership By: UDR, INC., a Maryland corporation, its General Partner</small>	Date: <a href="#">09/14/21</a>	
<i>(Note: Letter of authorization is required if not signed by owner)</i>		
<b>AS THE PERSON RESPONSIBLE FOR THIS APPLICATION, I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION IN AND INCLUDED WITH THIS APPLICATION IN ITS ENTIRETY IS CORRECT. I AGREE TO COMPLY WITH ALL APPLICABLE CITY AND COUNTY ORDINANCES AND STATE LAWS REGARDING BUILDING CONSTRUCTION AND LAND USE.</b>		
Applicant's Signature: 	Date: <a href="#">09/16/21</a>	

Land Use Application Type:

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Annexation (ANN)                          | <input type="checkbox"/> Historic Landmark (HIST)            | <input type="checkbox"/> Minor Architectural Review (MAR) |
| <input type="checkbox"/> Architectural Review (AR)                 | <input type="checkbox"/> Industrial Master Plan (IMP)        | <input type="checkbox"/> Minor Variance (MVAR)            |
| <input type="checkbox"/> Architectural Review—Single Family (ARSF) | <input checked="" type="checkbox"/> Plan Map Amendment (PMA) | <input type="checkbox"/> Sign Variance (SVAR)             |
| <input type="checkbox"/> Architectural Review—ADU (ARADU)          | <input type="checkbox"/> Plan Text Amendment (PTA)           | <input type="checkbox"/> Variance (VAR)                   |
| <input type="checkbox"/> Conditional Use (CUP)                     | <input type="checkbox"/> Tree Removal/Review (TCP)           |   |

Office Use		
Case No:	Date Received:	Received by:
Fee:	Receipt No:	



---

# **Tualatin Heights Apartments Plan Map Amendment**

---

**Prepared by Angelo Planning Group**

**On behalf of UDR, Inc.**

**Submitted to City of Tualatin**

**September 16, 2021**



**TABLE OF CONTENTS**

<b>PROPOSAL SUMMARY INFORMATION</b>	<b>2</b>
<b>PROJECT TEAM</b>	<b>3</b>
<b>SECTION 1: PROJECT INFORMATION</b>	<b>1</b>
<b>SECTION 2: COMPLIANCE WITH STATEWIDE PLANNING GOALS</b>	<b>9</b>
<b>SECTION 3: COMPLIANCE WITH THE TUALATIN COMPREHENSIVE PLAN (TUALATIN 2040)</b>	<b>13</b>
<b>SECTION 4: COMPLIANCE WITH THE TUALATIN DEVELOPMENT CODE</b>	<b>16</b>
<b>SECTION 6: CONCLUSION</b>	<b>27</b>

**LIST OF EXHIBITS**

- Exhibit A: Conceptual Site Plan
- Exhibit B: Neighborhood/Developer Meeting Documentation
- Exhibit C: Tualatin Heights Parking Assessment
- Exhibit D: Transportation Planning Rule Analysis Memorandum
- Exhibit E: Tualatin School District Impact Analysis
- Exhibit F: Proof of Ownership - Title Report
- Exhibit G: Pre-Application Summary

## Proposal Summary Information

<b>Applicant:</b>	Andrew Lavaux UDR, Inc. 1745 Shea Center Drive, Suite 200 Highlands Ranch, CO 80129 310.463.3211 <a href="mailto:alavaux@udr.com">alavaux@udr.com</a>
<b>Applicants Representative:</b>	Frank Angelo Angelo Planning Group 921 SW Washington Street, Suite 468 Portland, Oregon 97205 503.227.3664 <a href="mailto:fangelo@angeloplanning.com">fangelo@angeloplanning.com</a>
<b>Request:</b>	Plan Map Amendment from RML to RMH
<b>Site Address:</b>	9301 SW Sagert Street
<b>Tax Lot:</b>	2S123DC00600
<b>Site Size:</b>	22.30 acres
<b>Current Site Planning District:</b>	Medium Low Density Residential (RML)
<b>Proposed Site Planning District:</b>	Medium High Density Residential (RMH)

## Project Team

### **Owner Representative**

UDR Inc.  
1745 Shea Center Drive, Suite 200  
Highlands Ranch, CO 80129

Andrew Lavaux  
310.463.3211  
[alavaux@udr.com](mailto:alavaux@udr.com)

### **Land Use**

Angelo Planning Group  
921 SW Washington Street, Suite 468  
Portland, Oregon 97205

Frank Angelo, Principal  
503.227.3664  
[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)

Emma Porricolo, Assistant Planner  
503.542.3405  
[eporricolo@angeloplanning.com](mailto:eporricolo@angeloplanning.com)

### **Architecture**

Hennebery Eddy Architects, Inc.  
921 SW Washington Suite 250  
Portland, OR 97205

Jon McGrew, Associate Principal  
503.542.1180  
[jmcgrew@henneberyeddy.com](mailto:jmcgrew@henneberyeddy.com)

Erica Thompson, Associate  
971.200.7236  
[ethompson@henneberyeddy.com](mailto:ethompson@henneberyeddy.com)

### **Transportation**

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

Matt Hughart, Principal Planner  
503.535.7425  
[mhughart@kittelson.com](mailto:mhughart@kittelson.com)

### **Civil Engineering**

KPFF Consulting Engineers  
111 SW 5th Ave #2600  
Portland, OR 97204

Mark Reuland, Principal  
503.542.3860  
[mark.reuland@kpff.com](mailto:mark.reuland@kpff.com)



## Section 1: Project Information

### Background

#### *Proposal*

Tualatin Heights is a multi-family apartment complex located at 9301 SW Sagert Street, Tualatin, Oregon. The existing development includes 220 multi-family dwellings on 22.4 acres. The property is currently zoned Residential Medium Low (RML), with a maximum density of 10 dwelling units per acre. The property owner, UDR Inc. (UDR), is requesting a Plan Map Amendment (PMA) to allow for Residential Medium-High Density (RMH) on the site, increasing the allowed density to 15 dwelling units per acre for a maximum of 336 units. With an approved PMA, UDR plans to add up to 116 additional dwelling units to the site to more efficiently use the 22-acre site.

The existing and proposed Planning Districts have few differences in siting standards as they relate to multi-family development on the site. For the site's use, multi-family dwellings, the PMA would increase the maximum density from 10 units per acre to 15 units per acre. Other siting standards remain the same across both planning districts, as shown in Table 1.

*Table 1. Standards for Multi-family Development in Existing and Proposed Planning Districts.*

<b>Standards</b>	<b>Medium Low Density Residential (RML)</b>	<b>Medium High Density Residential (RMH)</b>
Maximum Density	10 units per acre	15 units per acre
Front Setback	35 feet	35 feet
Side & Rear Setbacks	12 feet	12 feet
Maximum Structure Height	35 feet	35 feet
Maximum Lot Coverage	40%	40%

*Note: Setbacks described above are for a 2.5 story structure, the maximum permitted in both zones.*

### *Site Context*

The 22-acre site is located at 9301 SW Sagert Street (Figure 1: Location Map). The site abuts both a residential neighborhood and a business park. Surrounding the site are:

- To the west (across SW 95<sup>th</sup> Ave): Industrial businesses zoned Light Manufacturing (ML);
- To the south (across SW Sagert St): detached single family homes, zoned RML;
- To the east : detached single family homes, zoned RML; and
- To the north (across railroad tracks): business park with primarily commercial businesses, zoned ML.

Within the vicinity of the site are various community attractions and services, including, but not limited to:

- Tualatin Elementary School,
- Tualatin Town Center,
- Commercial and Industrial Corridors on SW Tualatin-Sherwood Road and SW Teton Ave,
- Ten Tri-met bus stops within ¼ mile of the site, and
- Tualatin WES Station.

**Figure 1. Location Map**

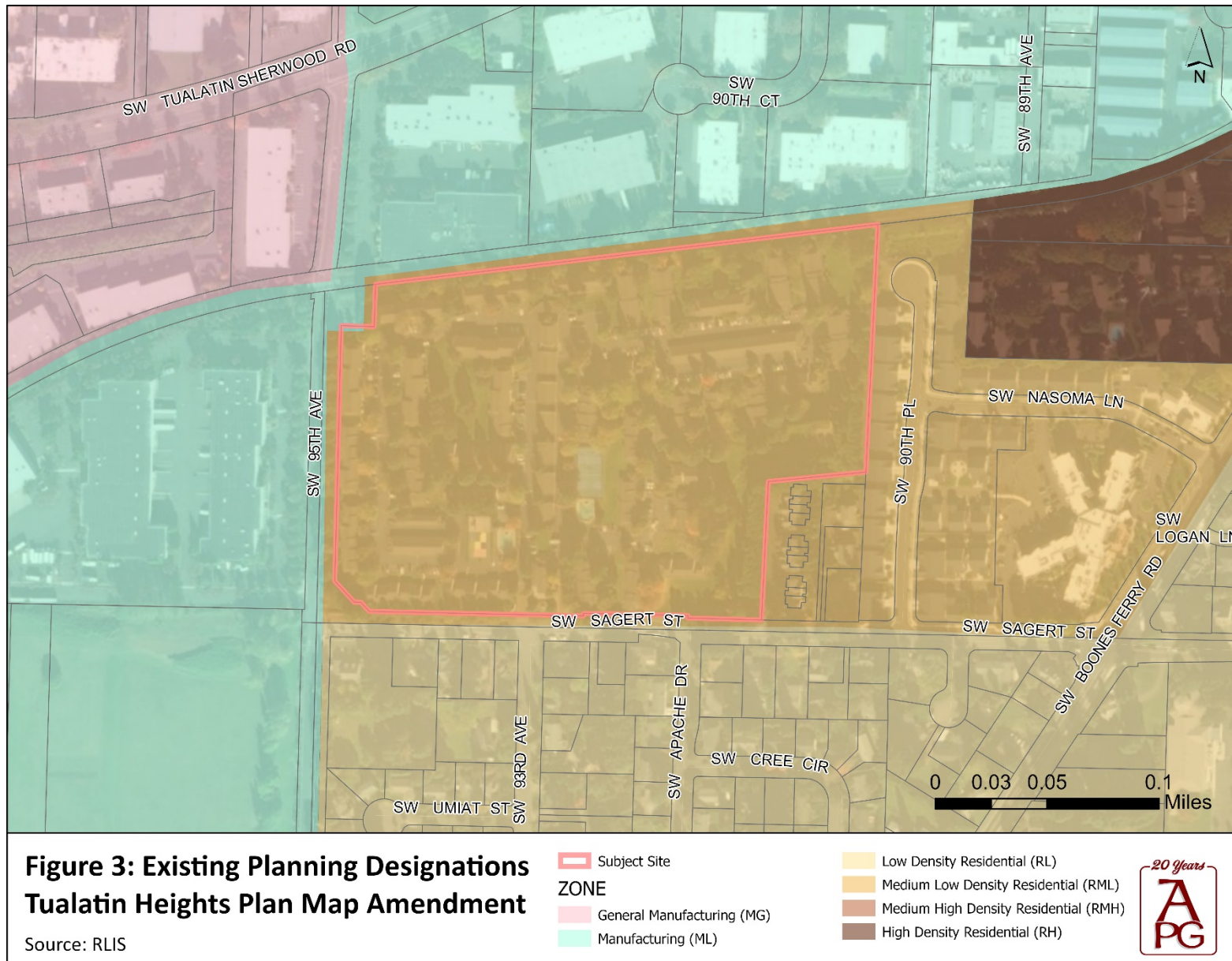




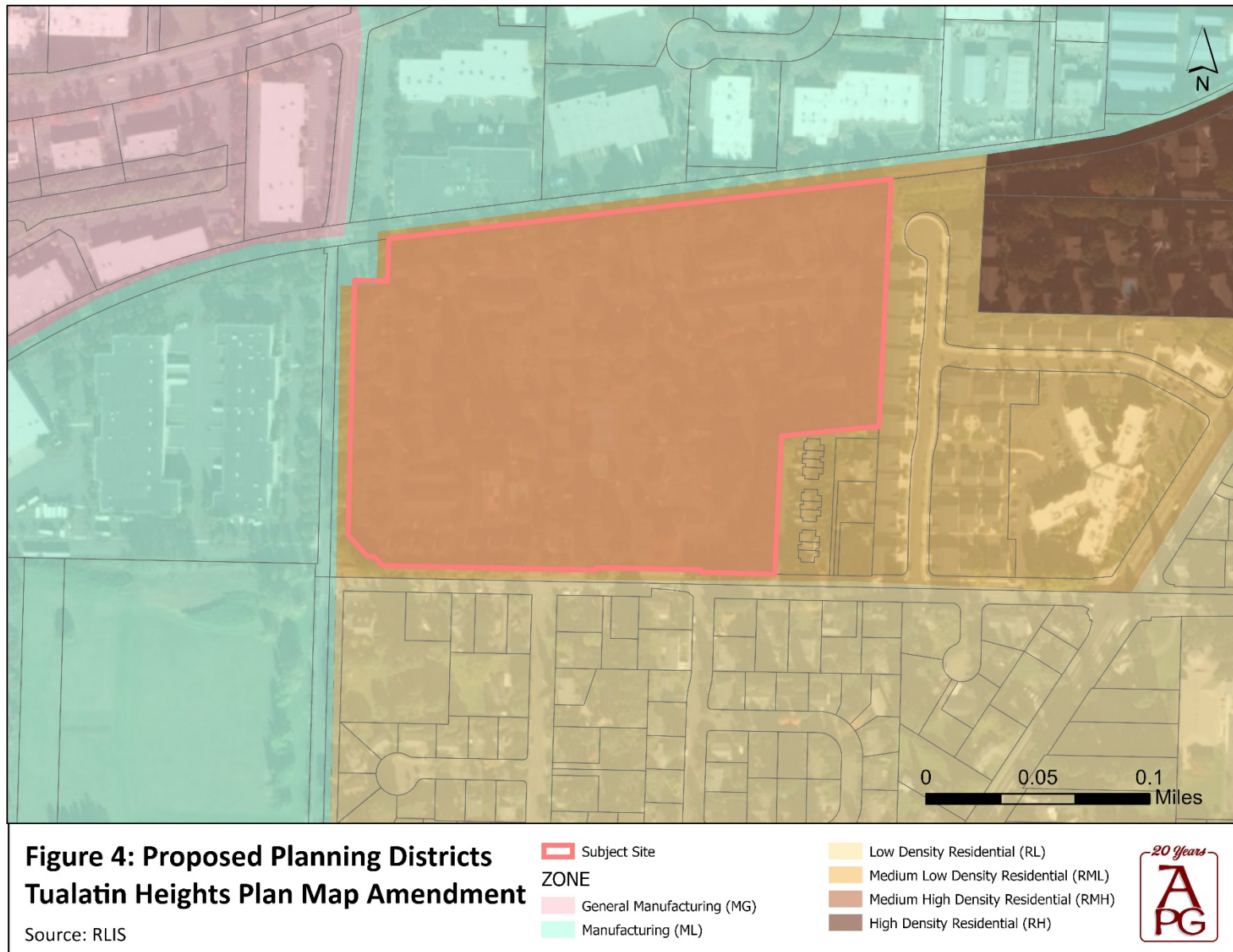




**Figure 3. Existing Planning District**



**Figure 4. Proposed Planning District**



## **Request**

The requested Plan Map Amendment would increase the maximum permitted density on the site. With the increased density allowance, the applicant would like to redevelop portions of the complex internal to the site to create additional dwelling units. Findings of the Tualatin Housing Needs Analysis (HNA), completed in 2019, supports the need for additional multi-family housing in the City consistent with this proposed amendment request. The report demonstrates a need for multi-family dwelling units and land with medium- to high-density planning designations. As shown in Table 2 (Source: HNA), Tualatin has a surplus of dwelling unit capacity in the RML designation, with surplus capacity for approximately 315 units and 27 gross acres of land to accommodate growth. Meanwhile, there is a deficit of land for dwelling units in the RMH designation. A deficit of 109 dwelling units or 7 gross acres of land. In addition to the deficit, there is also a demand for 122 units in the RMH district (Source: See Table 2). The proposed amendment would provide potential capacity for an additional 116 dwelling units on the existing site and reduce the documented deficit of the RMH district.

In addition to the specific plan designations capacity needs, Tualatin has an overall citywide need for multi-family dwellings. According to the HNA,

*“Tualatin will plan for more single-family attached and multi-family dwelling units in the future to meet the City’s housing needs. Historically, about 53% of Tualatin’s housing was single-family detached. While 40% of new housing in Tualatin is forecast to be single-family detached, the City will need to provide opportunities for development of new single-family attached (15% of new housing) and multi-family units (45% of new housing).”*

According to the HNA, several demographic trends contribute to the need for “relatively affordable attached single-family housing and multi-family housing,” they are:

- *Demographic and economic trends will drive demand for relatively affordable attached single-family housing and multi-family housing in Tualatin. The key demographic trends that will affect Tualatin’s future housing needs are: (1) the aging of the Baby Boomers, (2) aging of the Millennials, and (3) continued growth in the Latinx population.*
- *As the Baby Boomers age, growth of retirees will drive demand for housing types specific to seniors, such as small and easy-to-maintain dwellings, assisted living facilities, or age-restricted developments.*
- *Tualatin’s ability to retain Millennials will depend on whether the city has opportunities for housing that both appeals to and is affordable to Millennials.*
- *Growth in the number of Latinx households will result in increased demand for housing of all types, both for ownership and rentals, with an emphasis on housing that is comparatively affordable. Latinx households are more likely to be larger than average, with more children and possibly with multigenerational households. (Source: 2019 HNA)*

As described in Goal 3.2 of the Comprehensive Plan, “Encourage development and preservation of housing that is affordable for all households in Tualatin,” Tualatin encourages housing for all that is

affordable and meets the needs of all its residents. The demographic trends reflect a diversity of residents (in age and race) that have diverse housing needs.

*Table 2. Comparison of Plan Designation Capacities (Source: HNA Exhibit 4.)*

**Exhibit 4. Comparison of capacity of existing residential land with demand for new dwelling units and land surplus or deficit, Tualatin City Limits and Basalt Creek, 2020 to 2040**  
 Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note: DU is dwelling unit.

Residential Plan Designations	Capacity (Dwelling Units)	Demand for New Housing	Remaining Capacity (Supply minus Demand)	Land Surplus or (Deficit) Gross Acres
Low Density	523	466	57	10
Medium Low Density	386	71	315	27
Medium High Density	13	122	(109)	(7)
High Density	285	254	31	2
High Density High-Rise	-	101	(101)	(4)

This application requests the following Plan Map Amendment to change the Tualatin Heights designation from Medium Low Density Residential (RML) to Medium High Density Residential (RMH), subject to a Type VI-A review. The requested zone change would allow for an additional 116 units on the subject site, where the applicant plans to add additional multi-family units. A conceptual site plan showing how additional units can be developed is provided in Exhibit A.



## Section 2: Compliance with Statewide Planning Goals

This section responds to the applicable Oregon Statewide Planning Goals.

### **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:** Pursuant to the City of Tualatin requirements, a Neighborhood/Developer Meeting was held on June 9, 2021. A summary of the meeting is found in Exhibit B. Neighbors expressed specific concerns related to vehicle parking. The applicant heard these concerns, conducted a parking study, and is proposing the action noted in the Parking Assessment prepared by Kittelson & Associates. The assessment evaluated on-site and off-site parking conditions to improve understanding of the current conditions and to inform the parking management strategy. It also describes the current parking management policies for on-site parking.

A review of the on-street and apartment complex parking conditions revealed the following key findings:

- During the mid-week and Saturday time periods, existing on-street parking occupancy on the neighborhood street segments is never more than 54% utilized when looking at the collective whole. However, some segments along SW Sagert Street (between SW 95<sup>th</sup> Avenue and SW 93<sup>rd</sup> Avenue) have parking occupancy levels at 100% or close to 100% for most the study periods. It is unknown if the on-street parking is being generated by the adjacent single family homes, Tualatin Heights residents, or a combination of both.
- The total active parking supply within the Tualatin Heights apartment complex (excluding stalls available within the parking garage units that are primarily being used for storage) is 457 spaces.
- Peak apartment complex parking utilization was found during the 5:00-6:00 AM study period (79% during a mid-weekday and 81% on a Saturday). These findings indicate that the parking supply exceeds current demand.

For more information, the complete Parking Assessment is found in Exhibit C.

The application requires a Planning Commission and City Council hearing. Both public hearings will provide the opportunity for community members to provide comments on the application.

The proposed amendment is consistent with Goal 1.

### **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 applicable Tualatin Comprehensive Plan and Development Code standards have been addressed in this application. The application will be reviewed pursuant to the Type VI-A review procedures for Plan Map Amendments.

The proposed amendment is consistent with Goal 2.

**Goal 10 – Housing**

*To provide for the housing needs of citizens of the state.*

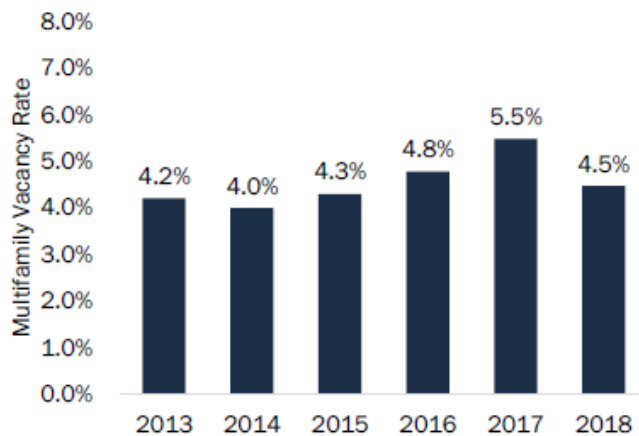
**Response:** The maximum permitted density would be increased on the site with the requested PMA, increasing the maximum density from 10 dwelling units per acre to 15 dwelling units per acre. This would add the potential for an additional 116 dwelling units through redevelopment of the Tualatin Heights site. The need for and importance of more multi-family units in Tualatin is supported by the HNA prepared in 2019. According to the HNA, Tualatin’s housing stock had a larger percentage of multi-family housing (42% of Tualatin’s housing stock) as compared to Washington County and Portland Metro region. However, the HNA also identified the need for more multi-family housing to meet the housing needs of a diverse range of Tualatin residents and provide housing opportunities for many of Oregon’s low-wage workers. According to the HNA, *“Tualatin’s key challenge over the next 20 years is providing opportunities for development of relatively affordable housing of all types, such as lower-cost single-family housing, townhouses and duplexes, market-rate multi-family housing, and government-subsidized affordable housing.”*

In addition, the extremely low vacancy rates for multi-family housing, see Table 3, shows there is strong demand for multi-family housing in Tualatin.

**Table 3. Average Multi-family Vacancy Rates in Tualatin (Source: 2019 HNA)**

Tualatin’s average multifamily vacancy rate dipped to a low of 4% in 2014. In 2018, Tualatin’s multifamily vacancy rate was 4.5%.

**Exhibit 25. Average Multifamily Vacancy Rate, Tualatin, 2013 through 2018**  
Source: CoStar.



The proposed amendment will provide the opportunity for additional multi-family residential dwelling units in the City through a more efficient use of an existing site that is already a committed multi-family development.

The proposed Plan Map amendment is consistent with Goal 10.

### **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:** The proposed development is located within the Tualatin city limits. As a part of this application the applicant’s engineer prepared a reconnaissance analysis to determine if existing infrastructure is sufficient with the proposed increased density permitted by the PMA. The analysis determined that the infrastructure capacity is sufficient to accommodate the additional housing that would result from the PMA. A more detailed analysis of infrastructure would occur during subsequent permitting for development on the site. For more information, see the responses to the Tualatin Comprehensive Plan Chapter 8 policies in Section 3 of this narrative.

The proposed amendment is consistent with Goal 11.

### **Goal 12 – Transportation**

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

**Response:** Statewide Planning Goal 12 is implemented by the Transportation Planning Rule, OAR 660-012 (TPR). The applicant conducted a traffic assessment to determine future transportation conditions under the current zoning and under the proposed zoning. The following is the summary of the findings of that assessment. The full traffic assessment is presented in Exhibit D.

#### *Existing Transportation Conditions*

- Traffic counts were collected in June 2021 at all of the study intersections during the critical weekday AM and PM peak travel periods. Historical 2019 counts were supplemented at several key intersections in order to account for travel demand reductions associated with on-going COVID-related factors.
- Operational analyses indicate that all of the study intersections currently operate acceptably based on the applicable City of Tualatin and Washington county standards.

#### *Future Year 2040 Traffic Conditions*

- The proposed land use action is a unique case that would involve upzoning the Tualatin Heights apartment complex property. The complex is approximately 22 acres in size and contains 220-unit multifamily apartment units. The underlying

zoning is Residential Medium Low (RML) which currently allows for a maximum density of 10 dwelling units per acre. Accordingly, the Tualatin Heights apartment complex is essentially maximizing the allowed development potential under the existing zoning. In order to support a vision for additional housing units on the site, the property owner is proposing to modify the zoning to Residential Medium-High Density (RMH) which would increase the density to a maximum of 15 dwelling units per acre.

- Background traffic volumes for the 2040 planning horizon year were estimated using a combination of regional travel demand model output and historical growth trends. Since the existing site is built out to its maximum allowed density, the resulting 2040 background traffic volumes represent the future traffic conditions that can be expected under the existing RML zoning.
- Operations of the study intersections under 2040 Background conditions (assuming regional and local traffic growth but no land use action on the Tualatin Heights site) found that all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the exception of the SW Boones Ferry Road/SW Sagert Street intersection. During the weekday AM Peak hour, this intersection is forecast to operate over capacity (v/c of 1.09) and at Level of Service F conditions.
- With the proposed RMH zoning, it was determined that the increased density allowance can potentially result in 116 additional multifamily housing units. Using ITE land use code 221, this increased density has the potential to generate approximately 630 net new daily trips, 42 net new AM peak hour trips, and 51 net new PM peak hour trips.
- Operations of the study intersections under the 2040 proposed RMH zoning scenario found that all of the study intersections are forecast to operate acceptably during both the weekday AM and PM peak hours with the continued exception of the SW Boones Ferry Road/SW Sagert Street intersection. During the weekday AM Peak hour, this intersection is forecast to also operate over capacity (v/c of 1.10) and at Level of Service F conditions. While a very small degradation in operations compared to existing zoning, this technically represents an impact to the operations of the intersection. To address TPR requirements, the identification of a long-term mitigation plan would be needed to restore capacity to the intersection and show it can meet operating standards.
  - Although not formally included in the City of Tualatin’s latest Transportation System Plan project list, the future year analysis behind the study did identify the potential for a northbound right-turn lane at the intersection. Such an improvement would restore capacity to the intersection and result in acceptable operations under both the 2040 no land use action and with the 2040 proposed RMH rezone.

The proposed amendment is consistent with Goal 12.

### ***Goal 14 – Urbanization***



*To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.*

**Response:** The subject site is located inside the Tualatin city limits and the Metro UGB. The proposed PMA from RML to RMH for the Tualatin Heights Apartment site will permit more density on the site, allowing up to an additional 116 units on the 22-acre site. The PMA will provide the opportunity to more efficiently use an existing site that is already committed to multi-family residential use. Public facilities to serve the additional dwelling units are already in-place and have sufficient capacity to accommodate the new units.

The proposed amendment is consistent with Goal 14.

## Section 3: Compliance with the Tualatin Comprehensive Plan (Tualatin 2040)

This section responds to the applicable policies and goals of the Tualatin Comprehensive Plan.

### **Chapter 1 – Community Involvement**

*POLICY 1.1.3 Conduct the planning process with adequate input and feedback from citizens in each affected neighborhood.*

**Response:** The applicant hosted a Neighborhood/Developer Meeting to inform and received feedback from neighbors. A summary of the meeting can be found in Exhibit B. Pursuant to City of Tualatin requirements, the application will be reviewed through a Type VI-A process that includes public hearings at Planning Commission and City Council.

The proposed amendment is consistent with the policy.

### **Chapter 3 - Housing**

*POLICY 3.1.2 ZONING FOR MULTI-FAMILY. Provide zoning for multi-family development, which may be located in areas adjacent to transit.*

**Response:** The site's use is multi-family housing, which is permitted in the current plan designation – RML. The proposed PMA would result in a RMH designation, which allows a higher density of multi-family development and would permit an additional 116 units on the 22-acre site. The site is located near several mass transit options. As shown in Figure 2, there are nine (9) bus stops located within a quarter mile from the site. Additionally, the Westside Express Service (WES) Tualatin station is located approximately a half mile from the site. The proposed amendment is consistent with the goal.

The proposed amendment is consistent with the policy.

*GOAL 3.2 HOUSING FOR ALL. Encourage development and preservation of housing that is affordable for all households in Tualatin.*

**Response:** Tualatin Heights Apartments is a multi-family housing complex that provides an alternative and typically a more affordable housing option to single-family detached housing for those who cannot afford a detached-single family home or prefer an alternative. The City's HNA prepared in 2019 detailed the demographic trends and groups that are more likely to live in multi-family housing.

The proposed PMA would allow development that would further enhance the choice of housing options in Tualatin as well as increase the availability of multi-family housing.

The proposed amendment is consistent with the goal.

*GOAL 3.5 HOUSING AND TRANSPORTATION. Encourage development and redevelopment in Tualatin that supports all modes of transportation, including walking, biking, and mass transit.*

**Response:** The proposed PMA will provide the opportunity to redevelop portions of the existing Tualatin Heights apartment complex and provide increased housing opportunities and density. Additional density typically supports transit service and alternative transportation options such as walking and biking. The site is located near several mass transit options. As shown in Figure 2, there are nine (9) bus stops located within a quarter mile from the site. Additionally, the Westside Express Service (WES) Tualatin station is located approximately a half mile from the site.

The proposed amendment is consistent with the goal.

## **Chapter 8 – Transportation**

*GOAL 8.1 ACCESS AND MOBILITY. Maintain and enhance the transportation system to reduce travel times, provide travel time reliability, provide a functional and smooth transportation system, and promote access for all users.*

**Response:** Exhibit D demonstrates compliance with the TPR with policies that regulate safe, efficient, and effective transportation systems. Note, the requested PMA does not approve development on the site. Future development would require additional land use approvals. At that time, a Traffic Impact Analysis would be required (if the threshold is met) which would trigger an analysis of site impacts on the surrounding transportation system.

The proposed amendment is consistent with the goal.

## **Goal 9 – Public Facilities and Services**

*Goal 9.1 Water Plan, construct, and maintain a City water system that protects the public health, provides cost-effective water service, meets the demands of users, addresses regulatory requirements and supports all land uses.*

**Response:** To achieve Goal 9.1, Policy 9.1.1 requires developers to aid in improving the water system by constructing facilities to serve new development and extend lines to adjacent properties.

The Tualatin Height Apartments are within the City of Tualatin Service Area B. The existing 222 multi-family units on the property are currently served by an existing, looped, 8-inch public main running through the site with two connections to a 12-inch public main in SW Sagert Street. The proposed PMA would provide the potential for an additional 116 multi-family units on the property. If the full 116 new units were constructed, the applicant's engineer has determined that the existing water infrastructure would be generally adequate to support future development and lines have already been constructed along the site frontage to adjacent properties. Detailed water modeling will be completed at the time of redevelopment to confirm the adequacy of the existing system.

The proposed amendment is consistent with Goal 9.1 and the corresponding policies of the Tualatin Comprehensive Plan.

*Goal 9.2 Plan, construct, and maintain a City sewer system that protects the public health, protects the water quality of creeks, ponds, wetlands and the Tualatin River, provides cost-effective sewer service, meets the demands of users, addresses regulatory requirements and supports all land uses.*

**Response:** To achieve Goal 9.2, Policy 9.2.4 requires developers to aid in improving the sewer system by constructing facilities to serve new development, as well as adjacent properties.

The 222 multi-family units at the Tualatin Heights Apartments are served by an existing, 8-inch public sewer main that runs in an easement along the north side of the site. The proposed PMA would provide the potential for an additional 116 multi-family units on the property. If the full 116 new units were constructed, the applicant's engineer has determined that the existing infrastructure would be generally adequate to support future development and adjacent parcels already have access to public sewer. Detailed sewer modeling will be completed at the time of redevelopment to confirm the adequacy of the existing system.

The proposed amendment is consistent with Goal 9.2 and the corresponding policies of the Tualatin Comprehensive Plan.

*Goal 9.3 Provide a plan for routing surface drainage through the City, utilizing the natural drainages where possible. Update the plan as needed with drainage studies of problem areas and to respond to changes in the drainage pattern caused by urban development.*

**Response:** To achieve Goal 9.3, Policy 9.3.7 requires the enforcement of drainage and stormwater management standards.

Stormwater runoff from the Tualatin Heights Apartments is currently collected and routed to an onsite stormwater management facility before discharging to an existing surface conveyance at the northeast corner of the site. The details and design parameters for the

existing facility are unknown. Redevelopment will trigger stormwater management improvements as required by Clean Water Services' Design and Construction Standards. A detailed storm report will be completed at the time of redevelopment to identify facilities that will address water quality, flow control and hydromodification requirements.

The proposed amendment is consistent with Goal 9.3 and the corresponding policies of the Tualatin Comprehensive Plan.

## Section 4: Compliance with the Tualatin Development Code

This section responds to the applicable policies and goals of the Tualatin Development Code.

### *Ch. 33.070 Plan Amendments*

*(2)Applicability. Quasi-judicial amendments may be initiated by the City Council, the City staff, or by a property owner or person authorized in writing by the property owner. Legislative amendments may only be initiated by the City Council.*

**Response:** The property owner is the applicant and has requested a Plan Map Amendment, a quasi-judicial amendment.

*(3)Procedure Type.(a)Map or text amendment applications which are quasi-judicial in nature (e.g., for a specific property or a limited number of properties) is subject to Type IV-A Review in accordance with TDC Chapter 32.(b)Map or text amendment applications which are legislative in nature are subject to Type IV-B Review in accordance with TDC Chapter 32.*

**Response:** The applicant understands the Plan Map amendment application is subject to a Type IV-A Review procedure.

*(4)Specific Submittal Requirements. An application for a plan map or text amendment must comply with the general submittal requirements in TDC 32.140 (Application Submittal).*

**Response:** This application package includes all applicable requirements for the application as described in TDC 32.140, they include, but are not limited to:

- Proof of Ownership (Exhibit F),
- Neighborhood Meeting Summary (Exhibit B),
- Application fees, and
- Application form.

*(5) Approval Criteria.*

*(a) Granting the amendment is in the public interest.*

**Response:** Amending the plan designation from RML to RMH will increase the permitted density on the site to allow for a maximum of 116 more units at the



Tualatin Heights Apartments site. The site currently contributes to diverse housing options in Tualatin, providing rental opportunities for apartments. The proposed PMA will enhance housing choices in the community and provide an affordable housing opportunity for existing and future residents. Housing is an important need in the Tualatin community, as supported by Tualatin Comprehensive Plan policies and goals (see Section 3 of this narrative). Providing additional housing opportunities and expanding housing choices within the City will support the public interest.

The requested Plan Map Amendment would increase the maximum permitted density on the site. With the increased density allowance, the applicant would like to redevelop portions of the complex internal to the site to create additional dwelling units. Findings of the Tualatin Housing Needs Analysis (HNA), completed in 2019, supports the need for additional multi-family housing in the City consistent with this proposed amendment request. The report demonstrates a need for multi-family dwelling units and medium- to high-density plan designations. As shown in Table 2 (taken from the City's HNA), Tualatin has a surplus of dwelling unit capacity in the RML designation, with surplus capacity for approximately 315 units and 27 gross acres of land to accommodate growth. Meanwhile there is a deficit of land for dwelling units in the RMH designation, a deficit of 109 dwelling units or 7 gross acres of land. In addition to the deficit, there is also a demand for 122 units in the RMH district (Source: See Table 2). The proposed amendment would provide potential capacity for an additional 116 dwelling units on the existing site and reduce the documented deficit within the RMH district.

The PMA will also provide the opportunity to further diverse housing options in Tualatin, through a more efficient use of an existing site that is already a committed multi-family development. Also, additional density typically supports transit service and alternative transportation options such as walking and biking. Public facilities to serve the additional dwelling units are already in-place and have sufficient capacity to accommodate the new units.

The criterion is met.

*(b) The public interest is best protected by granting the amendment at this time.*

**Response:** As demonstrated above, it is in the public interest to provide additional multi-family housing in Tualatin. In Chapter 4 of the HNA, trends affecting housing in Tualatin are discussed. Various trends remain pertinent and contribute to significant issues in the Tualatin and Oregon community: rent-burdened households and homelessness. According to the HNA, housing costs affect Oregon's low-wage workers the most, and low-wage employment is a growing share of the Oregon economy. Thus, the HNA states, "*Tualatin has a large share of multi-family housing (about 41% of the City's housing stock), but over half of renter households are cost burdened. Tualatin's key challenge over*

*the next 20 years is providing opportunities for development of relatively affordable housing of all types, such as lower-cost single-family housing, townhouses and duplexes, market-rate multi-family housing, and government-subsidized affordable housing.”*

The need for more housing has been and will continue to be an issue at the forefront of Oregon’s policy issues for years to come. The proposed PMA will provide the opportunity to redevelop portions of the existing Tualatin Heights apartment complex and provide increased housing opportunities and density. This proposed action will protect and enhance the public’s interest.

The criterion is met.

*(c) The proposed amendment is in conformity with the applicable goals and policies of the Tualatin Comprehensive Plan.*

**Response:** Conformance with applicable Tualatin Comprehensive Plan goals and policies are addressed in Section 3 of this narrative.

*(d) The following factors were consciously considered:*

*(i) The various characteristics of the areas in the City;*

**Response:** The neighborhood characteristics were considered in the proposal. The existing multi-family development site is located at the edge of a low- to medium-density residential neighborhood and abuts a light industrial zone to the north. The site’s current and proposed use and design are an ideal transition between the two zones.

With the increased density permitted on the site, the applicant intends to redevelop internal areas of the site to provide additional units. Changes internal to the site are expected to have minimal impacts on neighboring sites and will comply with applicable Tualatin Development Code standards, as determined through a future Architectural Review application following the PMA request.

At the Neighborhood/Developer Meeting neighbors expressed concerns about traffic and parking conditions in the site’s vicinity. In response, the applicant analyzed on-site and on-street parking abutting the site (see Parking Assessment, Exhibit C).

The criterion is met.

*(ii) The suitability of the areas for particular land uses and improvements in the areas;*

**Response:** The site is currently the location of the Tualatin Heights Apartments. There are 220 existing multi-family dwellings on the 22.4 acre site. The PMA would result in the redevelopment of a portion of the existing site with up to 116 additional multi-family dwelling units. The area is located near schools and employment opportunities. Tualatin Elementary school is within walking distance of the site, approximately ¼ mile away down SW 95<sup>th</sup> Ave . Tualatin High School is located just over a mile away.

There are a number of commercial and industrial businesses located along SW Tualatin-Sherwood Road, and SW Teton Ave, including the commercial hub located next to Interstate-5 located just over a mile from the site.

Multi-family development is often encouraged near transit. Within quarter-mile of the Tualatin Heights site there are nine (9) bus stops. Additionally, the Tualatin WES station is located approximately 0.8 miles walking distance from the site (see Figure 2).

The PMA will provide the opportunity to more efficiently use an existing site that is already committed to multi-family residential use. Public facilities to serve the additional dwelling units are already in-place and have sufficient capacity to accommodate the new units. The site and area are well-suited to support the proposed PMA.

The criterion is met.

*(iii) Trends in land improvement and development;*

**Response:** Recent land improvement and development trends have emphasized the need for a diversity in housing options. This finding is supported by the City's HNA prepared in 2019. The need to more efficiently use existing properties within the UGB is also a trend that is addressing housing costs and choice. The PMA will provide the opportunity to more efficiently use an existing site that is already committed to multi-family residential use. Public facilities to serve the additional dwelling units are already in-place and have sufficient capacity to accommodate the new units.

As noted in previous responses the proposed amendment is consistent with the trend of providing more multi-family housing to provide more housing choice and typically more affordable options to individuals and families.

The criterion is met.

*(iv) Property values;*

**Response:** The site is currently committed to multi-family development. Property values in the area already recognize the use as multi-family and

have accounted for any impact on value. The proposed PMA would continue this multi-family use on the site and would not alter property values.

The criterion is met.

*(v) The needs of economic enterprises and the future development of the area; needed right-of-way and access for and to particular sites in the area;*

**Response:** There is existing right-of-way and access to the site that does not obstruct or conflict with any surrounding sites. North of the site is a railroad right-of-way, which creates a buffering north and eliminates the potential for any access from the north of the property.

The criterion is met.

*(vi) Natural resources of the City and the protection and conservation of said resources;*

**Response:** There are no protected natural resources located on the site. The PMA would increase the permitted density on the site, allowing a more efficient use of land in the existing development. More efficient use of land located within the UGB and urban area of Tualatin could reduce pressure to expand the UGB.

The criterion is met.

*(vii) Prospective requirements for the development of natural resources in the City;*

**Response:** There are no protected natural resources located on the site.

The criterion is not applicable.

*(viii) The public need for healthful, safe, esthetic surroundings and conditions; and*

**Response:** The Tualatin Heights Apartments currently provides safe and healthy living conditions to its residents. The site includes amenities such as a pool and common rooms, and they will continue to exist and operate on the site.

The site provides buffering to the surrounding neighborhood via landscaping. Any future development will be reviewed for consistency with the TDC standards, including buffering and landscaping.

The Parking Assessment (Exhibit C) evaluated the current parking conditions at the Tualatin Heights Complex and on-street parking on the neighboring streets of SW Sager Street, SW 93<sup>rd</sup> Avenue, and SW Apache Drive. The



evaluation determined there are 457 spaces existing on the site: 417 surface parking spaces on the site and 40 covered spaces (either in carports or garages). With the existing 457 parking spaces there was a maximum utilization of 79%. The assessment accounted for buffers from fire hydrants and mailboxes. Concerns about access to mailboxes and waste collection were expressed by the neighbors during the Neighborhood/Developer Meeting.

The applicant and property owner/manager, UDR, has a well-organized system for delegating parking spaces to residents. They plan to maintain the structured, well-organized parking system and meet the parking requirements associated with additional units at the time of their construction, pursuant to TDC 73C.

As described above, the HNA demonstrates a clear need for additional multi-family housing in Tualatin. Approval of the requested PMA would permit development of additional multi-family units on the Tualatin Heights site, creating additional housing opportunities for the current and future Tualatin residents.

The criterion is met.

*(ix) Proof of change in a neighborhood or area, or a mistake in the Plan Text or Plan Map for the property under consideration are additional relevant factors to consider.*

**Response:** The proposed plan map amendment is not associated with a mistake in the Plan Text or Plan Map, nor is there a change in the neighborhood or area. The PMA will provide the opportunity to more efficiently use an existing site that is already committed to multi-family residential use.

The criterion is not applicable.

*(e) If the amendment involves residential uses, then the appropriate school district or districts must be able to reasonably accommodate additional residential capacity by means determined by any affected school district.*

**Response:** As demonstrated in Exhibit E, the additional dwelling units that would result from the proposed PMA can be reasonably accommodated by the Tigard/Tualatin School District schools that serve the Tualatin Heights apartments. The criterion is met.

*(f) Granting the amendment is consistent with the applicable State of Oregon Planning Goals and applicable Oregon Administrative Rules, including compliance with the Transportation Planning Rule TPR (OAR 660-012-0060).*

**Response:** The applicant conducted a traffic assessment to determine future transportation conditions under the current zoning and under the proposed zoning. The following is the summary of the findings of that assessment. The full traffic assessment is presented in Exhibit D.

#### *Existing Transportation Conditions*

- Traffic counts were collected in June 2021 at all of the study intersections during the critical weekday AM and PM peak travel periods. Historical 2019 counts were supplemented at several key intersections in order to account for travel demand reductions associated with on-going COVID-related factors.
- Operational analyses indicate that all of the study intersections currently operate acceptably based on the applicable City of Tualatin and Washington county standards.

#### *Future Year 2040 Traffic Conditions*

- The proposed land use action is a unique case that would involve upzoning the Tualatin Heights apartment complex property. The complex is approximately 22 acres in size and contains 220-unit multifamily apartment units. The underlying zoning is Residential Medium Low (RML) which currently allows for a maximum density of 10 dwelling units per acre. Accordingly, the Tualatin Heights apartment complex is essentially maximizing the allowed development potential under the existing zoning. In order to support a vision for additional housing units on the site, the property owner is proposing to modify the zoning to Residential Medium-High Density (RMH) which would increase the density to a maximum of 15 dwelling units per acre.
- Background traffic volumes for the 2040 planning horizon year were estimated using a combination of regional travel demand model output and historical growth trends. Since the existing site is built out to its maximum allowed density, the resulting 2040 background traffic volumes represent the future traffic conditions that can be expected under the existing RML zoning.
- Operations of the study intersections under 2040 Background conditions (assuming regional and local traffic growth but no land use action on the Tualatin Heights site) found that all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the exception of the SW Boones Ferry Road/SW Sagert Street intersection. During the weekday AM Peak hour, this intersection is forecast to operate over capacity (v/c of 1.09) and at Level of Service F conditions.
- With the proposed RMH zoning, it was determined that the increased density allowance can potentially result in 116 additional

multifamily housing units. Using ITE land use code 221, this increased density has the potential to generate approximately 630 net new daily trips, 42 net new AM peak hour trips, and 51 net new PM peak hour trips.

- Operations of the study intersections under the 2040 proposed RMH zoning scenario found that all of the study intersections are forecast to operate acceptably during both the weekday AM and PM peak hours with the continued exception of the SW Boones Ferry Road/SW Sagert Street intersection. During the weekday AM Peak hour, this intersection is forecast to also operate over capacity (v/c of 1.10) and at Level of Service F conditions. While a very small degradation in operations compared to existing zoning, this technically represents an impact to the operations of the intersection. To address TPR requirements, the identification of a long-term mitigation plan would be needed to restore capacity to the intersection and show it can meet operating standards.
  - Although not formally included in the City of Tualatin's latest Transportation System Plan project list, the future year analysis behind the study did identify the potential for a northbound right-turn lane at the intersection. Such an improvement would restore capacity to the intersection and result in acceptable operations under both the 2040 no land use action and with the 2040 proposed RMH rezone.

As demonstrated in Exhibit D, the proposed amendment is consistent with the TPR. The criterion is met.

*(g) Granting the amendment is consistent with the Metropolitan Service District's Urban Growth Management Functional Plan.*

**Response:** The following Functional Plan sections are applicable to the proposed amendment.

***Title 1 – Housing Capacity*** requires a city or county maintain or increase its housing capacity.

The findings of the 2019 HNA demonstrate a need for housing, particularly multi-family housing in Tualatin. It also demonstrates a deficit and demand for medium-to high-density residential plan designations, which includes the proposed plan designation. The proposed amendment will facilitate development of additional multi-family units.

The requested Plan Map Amendment would increase the maximum permitted density on the site. With the increased density allowance, the applicant would like to redevelop portions of the complex internal to the site to create additional dwelling units. Findings of the Tualatin Housing Needs

Analysis (HNA), completed in 2019, supports the need for additional multi-family housing in the City consistent with this proposed amendment request. The report demonstrates a need for multi-family dwelling units and medium-to high-density plan designations. As shown in Table 2 (taken from the City's HNA), Tualatin has a surplus of dwelling unit capacity in the RML designation, with surplus capacity for approximately 315 units and 27 gross acres of land to accommodate growth. Meanwhile there is a deficit of land for dwelling units in the RMH designation, a deficit of 109 dwelling units or 7 gross acres of land. In addition to the deficit, there is also a demand for 122 units in the RMH district (Source: See Table 2). The proposed amendment would provide potential capacity for an additional 116 dwelling units on the existing site and reduce the documented deficit of the RMH district.

The PMA will also provide the opportunity to more efficiently use an existing site that is already committed to multi-family residential use. Public facilities to serve the additional dwelling units are already in-place and have sufficient capacity to accommodate the new units.

The standard is met.

***Title 7 – Housing Choice*** implements policies regarding establishment of voluntary affordable housing production goals to be adopted by local governments.

***3.07.730 Requirements for Comprehensive Plan and Implementing Ordinance*** Changes Cities and counties within the Metro region shall ensure that their comprehensive plans and implementing ordinances:

*(a) Include strategies to ensure a diverse range of housing types within their jurisdictional boundaries.*

*(b) Include in their plans actions and implementation measures designed to maintain the existing supply of affordable housing as well as increase the opportunities for new dispersed affordable housing within their boundaries.*

*(c) Include plan policies, actions, and implementation measures aimed at increasing opportunities for households of all income levels to live within their individual jurisdictions in affordable housing.*

The proposed amendment will allow an increase of diversity of housing in Tualatin by allowing development of additional multi-family units. Although, Tualatin Heights Apartments are not government regulated affordable housing, multi-family development is typically a more affordable housing option when compared to detached single family home.

Recent land improvement and development trends have emphasized the need for a diversity in housing options and choice. This finding is supported by the City's HNA prepared in 2019. The need to more efficiently use existing



properties within the UGB is also a trend that is addressing housing costs and choice. The PMA will provide the opportunity to more efficiently use an existing site that is already committed to multi-family residential use. Public facilities to serve the additional dwelling units are already in-place and have sufficient capacity to accommodate the new units.

As noted in previous responses the proposed amendment is consistent with the trend of providing more multi-family housing to provide more housing choice and typically more affordable options to individuals and families.

The standard is met.

***Title 12 – Protection of Residential Neighborhoods protects existing residential neighborhoods from pollution, noise, crime, and provides adequate levels of public services.***

***3.07.1220 Residential Density Metro shall not require any city or county to authorize an increase in the residential density of a single-family neighborhood in an area mapped solely as Neighborhood.***

The proposed development is located adjacent to low- to medium-density neighborhoods. It is also abutting the Light Industrial zone. The site provides a transition compatible with all surrounding uses.

The City is not required to authorize an increase of density through the requested PMA. However, this application demonstrates that the proposed amendment is a public interest to provide multi-family housing in the community where a deficit and need has been identified.

The standard is met.

*(i) Granting the amendment is consistent with the objectives and policies regarding potable water, sanitary sewer, and surface water management pursuant to applicable goals and policies in the Tualatin Comprehensive Plan, water management issues are adequately addressed during development or redevelopment anticipated to follow the granting of a plan amendment.*

**Response:**

**WATER**

Goal 9.1 of the Tualatin Comprehensive Plan is to “Plan, construct and maintain a City water system that protects the public health, provides cost-effective water service, meets the demands of users, addresses regulatory requirements and supports all land uses.”

To achieve Goal 9.1, Policy 9.1.1 requires developers to aid in improving the water system by constructing facilities to serve new development and extend lines to adjacent properties.

The Tualatin Height Apartments are within the City of Tualatin Service Area B. The existing 222 multi-family units on the property are currently served by an existing, looped, 8-inch public main running through the site with two connections to a 12-inch public main in SW Sagert Street. The proposed PMA would provide the potential for an additional 116 multi-family units on the property. If the full 116 new units were constructed, the applicant's engineer has determined that the existing water infrastructure would be generally adequate to support future development and lines have already been constructed along the site frontage to adjacent properties. Detailed water modeling will be completed at the time of redevelopment to confirm the adequacy of the existing system.

The proposed amendment is consistent with Goal 9.1 and the corresponding polices of the Tualatin Comprehensive Plan.

#### SANITARY SEWER

Goal 9.2 of the Tualatin Comprehensive Plan is to *“Plan, construct and maintain a City sewer system that protects the public health, protects the water quality of creeks, ponds, wetlands and the Tualatin River, provides cost-effective sewer service, meets the demands of uses, addresses regulatory requirements and supports all land uses.”* To achieve Goal 9.2, Policy 9.2.4 requires developers to aid in improving the sewer system by constructing facilities to serve new development, as well as adjacent properties.

The 222 multi-family units at the Tualatin Heights Apartments are served by an existing, 8-inch public sewer main that runs in an easement along the north side of the site. The proposed PMA would provide the potential for an additional 116 multi-family units on the property. If the full 116 new units were constructed, the applicant's engineer has determined that the existing infrastructure would be generally adequate to support future development and adjacent parcels already have access to public sewer. Detailed sewer modeling will be completed at the time of redevelopment to confirm the adequacy of the existing system.

The proposed amendment is consistent with Goal 9.2 and the corresponding policies of the Tualatin Comprehensive Plan.

### STORM DRAINAGE

Goal 9.3 of the Tualatin Comprehensive Plan is to “Provide a plan for routing surface drainage through the City, utilizing the natural drainages where possible. Update the plan as needed with drainage studies of problem area and to respond to changes in the drainage pattern caused by urban development.” To achieve Goal 9.3, Policy 9.3.7 requires the enforcement of drainage and stormwater management standards.

Stormwater runoff from the Tualatin Heights Apartments is currently collected and routed to an onsite stormwater management facility before discharging to an existing surface conveyance at the northeast corner of the site. The details and design parameters for the existing facility are unknown. Redevelopment will trigger stormwater management improvements as required by Clean Water Services’ Design and Construction Standards. A detailed storm report will be completed at the time of redevelopment to identify facilities that will address water quality, flow control and hydromodification requirements.

The proposed amendment is consistent with Goal 9.3 and the corresponding policies of the Tualatin Comprehensive Plan.

The criterion is met.

*(j) The applicant has entered into a development agreement. This criterion applies only to an amendment specific to property within the Urban Planning Area (UPA), also known as the Planning Area Boundary (PAB), as defined in both the Urban Growth Management Agreement (UGMA) with Clackamas County and the Urban Planning Area Agreement (UPAA) with Washington County.*

**Response:** The subject property is not located in the UPA.

The criterion is not applicable.

## Section 5: Conclusion

In summary, the proposal complies with the applicable approval criteria. The applicant requests that the City approve the Plan Map Amendment to amend the subject site’s Plan Map designation to Medium High Density Residential (RMH).

**CERTIFICATION OF SIGN POSTING**



The applicant must provide and post a sign pursuant to Tualatin Development Code ([TDC 32.150](#)). The block around the word "NOTICE" must remain **blue** composed of the **RGB color values Red 0, Green 112, and Blue 192**. A template of this sign design is available at:

<https://www.tualatinoregon.gov/planning/land-use-application-sign-templates>

**NOTE:** For larger projects, the Community Development Department may require the posting of additional signs in conspicuous locations.

---

As the applicant for the Tualatin Heights Plan Map Amendment project, I hereby certify that on this day, 2 sign(s) was/were posted on the subject property in accordance with the requirements of the Tualatin Development Code and the Community Development Division.

Applicant's Name: Emma Porricolo *(Please Print)*

Applicant's Signature: 

Date: 09/30/21





---

MEMORANDUM

## Tualatin Heights Plan Map Amendment School Findings

DATE June 23, 2021  
TO Traci Rose, Community Relations Division, Tigard-Tualatin School District  
FROM Frank Angelo and Emma Porricolo, APG  
CC Andrew Lavaux, UDR Inc.  
Jon McGrew, Hennebery Edy Architects

---

### Project Description

Tualatin Heights is a multifamily apartment development located at 9301 SW Sagert Street, Tualatin, Oregon, 97062. The existing development includes 220 multifamily dwellings on 22.4 acres. The property is currently zoned Residential Medium Low (RML), with a maximum density of 10 dwelling units per acre. The property owner, UDR Inc., would like to apply for a Plan Map Amendment to allow for Residential Medium-High Density (RMH) on the site, increasing the density to 15 dwelling units per acre for a maximum of 336 units. The attached site plan diagrams describe the proposed concept for developing two new multifamily buildings and relocating existing outdoor amenity space to accommodate their construction.

### Plan Map Amendment – School Criteria

The City of Tualatin’s review criteria for a Plan Map Amendment includes providing findings for the following (Tualatin Code Section 33.070. 5.E):

*(e) If the amendment involves residential uses, then the appropriate school district or districts must be able to reasonably accommodate additional residential capacity by means determined by any affected school district.*

The applicant has prepared the attached draft findings related to school capacity with the proposed Plan Map Amendment. These findings demonstrate no real impact on school capacity at the three schools students from the Tualatin Heights complex attend.

We would request that the Tigard-Tualatin School District staff review the attached findings and provide a response on the conclusions reached. The school findings and the District’s response will be included in the Plan Map Amendment application submitted to the City of Tualatin for review and approval.

If you have any questions, please contact Frank Angelo at [fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com) or at 503-577-5087. Thank you for your assistance in this matter.

**Response:** Tualatin Heights is a multifamily apartment development located at 9301 SW Sagert Street, Tualatin, Oregon, 97062. The existing development includes 220 multifamily dwellings on 22.4 acres. The property is currently zoned Residential Medium Low (RML), with a maximum density of 10 dwelling units per acre. The property owner, UDR Inc., will be submitting an application for a Plan Map Amendment to allow for Residential Medium-High Density (RMH) on the site, increasing the density to 15 dwelling units per acre for a maximum of 336 units. If approved, and additional 116 multifamily units could be developed on the site.

The City of Tualatin's review criteria for a Plan Map Amendment includes providing findings for the following (Tualatin Code Section 33.070. 5.E):

*(e) If the amendment involves residential uses, then the appropriate school district or districts must be able to reasonably accommodate additional residential capacity by means determined by any affected school district.*

Given the request involves residential uses the application needs to address this review factor.

#### Student Forecast

Tualatin Heights is served by the following Tigard-Tualatin School District schools:

- Tualatin Elementary School
- Hazelbrook Middle School
- Tualatin High School

In order to forecast any potential impact on school capacity, we have assumed the following formula for the number of students generated by the 116 additional market rate units at Tualatin Heights:

- ES: 0.11 students / unit
- MS: 0.05 students / unit
- HS: 0.06 students / unit

This formula is the student generation formula used by the Beaverton School District when forecasting new students from a proposed development. The applicant searched the Tigard-Tualatin School District website for a similar formula but was unable to find one. Therefore, the applicant has used the best information available for this assessment.

Based on the above formula, the Plan Map Amendment from Residential Medium Low (RML) to Residential Medium-High Density (RMH) will generate the following number of new students at the three levels:

- Elementary School:  $116 \text{ units} \times 0.11/\text{unit} = 13 \text{ ES students}$
- Middle School:  $116 \times 0.05/\text{unit} = 6 \text{ MS students}$

- High School:  $116 \times 0.06/\text{unit} = 7$  HS students

### School Capacity

A review of the Tigard-Tualatin School District Enrollment Forecasts (2019/20 to 2028/29) prepared by the Portland State University Population Research Center for the District in January 2019 indicates that there is sufficient capacity at the three schools is question to accommodate the increase in student enrollment generated by the Tualatin Heights Plan Map Amendment. Attachment 1 shows the Forecasts for Individual Schools (in the TTSD), 2019-20 to 2028-29. This table notes that enrollment at both Tualatin Elementary School and Hazelbrook Middle School is forecasted to decrease over the 10-year period. The table also shows that Tualatin High School is expected to grow by a modest amount over the same period.

### Tualatin Elementary School

Tualatin Heights Plan Map Amendment will generate 13 additional elementary school children at Tualatin Elementary School. Attachment 2 shows the enrollment forecast at Tualatin Elementary School compared to the student capacity of the school. As can be seen, between 2018/19 and 2028/29 student enrollment at Tualatin ES is expected to decline from 488 students to 467 students. The capacity of the Tualatin ES is shown as 624 students. Therefore, the addition of 13 new elementary school students resulting from the Tualatin Heights Plan Map Amendment will have no impact on the school capacity and the addition these 13 students would still leave Tualatin ES enrollment less than in 2018/19 (480 students).

### Hazelbrook Middle School

Tualatin Heights Plan Map Amendment will generate 6 additional middle school children at Hazelbrook Middle School. Attachment 3 shows the enrollment forecast at Hazelbrook Middle School compared to the student capacity of the school. As can be seen, between 2018/19 and 2028/29 student enrollment at Hazelbrook MS is expected to decline from 995 students to 955 students. The capacity of the Hazelbrook MS is shown as 1,000 students. Therefore, the addition of 6 new middle school students resulting from the Tualatin Heights Plan Map Amendment will have no impact on the school capacity and the addition these 6 students would still leave Hazelbrook MS enrollment less than in 2018/19 (961 students).

### Tualatin High School

Tualatin Heights Plan Map Amendment will generate 7 additional high school children at Tualatin High School. Attachment 4 shows the enrollment forecast at Tualatin High School. The school's student capacity is not shown on this table but can be determined from the description of the Tualatin HS School Bond project that was completed in 2019:

*Tualatin High's main building was built for 1,700 students. Nearly 2,000 students are currently enrolled. It is undersized both for the number of students it serves now and in comparison to 2,000-student high schools being built today. More classrooms, restrooms, an expanded Commons (lunchroom), locker rooms and P.E. spaces are needed for existing and projected enrollments.*

The School Bond passed by Tualatin SD voters in 2016 provided additional classrooms at Tualatin HS to bring the school's capacity to 2,000 students. As can be seen on Attachment 4, between 2018/19 and 2028/29 student enrollment at Tualatin HS is expected to increase from 1,947 students to 2,017 students. The capacity of the Tualatin HS is considered to be 2,000 students. Therefore, the addition of 6 new high school students resulting from the Tualatin Heights Plan Map Amendment will have no impact on the school capacity.

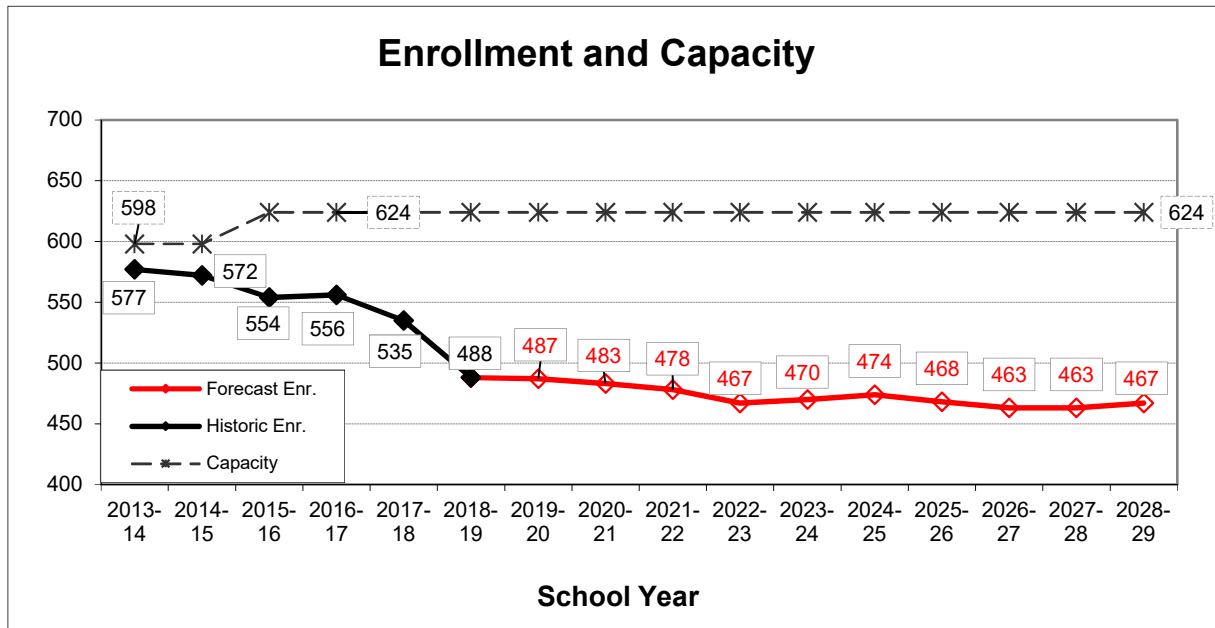


**Table 13**  
**Enrollment Forecasts for Individual Schools, 2019-20 to 2028-29**

School	Actual	Forecast										Change
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2018-19-2028-29
Alberta Rider	558	559	591	601	623	642	657	677	693	703	711	153
Bridgeport	549	563	560	571	562	553	547	546	541	540	542	-7
Byrom	557	553	546	545	543	545	541	538	538	539	543	-14
C.F. Tigard*	478	493	495	493	502	501	495	488	488	489	496	18
Deer Creek	605	590	600	628	619	616	632	630	630	635	647	42
Durham	560	542	570	601	602	593	589	589	588	587	591	31
Mary Woodward	569	599	622	635	662	660	670	669	666	661	665	96
Metzger*	618	604	588	583	577	580	582	587	591	598	607	-11
Templeton	556	550	558	557	546	542	556	554	550	549	557	1
Tualatin	488	487	483	478	467	470	474	468	463	463	467	-21
<b>Elementary Totals</b>	<b>5,538</b>	<b>5,540</b>	<b>5,613</b>	<b>5,692</b>	<b>5,703</b>	<b>5,702</b>	<b>5,743</b>	<b>5,746</b>	<b>5,748</b>	<b>5,764</b>	<b>5,826</b>	<b>288</b>
Fowler M.S.	835	871	886	883	871	876	872	914	923	933	920	85
Hazelbrook M.S.	995	980	980	976	991	968	981	968	973	968	955	-40
Twality M.S.	1,034	1,093	1,066	1,052	1,021	1,076	1,090	1,101	1,109	1,145	1,142	108
<b>Middle School Totals</b>	<b>2,864</b>	<b>2,944</b>	<b>2,932</b>	<b>2,911</b>	<b>2,883</b>	<b>2,920</b>	<b>2,943</b>	<b>2,983</b>	<b>3,005</b>	<b>3,046</b>	<b>3,017</b>	<b>153</b>
Tigard H.S.	1,832	1,781	1,763	1,806	1,860	1,884	1,915	1,879	1,884	1,908	1,941	109
Tualatin H.S.	1,947	1,966	2,026	2,031	2,071	2,075	2,022	2,051	2,040	2,038	2,071	124
Durham Center	52	52	52	52	52	52	52	52	52	52	52	0
Tig.-Tual. Online	93	93	93	93	93	93	93	93	93	93	93	0
<b>High School Totals</b>	<b>3,924</b>	<b>3,892</b>	<b>3,934</b>	<b>3,982</b>	<b>4,076</b>	<b>4,104</b>	<b>4,082</b>	<b>4,075</b>	<b>4,069</b>	<b>4,091</b>	<b>4,157</b>	<b>233</b>
<b>District Totals</b>	<b>12,326</b>	<b>12,376</b>	<b>12,479</b>	<b>12,585</b>	<b>12,662</b>	<b>12,726</b>	<b>12,768</b>	<b>12,804</b>	<b>12,822</b>	<b>12,901</b>	<b>13,000</b>	<b>674</b>

\*Note: Forecasts include the impact of a boundary change. New students residing in a portion of the former Metzger area were assigned to C.F. Tigard beginning in 2016-17. Population Research Center, Portland State University, December 2018.

## Tualatin Elementary School



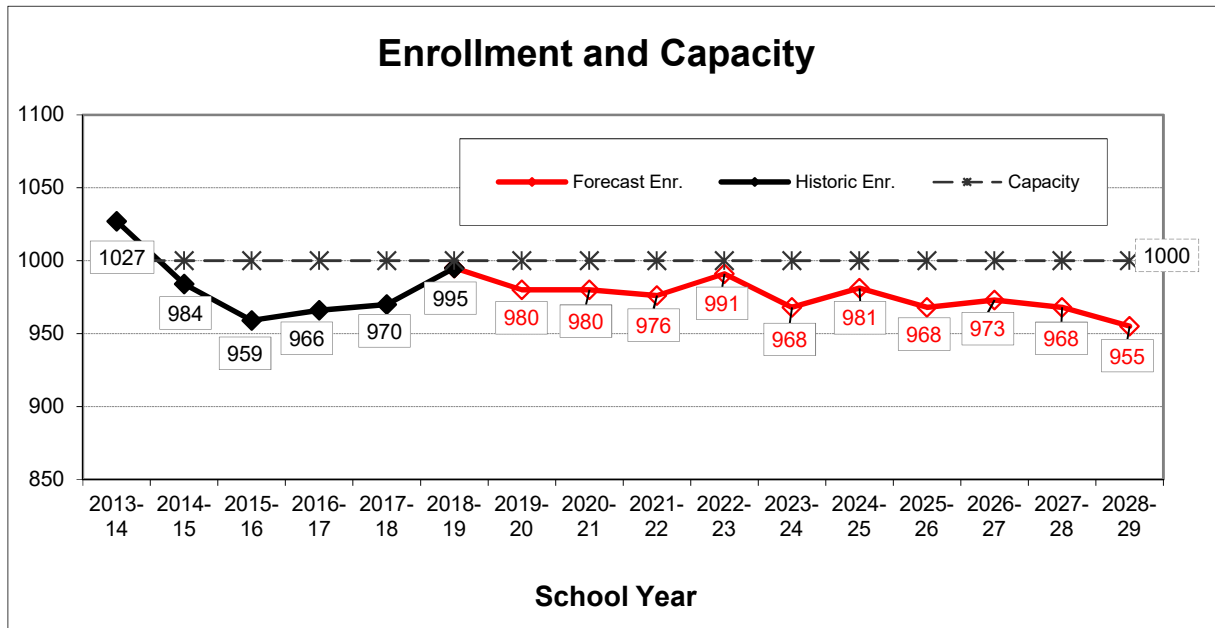
Note: Capacity prior to 2015-16 at all elementary schools includes some half day kindergarten classes. Beginning in 2015-16 all kindergarten classes are full day, thereby reducing capacity in some cases.

Enrollment History and Forecast				
	History		Forecast	
	2013-14	2018-19	2023-24	2028-29
Total enrollment	577	488	470	467
5 year Change		-89	-18	-3

New Housing Units Authorized by Building Permits					
	Permit Year				
	2014	2015	2016	2017	2018 (Jan-Sep)
Single Family Units	7	6	39	20	1
Multiple Family Units	0	14	0	0	0

Source: Permit reports from Construction Monitor, Inc., processed and geocoded by PSU-PRC.

## Hazelbrook Middle School

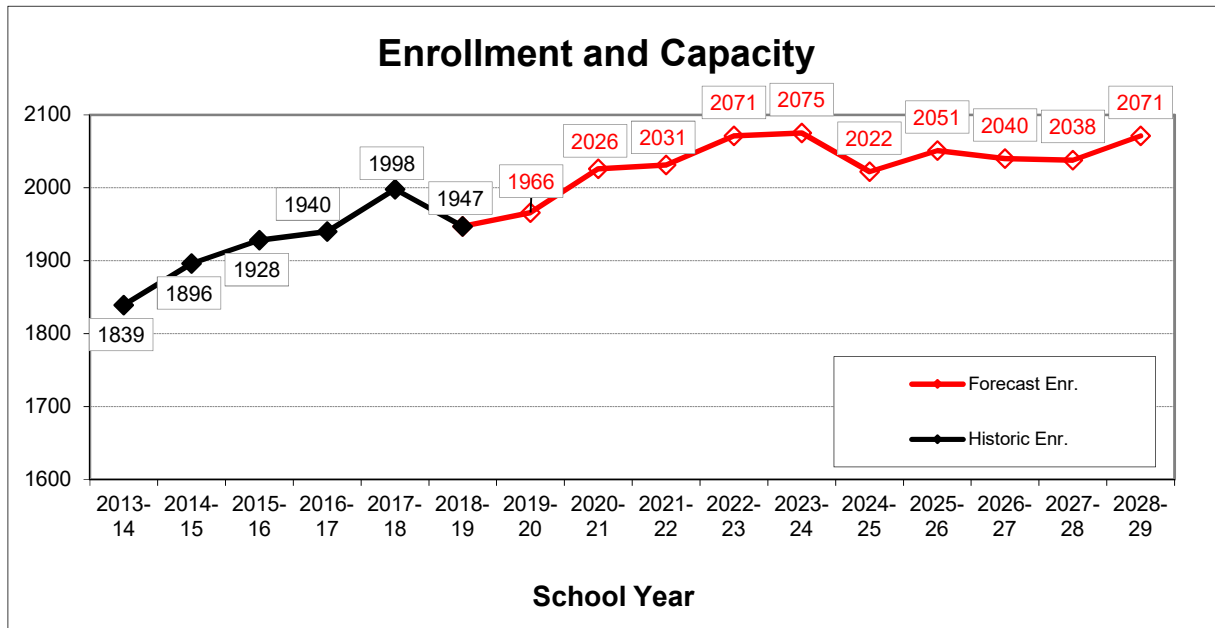


Enrollment History and Forecast				
	History		Forecast	
	2013-14	2018-19	2023-24	2028-29
Total enrollment	1027	995	968	955
5 year Change		-32	-27	-13

New Housing Units Authorized by Building Permits					
	Permit Year				
	2014	2015	2016	2017	2018 (Jan-Sep)
Single Family Units	15	18	45	23	66
Multiple Family Units	0	14	0	0	0

Source: Permit reports from Construction Monitor, Inc., processed and geocoded by PSU-PRC.

**Tualatin High School**



**DRAFT PENDING UPDATE OF FUTURE CAPACITY**

Enrollment History and Forecast				
	History		Forecast	
	2013-14	2018-19	2023-24	2028-29
Total enrollment	1839	1947	2075	2071
5 year Change		108	128	-4

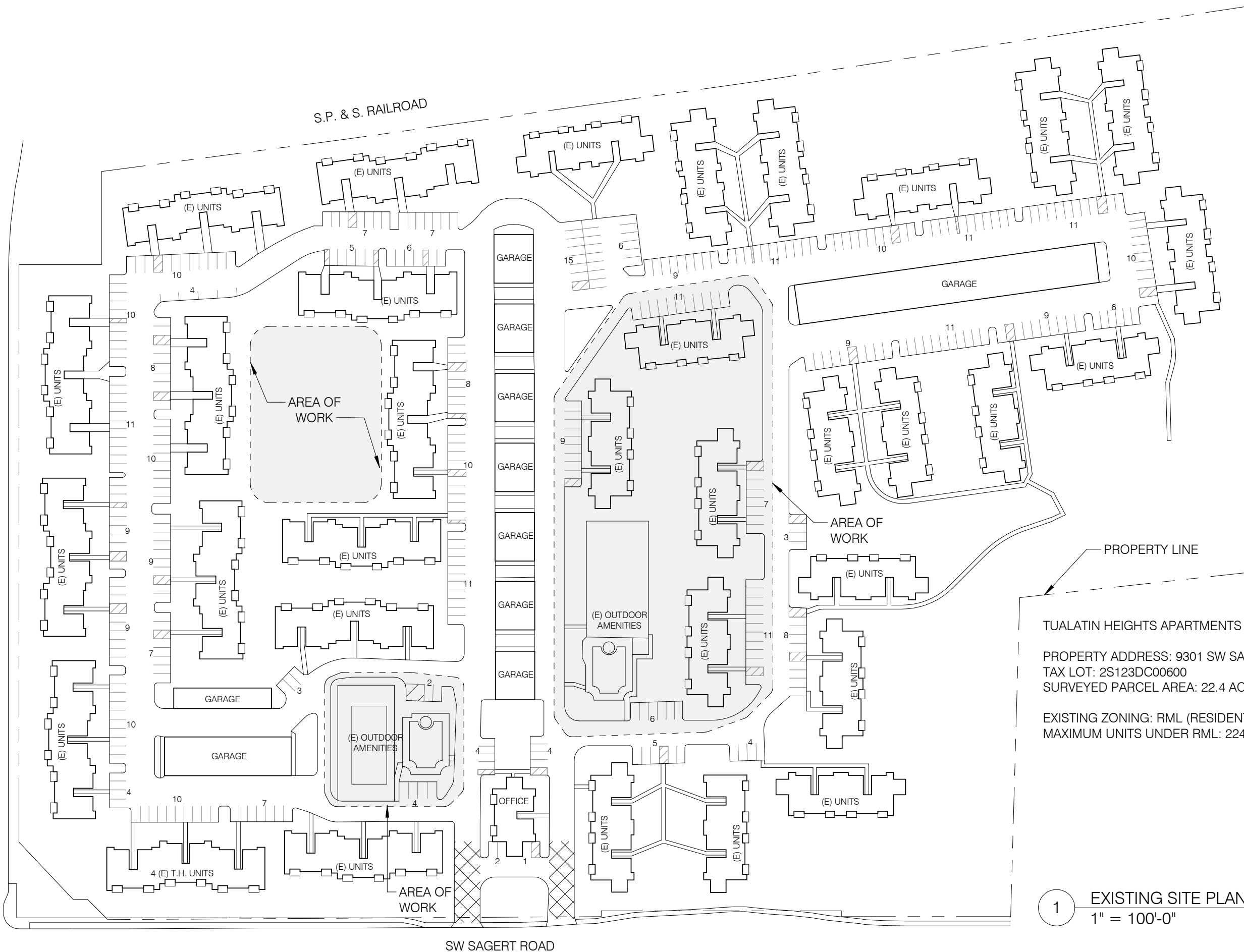
New Housing Units Authorized by Building Permits					
	Permit Year				
	2014	2015	2016	2017	2018 (Jan-Sep)
Single Family Units	42	97	228	82	96
Multiple Family Units	0	206	0	20	0

Source: Permit reports from Construction Monitor, Inc., processed and geocoded by PSU-PRC.



SW 95TH AVE

S.P. & S. RAILROAD



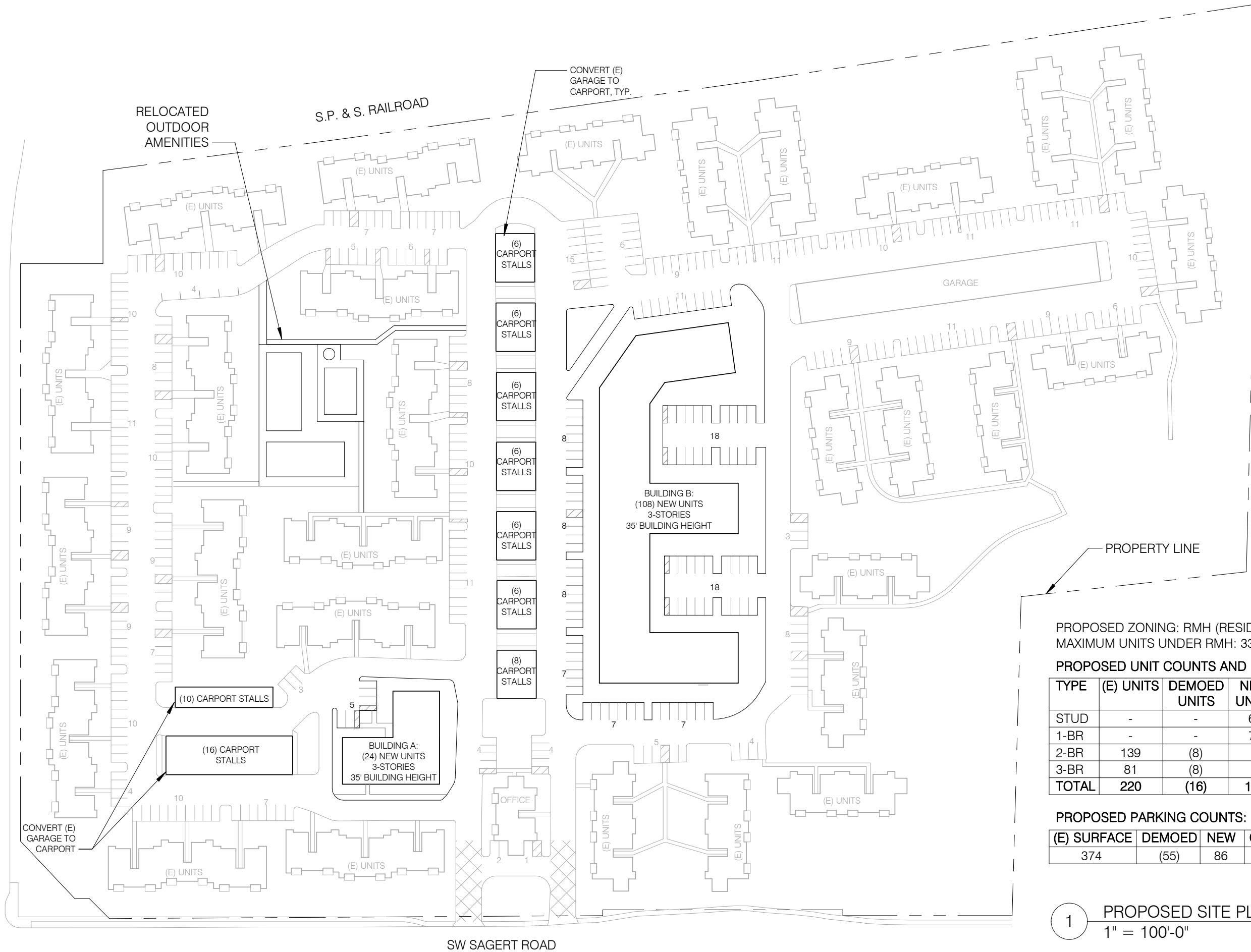
TUALATIN HEIGHTS APARTMENTS  
 PROPERTY ADDRESS: 9301 SW SAGERT ST, TUALATIN, OR 97062  
 TAX LOT: 2S123DC00600  
 SURVEYED PARCEL AREA: 22.4 ACRES  
 EXISTING ZONING: RML (RESIDENTIAL MEDIUM LOW)  
 MAXIMUM UNITS UNDER RML: 224

1 EXISTING SITE PLAN  
 1" = 100'-0"



SW SAGERT ROAD

SW 95TH AVE



PROPOSED UNIT COUNTS AND REQUIRED PARKING:

TYPE	(E) UNITS	DEMOED UNITS	NEW UNITS	TOTAL UNITS	REQ. PARKING	REQ. GARAGE
STUD	-	-	60	60	60	0
1-BR	-	-	72	72	90	0
2-BR	139	(8)	-	131	196.5	0
3-BR	81	(8)	-	73	127.75	0
<b>TOTAL</b>	<b>220</b>	<b>(16)</b>	<b>132</b>	<b>336</b>	<b>475</b>	<b>0</b>

PROPOSED PARKING COUNTS:

(E) SURFACE	DEMOED	NEW	CONVERTED CARPORTS	TOTAL
374	(55)	86	70	475

1 PROPOSED SITE PLAN  
 1" = 100'-0"



FORMERLY AMERICAN LAND TITLE ASSOCIATION  
OWNER'S POLICY FORM B-1970  
(Rev. 10-17-70 and 10-17-84)

**DUPLICATE**

CHICAGO TITLE INSURANCE COMPANY

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS CONTAINED IN SCHEDULE B AND THE PROVISIONS OF THE CONDITIONS AND STIPULATIONS HEREOF, CHICAGO TITLE INSURANCE COMPANY, a Missouri corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the amount of insurance stated in Schedule A, and costs, attorneys' fees and expenses which the Company may become obligated to pay hereunder, sustained or incurred by the insured by reason of:

- 1 Title to the estate or interest described in Schedule A being vested otherwise than as stated therein;
- 2 Any defect in or lien or encumbrance on such title;
- 3 Lack of a right of access to and from the land; or
- 4 Unmarketability of such title

*In Witness Whereof*, CHICAGO TITLE INSURANCE COMPANY has caused this policy to be signed and sealed as of the date of policy shown in Schedule A, the policy to become valid when countersigned by an authorized signatory.

CHICAGO TITLE INSURANCE COMPANY

By:

*Richard L. Polla*  
President

By:

*Thomas J. Adams*  
Secretary



**IMPORTANT**

This policy necessarily relates solely to the title as of the date of the policy. In order that a purchaser of the real estate described herein may be insured against defects, liens or encumbrances, this policy should be reissued in the name of such purchaser.

SCHEDULE A

ALTA

-----  
Order Number : 96-0045-28  
Re : TUALATIN HEIGHTS  
-----  
Date of Policy : MARCH 28, 1996 at 8:00 A.M.  
-----  
Amount of Insurance : \$11,138,000.00  
-----

1. Name of insured:

AMERICAN APARTMENT COMMUNITIES II, L.P. A DELAWARE LIMITED PARTNERSHIP

2. The estate or interest in the land which is covered by this policy is

FEE SIMPLE

3. Title to the estate or interest in the land is vested in:

THE NAMED INSURED

4. The land referred to in this policy is described as follows:

A TRACT OF LAND IN SECTION 23, TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF TUALATIN, IN WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THAT TRACT OF LAND CONVEYED TO CLIFFORD G. KING, ET UX, BY DEED RECORDED AUGUST 13, 1964, IN BOOK 519, PAGE 362, WASHINGTON COUNTY DEED RECORDS, SAID POINT BEING 1624.78 FEET (1,624.5 FEET BY DEED) SOUTH 89°29'45" WEST ALONG THE SOUTH LINE OF SAID SECTION 23 FROM THE SOUTHEAST CORNER THEREOF; THENCE NORTH 01°11'00" EAST, A DISTANCE OF 30.00 FEET TO THE NORTH LINE OF S.W. SAGERT ROAD AND THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT; THENCE NORTH 01°11'00" EAST, A DISTANCE OF 326.84 FEET TO AN IRON ROD AT THE SOUTHWEST CORNER OF THAT TRACT CONVEYED TO THE ROBERT RANDALL COMPANY BY DEED RECORDED AS RECORDER'S FEE NO. 81006269, WASHINGTON COUNTY DEED RECORDS; THENCE ALONG THE SOUTHERLY LINE OF SAID ROBERT RANDALL COMPANY TRACT NORTH 82°44'44" EAST, A DISTANCE OF 231.06 FEET TO AN IRON ROD; THENCE NORTH 01°09'42" EAST, A DISTANCE OF 584.40 FEET TO AN IRON ROD SET ON THE SOUTH RIGHT OF WAY LINE OF THE S.P. & S. RAILROAD (BURLINGTON NORTHERN); THENCE SOUTH 81°30'52" WEST, A DISTANCE OF 1,194.87 FEET ALONG THE SOUTH LINE TO AN IRON ROD; THENCE SOUTH 00°07'32" WEST, A DISTANCE OF 100.00 FEET TO AN IRON ROD; THENCE NORTH 89°52'28" WEST, A DISTANCE OF 85.01 FEET TO AN IRON ROD; THENCE SOUTH 00°14'57" EAST, A DISTANCE OF 595.31 FEET TO AN IRON ROD; THENCE SOUTH 44°17'29" EAST, A DISTANCE OF 78.34 FEET; THENCE NORTH 89°29'45", A DISTANCE OF 15.66 FEET; THENCE SOUTH 44°17'29" EAST, A DISTANCE OF 29.37 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF SW SAGERT ROAD; THENCE NORTH 89°29'45" EAST, A DISTANCE OF 505.98 FEET; THENCE NORTH 00°30'15" WEST, A DISTANCE OF 6.00 FEET; THENCE NORTH 89°29'45" EAST, A DISTANCE OF 246.00 FEET; THENCE SOUTH 00°30'15" EAST, A DISTANCE OF 6.00 FEET TO A POINT ON THE NORTH LINE OF SW SAGERT ROAD; THENCE NORTH 89°29'45" EAST, A DISTANCE OF 173.80 FEET TO THE PLACE OF BEGINNING.



**SCHEDULE B**

---

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

**SPECIAL EXCEPTIONS:**

1. TAXES FOR THE FISCAL YEAR 1995-1996, HAVE BEEN PAID IN FULL  
AMOUNT : \$167,515.07  
LEVY CODE : 023-76  
ACCOUNT NO. : R1185835  
MAP NO. : 2S123DC  
TAX LOT NO. : 00600
  
2. THE PREMISES HEREIN DESCRIBED ARE WITHIN AND SUBJECT TO THE STATUTORY POWER, INCLUDING THE POWER OF ASSESSMENT OF THE UNIFIED SEWERAGE AGENCY OF WASHINGTON COUNTY. (THERE ARE NO UNPAID ASSESSMENTS AS OF THE DATE OF SAID REPORT)
  
3. STREET IMPROVEMENT AGREEMENT, INCLUDING THE TERMS AND PROVISIONS THEREOF:  
DATED : JULY 14, 1988  
RECORDED : FEBRUARY 7, 1989  
RECORDING NO. : 89-05583  
(NOTE: THERE ARE NO OBLIGATIONS OUTSTANDING WITH RESPECT TO SAID AGREEMENT AS OF THE DATE OF THIS POLICY)
  
4. DEED OF TRUST, SECURITY AGREEMENT, FIXTURE FILING AND ASSIGNMENT OF RENTS AND LEASES, GIVEN TO SECURE AN INDEBTEDNESS, AND THE TERMS AND CONDITIONS CONTAINED THEREIN:  
AMOUNT : \$9,203,000.00  
DATED : OCTOBER 11, 1995  
RECORDED : OCTOBER 17, 1995  
RECORDING NO. : 95075549  
GRANTOR : AMERICAN APARTMENT COMMUNITIES OPERATING PARTNERSHIP, L.P., A DELAWARE LIMITED PARTNERSHIP  
TRUSTEE : CHICAGO TITLE INSURANCE COMPANY, A MISSOURI CORPORATION  
BENEFICIARY : TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF AMERICA

5. ASSIGNMENT OF RENTS AND LEASES AND THE TERMS AND CONDITIONS CONTAINED THEREIN:  
 DATED : OCTOBER 11, 1995  
 RECORDED : OCTOBER 17, 1995  
 RECORDING NO. : 95075550  
 EXECUTED BY : AMERICAN APARTMENT COMMUNITIES OPERATING PARTNERSHIP,  
 L.P., A DELAWARE LIMITED PARTNERSHIP  
 TO : TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF  
 AMERICA
6. SECOND DEED OF TRUST, SECURITY AGREEMENT, FIXTURE FILING AND ASSIGNMENT OF  
 RENTS AND LEASES, GIVEN TO SECURE AN INDEBTEDNESS, AND THE TERMS AND CONDITIONS  
 CONTAINED THEREIN:  
 AMOUNT : \$113,905,000.00  
 DATED : OCTOBER 11, 1995  
 RECORDED : OCTOBER 17, 1995  
 RECORDING NO. : 95075551  
 GRANTOR : AMERICAN APARTMENT COMMUNITIES OPERATING PARTNERSHIP,  
 L.P., A DELAWARE LIMITED PARTNERSHIP  
 TRUSTEE : CHICAGO TITLE INSURANCE COMPANY, A MISSOURI  
 CORPORATION  
 BENEFICIARY : TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF  
 AMERICA
7. SECOND ASSIGNMENT OF LEASES AND RENTS AND THE TERMS AND CONDITIONS CONTAINED  
 THEREIN:  
 DATED : OCTOBER 11, 1995  
 RECORDED : OCTOBER 17, 1995  
 RECORDING NO. : 95075552  
 EXECUTED BY : AMERICAN APARTMENT COMMUNITIES OPERATING PARTNERSHIP,  
 L.P., A DELAWARE LIMITED PARTNERSHIP  
 TO : TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF  
 AMERICA
8. FINANCING STATEMENT:  
 SECURED PARTY : TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF  
 AMERICA  
 DEBTOR : AMERICAN APARTMENT COMMUNITIES OPERATION PARTNERSHIP,  
 L.P., A DELAWARE LIMITED PARTNERSHIP  
 RECORDED : OCTOBER 17, 1995  
 RECORDING NO. : 95075553

9. ASSUMPTION OF LIABILITY SECURED BY REAL PROPERTY AND RELEASE OF ORIGINAL BORROWER AGREEMENT, INCLUDING THE TERMS AND PROVISIONS THEREOF:  
 DATED : JANUARY 31, 1996  
 RECORDED : MARCH 21, 1996  
 RECORDING NO. : 96024354  
 BY AND BETWEEN : TEACHERS INSURANCE AND ANNUITY ASSOCIATION OF AMERICA, A NEW YORK CORPORATION, AND AMERICAN APARTMENT COMMUNITIES OPERATING PARTNERSHIP, L.P., A DELAWARE LIMITED PARTNERSHIP, AND AMERICAN APARTMENT COMMUNITIES II, L.P., A DELAWARE LIMITED PARTNERSHIP
10. AN EASEMENT CREATED BY INSTRUMENT, INCLUDING THE TERMS AND PROVISIONS THEREOF:  
 DATED : AUGUST 8, 1988  
 RECORDED : AUGUST 15, 1988  
 RECORDING NO. : 88-35910  
 IN FAVOR OF : CITY OF TUALATIN  
 FOR : PUBLIC PEDESTRIAN WALKWAY AND BIKE PATH  
 AFFECTS : THE SOUTHERLY PORTION OF THE SUBJECT PROPERTY  
  
 RE-RECORDED : FEBRUARY 7, 1989  
 RECORDING NO. : 89-05588
11. AN EASEMENT CREATED BY INSTRUMENT, INCLUDING THE TERMS AND PROVISIONS THEREOF:  
 DATED : OCTOBER 27, 1989  
 RECORDED : NOVEMBER 21, 1989  
 RECORDER'S FEE NO. : 89-56745  
 IN FAVOR OF : CITY OF TUALATIN  
 FOR : SANITARY SEWER LINE  
 AFFECTS : THE NORTHERLY 10 FEET OF THE SUBJECT PROPERTY
12. AN EASEMENT CREATED BY INSTRUMENT, INCLUDING TERMS AND PROVISIONS THEREOF:  
 DATED : OCTOBER 27, 1989  
 RECORDED : NOVEMBER 21, 1989  
 RECORDER'S FEE NO. : 89-56746  
 IN FAVOR OF : CITY OF TUALATIN  
 FOR : STORM DRAIN  
 AFFECTS : THE SOUTHERLY AND EASTERLY PORTIONS OF THE SUBJECT PROPERTY
13. AN EASEMENT CREATED BY INSTRUMENT, INCLUDING TERMS AND CONDITIONS THEREOF:  
 DATED : OCTOBER 27, 1989  
 RECORDED : NOVEMBER 21, 1989  
 RECORDER'S FEE NO. : 89-56747  
 IN FAVOR OF : CITY OF TUALATIN  
 FOR : WATER LINE

14. MEMORANDUM OF TELEVISION LICENSE AGREEMENT, INCLUDING THE TERMS AND PROVISIONS THEREOF:

RECORDED : JULY 20, 1989  
RECORDER'S FEE NO. : 89-32960

THE INTEREST OF MARQUIS CABLEVISION, AN OREGON GENERAL PARTNERSHIP, AS LICENSEE WAS ASSIGNED TO CABLE PLUS, INC., BY INSTRUMENT:

RECORDED : JANUARY 23, 1990  
RECORDER'S FEE NO. : 90-03756

THE TERMS AND PROVISIONS OF SAID AGREEMENT WERE MODIFIED BY INSTRUMENT:

RECORDED : FEBRUARY 5, 1990  
RECORDER'S FEE NO. : 90-06032

THE LIEN OF THE ABOVE ASSIGNMENT OF TELEVISION LICENSE AGREEMENT WAS SUBORDINATED TO THE LIEN OF THE TRUST DEED SHOWN HEREIN, BY INSTRUMENT:

DATED : DECEMBER 19, 1990  
RECORDED : DECEMBER 20, 1990  
RECORDER'S FEE NO. : 90-69573

15. ENCROACHMENT DISCLOSED BY SURVEY:

DATED : OCTOBER 10, 1989  
SURVEYOR : W. B. WELLS AND ASSOC., INC.  
SURVEY NO. : 87-126  
BEING : ENCROACHMENT OF FENCE ALONG THE NORTHEASTERLY,  
SOUTHEASTERLY AND SOUTHWESTERLY PORTIONS OF THE  
SAID PROPERTY

UNRECORDED ACCESS EASEMENT

EVIDENCES OF UTILITIES: WATER VALVES, MANHOLES,  
CLEANOUTS, AND TELEPHONE AND ELECTRIC SERVICE PADS

ENCROACHMENT OF BRICK PAVERS ONTO S. W. SAGERT ROAD

16. EXCLUSIVE LICENSE AND EASEMENT AGREEMENT, INCLUDING THE TERMS AND PROVISIONS THEREOF:

DATED : MARCH 31, 1995  
RECORDED : JUNE 26, 1995  
RECORDER'S FEE NO. : 95043816  
BY AND BETWEEN : AMERICAN APARTMENT COMMUNITY OPERATING PARTNERSHIP,  
L.P., A DELAWARE LIMITED PARTNERSHIP AND INTERACTIVE  
CABLE SYSTEMS, INC.

17. RIGHTS OF PARTIES IN POSSESSION, AS TENANTS ONLY.

...END OF SCHEDULE B...

RE: Tualatin Heights  
Tualatin, Oregon

**ENDORSEMENT**

Attached to Policy No NBG NO 96-0045-28

Issued by

**CHICAGO TITLE INSURANCE COMPANY**

The policy is hereby amended by adding as a named insured therein

AMERICAN APARTMENT COMMUNITIES II, L P., A DELAWARE LIMITED  
PARTNERSHIP

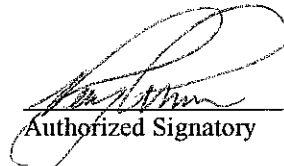
This endorsement does not extend the coverage of the policy to any later date than Date of Policy, nor does it impose any liability on the Company for loss or damage resulting from (1) failure of such added insured to acquire an insurable estate or interest in the land, or (2) any defect, lien or encumbrance attaching by reason of the acquisition of an estate or interest in the land by such added insured.

This endorsement is made a part of the policy and is subject to all the terms and provisions thereof and of any prior endorsements thereto. Except to the extent expressly stated, it neither modifies any of the terms and provisions of the policy and prior endorsements, if any, nor does it extend the effective date of the policy and prior endorsements or increase the face amount thereof.

Dated: December 8, 1998

**CHICAGO TITLE INSURANCE COMPANY**

By

  
Authorized Signatory



## ENDORSEMENT

Attached to Policy No. 96-0045-28

Issued by

### CHICAGO TITLE INSURANCE COMPANY

The Company insures against loss or damage sustained by reason of:

1. Any incorrectness in the assurance that, as Date of Policy:
  - (a) There are no covenants, conditions or restrictions under which the estate insured in Schedule A can be divested or extinguished.
  - (b) Unless expressly excepted in Schedule B:
    - (1) There are no present violations on the land of any enforceable covenants, conditions or restrictions, nor do any existing improvements on the land violate any building setback lines on a plat of subdivision recorded or filed in the public records.
    - (2) Any instrument referred to in Schedule B as containing covenants, conditions or restrictions on the land does not, in addition, (i) establish an easement on the land; (ii) provide a lien for liquidated damages; (iii) provide for a private charge or assessment; (iv) provide for an option to purchase, a right of first refusal or the prior approval of a future purchaser of occupant
    - (3) There are no encroachments of existing improvements located on the land onto adjoining land, nor any encroachments onto the land of existing improvements located on adjoining land.
    - (4) There is no encroachment of existing improvements located on the land onto that portion of the land subject to any easement excepted in Schedule B
    - (5) There are no notices of violation of covenants, conditions and restrictions relating to environmental protection recorded or filed in the public records
2. Any future violation on the land of any existing covenants, conditions or restrictions provided the violation results in loss of title to the estate or interest in the land.
3. Damage to buildings:
  - (a) which are located on or encroach upon that portion of the land subject to any easement excepted in Schedule B, which damage results from the exercise of the right to maintain the easement for the purpose for which it was granted or reserved;
  - (b) resulting from the future exercise of any right to use the surface of the land for the extraction or development of minerals excepted from the description of the land or excepted in Schedule B.

4. Any final order or judgment requiring the removal from any land adjoining the land of any encroachment, other than fences, landscaping or driveways, excepted in Schedule B.
5. Any final court order or judgment denying the right to maintain any existing buildings on the land because of any violation of covenants, conditions, or restrictions or building setback lines shown on a plat of subdivision recorded or filed in the public records.

Wherever in this endorsement the words "covenants, conditions or restrictions" appear, they shall not be deemed to refer to or include the terms, covenants, conditions or limitations contained in an instrument creating a lease or declaration or condominium referred to in Schedule A.


As used in Paragraphs 1(b) (1) and 5, the words, "covenants, conditions, or restrictions" shall not be deemed to refer to or include any covenants, conditions or restrictions relating to environmental protections.

This endorsement is made a part of the policy and is subject to all the terms and provisions thereof and of any prior endorsements thereto. Except to the extent expressly stated, it neither modifies any of the terms and provisions of the policy and prior endorsements, if any, nor does it extend the effective date of the policy and prior endorsements or increase the face amount thereof.

Dated: March 28, 1996

**CHICAGO TITLE INSURANCE COMPANY**

By



Authorized Signatory

Comprehensive

**ENDORSEMENT**

Attached of Policy No. 96-0045-28

Issued by

**CHICAGO TITLE INSURANCE COMPANY**

The Company hereby insures the Insured against loss which said insured shall sustain as a result of any exercise of the right to use or maintenance of the easement referred to in Paragraphs 10, 11, 12 and 13 of Schedule B - Part 1 over or through said land

This endorsement is made a part of the policy and is subject to all of the terms and provisions thereof and of any prior endorsements thereto. Except to the extent expressly stated, it neither modifies any of the terms and provisions of the policy and any prior endorsements, nor does it extend the effective date of the policy and any prior endorsements, nor does it increase the face amount thereof.

**CHICAGO TITLE INSURANCE COMPANY**

By



Authorized Signatory

**ENDORSEMENT**

Attached to Policy No. 96-0045-28

Issued by

**CHICAGO TITLE INSURANCE COMPANY**

The Company assures the Insured that said land is the same as that delineated on the plat of a survey made by W B Wells & Assoc Inc , File No 95-199, dated August 28, 1995


The Company hereby insures said Assured against loss which said Assured shall sustain in the event that the assurance herein shall prove to be incorrect

The total liability of the Company under said policy and any endorsement therein shall not exceed, in the aggregate, the face amount of said policy and costs which the Company is obligated under the conditions and stipulations thereof to pay.

This endorsement is made a part of said policy and is subject to the schedules, conditions, and stipulations therein except as modified by the provisions hereof.

**CHICAGO TITLE INSURANCE COMPANY**

By

  
Authorized Signatory

**ENDORSEMENT**

Attached to Policy No 96-0045-28

Issued by

**CHICAGO TITLE INSURANCE COMPANY**

The Company hereby assures the Insured

That said land has legal and actual access sufficient for vehicular and pedestrian use to and from S. W. Sagert Road

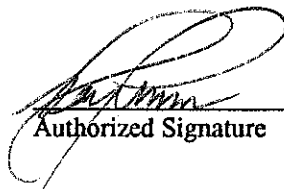
and the Company hereby insures said Assured against loss which said Assured shall sustain in the event said assurances herein shall prove incorrect.

The total liability of the Company under said policy and any endorsements therein shall not exceed, in the aggregate, the face amount of said policy and costs which the Company is obligated under the conditions and stipulations thereof to pay.

This endorsement is made part of said policy and is subject to the Schedules and the Conditions and Stipulation therein, except as modified by the provisions hereof.

**CHICAGO TITLE INSURANCE COMPANY**

By

  
Authorized Signature

ENDORSEMENT 103.7



**ENDORSEMENT**

Attached to Policy No 96-0045-28

Issued by

**CHICAGO TITLE INSURANCE COMPANY**

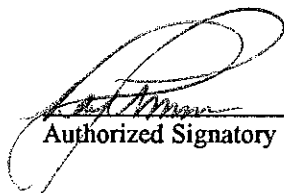
The Company hereby insures the Insured that the property referred to in Schedule B consists of a separate tax lot or lots and said lot or lots will not include any property not included with said parcels.

This endorsement is made a part of the policy and is subject to all the terms and provisions thereof and of any prior endorsements thereto. Except to the extent expressly stated, it neither modifies any of the terms and provisions of the policy and prior endorsements, if any, nor does it extend the effective date of the policy and prior endorsements or increase the face amount thereof.

Dated: March 28, 1996

**CHICAGO TITLE INSURANCE COMPANY**

By



Authorized Signatory

Separate Tax Lot

## ENDORSEMENT

Attached to Policy No 96-0045-28

Issued by

### CHICAGO TITLE INSURANCE COMPANY

The Company agrees that if, within 10 years after the date of this policy, application is made to increase the face amount of the policy or to issue a new policy, it will issue additional title insurance policies, or increase the face amount of this policy insuring such title or interest as may then exist in the insured or the insured's designee. The amount of insurance to be issued will not exceed the amount of the mortgage to be placed on the land nor the fair market value of the land and improvements therein at the date of the application. In the event a claim has been made or is pending against the Company, or a defect in title has been discovered, the Company shall not be required to issue insurance for an amount greater than the face amount of this policy as to the defect discovered or resulting in said claim. Upon receipt of the application to issue a subsequent policy or increase the face amount of this policy, the Company will extend its examination of the title to the then current date and will then issue its policy or increase the face of this policy, subject to such matters created, first appearing in the public records attaching subsequent to the effective date of this policy, of which have become known to either the insured or the Company.

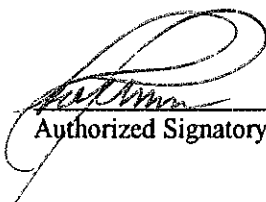
The insurance to be issued shall be issued for an additional premium equal to \$.70 per thousand dollars of additional amount of insurance. The Company shall not be obligated to issue additional insurance coverage which would exceed the amount of the usual reinsurance retention of the Company if, after the exercise of reasonable effort, the Company is unable to obtain reinsurance or co-insurance as may be required in order for it to issue the full amount of additional insurance for which application is made

This endorsement is made a part of the policy and is subject to all the terms and provisions thereof and of any prior endorsements thereto. Except to the extent expressly stated, it neither modifies any of the terms and provisions of the policy and prior endorsements, if any, nor does it extend the effective date of the policy and prior endorsements or increase the face amount thereof.

Dated: March 28, 1996

### CHICAGO TITLE INSURANCE COMPANY

By

  
Authorized Signatory

4. Any final order or judgment requiring the removal from any land adjoining the land of any encroachment, other than fences, landscaping or driveways, excepted in Schedule B.
5. Any final court order or judgment denying the right to maintain any existing buildings on the land because of any violation of covenants, conditions, or restrictions or building setback lines shown on a plat of subdivision recorded or filed in the public records.

Wherever in this endorsement the words "covenants, conditions or restrictions" appear, they shall not be deemed to refer to or include the terms, covenants, conditions or limitations contained in an instrument creating a lease or declaration or condominium referred to in Schedule A.

As used in Paragraphs 1(b) (1) and 5, the words, "covenants, conditions, or restrictions" shall not be deemed to refer to or include any covenants, conditions or restrictions relating to environmental protections.

This endorsement is made a part of the policy and is subject to all the terms and provisions thereof and of any prior endorsements thereto. Except to the extent expressly stated, it neither modifies any of the terms and provisions of the policy and prior endorsements, if any, nor does it extend the effective date of the policy and prior endorsements or increase the face amount thereof.

Dated: March 28, 1996

**CHICAGO TITLE INSURANCE COMPANY**

By



Authorized Signatory

Comprehensive

## ENDORSEMENT

Attached to Policy No. 96-0045-28

Issued by

### CHICAGO TITLE INSURANCE COMPANY

The Company hereby assures the Insured that notwithstanding the provisions of paragraphs numbered 3(a) and 3(b) of the exclusions from coverage in the policy, in the event of loss or damage insured against under the terms of the policy, the Company will not deny its liability thereunder to the Insured on the ground that the Insured had knowledge of any matter solely by reason of notice thereof imputed to it through James D Klingbeil, American Apartment Communities, Inc., American Apartment Communities Operating Partnership, L.P., AAC Funding Partnership II, AAC Funding Partnership III, AAC Funding II, Inc., AAC Funding III, Inc., their current and former officers and directors, and their partners (collectively the "AAC Group")

This endorsement is made a part of the policy and is subject to all of the terms and provisions thereof and of any prior endorsements thereto. Except to the extent expressly stated, it neither modifies any of the terms and provisions of the policy and any prior endorsement, nor does it extend the effective date of the policy and any prior endorsements, nor does it increase the face amount thereof.

Dated: March 28, 1996

### CHICAGO TITLE INSURANCE COMPANY

By

  
Authorized Signatory

## CONDITIONS AND STIPULATIONS

### DEFINITION OF TERMS

The following terms when used in this policy mean:

(a) "insured": the insured named in Schedule A, and subject to any rights or defenses the Company may have had against the named insured, those who succeed to the interest of such insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors

(b) "insured claimant": an insured claiming loss or damage hereunder.

(c) "knowledge": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of any public records

(d) "land": the land described, specifically or by reference in Schedule A, and improvements affixed thereto which by law constitute real property; provided however the term "land" does not include any property beyond the lines of the area specifically described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy

(e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument

(f) "public records": those records which by law impart constructive notice of matters relating to said land

### 2. CONTINUATION OF INSURANCE AFTER CONVEYANCE OF TITLE

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured so long as such insured retains an estate or interest in the land or holds an indebtedness secured by a purchase money mortgage given by a purchaser from such insured, or so long as such insured shall have liability by reason of covenants of warranty made by such insured in any transfer or conveyance of such estate or interest; provided, however, this policy shall not continue in force in favor of any purchaser from such insured of either said estate or interest or the indebtedness secured by a purchase money mortgage given to such insured

### 3. DEFENSE AND PROSECUTION OF ACTIONS—NOTICE OF CLAIM TO BE GIVEN BY AN INSURED CLAIMANT

(a) The Company, at its own cost and without undue delay, shall provide for the defense of an insured in all litigation consisting of actions or proceedings commenced against such insured, or a defense interposed against an insured in an action to enforce a contract for a sale of the estate or interest in said land to the extent that such litigation is founded upon an alleged defect, lien, encumbrance or other matter insured against by this policy

(b) The insured shall notify the Company promptly in writing (i) in case any action or proceeding is begun or defense is interposed as set forth in (a) above; (ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy; or (iii) if title to the estate or interest, as insured, is rejected as unmarketable. If such prompt notice shall not be given to the Company then as to such insured all liability of the Company shall cease and terminate in regard to the matter or matters for which such prompt notice is required; provided, however, that failure to notify shall in no case prejudice the rights of any such insured under this policy unless the Company shall be prejudiced by such failure and then only to the extent of such prejudice

(c) The Company shall have the right at its own cost to institute and without undue delay prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest as insured, and the Company may take any appropriate action under the terms of this policy, whether or not it shall be liable thereunder, and shall not thereby concede liability or waive any provision of this policy

(d) Whenever the Company shall have brought any action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any such litigation to final determination by a court of competent jurisdiction and expressly reserves the right in its sole discretion, to appeal from any adverse judgment or order.

(e) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured hereunder shall secure to the Company the right to so prosecute or provide defense in such action or proceeding and all appeals therein, and permit the Company to use, at its option, the name of such insured for such purpose. Whenever requested by the Company, such insured shall give the Company all reasonable aid in any such action or proceeding, in effecting settlement, securing evidence, obtaining witnesses, or prosecuting or defending such action or proceeding, and the Company shall reimburse such insured for any expense so incurred

### 4. NOTICE OF LOSS—LIMITATION OF ACTION

In addition to the notices required under paragraph 3(b) of these Conditions and Stipulations, a statement in writing of any loss or damage for which it is claimed the Company is liable under this policy shall be furnished to the Company within 90 days after such loss or damage shall have been determined and no right of action shall accrue to an insured claimant until 30 days after such statement shall have been furnished. Failure to furnish such statement of loss or damage shall terminate any liability of the Company under this policy as to such loss or damage

### 5. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS

The Company shall have the option to pay or otherwise settle for or in the name of an insured claimant any claim insured against or to terminate all liability and obligations of the Company hereunder by paying or tendering payment of the amount of insurance under this policy together with any costs, attorneys' fees and expenses incurred up to the time of such payment or tender of payment, by the insured claimant and authorized by the Company

### 6. DETERMINATION AND PAYMENT OF LOSS

(a) The liability of the Company under this policy shall in no case exceed the least of:

(i) the actual loss of the insured claimant; or

(ii) the amount of insurance stated in Schedule A

(b) The Company will pay, in addition to any loss insured against by this policy, all costs imposed upon an insured in litigation carried on by the Company for such insured, and all costs, attorneys' fees and expenses in litigation carried on by such insured with the written authorization of the Company

(c) When liability has been definitely fixed in accordance with the conditions of this policy, the loss or damage shall be payable within 30 days thereafter.

### 7. LIMITATION OF LIABILITY

No claim shall arise or be maintainable under this policy (a) if the Company, after having received notice of an alleged defect, lien or encumbrance insured against hereunder, by litigation or otherwise, removes such defect, lien or encumbrance or establishes the title, as insured, within a reasonable time after receipt of such notice; (b) in the event of litigation until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title, as insured, as provided in paragraph 3 hereof; or (c) for liability voluntarily assumed by an insured in settling any claim or suit without prior written consent of the Company.

### 8. REDUCTION OF LIABILITY

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto. No payment shall be made without producing this policy for endorsement of such payment unless the policy be lost or destroyed, in which case proof of such loss or destruction shall be furnished to the satisfaction of the Company

### 9. LIABILITY NONCUMULATIVE

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring either (a) a mortgage shown or referred to in Schedule B hereof which is a lien on the estate or interest covered by this policy, or (b) a mortgage hereafter executed by an insured which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy. The Company shall have the option to apply to the payment of any such mortgages any amount that otherwise would be payable hereunder to the insured owner of the estate or interest covered by this policy and the amount so paid shall be deemed a payment under this policy to said insured owner.





---

MEMORANDUM

**Neighborhood / Developer Meeting Summary**  
Tualatin Heights Plan Map Amendment

DATE August 31, 2021  
TO City of Tualatin Planning  
FROM Frank Angelo and Emma Porricolo, APG  
CC Jon McGrew and Erica Thompson, HEA

---

**Summary**

The Neighborhood/Developer Meeting for the proposed Plan Map Amendment application was held on Tuesday, June 8, 2021 at 6:00 PM . The meeting was virtually hosted on GoToMeeting. Approximately 23 neighbors were in attendance. A list of attendees who signed into the meeting is found in Attachment A.

The project team provided a brief overview of the site, the application proposal, and Plan Map Amendment application requirements. Following the presentation, attendees were asked to share questions and comments. A summary of the questions and comments from neighbors (organized by topic), and the responses from the project team are as follows:

**I. Traffic, Street Improvements, and Access**

- The project team noted that emergency access is located on 95<sup>th</sup> Ave., just south of the railroad tracks. The 95<sup>th</sup> Ave. access will not be open to the public.
- Neighbors recommended more street improvements for safety, such as additional crosswalks near Tualatin Elementary School.
- Neighbors expressed concerns about the amount of traffic in the area and said they have seen many accidents around the site. They noted that Sagert St. is very congested, especially during rush hour.
- Neighbors suggested considering moving or adding entrance(s) to the site, suggested locating an entrance on 95<sup>th</sup> Ave.
  - Response (from project team): One of the constraints on access is the railroad tracks located to the north. The City is aware of the neighborhood traffic and parking conditions. A traffic assessment is required as a part of the Plan Map amendment application.

**II. Parking**

- Written comments regarding parking concerns were received prior to the meeting. Those are found in Attachment B.

- Many residents expressed concerns about the current parking conditions and resulting parking conditions that could occur from having more units at the Tualatin Heights Apartments. Comments included:
  - *Concerns about parking.*
    - The project team noted that the draft plans depict the City’s parking requirements, that are based on number of bedrooms per unit. One attendee had concerns about parking minimums required by the City of Tualatin and did not feel they are adequate.
    - Neighbors expressed concerns about the parking permit fees at Tualatin Heights, assuming residents park on neighborhood streets to avoid fees.
  - *Concerns related to use of street parking.*
    - “It’s almost impossible to live in the neighborhood with the situation that it is now, new units will create some difficulty. We can’t put trash cans out, street sweeping, not able to park in front of house. It is a major issue. The issue changed when the apartment policy changed (has been in the neighborhood for 12 years). Are you aware of how serious the parking situation is for the neighborhood?” Several other neighbors in attendance echoed this concern.
    - One attendee suggested adding a parking garage or allowing on-street parking on 95<sup>th</sup> Ave and Sagert St.
    - Neighbors noted the difficulty to see when backing out of their driveways because of the cars parked on the street.
  - *Concerns about safety* due to proximity to the nearby Tualatin Elementary School.
    - “At Sagert St. & 93<sup>rd</sup> Ave. intersection, lots of kids live on 93<sup>rd</sup> Ave. It is a walking route to elementary school for many kids. With cars parking on Sagert St., is dangerous for kids and drivers. It is nerve racking have to pull out and not know what’s around the corner.” Neighbors also noted there is a school bus stop located on 93<sup>rd</sup> Ave. near the site.
    - Response: The project team thanked attendees for their comments. The comments would be shared with project team who will consider how they can be addressed. The development proposal has not been fully defined, that is a part of next steps.

### III. Miscellaneous

- What are other zone changes in the city? Don’t think this is an appropriate location for a high density zone considering the vicinity to low density zones.
  - Response: Not sure what other zones changes are proposed in the City, they aren’t a part of this project.
- Does the zone change allow a greater maximum building height?
  - Response: It is only a change to maximum density. Heights and other siting requirements are consistent across two zones (existing and proposed zones).
- Is the water and waste infrastructure for the site currently adequate for the additional units?
  - Response: The project team is researching infrastructure capacity now. We will need to confirm that infrastructure capacity is adequate through development approval process.
- Will there be tree removal? Would like to retain large trees on the perimeter of the site.

- Response: The project team hasn't gotten to that level of detail yet. We are trying to keep changes to internal to the site and reduce impacts to neighbors. Also, the City has buffering/landscaping requirements that will be considered when development is proposed (not a part of this application).

### **Attachments**

- A. Sign-in Sheet
- B. Written Comments
- C. Presentation
- D. Mailed Meeting Notice

Attachment A

Tualatin Heights Neighborhood Meeting

Attendance Sign- In

Name	Address	Phone	Email
Melissa Snowberger	[REDACTED]	[REDACTED]	[REDACTED]
Kathleen Cunnington	[REDACTED]	[REDACTED]	[REDACTED]
Rebekah Deal	[REDACTED]	[REDACTED]	[REDACTED]
Rebecca & Paulius Jurevicius	[REDACTED]	[REDACTED]	[REDACTED]
Jonathan Stone	[REDACTED]	[REDACTED]	[REDACTED]
Bob Haas	[REDACTED]	[REDACTED]	[REDACTED]
Mike Snowberger	[REDACTED]	[REDACTED]	[REDACTED]
Peter and Lauren Henkle;	[REDACTED]	[REDACTED]	[REDACTED]
Keith Crosby	[REDACTED]	[REDACTED]	[REDACTED]
Lisa Hayes	[REDACTED]	[REDACTED]	[REDACTED]
Amy & Paul Wheatcroft	[REDACTED]	[REDACTED]	[REDACTED]
Ryan Henderson	[REDACTED]	[REDACTED]	[REDACTED]

**From:** [Frank Angelo](#)  
**To:** [Jon McGrew](#); [Erica Thompson](#); [Andrew J. Lavaux](#)  
**Cc:** [Emma Porricolo](#)  
**Subject:** FW: Opposition to Tualatin Heights Zone Change  
**Date:** Tuesday, June 8, 2021 2:34:47 PM

---

fyi

**From:** Ryan Henderson [REDACTED]  
**Sent:** Tuesday, June 08, 2021 2:20 PM  
**To:** Frank Angelo <fangelo@angeloplanning.com>  
**Subject:** Opposition to Tualatin Heights Zone Change

Hi

I'm a homeowner along 93rd AVE near the proposed zoning change. I'm concerned that increasing the apartment density will worsen the problematic illegal parking in front of my house.

Sometime in 2019 Tualatin Heights changed their parking policy which led to a significant increase in on-street parking in the neighborhood around the complex. The increase in traffic leads to more late night loud music, trash and blocked mailboxes. I can request for the City to remove cars parked over 72 hours, but that process can actually take 2 weeks from the time the car is parked until it is towed. In short, Tualatin Heights is currently using the public street as an extension to their own parking lot and this zoning change will make that worse.

I am opposed to increased traffic and noise this expansion will bring to the neighborhood, but I will be mostly impacted by the increase in parked cars in front of my house.

Increasing the population density of Tualatin heights by 50% needs at least a 100% increase in available parking. In addition, prohibiting overnight street parking in the surrounding neighborhood would lower the impact of the zoning change. Can these requirements be added to the zoning change?

Thank you for your time  
- Ryan Henderson



**From:** [Frank Angelo](#)  
**To:** [Jon McGrew](#); [Erica Thompson](#); [Andrew J. Lavaux](#)  
**Cc:** [Emma Porricolo](#)  
**Subject:** FW: Tualatin Heights expansion  
**Date:** Tuesday, June 8, 2021 2:34:26 PM

---

fyi

**From:** Randi Ausland [REDACTED]  
**Sent:** Tuesday, June 08, 2021 2:10 PM  
**To:** Frank Angelo <fangelo@angeloplanning.com>  
**Subject:** Tualatin Heights expansion

Mr. Angelo,

I would like to comment on the proposed expansion of Tualatin Heights. I have lived off Sagert Rd and SW 93rd for over 40 years. I am an active Real Estate Broker in Tualatin. I understand that affordable housing is needed in our community.

My objection to the expansion is due to the new policies the Tualatin Heights management has imposed on it's tenants. There was never a parking "spill over" into the neighborhood before the last year or two. I believe management started charging the tenants for parking. This pushed people out of the complex parking lot into the neighboring streets.

Mailboxes are blocked, property owners no longer have room for their guests or family to park in front of their homes. Adding an additional 130 units without addressing the parking situation is irresponsible.

Removing the garages and creating carports will address some of the problem but not nearly enough to make up for adding 130 units with the potential for 130 to 200 more cars. This is not an area with convenient mass transit or high walking scores. Cars are the norm. Neighborhoods are considering "permit" parking for our streets to discourage the overflow from Tualatin Heights. Where will the tenants park if that is enacted?

I hope to hear answers to these questions at the meeting scheduled for June 9th at 6:00pm.

--

***Randi Ausland, Principal Broker***

**C** 503-407-0828

**O** 503-692-3050

**F** 503-692-0592

**Email** [REDACTED]

**Website** [www.metro-westrealty.com](http://www.metro-westrealty.com)

**From:** [REDACTED]  
**To:** [Frank Angelo](#)  
**Cc:** [Jon McGrew](#); [Emma Porricolo](#); [Andrew J. Lavaux](#)  
**Subject:** Re: Tualatin Heights Zone Change Virtual Meeting  
**Date:** Wednesday, June 9, 2021 3:46:49 PM

---

Hi Frank (et al),

So this is the view from 93rd onto Sagert, facing northbound, on a fairly typical afternoon, from the marked “stop” line. I end up creeping forward another car length or so to see into the street well enough to make a turn (the road from the west comes out of an industrial area that has relatively high traffic during shift changes, so that’s more of an impact than the east side where a driveway forces some visibility). My guess is that the intersection is not directly related to the zoning change, but 50% more housing on that property is not going to improve things without changes to this intersection and the parking on the street.

- Tony



On Jun 2, 2021, at 09:51, Frank Angelo <[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)> wrote:

Hello Anthony - thank you for contacting me. I have shared your comments with the project team, and we will be sure to address them at the Neighborhood

meeting.  
Thanks, Frank Angelo

-----Original Message-----

From: Anthony Mayernik <a[REDACTED]>  
Sent: Friday, May 28, 2021 8:52 PM  
To: Frank Angelo <[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)>  
Subject: Tualatin Heights Zone Change Virtual Meeting

Hi Frank,

I got the notice today, much appreciate you guys sending this stuff out in advance.  
My only question/concern/comment on the proposed change:

Parking in/around that property is already bad. The street parking just outside the property is usually full. While I'm sure part of this is likely due to the property owner requiring tenants to pay for parking permits for 2nd vehicles or the "assigned" space being inconvenient to the tenant's unit, I'm curious to know how the increased zoning will affect the parking situation? It feels like more units in the same space would make the problem worse. It's hard enough making the turn onto Sagert when northbound on 93rd (I usually end up nosing into the intersection so I can see cross traffic), I'm just trying to picture how things will be with a 50% increase in unit density on that property.

Regards,  
Anthony Mayernik

**From:** [Frank Angelo](#)  
**To:** [REDACTED] [planning@tualatin.gov](mailto:planning@tualatin.gov)  
**Cc:** [Jon McGrew](#); [Emma Porricolo](#); [Andrew J. Lavaux](#)  
**Subject:** RE: Tualatin Heights zoning proposal question for June 9 meeting  
**Date:** Wednesday, June 2, 2021 9:48:48 AM

---

Hello Tim - thank you for contacting me. I have shared your comments with the project team, and we will be sure to address them at the Neighborhood meeting.  
Thanks, Frank Angelo

-----Original Message-----

From: Tim G <[hadasaugh@comcast.net](mailto:hadasaugh@comcast.net)>  
Sent: Tuesday, June 01, 2021 8:42 PM  
To: [planning@tualatin.gov](mailto:planning@tualatin.gov)  
Cc: Frank Angelo <[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)>  
Subject: Fwd: Tualatin Heights zoning proposal question for June 9 meeting

Resent as a forwarded email to the entire Planning Group at the City of Tualatin, as L. Sanford no longer works there.

> ----- Original Message -----

> From: Tim G [REDACTED]  
> To: "[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)" <[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)>  
> Cc: "[lsanford@tualatin.gov](mailto:lsanford@tualatin.gov)" <[lsanford@tualatin.gov](mailto:lsanford@tualatin.gov)>  
> Date: 06/01/2021 8:31 PM  
> Subject: Tualatin Heights zoning proposal question for June 9 meeting

> Dear Mr. Angelo,

> This email is in response to the broadcast mailer sent to local residences by your organization dated May 25, 2020; RE: Tualatin Heights Comprehensive Plan Map Amendment.

> I thank you for the opportunity for us to express our interests and concerns. I ask that the below matter and question be submitted in the documentation and addressed during the upcoming June 9, 2021 virtual meeting.

> A copy of this email has also been forwarded to the City of Tualatin Planning Group to ensure they are also aware of the major concern identified below.

> Presently, with 220 units at Tualatin Heights, the present tenants have one space and pay a "surface fee" of \$25.00, or \$175.00 for a monthly unattached garage fee. Many tenants choose to do neither and opt to park their vehicles in front of residential properties on the surrounding neighborhood streets of SW Sagert, SW Apache, and SW 93rd, and occasionally SW Umiat.

> These tenants are parking there because of the fee-based parking demanded by Tualatin Heights, and because Tualatin Heights presently either does not provide enough adequate parking for all tenants and their vehicles now, or refuses to address tenant issues regarding multiple vehicles per occupancy unit.

> Cutting to the chase, in adding 130 plus more units, current and new tenants will park even more personal vehicles in front of more residential homes - blocking more curbside space for our families, friends, and visitors to park when they visit us in our residential homes.

> The simple question is:

>

> What makes us (neighborhood home owners) believe Tualatin Heights will abruptly change their policies and provide adequate, free parking for existing and future tenants, when they do not adequately provide parking now?

>

> In asking this question, an indifferent or dismissive response by the owner and managers of Tualatin Heights is unacceptable.

>

> Tualatin Heights must first address issues regarding their tenants' parking all over our residential streets. It needs to be in writing and contained in changes to the property planning documentation and blueprints to show ample parking will accommodate any future expansion/zone changes.

>

> If nothing is done to formally address this major concern in planning and development documents, the zone change proposal must be denied.

>

> Tim G

> Lieutenant Commander, US Navy (ret)

> SW Tonopah Street



**From:** [Emma Porricolo](#)  
**To:** [Emma Porricolo](#)  
**Subject:** RE: tualatin heights  
**Date:** Monday, June 28, 2021 12:02:49 PM

---

**From:** Jeff McGinty [REDACTED]  
**Sent:** Friday, June 04, 2021 6:12 PM  
**To:** Frank Angelo <[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)>  
**Subject:** Re: tualatin heights

Hello frank,

I have some questions about the proposed zone change. First is on street parking and added traffic. Some of the tenants are parking extra junk cars in front of my house now with 220 units. Adding another 116 units or less with two cars each could be a problem. Is there going to be enough overflow parking that they can rent to park junk?

Are there plans to add an entrance from 95th ave to ease traffic on sagert? So many cars are running the stop sign at apache dr. seems like every one is in hurry.

Is there any idea how much more delivery traffic will be added to sagert from FedEx, Amazon, ups, grub hub....?

Do think that there will be added noise to the neighborhood from more people? And how does that effect wild life, birds?

Will the zone change lower my property value?

Will I see any postvie things from the zone change?

Do any of the owners of the property live close by?

I really like this neighborhood and don't want to see more junk cars. I've attached some picture for reference from this morning.

I think It's a great idea to make more home's for people. I just don't want to make tualatin like south salem or Portland.

Thanks for answering all my questions, looking forward to hearing from you.





# **Tualatin Heights Apartments Plan Map Amendment Neighborhood Meeting**





# Virtual Sign-In

- Please complete the quick online sign-in sheet
- Options
  - Type your information in the chat/message box
  - Email the following information to [fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)
- Please list:
  - Name
  - Address
  - Email address
  - Phone number

# Agenda

- ❑ Welcome
- ❑ Background
- ❑ Plan Map Amendment
- ❑ Architectural Review Process
- ❑ Questions & Comments

# Existing Site

## Location

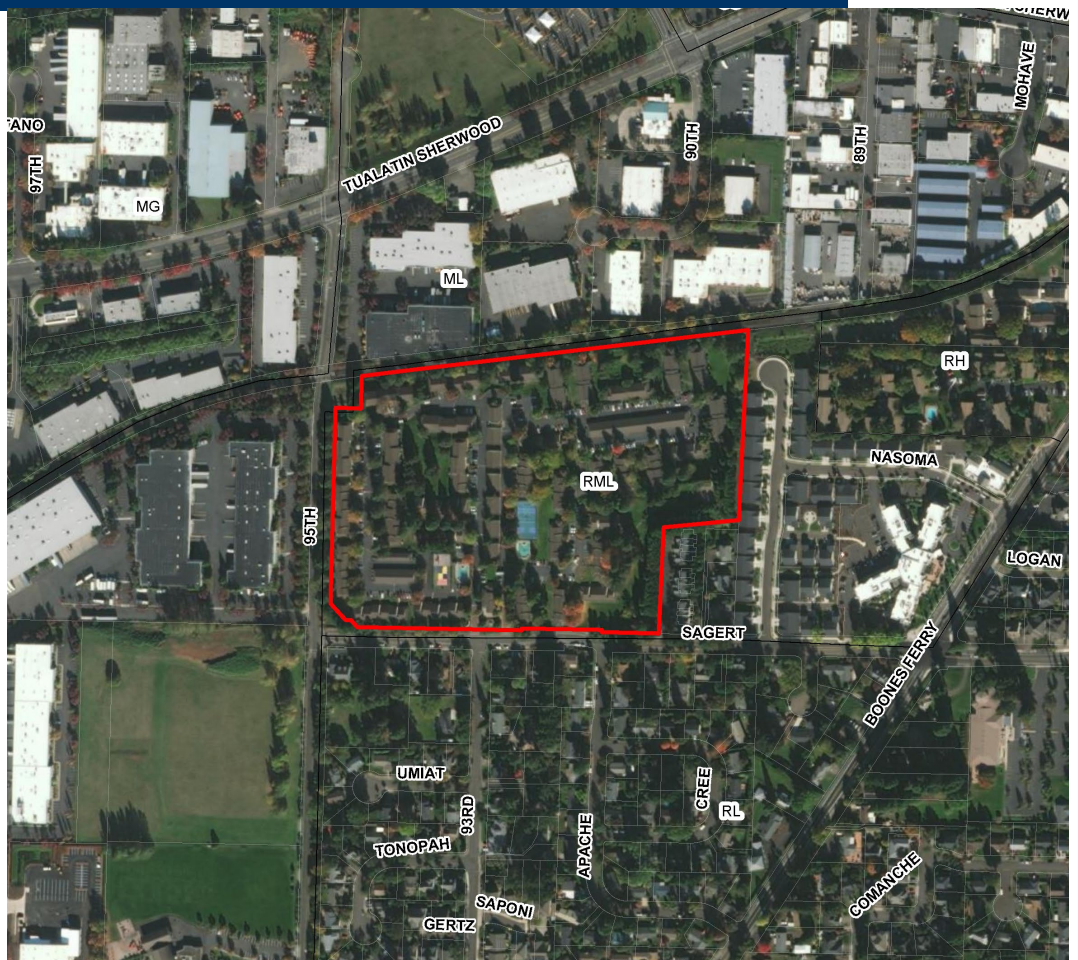
9301 SW Sagert Street

## Current Use

220 multifamily units

## Site Size

22.4 acres





# Background

- ❑ History of site
  - ❑ 220 multi-family units
- ❑ Current opportunity
  - ❑ The City has determined there is a lack of medium-high density (RMH) zoning in the City. (Source: Housing Needs Analysis, 2019)
  - ❑ There is an opportunity to infill on the existing Tualatin Heights site to provide additional 116 units.

# Plan Map Amendment Application Process

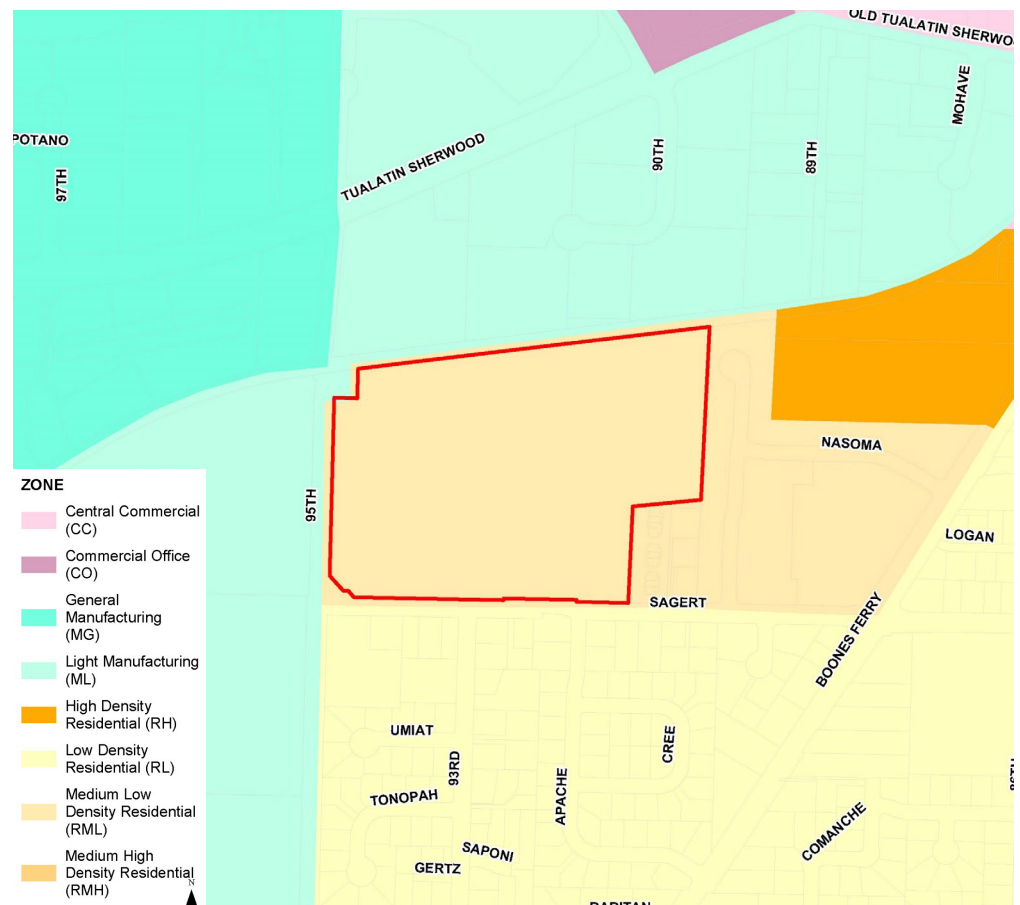
- ❑ Comprehensive Plan Map Amendment (also known as a Zone Change)
  - ❑ Current Zoning is Residential Medium Low (RML)
  - ❑ Proposed Zoning is Residential Medium High (RMH)
- ❑ Review process
  - ❑ A Type IV-A process with Planning Commission public hearing
  - ❑ Planning Commission recommendation to City Council
  - ❑ Tualatin City Council final action

# Existing Zoning Map

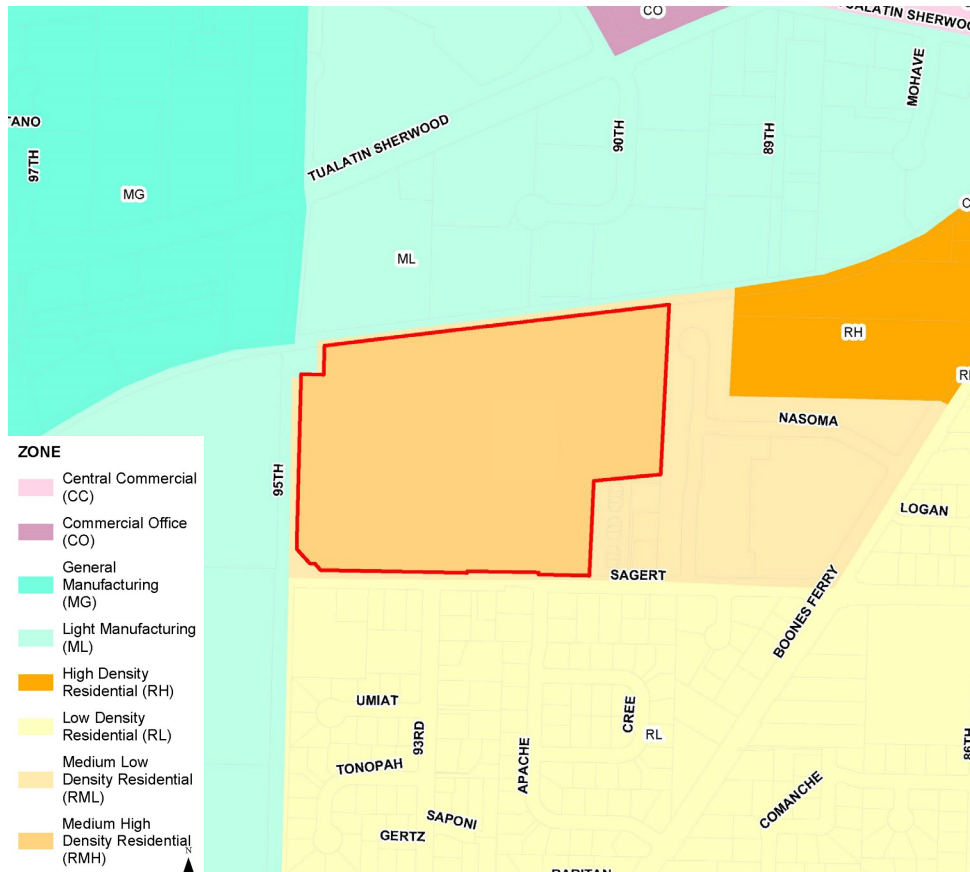
**Current Zoning**  
Residential Medium Low  
(RML)

**Maximum density**  
10 units/acre

224 Units



# Proposed Zoning Map



**Proposed Zoning**  
Residential Medium-  
High Density (RMH)

**Maximum density**  
15 units/acre

**Maximum of 336 units,**  
or 116 more units

# Standards for Approval of Plan Map Amendment

- ❑ The following review factors will be applied to the proposed amendments:
  - ❑ Comprehensive Plan Policies
  - ❑ Neighborhood Plan Policies
  - ❑ Housing Needs Analysis (2019)
  - ❑ Transportation Planning Rule
  - ❑ Statewide Planning Goals

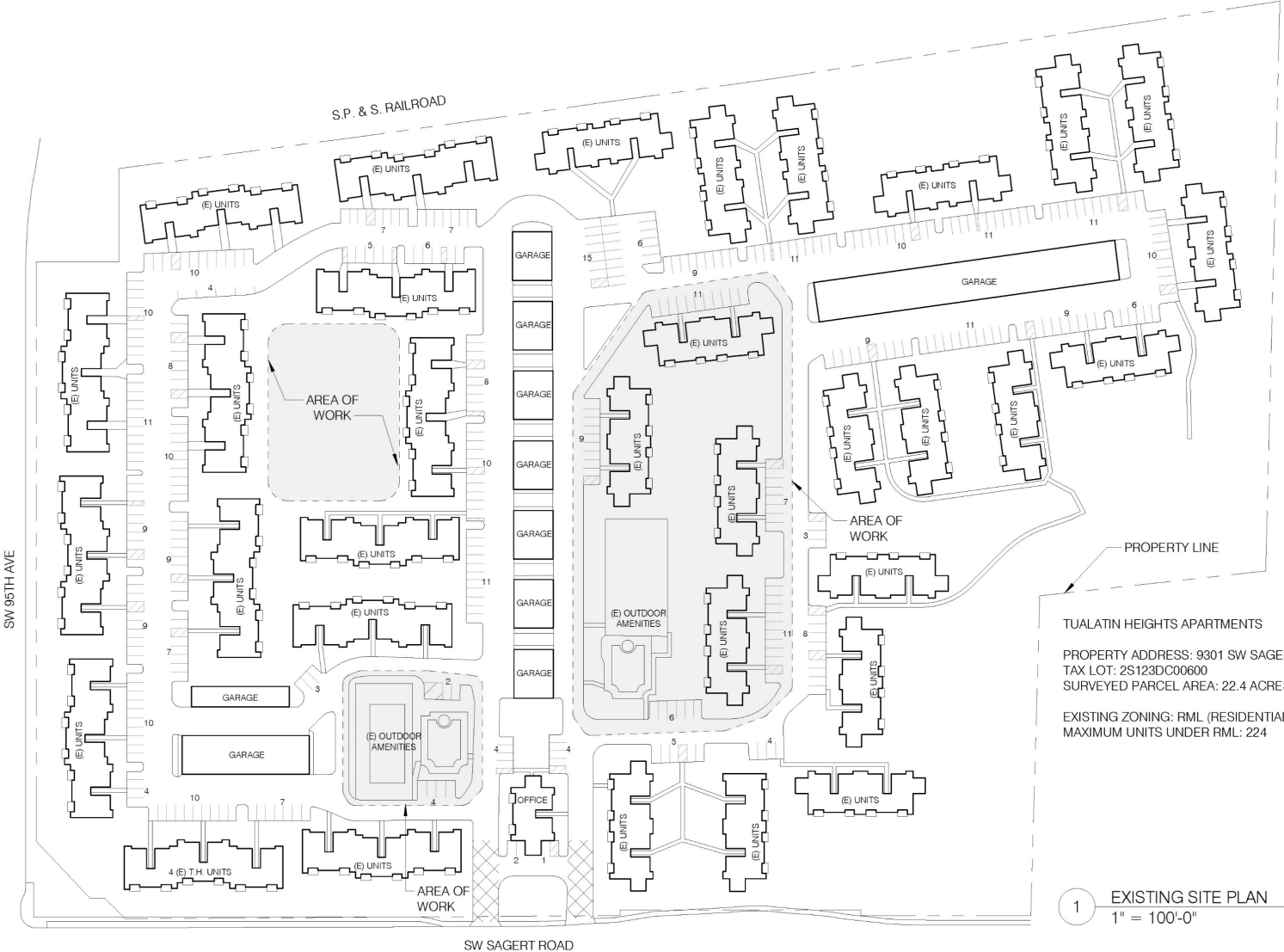


# Architectural Review Process

- ❑ Following approval of Plan Map Amendment, an Architectural Review Application will be filed to the City.
- ❑ Architectural Review application will apply applicable Tualatin Development Code criteria, and consider:
  - ❑ Site Design
  - ❑ Building Design
  - ❑ Traffic
  - ❑ Parking
  - ❑ Public Facilities
- ❑ Architectural Review Type III for 100 units or more.
  - ❑ Type III Architectural Review Applications go to a hearing at the Architectural Review Board.

# Existing Site Plan

BIM 360://21007 - UDR Tualatin Heights Apartments/21007\_UDR Tualatin Heights Apartments\_Central - 2020.rvt 3/9/2021 1:45:45 PM



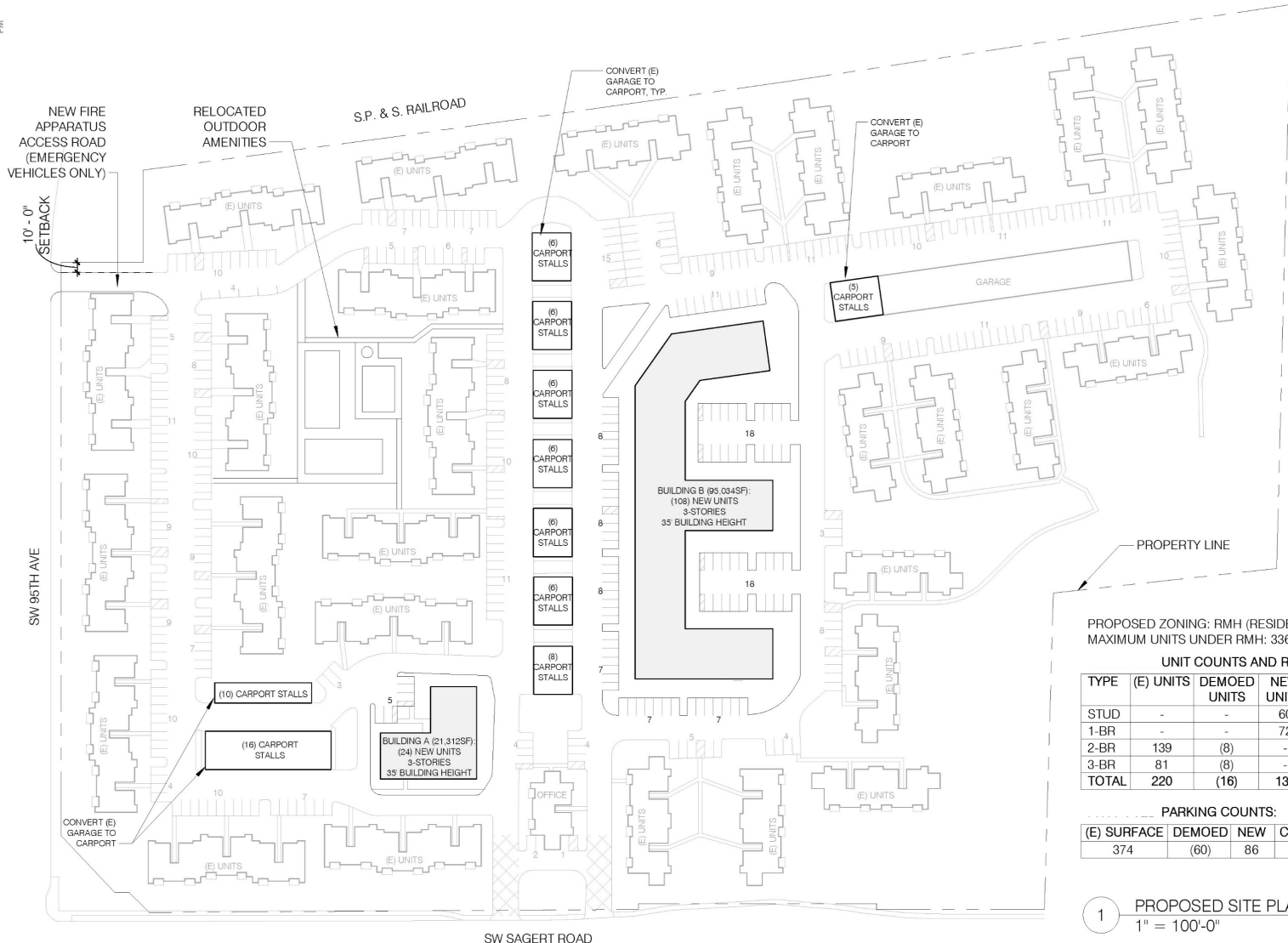
**TUALATIN HEIGHTS APARTMENTS**  
 PROPERTY ADDRESS: 9301 SW SAGERT ST, TUALATIN, OR 97062  
 TAX LOT: 2S123DC00600  
 SURVEYED PARCEL AREA: 22.4 ACRES  
 EXISTING ZONING: RML (RESIDENTIAL MEDIUM LOW)  
 MAXIMUM UNITS UNDER RML: 224

1 EXISTING SITE PLAN  
 1" = 100'-0"



# Conceptual Site Plan

BIM 360://11007 - UDR Tualatin Heights Apartments/11007\_UDR Tualatin Heights Apartments\_Central - 2020.rvt 5/20/2021 3:20:38 PM



PROPOSED ZONING: RMH (RESIDENTIAL MEDIUM HIGH)  
 MAXIMUM UNITS UNDER RMH: 336

**UNIT COUNTS AND REQUIRED PARKING:**

TYPE	(E) UNITS	DEMOED UNITS	NEW UNITS	TOTAL UNITS	REQ. PARKING	REQ. GARAGE
STUD	-	-	60	60	60	0
1-BR	-	-	72	72	90	0
2-BR	139	(8)	-	131	196.5	0
3-BR	81	(8)	-	73	127.75	0
<b>TOTAL</b>	<b>220</b>	<b>(16)</b>	<b>132</b>	<b>336</b>	<b>475</b>	<b>0</b>

**PARKING COUNTS:**

(E) SURFACE	DEMOED	NEW	CONVERTED CARPORTS	TOTAL
374	(60)	86	75	475

1 PROPOSED SITE PLAN  
 1" = 100'-0"



SW SAGERT ROAD

# Next Steps

*Dates are tentative*

- ❑ July 2021: File application for proposed Plan Map Amendment
- ❑ August 2021: Planning Department Application Review
- ❑ Fall 2021: Planning Commission Review and Tualatin City Council Hearings
- ❑ TBD: Development proposal – Architectural Review Application
- ❑ TBD: Development review

# Questions / Comments

Contact: Frank Angelo

Principal, Angelo Planning Group

[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)

503.227.3664





May 25, 2020

RE: Tualatin Heights Comprehensive Plan Map Amendment

Dear Property Owner:

You are cordially invited to attend a virtual Neighborhood/Developer Meeting on **Wednesday, June 9, 2021 at 6:00pm** (see page 3 for instructions on how to join the virtual meeting). This meeting is being held to discuss a proposed zone change for the Tualatin Heights property located at 9301 SW Sagert Street. Tualatin Heights is a multifamily apartment development; existing development includes 220 multifamily dwellings on 22.4 acres. The property is currently zoned Residential Medium Low (RML), with a maximum density of 10 dwelling units per acre. The property owner, United Dominion Realty, L.P., is interested in a zone change to allow for Residential Medium-High Density (RMH) on the site, increasing the density to 15 dwelling units per acre for a maximum of 336 units.

City approval is required for a zone change, formally referred to as Comprehensive Plan Map Amendment. The Tualatin Planning Commission will review the application and the Planning Commission will make a recommendation to the Tualatin City Council who will make the final decision.

Please note this meeting will be an informational meeting on the zone change application only. No development is planned at this time.

Because of the current COVID-19 situation, the City of Tualatin has prepared Temporary Guidance for Neighborhood/Developer Meetings. This Guidance allows the Neighborhood/Developer Meeting to be conducted as a Virtual Meeting. The Tualatin Heights Plan Map Amendment Virtual Neighborhood/Developer Meeting will be held on **Wednesday, June 9, 2021 at 6:00pm. See page 3 for instructions on how to join the virtual meeting.**

The City of Tualatin has laid out the following requirements for a Virtual Neighborhood Meeting:

- Be publicly accessible
- Does not require user login
- Allows a call-in option for non-internet users

Accordingly, we are providing the attached instructions for you to use if you choose to participate in this Neighborhood/Developer Meeting for the proposed Tualatin Heights zone change.

Mailed notice of this Virtual Meeting has been provided in the same manner as specified in TDC 32.120.

a. This notice includes the following information:

- i. Instructions for how to join the virtual meeting and how to submit written comments both prior to and during the meeting. See attachment.*
- ii. Instructions for how to obtain or view materials to be presented during the virtual meeting. Such materials shall be made available, upon request or on a publicly accessible digital platform, a minimum of two days prior to the meeting and a minimum of 10 days after the meeting concludes. See attachment.*
- iii. Preliminary details of the major elements of the proposed development. See description above.*
- iv. Whether the development proposal includes a single or multiple applications. The application is for a Comprehensive Plan Map Amendment.*

The purpose of this meeting is to provide a forum for surrounding property owners / residents to review the proposal and to identify issues so they can be considered before the formal application is submitted to the City of Tualatin. This meeting gives you the opportunity to share with us any special information you know about the property involved. Please note that this will be an informational meeting on preliminary development plans prior to official submission to the City.

Please contact me at 503-227-3664 (leave a message) or at [fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com) if you have questions about this meeting or the proposed project. We look forward to discussing this proposal with you.

Sincerely,



Frank Angelo, Principal  
Angelo Planning Group  
[fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)

Attachment: Tualatin Heights Project Neighborhood/Developer Meeting Instructions  
Project Location Map

## **Tualatin Heights Zone Change Virtual Neighborhood Meeting Instructions**

The following are the instructions to participate in the Tualatin Heights Zone Change Virtual Neighborhood/Developer Meeting to be held on **Wednesday, June 9, 2021 at 6:00 PM.**

1. Log or call in via GoToMeeting using the information below:

Website for video: <https://www.gotomeet.me/AngeloPlanning/thzonechange>

**You can also dial in using your phone.**

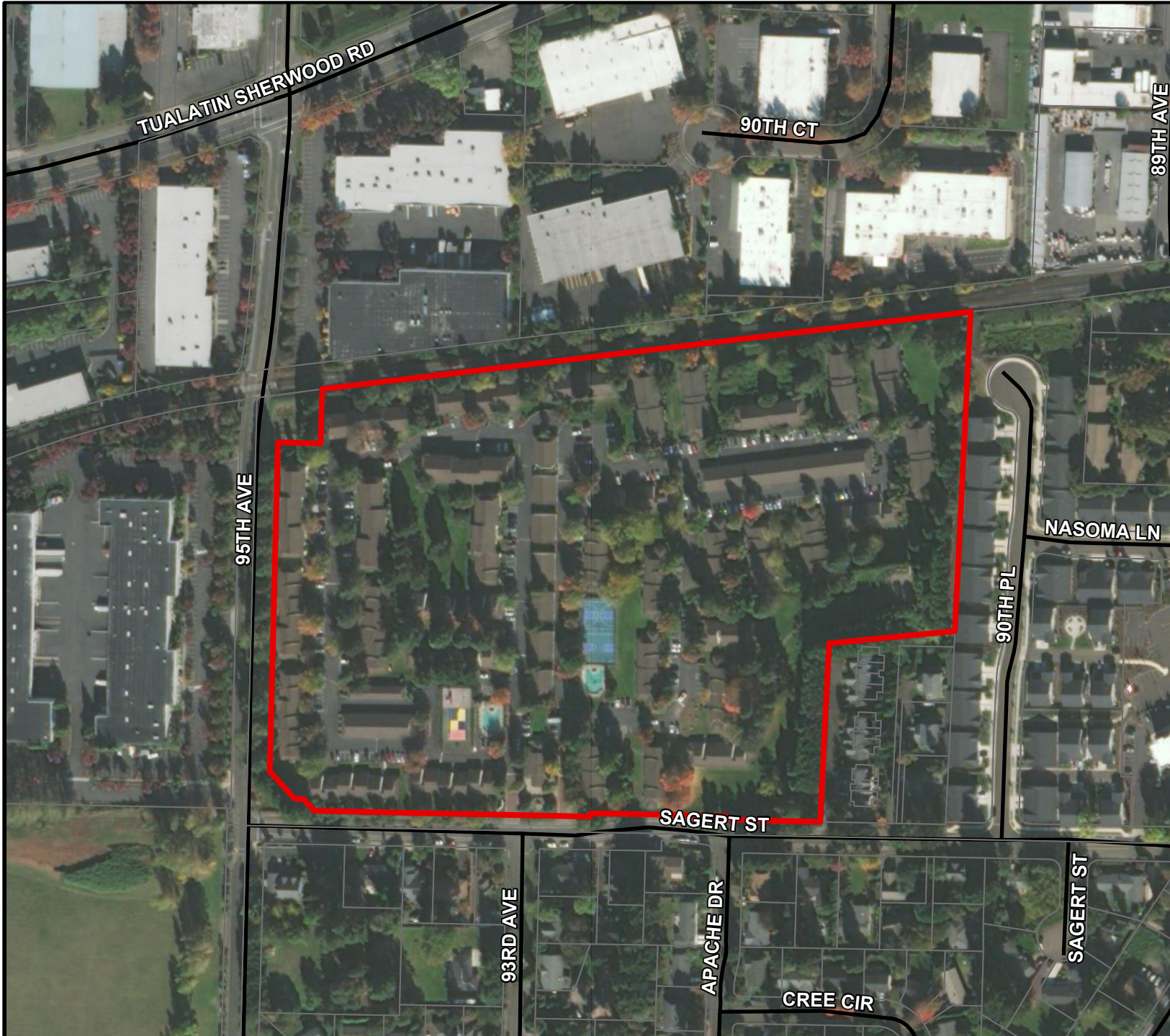
United States: [+1 \(571\) 317-3122](tel:+15713173122) and use **Access Code:** 585-997-213

If you are new to GoToMeeting? Get the app now and be ready when your first meeting starts:

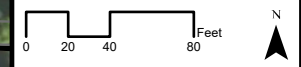
<https://global.gotomeeting.com/install/585997213>

2. Submit written questions before or during the meeting by emailing Frank Angelo at: [fangelo@angeloplanning.com](mailto:fangelo@angeloplanning.com)
3. Materials presented at the meeting will be available to view online 2 days prior to, and 10 days after, the meeting at the following link: <https://tinyurl.com/thzonechange>  
(The link will take you to a Dropbox folder.)

# Tualatin Heights Zone Change Vicinity Map



 Site



Prepared By: Angelo Planning Group  
Date: 05/19/2021

Coordinate System: NAD 1983 HARN  
StatePlane Oregon North FIPS 3601 Feet Intl  
Data Sources: Metro RLIS, WWSP

This map is intended for informational purposes only. While this map represents the best data available at the time of publication, APG makes no claims, representations, or warranties as to its accuracy or completeness. Metadata available upon request.



CERTIFICATION OF SIGN POSTING

<p><b>NOTICE</b></p> <p><b>NEIGHBORHOOD / DEVELOPER MEETING</b></p> <p>06/09/20<sup>21</sup>10:00 p.m.</p> <p>SW _____</p> <p>503-691-3026</p>
--

In addition to the requirements of TDC 32.150, the 18" x 24" sign must display the meeting date, time, and address as well as a contact phone number. The block around the word "NOTICE" must remain orange composed of the RGB color values Red 254, Green 127, and Blue 0. A PowerPoint template of this sign is available at: <https://www.tualatinoregon.gov/planning/land-use-application-sign-templates>.

As the applicant for the Tualatin Heights Plan Amendment project, I hereby certify that on this day, 2 sign(s) was/were posted on the subject property in accordance with the requirements of the Tualatin Development Code and the Community Development Division.

Applicant's Name: Frank Angelo  
(Please Print)

Applicant's Signature: [Handwritten Signature]

Date: May 26, 2021



**AFFIDAVIT OF MAILING NOTICE**

STATE OF OREGON            )  
  ) SS  
COUNTY OF WASHINGTON )

I, Emma Pomcoib being first duly sworn, depose and say:

That on the 26 day of May, 2021, I served upon the persons shown on Exhibit "A" (Mailing Area List), attached hereto and by this reference incorporated herein, a copy of the Notice of Neighborhood/Developer Meeting marked Exhibit "B," attached hereto and by this reference incorporated herein, by mailing to them a true and correct copy of the original hereof. I further certify that the addresses shown on said Exhibit "A" are their regular addresses as determined from the books and records of the Washington County and/or Clackamas County Departments of Assessment and Taxation Tax Rolls, and that said envelopes were placed in the United States Mail with postage fully prepared thereon.

[Handwritten Signature]  
\_\_\_\_\_  
Signature

SUBSCRIBED AND SWORN to before me this 26<sup>th</sup> day of May, 2021.



[Handwritten Signature]  
\_\_\_\_\_  
Notary Public for Oregon  
My commission expires:

RE: Tualatin Heights Plan Amendment

# Tualatin Heights Apartments | 9301 SW Sagert Street

## Pre-Application Meeting 4/7/21 Summary

Thank you for discussing the proposed Plan Map Amendment and redevelopment. Below, please find a summary of some of the points we were able to discuss. If there is anything else you would like to document from our meeting, please respond with your notes as well. Thank you.

### Required Land Use Reviews

All land use reviews may be submitted electronically via eTrakit:  
<https://permits.ci.tualatin.or.us/eTrakit/>

### A Neighborhood/Developer meeting

- Holding a new Neighborhood/Developer meeting is required for both a Plan Map Amendment and Architectural Review application; these meetings may be combined.
- One Neighborhood/Developer meeting may cover multiple applications but should generally be held no more than six months prior to application. More detailed information about this meeting, including options for virtual meetings during the present pandemic response, is online here: <https://www.tualatinoregon.gov/planning/neighborhood-developer-meetings>
- Applicants are responsible for mailing and posting notice of your Neighborhood Developer meeting. The City can provide a list of addresses for your notice letters. This mailing list includes neighboring property owners, but communicating with your current residents is also encouraged to proactively address concerns. Please email us at [planning@tualatin.gov](mailto:planning@tualatin.gov) to request a Mailing List for a \$32 fee.

### Plan Map Amendment

An applicant-initiated Plan Map Amendment is a [Type IV-A](#) process with review by Tualatin City Council.

An advisory recommendation is sought at Tualatin Planning Commission prior to a City Council hearing. The applicant team is invited to attend and share information at this meeting, as are members of the public, but it is not a formal hearing.

Plan Map Amendment application packet:

[https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/5083/pma\\_instructions\\_withform.pdf](https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/5083/pma_instructions_withform.pdf)

Criteria to address in your narrative:

- TDC 33.070(5):  
[https://library.municode.com/or/tualatin/codes/development\\_code?nodeId=THDECOTUOR\\_CH\\_33APAPCR\\_TDC\\_33.070PLAM](https://library.municode.com/or/tualatin/codes/development_code?nodeId=THDECOTUOR_CH_33APAPCR_TDC_33.070PLAM)

With an upzone adding residential density, special attention is needed to the Transportation Planning Rule (TPR) analysis. Your findings should also address public capacity for sanitary sewer conveyance and water availability.

The proposal should also respond to the current Housing Needs Analysis and housing development goals. The HNA shows a deficient of capacity within RMH zoning.

- Housing Needs Analysis (2019):  
<https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/22631/hna.pdf>
- Tualatin 2040 information: <https://www.tualatinoregon.gov/planning/tualatin-2040>

Tualatin Comprehensive Plan:

[https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/4716/comprehensive\\_plan\\_web.pdf](https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/4716/comprehensive_plan_web.pdf)

### **Architectural Review (AR)**

- Architectural Review (Type III for 100 units or more). Type III ARs go to a hearing at the Architectural Review Board.
- AR Application:  
[https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/5081/ar\\_instructions\\_2019\\_withforms.pdf](https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/5081/ar_instructions_2019_withforms.pdf)

Criteria to address in your AR narrative includes:

#### **Tualatin Municipal Code:**

- [Chapter 03-02: Sewer Regulations; Rates;](#)
- [Chapter 03-03: Water Service;](#)
- [Chapter 03-05: Soil Erosion, Surface Water Management, Water Quality Facilities, and Building and Sewers;](#)

#### **Tualatin Development Code:**

- [TDC 42: Medium High Density Residential](#)
- [TDC 73A: Site Design,](#)
- [73B: Landscaping Design,](#)
- [73C: Parking Standards, and](#)
- [73D: Waste and Recyclables Management Standards;](#)
- [TDC 74: Public Improvements;](#)
- [TDC 75: Access.](#)

While not directly applicable to larger multi-family development, changes to the Tualatin Development Code related to middle housing and consistent with Oregon House Bill 2001 are anticipated in the second half of 2021. Minor changes in the development code such as definition updates may possibly be relevant to this project. Updates on this project at: <https://www.tualatinoregon.gov/planning/middle-housing>.

## Highlighted Site Design Standards

### **RMH Standards:**

[https://library.municode.com/or/tualatin/codes/development\\_code?nodeId=THDECOTUOR\\_CH42MEHI\\_DEREZORM](https://library.municode.com/or/tualatin/codes/development_code?nodeId=THDECOTUOR_CH42MEHI_DEREZORM)

### **Community Design Standards:**

The 73A “Common wall” standards must be met unless the applicant team seeks a Variance prior to Architectural Review. Where it may not be immediately clear that the design meets these standards, making the case in your narrative for how the design meets the standards is key.

### **Parking:**

TDC 73C requires garages in addition to the parking thresholds. Your plans should reflect this requirement.

### **Access:**

TVF&R has described the need for a secondary access off of SW 95<sup>th</sup> Ave. See additional comments from TVF&R.

### **Natural resources:**

Clean Water Services will comment on any applicable natural resource concerns, including any possible required dedications and mitigations, through their Environmental Review process. The Service Provider Letter from CWS is a requirement of a complete Architectural Review submittal. For more information, see <http://www.cleanwaterservices.org/permits-development/step-by-step-process/environmental-review/>

## Public Utilities and Other Site Development

- An Erosion Control permit is required from Tualatin for projects disturbing over 500 square feet.
  - Additionally if between one and five acres are disturbed, a 1200CN is needed from CWS.
  - If over five acres are disturbed, a 1200C is needed from DEQ.
  
- A Water Quality Permit is needed for construction and modification of public and private impervious areas. The permit will include wetland mitigation/revegetation required by CWS SPL in addition to treatment, detention per [TMC 3-5-3-220\(4\)](#), and hydromodification per CWS D&CS Ch 4.
  - Improve existing facilities to adequate condition
  - Include all private stormwater treatment and conveyance within a maintenance agreement including existing facilities.
  - Stormwater plans and calculations certified by an Oregon registered, professional engineer in accordance with TMC 3-5-390(1) proving proposed systems:
    - In accordance with TMC 3-5-200 through 3-5-430, TDC 74.630 and 74.650, Public Works Construction Code (PWCC), and Clean Water Services’ (CWS) Design and Construction Standards (D&CS) Chapter 4.
    - Show onsite facilities for proposed new and modified impervious areas.
    - Address runoff from all new and modified private impervious areas.

- Treat new and modified impervious areas in accordance with CWS D&CS 4.08.1.d meeting phosphorous removal in accordance with TMC 3-5-350 per the design storm in accordance with TMC 3-5-360 and CWS D&CS 4.08.2.
    - Detain up to the 25 year storm event in accordance with TMC 3-5-220(4), TMC 3-5-230, and CWS D&CS 4.08.
    - Accommodate hydromodification in accordance with CWS D&CS 4.03.5.
    - Include conveyance calculations that accommodates up to a 25-year storm event with 100-year overland flow to the public stormwater system in accordance with TDC 74.640 and CWS D&CS 5.05.2.d.
      - Downstream evaluation with a maximum of 82% capacity within public lines per [TMC 3-5-210 - Review of Downstream System](#)
      - Obtain any permissions to reach Tualatin's public lines. An ODOT Rail Contact that may be beneficial Bob Stolle, PE, PMP, Crossing Engineer, Commerce and Compliance Division, 3930 Fairview Industrial Dr. SE | Salem , OR , 97302-1166, C. 503-551-0618 | bob.stolle@odot.state.or.us
    - Demonstrate compliance with the Clean Water Services' Service Provider Letter CWS conditions sufficient to obtain a Stormwater Connection Permit Authorization Letter in accordance with TDC 74.650(2) and CWS D&CS 3.01.2(d).
  - Geotech/soil/infiltration report: An infiltration test report will need to be submitted to Engineering for a complete land use application if the proposed water quality facility includes infiltration in the design.
- A Public Works Permit is needed for any work within right-of-way or public easements.
  - Typical improvements to bring into code compliance
    - Separate water laterals for domestic and fire
    - Sanitary sewer and stormwater cleanouts near the right-of-way
    - Sidewalks and ramps adjacent to the lot must be evaluated. If not in compliance with ADA requirements, they must be improved.
  - Dedicate and construct/reconstruct public street cross-sections. Sidewalks and ramps adjacent to the lot must be evaluated. If not in compliance with ADA requirements, they must be improved.
    - The City Engineer may allow modification of the cross-sections based on existing development, Traffic Impact Analysis results, and Tualatin Moving Forward projects.
    - [Figure 11-1: Functional Classification and Street Signal Plan](#)
    - Sagert and 95<sup>th</sup> are classified as [Minor Collectors](#)
    - Fee-in-lieu potentials may include cross-walks, sidewalks, or signal relating Tualatin Moving Forward, 95th Ave and Avery St (Tualatin Elementary School), <https://www.tualatinmovingforward.com/95th-avenue-and-avery/>
    - Please propose alternatives that are less than preferred for confirmation with the City Engineer ahead of land use for initial responses and potential modification to proposed plans.
  - Rezoning includes the possibility of increase of public sanitary sewer downstream conveyance and water use. Capacity and availability must be confirmed.



- Hydraulic Modeling is required for over 48,300 square footage of new building area, 870 gallons/acre/day use, and/or more than 49 residential units. Hydraulic Modeling may be requested in advance of application for a land use to confirm availability and requirements, but may need to be updated depending on changes due to conditions of approval. When submitting a modeling application include:
  - Requirements/alternatives allowed by Tom Mooney, TVF&R (503) 259-1419; [thomas.mooney@tvfr.com](mailto:thomas.mooney@tvfr.com)
  - Hydrant flow test results. Request testing via <https://www.tualatinoregon.gov/publicworks/hydrant-flow-tests>. For questions contact Terrance Leahy, Water Division Manager, (503) 691-3095; [tleahy@tualatin.gov](mailto:tleahy@tualatin.gov)

### Transportation and Site Access

- Have your transportation engineer confirm their proposed Traffic Impact Analysis scope by emailing Mike McCarthy, Principal Traffic Engineer, [mmccarthy@tualatin.gov](mailto:mmccarthy@tualatin.gov) (please also copy [tdoran@tualatin.gov](mailto:tdoran@tualatin.gov)).

### Fire

- Additional comments from Tualatin Valley Fire and Rescue are attached.
- Tom Mooney, TVF&R (503) 259-1419; [thomas.mooney@tvfr.com](mailto:thomas.mooney@tvfr.com))
- Flow testing: Terrance Leahy, Water Division Manager, (503) 691-3095; [tleahy@tualatin.gov](mailto:tleahy@tualatin.gov))

### Fees

- Current fee schedule: <https://www.tualatinoregon.gov/finance/fee-schedule>
- For calculating SDC fees, please work with Lauren Gonzalez, [lgonzalez@tualatin.gov](mailto:lgonzalez@tualatin.gov)

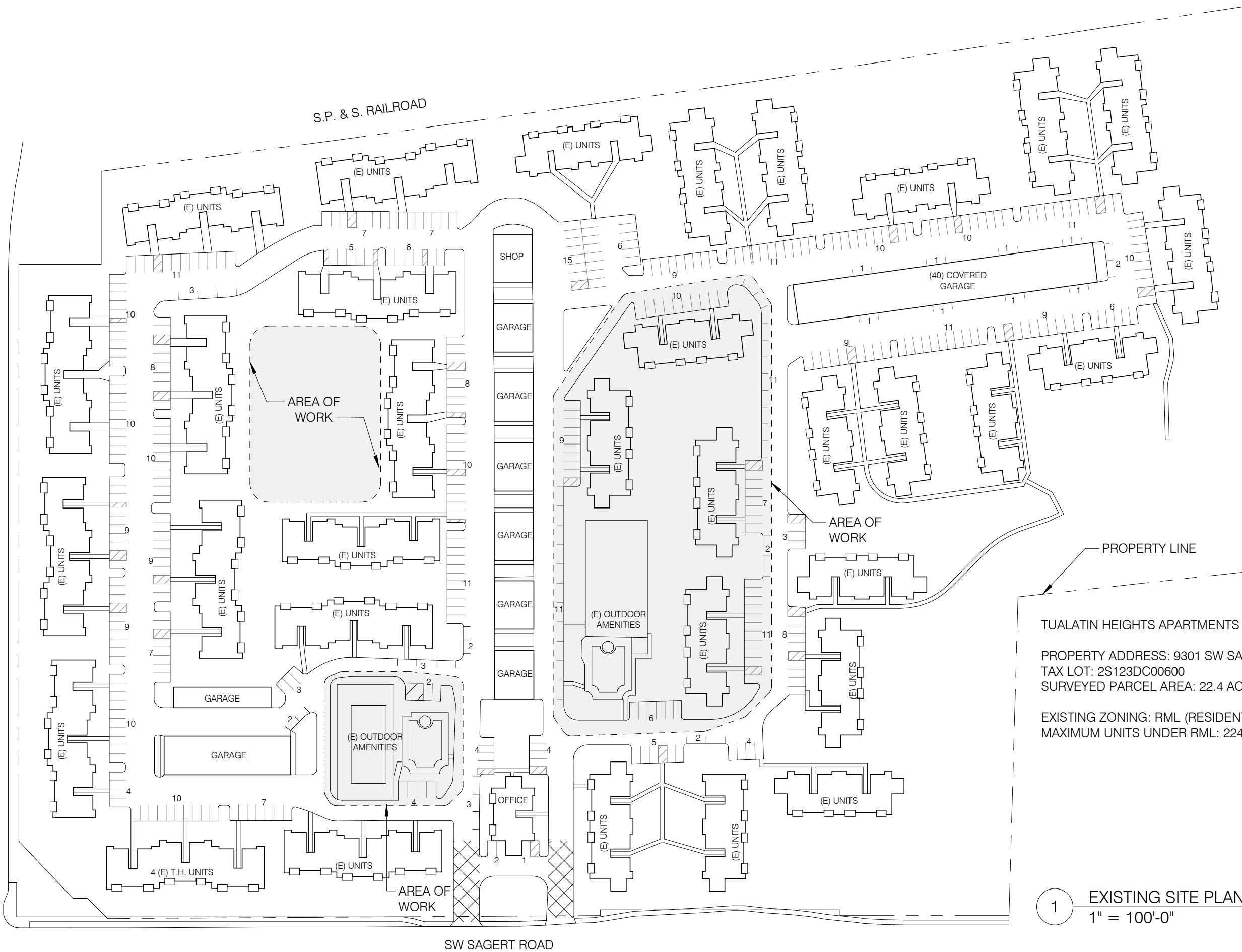
---

# **EXHIBIT A**

## **Conceptual Site Plan**

SW 95TH AVE

S.P. & S. RAILROAD



TUALATIN HEIGHTS APARTMENTS  
 PROPERTY ADDRESS: 9301 SW SAGERT ST, TUALATIN, OR 97062  
 TAX LOT: 2S123DC00600  
 SURVEYED PARCEL AREA: 22.4 ACRES  
 EXISTING ZONING: RML (RESIDENTIAL MEDIUM LOW)  
 MAXIMUM UNITS UNDER RML: 224

1 EXISTING SITE PLAN  
 1" = 100'-0"



NEW FIRE APPARATUS ACCESS ROAD (EMERGENCY VEHICLES ONLY)

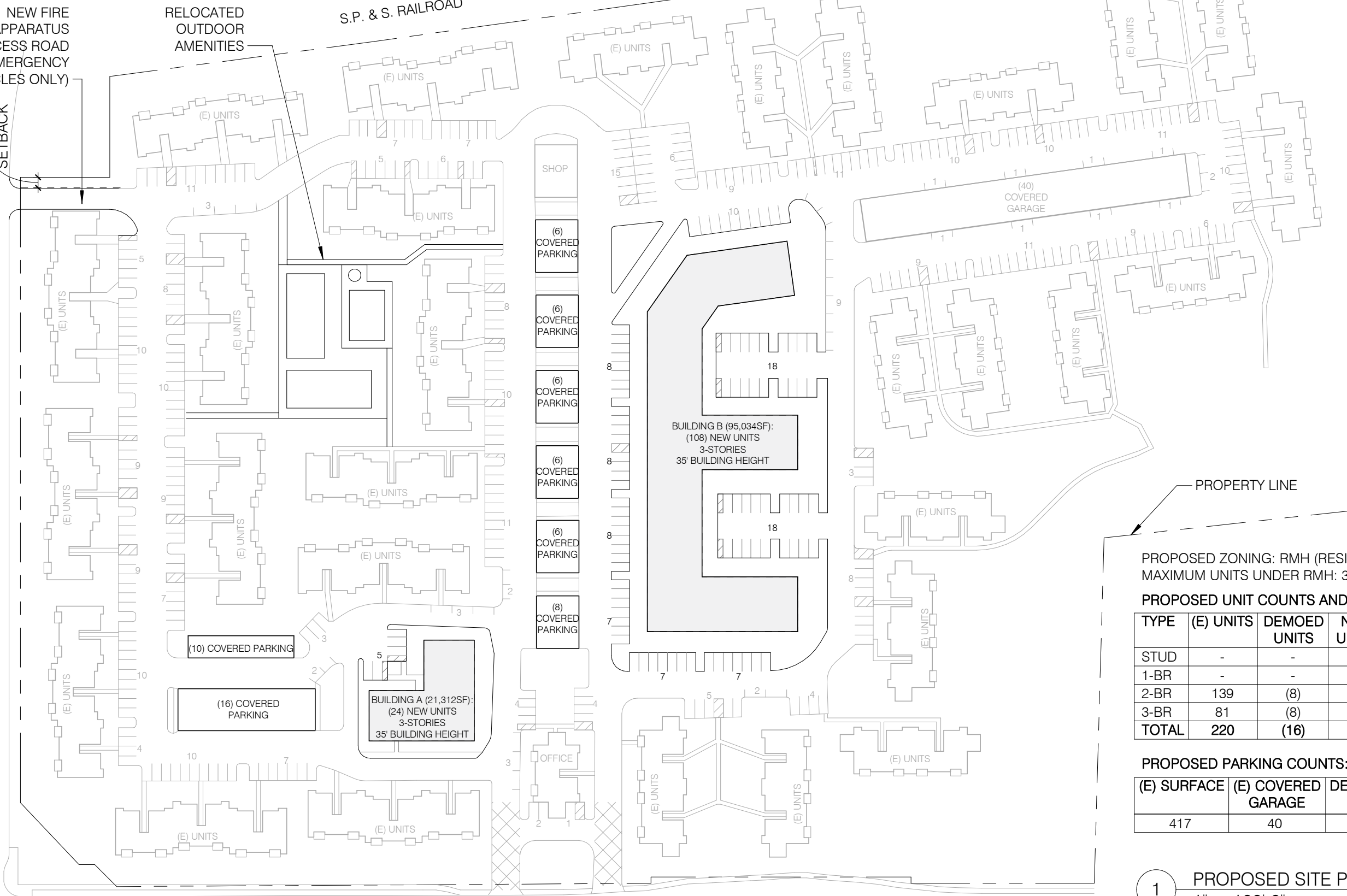
10'-0" SETBACK

RELOCATED OUTDOOR AMENITIES

S.P. & S. RAILROAD

SW 95TH AVE

SW SAGERT ROAD



PROPOSED ZONING: RMH (RESIDENTIAL MEDIUM HIGH)  
 MAXIMUM UNITS UNDER RMH: 336

PROPOSED UNIT COUNTS AND REQUIRED PARKING:

TYPE	(E) UNITS	DEMOED UNITS	NEW UNITS	TOTAL UNITS	REQ. PARKING	REQ. GARAGE
STUD	-	-	60	60	60	0
1-BR	-	-	72	72	90	0
2-BR	139	(8)	-	131	196.5	0
3-BR	81	(8)	-	73	127.75	0
<b>TOTAL</b>	<b>220</b>	<b>(16)</b>	<b>132</b>	<b>336</b>	<b>475</b>	<b>0</b>

PROPOSED PARKING COUNTS:

(E) SURFACE	(E) COVERED GARAGE	DEMOED	NEW SURFACE	NEW COVERED	TOTAL
417	40	(59)	86	64	548

1 PROPOSED SITE PLAN  
 1" = 100'-0"

NORTH



---

# **EXHIBIT C**

## **Tualatin Heights Parking Assessment**



MEMORANDUM

Date: August 16, 2021

Project #: 26462

To: Dustin Miller, UDR

Cc: Andrew Lavaux, Jon McGrew, Erica Thompson, Frank Angelo, Chylo Schwab, Erin Long

From: Matt Hughart, AICP

Project: Tualatin Heights

Subject: Parking Assessment

A parking assessment was performed for the existing Tualatin Heights apartment complex and the immediately adjacent local streets to the south. These study areas are illustrated in Exhibit 1. Consistent with industry practice, parking data was collected on a mid-week and Saturday in July 2021. The parking assessment included the total number of stalls available along each roadway segment and within the Tualatin Heights apartment complex and compared it to the total number of vehicles parking during multiple key study periods. Tables 1 and 2 summarize the parking conditions during the mid-week and Saturday time periods, respectively.

**Exhibit 1 – Parking Inventory Study Area**



**Table 1 – Existing Neighborhood On-Street and Tualatin Heights Parking Conditions (Weekday)**

Street	Segment	Side	Parking Supply <sup>1</sup>	Existing Weekday Neighborhood Street Demand				
				5:00-6:00 AM	10:00 – 11:00 AM	3:00-4:00 PM	7:00 – 8:00 PM	11:00 PM – 12:00 AM
<b>On-Street Parking</b>								
SW Sagert Street	SW 95 <sup>th</sup> Avenue to SW 93 <sup>rd</sup> Avenue	South	11	9	8	8	9	10
	SW 93 <sup>rd</sup> Avenue to SW Apache Drive	South	8	5	3	3	4	4
	SW Apache Drive to SW 90 <sup>th</sup> Place	South	12	5	3	4	4	6
SW 93 <sup>rd</sup> Avenue	SW Sagert Street to SW Umait Street	West	8	3	3	1	2	2
		East	5	0	1	0	0	0
SW Apache Drive	SW Sagert Street to SW Cree Circle	West	7	4	3	2	4	5
		East	6	0	1	1	2	1
Existing Total			57	26	22	19	25	28
<b>Existing On Street Parking Utilization</b>				<b>47%</b>	<b>39%</b>	<b>33%</b>	<b>44%</b>	<b>49%</b>
<b>Tualatin Heights Parking</b>								
Tualatin Heights Complex			457 <sup>2</sup>	363	237	203	268	344
<b>Existing Tualatin Heights Parking Utilization</b>				<b>79%</b>	<b>52%</b>	<b>44%</b>	<b>59%</b>	<b>75%</b>

<sup>1</sup> Parking supply is estimated based on visual observations and taking into account buffers from fire hydrants and mailboxes

<sup>2</sup> Includes 417 striped surface parking spaces and 40 covered garage spaces

**Table 2 – Existing Neighborhood On-Street and Tualatin Heights Parking Conditions (Saturday)**

Street	Segment	Side	Parking Supply <sup>1</sup>	Existing Weekday Neighborhood Street Demand				
				5:00-6:00 AM	10:00 – 11:00 AM	3:00-4:00 PM	7:00 – 8:00 PM	11:00 PM – 12:00 AM
<b>On-Street Parking</b>								
SW Sagert Street	SW 95 <sup>th</sup> Avenue to SW 93 <sup>rd</sup> Avenue	South	11	10	10	7	6	11
	SW 93 <sup>rd</sup> Avenue to SW Apache Drive	South	8	6	4	4	5	6
	SW Apache Drive to SW 90 <sup>th</sup> Place	South	12	4	4	5	6	6
SW 93 <sup>rd</sup> Avenue	SW Sagert Street to SW Umait Street	West	8	3	2	1	2	2
		East	5	0	1	1	3	2
SW Apache Drive	SW Sagert Street to SW Cree Circle	West	7	5	4	4	4	3
		East	6	2	1	1	1	1
Existing Total			57	30	26	23	27	31
<b>Existing On Street Parking Utilization</b>				<b>53%</b>	<b>46%</b>	<b>40%</b>	<b>47%</b>	<b>54%</b>
<b>Tualatin Heights Parking</b>								
Tualatin Heights Complex			457 <sup>2</sup>	368	291	247	275	345
<b>Existing Tualatin Heights Parking Utilization</b>				<b>81%</b>	<b>64%</b>	<b>54%</b>	<b>60%</b>	<b>75%</b>

<sup>1</sup> Parking supply is estimated based on visual observations and taking into account buffers from fire hydrants and mailboxes

<sup>2</sup> Includes 417 striped surface parking spaces and 40 covered garage spaces

A review of the on-street and apartment complex parking conditions revealed the following key findings:

- During the mid-week and Saturday time periods, existing on-street parking occupancy on the neighborhood street segments is never more than 54% utilized when looking at the collective whole. However, some segments along SW Sagert Street (between SW 95<sup>th</sup> Avenue and SW 93<sup>rd</sup> Avenue) have parking occupancy levels at 100% or close to 100% for most the study periods. It is unknown if the on-street parking is being generated by the adjacent single family homes, Tualatin Heights residents, or a combination of both.
- The total active parking supply within the Tualatin Heights apartment complex (excluding stalls available within the parking garage units that are primarily being used for storage) is 457 spaces.
- Peak apartment complex parking utilization was found during the 5:00-6:00 AM study period (79% during a mid-week day and 81% on a Saturday). These findings indicate that the parking supply exceeds current demand.

### Tualatin Heights Parking Management/Policies

In order to better understand the summarized parking profile within the Tualatin Heights apartment complex, the existing parking management practices and policies are summarized below.

- Each apartment home comes with one assigned/permitted parking space. This space is located in close proximity to the apartment home.
- A second assigned parking space is available upon request and rents for \$25/month.
- There are 9 signed guest parking spaces for the complex. A virtual permit is required and obtained by scanning a QR code on the adjacent sign.



---

MEMORANDUM

## Parking Policies

TUALATIN HEIGHTS PLAN MAP AMENDMENT (PMA 21-0001)

**DATE** January 20, 2022  
**TO** Steve Koper, Assistant Community Development Director  
Keith Leonard, Associate Planner  
**FROM** Frank Angelo and Emma Porricolo, APG  
**CC** Brad Hodack, UDR  
Andrew Lavaux, UDR  
Dustin Miller, UDR  
Jon McGrew, Hennebery Edy  
Matt Hughart, Kittelson & Associates

---

The issue of on-site parking at the Tualatin Heights Apartments was raised at the Planning Commission meeting. The following is information on the current parking policies at Tualatin Heights. In addition, the project team collected information from six apartment developments within 1 mile of Tualatin Heights to get an understanding of how they currently address on-site vehicle parking.

### **A. Tualatin Heights Parking Management/Policies (from page 3 of Parking Study submitted with application)**

In order to better understand the summarized parking profile within the Tualatin Heights apartment complex, the existing parking management practices and policies are summarized below.

- Each apartment home comes with one assigned/permitted parking space. This space is located in close proximity to the apartment home.
- A second assigned parking space is available upon request and rents for \$25/month.
- There are 9 signed guest parking spaces for the complex. A virtual permit is required and obtained by scanning a QR code on the adjacent sign

### **B. Other Apartment Developments**

The apartment developments surveyed by the project team provided the following information:

1. **Chelan Apts.** – 1 assigned space – free. They have 0 additional spaces so any additional cars are on the street.

2. **Fox Meadows** – 1 assigned open parking – free – they are currently moving to a reserved paid model – spaces will rent for \$55/month
3. **Todd Village** – 1 assigned free space – another other car can park in visitor parking or if it's full, on the street.
4. **Tualatin Meadows** – 1 car is allowed – 1 space free, however, they also have \$35 carports (waiting list) and \$135 garages (waiting list) or ok to park in visitor.
5. **Arya @ Hedges Creek** – 1 bed – 1 assigned space; 2 bed – 2 assigned spaces (assigned is free). Additional parking is \$50 for open reserved, \$55 carport, \$110 garage
6. **Martinazzi Village** – 1 assigned free space – additional cars park in visitor parking or street

As can be seen in the above information, it is standard practice to provide one free parking spot per unit and offer additional parking spots with a monthly fee. The properties that currently don't charge for parking (#3 and #6) don't have any additional parking to charge for.



---

# **EXHIBIT D**

## **TPR Analysis**

September 16, 2021

Project #: 26462

Mike McCarthy, P.E.  
City of Tualatin  
18880 SW Martinazzi Avenue  
Tualatin, OR 97062

***RE: Tualatin Heights Plan Map Amendment***

Dear Mike,

This letter presents a Traffic Impact Analysis supporting a proposed plan map amendment that would rezone the Tualatin Heights multifamily apartment property from its existing Residential Medium Low zoning to Residential Medium-High Density zoning.

Based on the results of the transportation analysis outlined in this report, the proposed rezone has the potential to create a significant effect on the surrounding transportation network if no mitigations are proposed. However, acceptable operational levels can be achieved at the study intersections in the planning horizon year 2040 with potential mitigation measures in place as described in the report.

**FINDINGS****Existing Transportation Conditions**

- Traffic counts were collected in June 2021 at all of the study intersections during the critical weekday AM and PM peak travel periods. Historical 2019 counts were supplemented at several key intersections in order to account for travel demand reductions associated with on-going COVID-related factors.
- Operational analyses indicate that all of the study intersections currently operate acceptably based on the applicable City of Tualatin and Washington county standards.

**Future Year 2040 Traffic Conditions**

- The proposed land use action is a unique case that would involve upzoning the Tualatin Heights apartment complex property. The complex is approximately 22 acres in size and contains 220-unit multifamily apartment units. The underlying zoning is Residential Medium Low (RML) which currently allows for a maximum density of 10 dwelling units per

acre. Accordingly, the Tualatin Heights apartment complex is essentially maximizing the allowed development potential under the existing zoning. In order to support a vision for additional housing units on the site, the property owner is proposing to modify the zoning to Residential Medium-High Density (RMH) which would increase the density to a maximum of 15 dwelling units per acre.

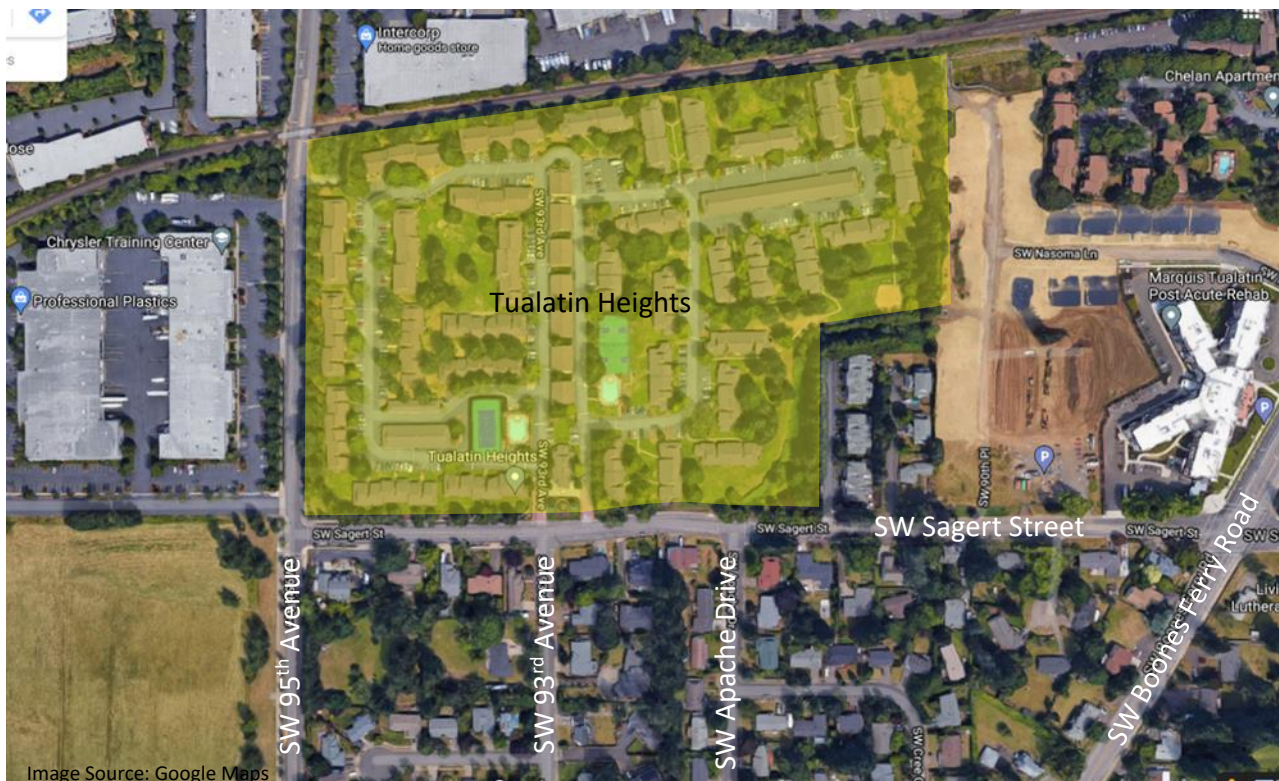
- Background traffic volumes for the 2040 planning horizon year were estimated using a combination of regional travel demand model output and historical growth trends. Since the existing site is built out to its maximum allowed density, the resulting 2040 background traffic volumes represent the future traffic conditions that can be expected under the existing RML zoning.
- Operations of the study intersections under 2040 Background conditions (assuming regional and local traffic growth but no land use action on the Tualatin Heights site) found that all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the exception of the SW Boones Ferry Road/SW Sagert Street intersection. During the weekday AM Peak hour, this intersection is forecast to operate over capacity (v/c of 1.09) and at Level of Service F conditions.
- With the proposed RMH zoning, it was determined that the increased density allowance can potentially result in 116 additional multifamily housing units. Using ITE land use code 221, this increased density has the potential to generate approximately 630 net new daily trips, 42 net new AM peak hour trips, and 51 net new PM peak hour trips.
- Operations of the study intersections under the 2040 proposed RMH zoning scenario found that all of the study intersections are forecast to operate acceptably during both the weekday AM and PM peak hours with the continued exception of the SW Boones Ferry Road/SW Sagert Street intersection. During the weekday AM Peak hour, this intersection is forecast to also operate over capacity (v/c of 1.10) and at Level of Service F conditions. While a very small degradation in operations compared to existing zoning, this technically represents an impact to the operations of the intersection. To address TPR requirements, the identification of a long-term mitigation plan would be needed to restore capacity to the intersection and show it can meet operating standards.
  - Although not formally included in the City of Tualatin's latest Transportation System Plan project list, the future year analysis behind the study did identify the potential for a northbound right-turn lane at the intersection. Such an improvement would restore capacity to the intersection and result in acceptable operations.

## PROJECT BACKGROUND

The property located at 9301 SW Sagert Street, Tualatin, Oregon (see Figure 1) is approximately 22 acres in size and consists of the Tualatin Heights Apartments, a 220-unit multifamily apartment complex. The underlying zoning is Residential Medium Low (RML) which currently allows for a maximum density of 10 dwelling units per acre. Accordingly, the Tualatin Heights Apartments is essentially maximizing the allowed development potential under the existing zoning. In order to support a vision for additional housing units on the site, the property owner is proposing to modify the zoning to Residential Medium-High Density (RMH) which would increase the density to a maximum of 15 dwelling units per acre.

Per Oregon Administrative Rule 660-012-0060, also known as the Transportation Planning Rule (TPR), land use actions such as these need to determine if there will be a significant effect on an existing or planned transportation facility. Under these types of land use actions, a significant effect to a transportation facility typically is anything that could involve the degradation of the performance of an existing or planned transportation facility such that it would not meet adopted local performance standards. The following report addresses the TPR requirements.

Figure 1 – Site Vicinity Map



---

## STUDY SCOPE & ANALYSIS METHODOLOGY

The proposed land use action is a unique case in that the existing development already represents the maximum development potential under the existing zoning. As such, the focus of this analysis is on the transportation impacts of the proposed zone amendment.

### Study Scope

This analysis identifies the transportation-related impacts associated with the proposed land change. The study was prepared in accordance with the City of Tualatin's traffic impact study requirements and supplemental direction provided by City staff. The study scope and overall study area for this project were selected based on an analysis of current and future traffic volumes at study intersections and discussions with City staff. As required by the City's development review requirements and the TPR requirements, the analysis was prepared to address the following transportation issues:

- Existing land use and transportation system conditions within the site vicinity;
- Review of regional traffic growth and seasonal traffic patterns, in-process developments, planned transportation improvements, and related transportation impact studies for other developments in the study area;
- Site trip generation and distribution estimates for reasonable worst-case development scenarios for the proposed RMH zoning;
- Planning horizon year 2034 traffic operations under existing zoning and proposed RMH zoning scenarios;
- Identification of traffic system deficiencies and potential mitigation measures;
- Assessment of zone change compliance with the TPR (OAR Section 660-12-060); and,
- Conclusions and recommendations.

### Study Intersections

The study intersections were identified in collaboration with City staff. Figure 1 illustrates the location of the study intersections that are listed below. For ease of review, each intersection is referenced within this report using a numerical ID.

1. Tualatin Sherwood Road / SW 95<sup>th</sup> Avenue
2. SW Sagert Street / SW 95<sup>th</sup> Avenue
3. SW Sagert Street / SW 93<sup>rd</sup> Avenue / West Tualatin Heights Site Access Driveway
4. SW Sagert Street / East Tualatin Heights Site Access Driveway
5. SW Sagert Street / SW Boones Ferry Road
6. SW Avery Street / SW 95<sup>th</sup> Avenue



## Traffic Analysis Time Periods

Study intersection operations were analyzed during the weekday morning (intersection peak hour between 7:00-9:00 AM) and evening peak hour (intersection peak hour between 4:00-6:00 PM).

## Analysis Methodology

The unsignalized and signalized intersection operational analyses presented in this report were prepared following Highway Capacity Manual 6<sup>th</sup> edition (Reference 2) analysis procedures using VISTRO software.

## Applicable Mobility Standards

While the study area roadways are located exclusively within the City of Tualatin, some of the study intersections are owned/operated by Washington County. Intersection operating targets adopted by the City of Tualatin and Washington County are summarized below.

### ***Washington County Intersection Operating Standards***

Washington County maintains the traffic signal timing at the signalized SW Tualatin Sherwood Road/SW 95<sup>th</sup> Avenue and SW Boones Ferry Road/SW Sagert Street intersections. The acceptable standard for signalized intersections per Washington County motor vehicle performance measures is a v/c ratio no greater than 0.99 during the peak hour.

### ***City of Tualatin Operating Standards***

The City of Tualatin maintains all of the other study intersections. At unsignalized intersections, LOS E is considered the maximum operating standard.

## EXISTING CONDITIONS TRAFFIC ANALYSIS

The existing conditions analysis identifies field conditions and the current operational, traffic control, and geometric characteristics of the roadways and other transportation facilities within the study vicinity. These conditions will be compared with future year conditions later in this report. Kittelson staff visited the study area and inventoried the existing transportation system to identify lane configurations, traffic control devices, bicycle and pedestrian facilities, transit stops, and geometric features at the study intersections during the summer of 2019.

### Site Conditions and Adjacent Land Uses

The Tualatin Heights apartment complex is bounded by SW Sagert Street to the south, SW 95<sup>th</sup> Avenue to the west, a Pacific & Wester rail line to the north, and residential development to the east.

### Transportation Facilities

Table 2 summarizes the attributes of key roadways in the site vicinity. Figure 2 illustrates the existing lane configurations and traffic control devices at the study intersections.

**Table 1 – Existing Transportation Facilities**

Roadway	Jurisdictional Authority	Functional Classification <sup>1</sup>	Number of Auto Lanes	Posted Speed (MPH)	Sidewalks Present	Bicycle Lanes Present	On-Street Parking Allowed?
SW Tualatin Sherwood Road	Washington County	Arterial – Washinton County Major Arterial - Tualatin	5	45	Yes	Yes	No
SW Sagert Street	Tualatin	Minor Collector	2	25	Yes	Yes <sup>2</sup>	Yes <sup>2</sup>
SW Avery Street	Tualatin	Major Collector	2	35	Yes	Yes	No
SW 95 <sup>th</sup> Avenue	Tualatin	Minor Collector	2	35	Yes	Partial	No
SW 93 <sup>rd</sup> Avenue	Tualatin	Local Street	2	25	Partial	No	Yes
SW Boones Ferry Road	Tualatin	Arterial – Washington County Major Arterial - Tualatin	3	35	Yes	Yes	No

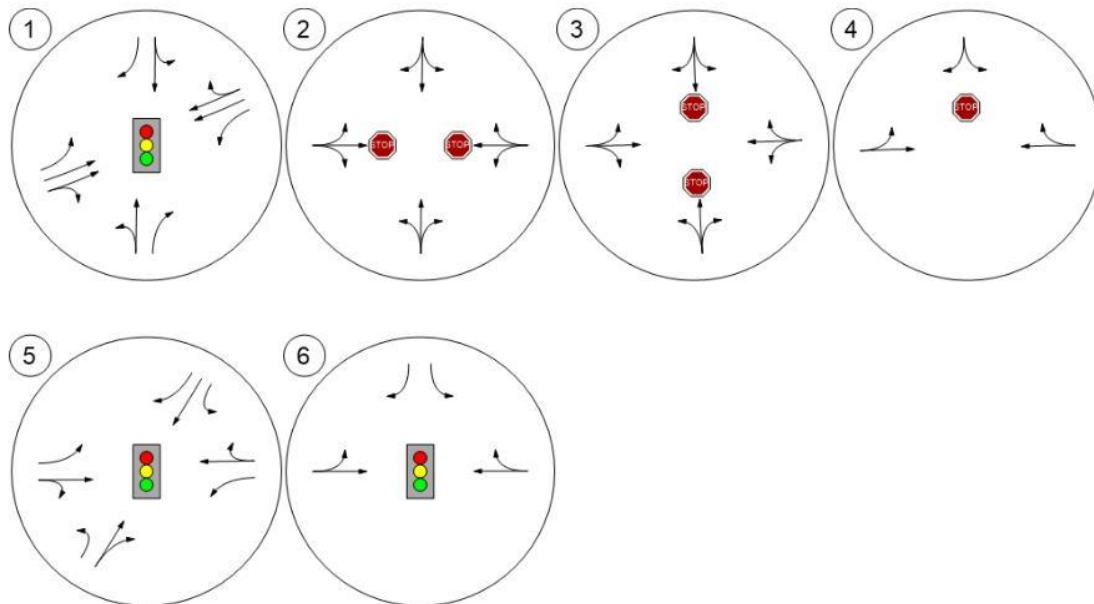
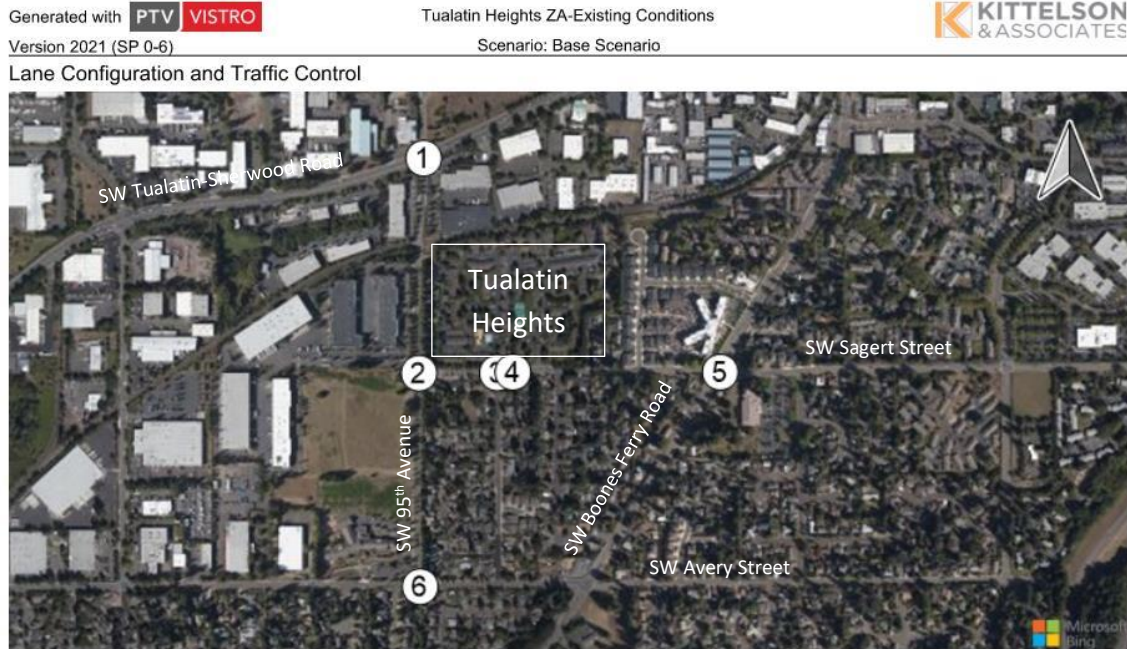
<sup>1</sup> Source: City of Tualatin Transportation System Plan and Washington County Transportation System Plan

<sup>3</sup> Only on the south side

### Transit Facilities

TriMet provides transit service in the Portland Metro area including fixed bust route, light rail, and commuter rail transit services. The Tualatin Heights apartment complex is not directly served by fixed route transit service. However, Route 97 provides daily weekday service along SW Tualatin Sherwood Road and Route 96 provides daily weekday service along portions of SW Boones Ferry Road and SW Sagert Street (east of SW Boones Ferry Road). Both stops are within a ¼-mile walking distance of the Tualatin Heights apartment complex.

Figure 2 - Existing Study Intersection Lane Configurations and Traffic Control Devices



## Existing Conditions Operational Analysis

### **COVID Adjustment**

Turning movement counts at the study intersections were conducted on a mid-week day in June 2021. *Appendix "A" contains the intersection turning movement count sheets.* Due to the atypical traffic conditions associated with the on-going COVID-19 pandemic, prior turning movement counts at several of the study intersections were consulted to assess the validity of the June 2021 counts. Available counts collected in 2019 at SW 95<sup>th</sup> Avenue/SW Avery Street, SW 95<sup>th</sup> Avenue/SW Sagert Street, SW Boones Ferry Road/SW Avery Street, and SW Tualatin Sherwood Road/SW Teton Avenue<sup>1</sup> were compared to counts taken in June 2021. As shown in Table 2, the 2021 counts revealed significantly lower volumes at the SW 95<sup>th</sup> Avenue/SW Sagert Street and SW 95<sup>th</sup> Avenue/SW Avery Street intersections. This is likely due in part to the fact that although the 2021 counts were taken while the nearby Tualatin Elementary School was still in session, the school was operating in a hybrid setting with split cohort schedules and some kids still in a virtual learning setting. In addition to these differences, the SW Boones Ferry Road corridor volumes measured in 2021 appear to be significantly lower when compared to the 2019 volumes taken at the SW Boones Ferry Road/SW Avery Street intersection.

Based on these findings, the following changes were made to the study intersection volumes to better reflect conditions that occur when schools are fully in-session and fewer people are working from home:

- The 2019 AM peak hour volumes at the SW 95<sup>th</sup> Avenue/SW Avery Street and SW 95<sup>th</sup> Avenue/SW Sagert Street intersections were used in place of the more recent 2021 AM peak hour counts as it was determined that they more accurately represent typical traffic volumes with the Tualatin Elementary School in full/normal session.
- The 2021 AM peak hour volumes at the SW Boones Ferry Road/SW Sagert Street intersection were proportionally adjusted based on the SW Boones Ferry Road corridor volumes extracted from the 2019 SW Boones Ferry Road/SW Avery Street intersection volumes.
- All other intersection volumes were factored and balanced (where necessary) according to the percent change in volumes summarized in Table 2.

---

<sup>1</sup> Although not study intersections, counts at the SW Tualatin Sherwood Road/SW Teton Avenue and SW Boones Ferry Road/SW Avery Street intersection were assessed to help understand volume differences along the SW Tualatin Sherwood Road and SW Boones Ferry Road corridors.

**Table 2 - COVID Adjustment**

Intersection	Weekday AM Peak Hour			Weekday PM Peak Hour		
	2019 Count	2021 Count	Difference	2019 Count	2021 Count	Difference
SW 95 <sup>th</sup> Avenue/ SW Sagert Street <sup>1</sup>	583	265	-120%	492	468	-5%
SW 95 <sup>th</sup> Avenue/ SW Avery Street <sup>1</sup>	920	583	-58%	962	949	-1%
SW Boones Ferry Road/ SW Avery Street <sup>2</sup>	1,228	810	-68%	1,428	1,433	+1%
SW Tualatin Sherwood Road/ SW Teton Avenue <sup>3</sup>	2,039	1,902	-7%	2,126	2,140	+1%

<sup>1</sup> Identified volumes represent the total entering volume at the intersection

<sup>2</sup> Identified volume is the total volume on the north leg of SW Boones Ferry Road (representing the segment volume between SW Sagert Street and SW Avery Street).

<sup>3</sup> Identified volume is the total volume on the east leg of SW Tualatin Sherwood Road (representing the segment volume between SW Teton Avenue and SW 95<sup>th</sup> Avenue).

Figures 3 and 4 illustrate the adjusted 2021 existing traffic volumes at the study intersections while Table 3 summarizes the corresponding traffic operations during the weekday morning and evening peak hours. As shown in Table 3 and detailed in *Appendix "B"* (which includes the existing conditions operations analysis worksheets), the study intersection operations satisfy applicable City of Tualatin and Washington County standards.

**Table 3 – Existing Traffic Conditions**

Intersection	Weekday AM Peak Hour				Weekday PM Peak Hour			
	Critical Approach/ Lane	V/C	Delay (sec)	LOS	Critical Approach/ Lane	V/C	Delay (sec)	LOS
SW Tualatin Sherwood Road/ SW 95 <sup>th</sup> Avenue	-	0.54	16.9	B	-	0.55	17.6	B
SW Sagert Street/ SW 95 <sup>th</sup> Avenue	WB	0.55	19.3	C	WB	0.24	12.8	B
SW Sagert Street/ SW 93 <sup>rd</sup> Avenue/ West Tualatin Heights Driveway	SB	0.06	11.7	B	SB	0.04	11.7	B
SW Sagert Street/East Tualatin Heights Driveway	SB	0.07	11.7	B	SB	0.07	10.9	B
SW Sagert Street/ SW Boones Ferry Road	-	0.86	32.5	C	-	0.70	19.0	B
SW Avery Street/ SW 95 <sup>th</sup> Avenue	-	0.55	6.6	A	-	0.54	6.4	A



Figure 3 – Existing Traffic Volumes, Weekday AM Peak Hour

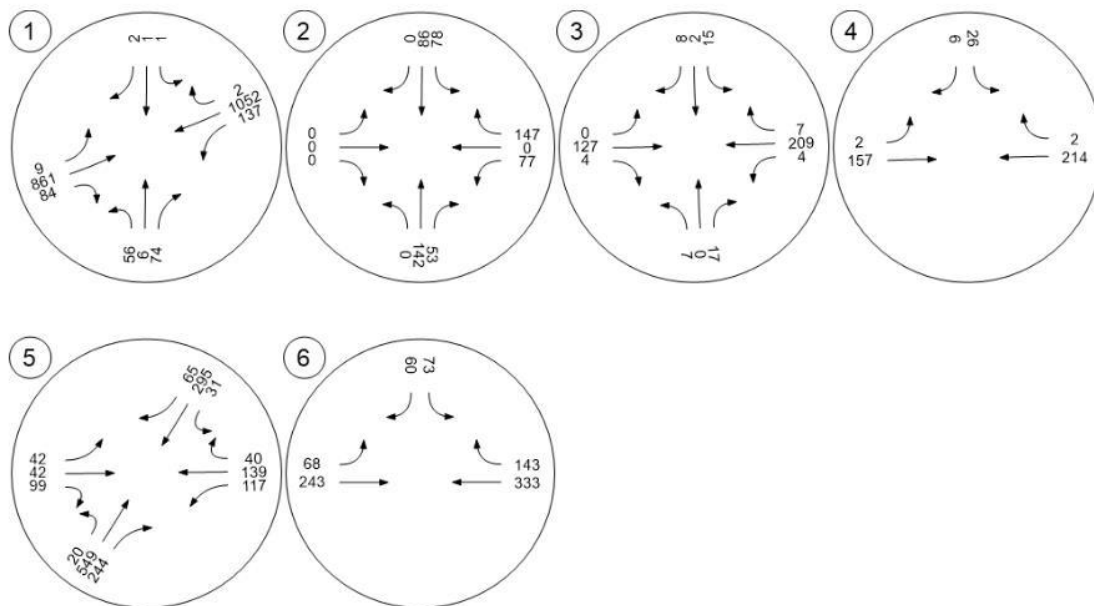
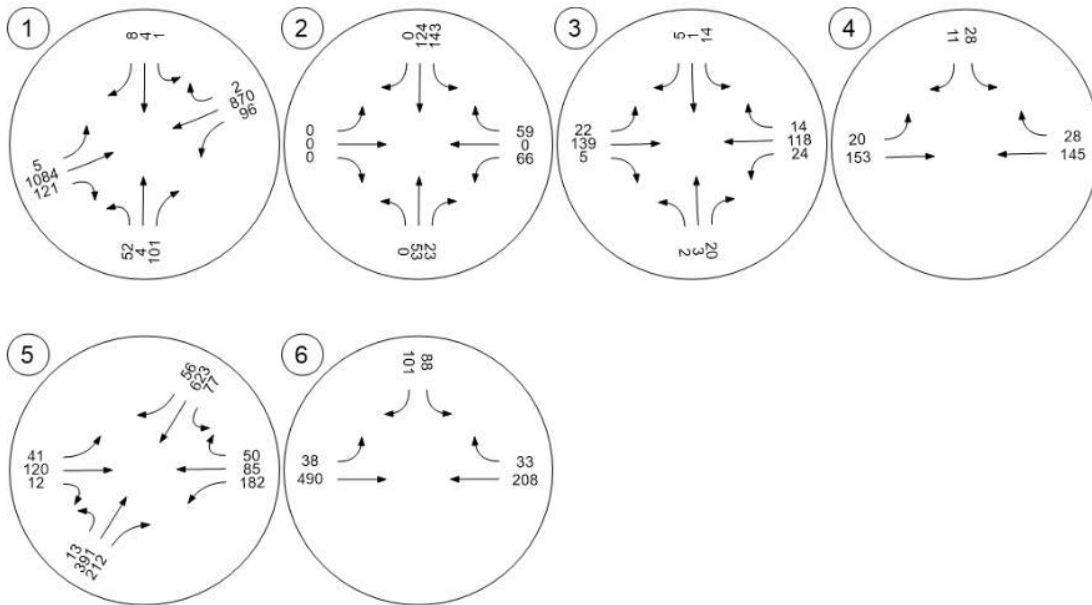


Figure 4 – Existing Traffic Volumes, Weekday PM Peak Hour

Generated with **PTV VISTRO** Tualatin Heights ZA-Existing Conditions  
Version 2021 (SP 0-6) Scenario: Base Scenario **KITTELSON & ASSOCIATES**

Traffic Volume - Base Volume



## Intersection Crash History

The crash histories at the individual study intersections were obtained and reviewed in an effort to identify potential safety issues. ODOT provided crash records for the study intersections for the five-year period from January 1, 2015 through December 31, 2019. Table 4 summarizes the ODOT crash data.

**Table 4 – Study Intersection Crash Summary (January 2015 to December 2019)**

Study Intersections	Collision Type					Severity			Total
	Rear-End	Turning	Angle	Fixed Object	Other	PDO	Injury	Fatal	
Tualatin Sherwood Road / SW 95th Avenue	9	7	1	0	0	6	11	0	17
SW Sagert Street / SW 95th Avenue	0	3	0	0	0	0	3	0	3
SW Sagert Street / SW 93rd Avenue / Tualatin Heights Site Access Driveway	0	0	0	0	0	0	0	0	0
SW Sagert Street / SW Boones Ferry Road	1	7	3	0	0	5	6	0	11
SW Avery Street / SW 95th Avenue	1	0	0	0	0	1	0	0	1

In addition to the crash types, intersection crash rates were calculated and compared to statewide crash rate performance thresholds per guidance in the ODOT *Analysis Procedures Manual*. For this analysis, the observed crash rate was calculated and compared with the 90<sup>th</sup> percentile crash rates for urban intersections by traffic control and approach configuration. The intersection crash rate assessment for the study intersections is summarized in Table 5.

**Table 5 – Intersection Critical Crash Rate Assessment**

Intersection	Total Crashes	Observed Crash Rate	90 <sup>th</sup> Percentile Crash Rate by Lane Type and Traffic Control	Observed Crash Rate > 90 <sup>th</sup> Percentile Crash Rate?
Tualatin Sherwood Road / SW 95th Avenue	17	0.40	0.86	No
SW Sagert Street / SW 95th Avenue	3	0.35	0.29	Yes
SW Sagert Street / SW 93rd Avenue / Tualatin Heights Site Access Driveway	0	0.00	0.29	No
SW Sagert Street / SW Boones Ferry Road	11	0.32	0.86	No
SW Avery Street / SW 95th Avenue	1	0.06	0.29	No

A review of Table 5 revealed the following:

- The majority of crashes at the SW Tualatin Sherwood Road/SW 95<sup>th</sup> Avenue intersection consisted of rear-end and turning crashes. A review of these crashes indicated they were evenly distributed amongst the applicable approaches/movements with no other discernable patterns.

- The observed crash rate at the SW Sagert Street/SW 95<sup>th</sup> Avenue intersection exceeds the 90<sup>th</sup> percentile crash rates for similar urban intersections statewide. Partly for this reason, the City of Tualatin will be converting the intersection to an all-way stop-controlled intersection in late 2021/2022. Additional details regarding this planned and funded improvement are provided later in this report.
- The majority of crashes at the SW Boones Ferry Road/SW Sagert Street intersection consisted of turning crashes. A review of these crashes revealed that the crashes were generally distributed amongst the various turn movements with no other discernable patterns.

No safety-based mitigation measures were identified for implementation with the proposed development based on review of the study intersection crash history. *Appendix "C" contains the crash data summary sheets.*

## YEAR 2040 TRAFFIC CONDITIONS

This section of the report contains a detailed assessment of the long-term traffic impacts associated with the proposed plan map amendment. More specifically, it evaluates the impacts of additional housing units within the Tualatin Heights apartment complex consistent with the higher density allowed in the proposed RMH zone. The analysis of long-term traffic conditions is mandated by the State's Transportation Planning Rule (TPR, OAR Section 660-12-0060), given that the proposed plan map amendment would require an amendment to an acknowledged land use regulation and may have the potential to significantly affect a transportation facility.

To test for significant effect, an analysis of traffic conditions was conducted under reasonable worst-case site development scenarios for the subject site under the proposed RMH zoning and its maximum 15 dwelling units per acre allowance.

Based on the required analysis, the impacts of traffic generated by the potential RMH zoning were examined in the following manner:

- Anticipated background traffic growth patterns were identified for the weekday AM and PM peak hour under the 2040 planning horizon year<sup>2</sup>.
- Planned transportation improvements in the site vicinity were identified and reviewed.
- Reasonable worst-case land development scenarios were developed under the proposed RMH zoning designation. Estimates of average daily, weekday AM, and weekday PM peak hour site trips were prepared for the potential RMH zoning designation.
- A site trip distribution pattern was derived through a review of existing traffic volumes at the Tualatin Heights site access driveways.
- Weekday AM and PM peak hour site-generated trips from the RMH zoning were assigned to the surrounding street/study intersections network.
- Planning horizon year 2040 traffic volumes, operations, and vehicle queuing conditions were analyzed for the weekday AM and PM peak hour under existing background conditions and for the proposed RMH zoning designation.
- Operational deficiencies were identified and appropriate mitigation measures were evaluated.

---

<sup>2</sup> 2034 is technically the official planning horizon year as it matches the 20-year planning period from the City of Tualatin's 2014 Transportation System Plan. This time period is consistent with OAR 660-012-0060 which requires that the comparative operations analysis be *measured at the end of the planning period identified in the adopted TSP*. However, as will be outlined later in this report, a more conservative 2040 horizon year was chosen as it is consistent with the long-term planning year used in the Metro Regional Travel Demand Model.



## Year 2040 Planned Transportation Improvements

The Transportation Planning Rule provides specific language and direction on how planned transportation improvements can be included in the long-range transportation impact analyses for proposed comprehensive plan and zone changes. Specifically, the TPR allows roadway or intersection improvement projects to be included in the analysis if they are in a Capital Improvement Plan with secured funding, are on a “financially constrained” project list in the adopted TSP, or alternatively, are deemed by the local agency to be “reasonably likely to occur” within the planning horizon. Within the study area, the following improvements have been identified to occur within the 2040 planning horizon based on consultation with City of Tualatin engineering staff:

- Conversion of the SW 95<sup>th</sup> Avenue/SW Sagert Street intersection to all-way stop-control. This project includes the removal of the existing curb extensions and reconstruction of the curbs, ramps, and sidewalks in the vicinity of the intersection.
- Installation of a pedestrian activated pedestrian beacon to facilitate mid-block pedestrian crossings of SW Sagert Street near the SW 93<sup>rd</sup> Avenue intersection.
- Installation of “No Turn on Red” signs at the south and east legs of the SW 95<sup>th</sup> Avenue/SW Avery Street intersection.

## Year 2040 Background Traffic Forecast

To achieve a reasonable estimate of background traffic levels during the 2040 planning horizon year, this analysis relied primarily on travel forecasting data from the Metro Regional Travel Demand Model. For the weekday PM time period, intersection turn movements were generated by the model at the study intersections for the base year 2015 and forecast year 2040 model scenarios. These turn movement volumes were then processed and refined using the 2019 and 2021 intersection turning movement counts to generate base level future year intersection volumes. To account for a noted imbalance and inconsistency with the volumes generated by the 2015 Tualatin Transportation System Plan (TSP), an additional 2% per year growth rate was applied to the north/south volumes on SW Boones Ferry Road at the SW Sagert Street intersection.

Since the travel demand model is only a PM peak hour based model, the weekday AM 2040 background volumes at the study intersections were developed by applying a growth rate calculated from the percentage increase in total entering volumes from the existing weekday PM and 2040 background weekday PM volumes.

The resulting Year 2040 background traffic volumes forecast for the weekday AM and PM peak hour are illustrated in Figures 5 and 6 for all study intersections. These figures reflect background traffic levels without any changes to the underlying zoning on the subject site.

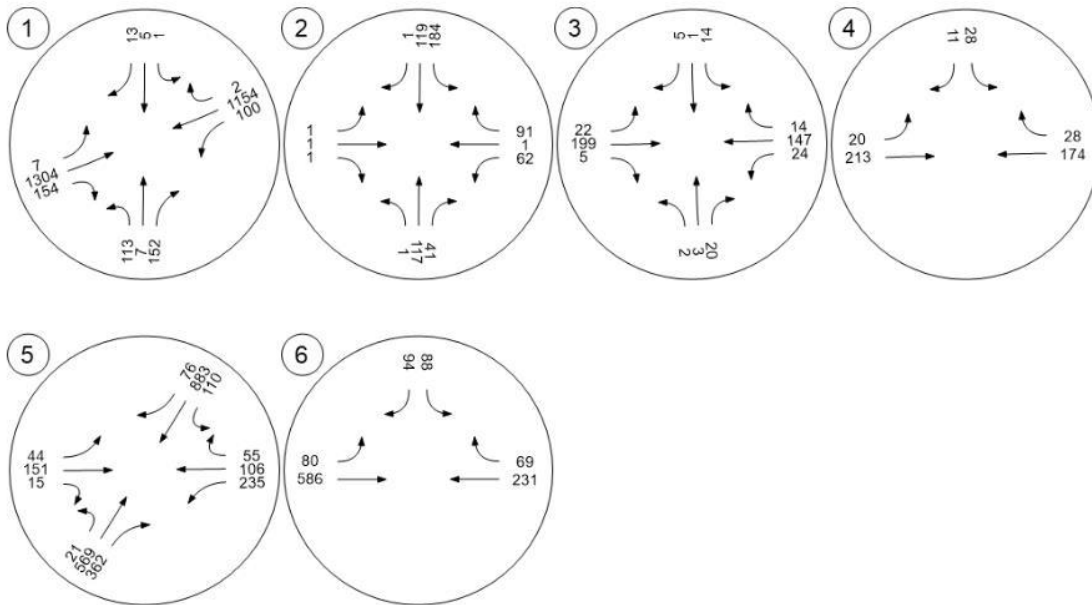


Figure 6 – 2040 Background Traffic Volumes, Weekday PM Peak Hour

Generated with **PTV VISTRO** Tualatin Heights ZA-Existing Conditions  
 Version 2021 (SP 0-6) Scenario 3: 3 Future Traffic Conditions\_notrips



Traffic Volume - Base Volume



### Year 2040 Background Intersection Operations (No Change in Zoning)

Operations of the study intersections under 2040 Background conditions (representing no zoning modifications on the Tualatin Heights property) were assessed with the previously noted transportation improvements to understand the base future year operations assuming no changes are made to the Tualatin Heights Apartment site zoning. Table 6 summarizes the operational analyses for the weekday AM and PM peak hour reflective of anticipated regional and local traffic volume growth. As shown, all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the exception of the SW Boones Ferry Road/SW Sagert Street intersection. During the weekday AM Peak hour, the intersection is forecast to operate with a volume-to-capacity ratio of 1.09<sup>3</sup> which exceeds the 0.99 volume to capacity ratio standard. *Appendix “D” includes the 2040 background conditions intersection operations analysis worksheets.*

**Table 6 – 2040 Background Traffic Conditions (No Change in Zoning)**

Intersection	Weekday AM Peak Hour				Weekday PM Peak Hour			
	Critical Approach/Lane	V/C	Delay (sec)	LOS	Critical Approach/Lane	V/C	Delay (sec)	LOS
SW Tualatin Sherwood Road/ SW 95 <sup>th</sup> Avenue	-	0.67	19.6	B	-	0.66	21.4	C
SW Sagert Street/ SW 95 <sup>th</sup> Avenue	-	0.61	15.1	C	-	0.41	9.9	A
SW Sagert Street/ SW 93 <sup>rd</sup> Avenue/ West Tualatin Heights Driveway	SB	0.09	13.0	B	SB	0.05	12.8	B
SW Sagert Street/East Tualatin Heights Driveway	SB	0.09	12.9	B	SB	0.08	11.7	B
SW Sagert Street/ SW Boones Ferry Road	-	1.09	102.8	F	-	0.91	45.1	D
SW Avery Street/ SW 95 <sup>th</sup> Avenue	-	0.64	7.2	A	-	0.64	6.7	A

<sup>3</sup> The 2040 operations are reflective of the existing overall cycle length and no timing optimization.

## Proposed RMH Zoning

Under the proposed RMH zoning, the maximum allowed density would be increased to 15 dwelling units/acre. Increasing the density to 15 dwelling units per acres would result in a maximum of 336 multifamily housing units. Considering the site already has 220 units, this zone change analysis is conservatively assessing the impacts of 116 additional housing units on the site.

Table 7 shows the trip generation estimate for 116 additional multifamily housing units as calculated by Land Use 221 (Multifamily Housing Mid-Rise) in the ITE *Trip Generation Manual, 10<sup>th</sup> Edition*. As shown, the additional housing units are forecast to generate approximately 630 new daily trips, 42 new AM peak hour trips, and 51 new PM peak hour trips.

**Table 7 – Estimated Trip Generation (Proposed RMH Zone w/116 Additional Multifamily Housing Units)**

Land Use	ITE Code	Size	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Assumed RMH Zoning									
Multifamily Housing (Mid-Rise)	221	116 units	630	42	11	31	51	31	20

### *Site Trip Distribution and Assignment*

The trips from the additional 116 housing units were assigned to the study area network utilizing the Tualatin Heights Apartment’s two site driveways along SW Sagert Street. From these points of access, the distribution of site-generated trips onto the study area roadway system was estimated based on a review of major transportation facilities within the site vicinity and travel characteristics observed from the existing weekday AM and PM traffic counts.



### Year 2040 Rezone Intersection Operations (w/Proposed RMH Zoning)

To produce the analysis under the 2040 RMH zoning scenario, the weekday AM and PM peak hour site generated traffic volumes shown in Table 7 were added to the background traffic volumes shown in Figures 5 and 6 to arrive at the cumulative 2040 traffic volumes shown in Figures 7 and 8.

Operations of the study intersections under 2040 conditions (with the site converted to RMH zoning) are summarized in Table 8 for the weekday AM and PM peak hours. As shown, all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the continued exception of the SW Boones Ferry Road/SW Sagert Street intersection. During the weekday AM Peak hour, the intersection is forecast to operate with a volume-to-capacity ratio of 1.10 which exceeds the respective 0.99 volume to capacity ratio standard. *Appendix "E" includes the 2040 total traffic conditions intersection operations analysis worksheets.*

**Table 8 - 2040 Rezone Traffic Conditions (w/Proposed RMH Zoning)**

Intersection	Weekday AM Peak Hour				Weekday PM Peak Hour			
	Critical Approach/Lane	V/C	Delay (sec)	LOS	Critical Approach/Lane	V/C	Delay (sec)	LOS
SW Tualatin Sherwood Road/ SW 95 <sup>th</sup> Avenue	-	0.68	19.9	B	-	0.66	21.7	C
SW Sagert Street/ SW 95 <sup>th</sup> Avenue	-	0.64	16.0	C	-	0.43	10.1	B
SW Sagert Street/ SW 93 <sup>rd</sup> Avenue/ West Tualatin Heights Driveway	SB	0.16	13.7	B	SB	0.09	13.1	B
SW Sagert Street/East Tualatin Heights Driveway	SB	0.10	13.2	B	SB	0.08	12.0	B
SW Sagert Street/ SW Boones Ferry Road	-	1.10	104.9	F	-	0.91	46.3	D
SW Avery Street/ SW 95 <sup>th</sup> Avenue	-	0.64	7.2	A	-	0.64	6.7	A

Figure 7 – 2040 Traffic Volumes (w/ Proposed RMH Zoning), Weekday AM Peak Hour

Generated with **PTV VISTRO** Tualatin Heights ZA-Existing Conditions  
Version 2021 (SP 0-6) Scenario 2: 2.2 Future Traffic Conditions\_scenario1  
**KITTELSON & ASSOCIATES**

Traffic Volume - Base Volume

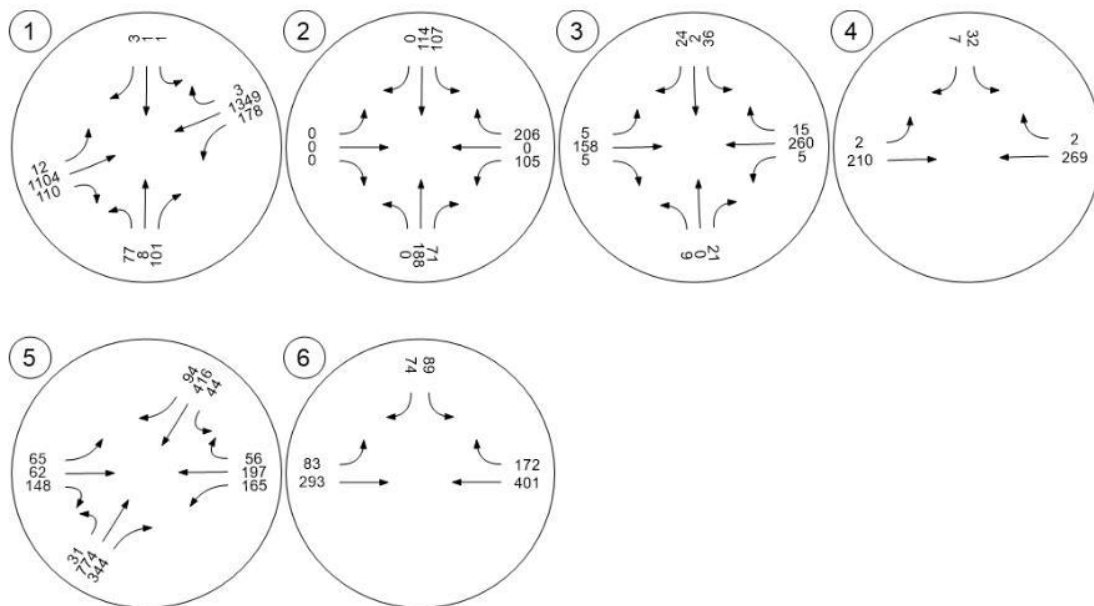
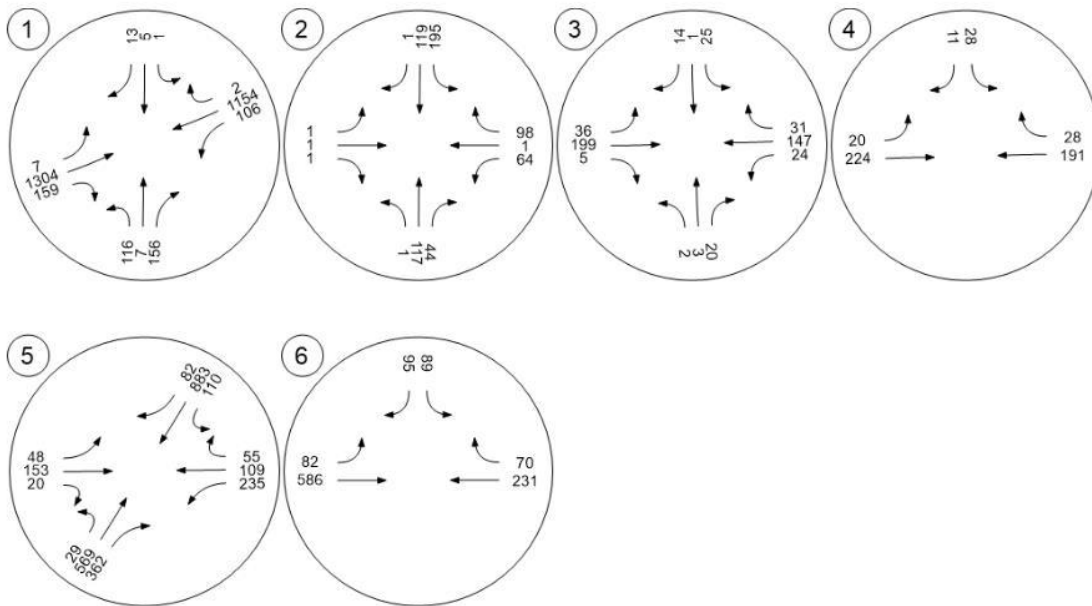


Figure 8 – 2040 Traffic Volumes (w/ Proposed RMH Zoning), Weekday PM Peak Hour

Generated with **PTV VISTRO** Tualatin Heights ZA-Existing Conditions  
 Version 2021 (SP 0-6) Scenario 2: 2 2 Future Traffic Conditions



Traffic Volume - Base Volume

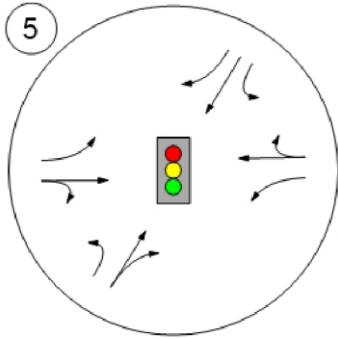
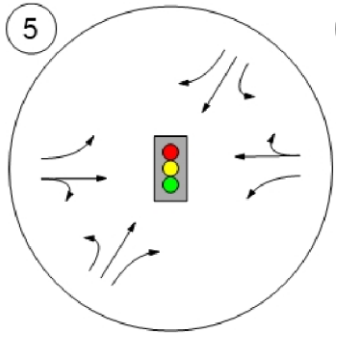


### Year 2040 Intersection Operation Deficiencies and Mitigation Measures

As noted in Table 8, the inclusion of RMH zoning and the potential for up to 116 additional multifamily housing units is forecast to result in a slight degradation of the SW Boones Ferry Road/SW Sagert Street intersection when compared to the 2040 Background Conditions analysis. While minor, this further degradation of an intersection that is already forecast to experience capacity constraints requires the identification of mitigation measures to address forecast operations.

A review of the City of Tualatin’s Transportation System Plan revealed no long-term improvement projects at the SW Boones Ferry Road/SW Sagert Street intersection. However, the future alternatives analysis did identify and investigate several potential capacity enhancing projects. One specific project involved the construction of a separate northbound right-turn lane on SW Boones Ferry Road to better facilitate peak time period demand to the SW Sagert Street corridor. Based on a review of the existing and 2040 forecast volumes generated in this study, such an improvement would restore long-term capacity to the intersection and result in acceptable operations under both the 2040 Background (no zone change) and 2040 Rezone (with RMH zoning) conditions as summarized below. *Appendix “E” includes the 2040 mitigation operations analysis worksheets.*

**Table 9 - SW Boones Ferry Road/SW Sagert Street Intersection Mitigation Operations**

Scenario	2040 Background (No Change in Zoning)		2040 Rezone (With RMZ Zoning)	
	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday AM Peak Hour	Weekday PM Peak Hour
Existing Intersection Configuration 	LOS F Delay = 102.8 V/C = 1.09	LOS D Delay = 45.1 V/C = 0.91	LOS F Delay = 104.9 V/C = 1.10	LOS D Delay = 46.3 V/C = 0.91
With a NB Right-Turn Lane 	LOS D Delay = 37.8 V/C = 0.88	LOS C Delay = 26.6 V/C = 0.82	LOS D Delay = 38.7 V/C = 0.89	LOS C Delay = 27.6 V/C = 0.83

## TRANSPORTATION PLANNING RULE COMPLIANCE

This section addresses the Oregon Administrative Rule Section 660-12-0060 of the Oregon Transportation Planning Rule (TPR) requirements for the proposed zone change.

### TRANSPORTATION PLAN RULE

OAR Section 660-12-0060 Plan and Land Use Regulation Amendments of the TPR sets forth the criteria for evaluating plan and land use regulation amendments. The criteria establish the determination of significant effect on a transportation system resulting from a land use action; where a significant effect is identified, the criteria establish the means for achieving compliance. The relevant portion of this section of the TPR is reproduced below in italics followed by the response for this project in standard text.

#### ***660-12-0060 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);*

**Response: The proposed rezone will not require or result in any changes to the functional classification of any transportation facility in the vicinity of the site.**

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

**Response: The proposed rezone will not outright require changes to the standards that implement the functional classification system.**

*(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: The proposed rezone would result in future traffic volumes that are still consistent with the functional classifications of the roadways in the study area.**

*(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 proposed rezone would slightly degrade operations of the SW Boones Ferry Road/SW Sagert Street intersection beyond 2040 background conditions. However, the intersection is already forecast to operate over capacity under 2040 background conditions. The installation of a northbound right-turn lane would restore long-term capacity to the intersection and result in acceptable operations under both the 2040 Background (no zone change) and 2040 Rezone (with RMH zoning) conditions.**

*(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: Without any mitigation measures in place, the proposed rezone would result in a small degradation of failing operations at the SW Boones Ferry Road/SW Sagert Street intersection. The installation of a northbound right-turn lane would restore long-term capacity to the intersection and result in acceptable operations under both the 2040 Background (no zone change) and 2040 Rezone (with RMH zoning) conditions.**

## CONCLUSIONS

Based on the long-term traffic impact analyses detailed in this report, the proposed rezone has the potential to generate a small degradation in the operations of the SW Boones Ferry Road/SW Sagert Street intersection compared to existing zoning. To comply with the TPR (OAR Section 660-012-0060), the installation of a northbound right-turn lane on SW Boones Ferry Road would restore long-term capacity to the intersection and result in acceptable operations under both the 2040 Background (no zone change) and 2040 Rezone (with RMH zoning) conditions.

Sincerely,  
KITTELSON & ASSOCIATES, INC.



Matt Hughart, AICP  
Principal Planner



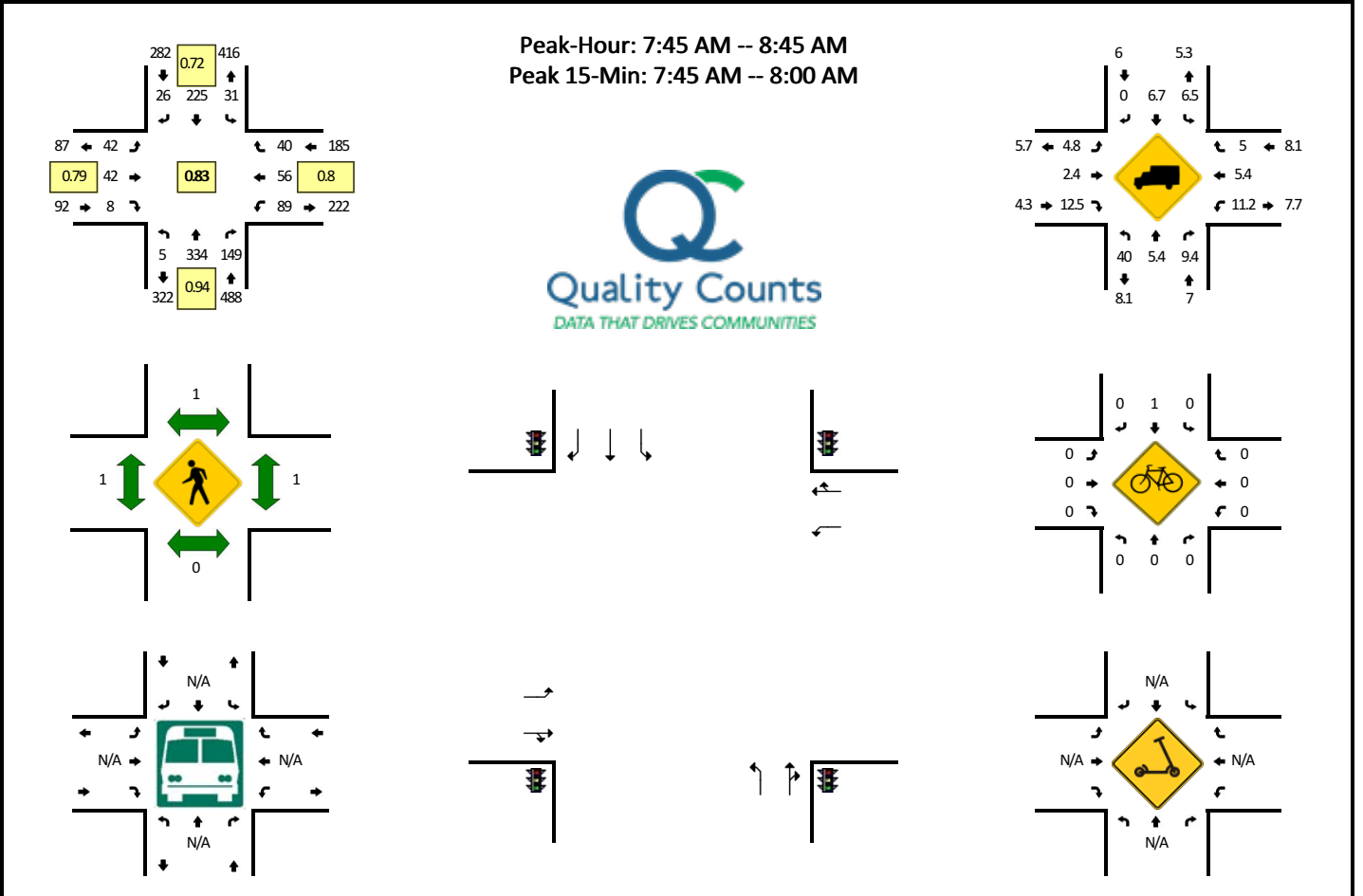
Bincy Koshy  
Transportation Analyst

Julia Kuhn, P.E.  
Senior Principal Engineer

## Appendix A Traffic Counts

**LOCATION:** SW Boones Ferry Rd -- SW Sagert St  
**CITY/STATE:** Tualatin, OR

**QC JOB #:** 15473301  
**DATE:** Fri, Jun 11 2021

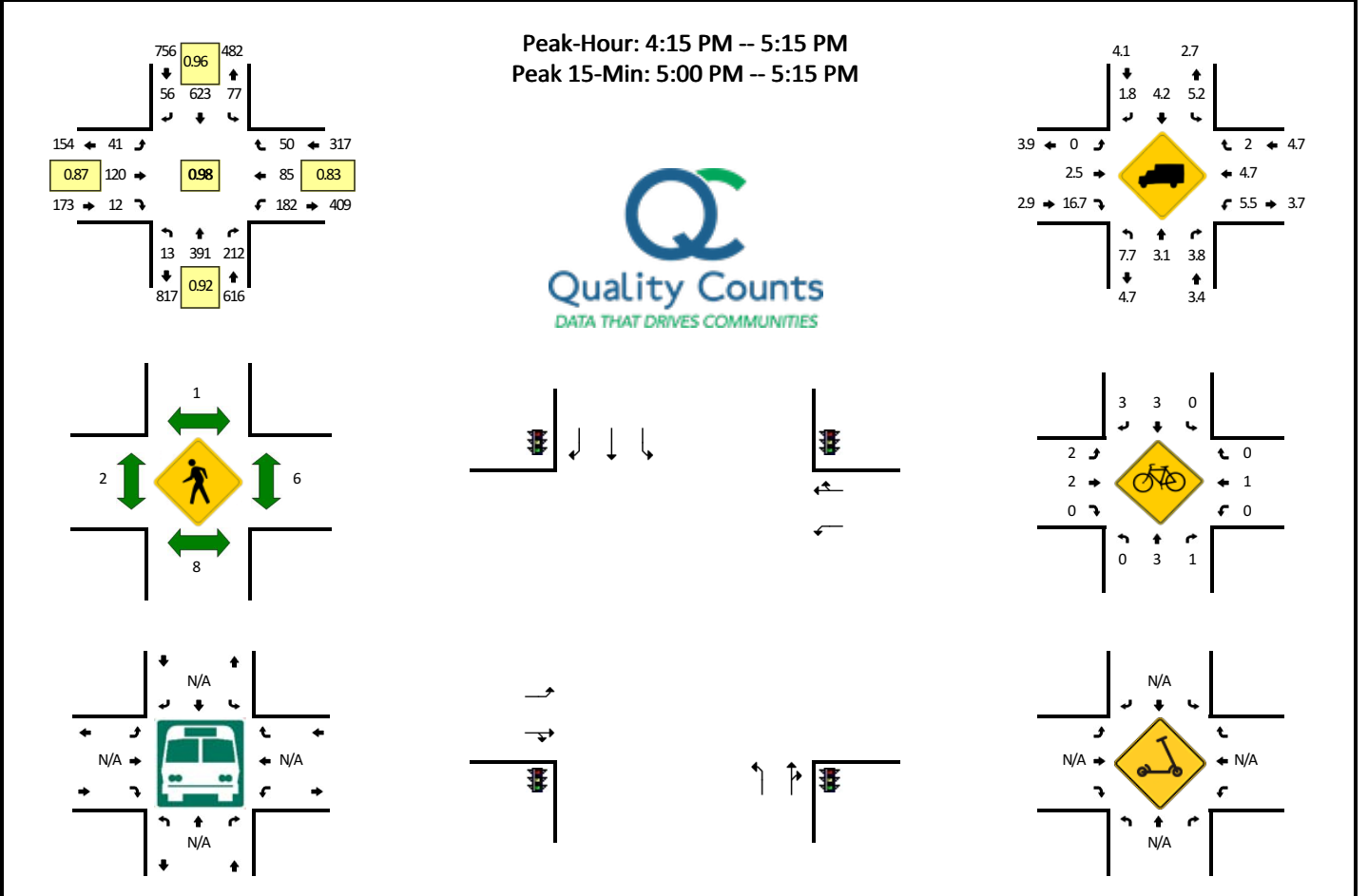


15-Min Count Period Beginning At	SW Boones Ferry Rd (Northbound)				SW Boones Ferry Rd (Southbound)				SW Sagert St (Eastbound)				SW Sagert St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	69	18	0	6	16	5	0	10	6	1	0	23	6	3	0	163	
7:15 AM	0	77	36	0	6	38	14	0	5	11	1	0	24	12	8	0	232	
7:30 AM	1	92	31	0	4	41	6	0	12	10	2	0	23	17	7	0	246	
7:45 AM	2	90	38	0	11	74	13	0	12	15	2	0	26	26	6	0	315	956
8:00 AM	1	79	41	0	4	39	4	0	13	10	3	0	28	11	9	0	242	1035
8:15 AM	0	73	35	0	9	58	3	0	6	9	0	0	17	9	15	0	234	1037
8:30 AM	2	92	35	0	7	54	6	0	11	8	3	0	18	10	10	0	256	1047
8:45 AM	2	83	27	0	14	56	8	0	12	14	0	0	31	12	15	0	274	1006
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	360	152	0	44	296	52	0	48	60	8	0	104	104	24	0	1260	
Heavy Trucks	4	12	4		4	24	0		4	0	4		12	0	0		68	
Buses																	0	
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																	0	

*Comments:*

**LOCATION:** SW Boones Ferry Rd -- SW Sagert St  
**CITY/STATE:** Tualatin, OR

**QC JOB #:** 15473302  
**DATE:** Thu, Jun 10 2021

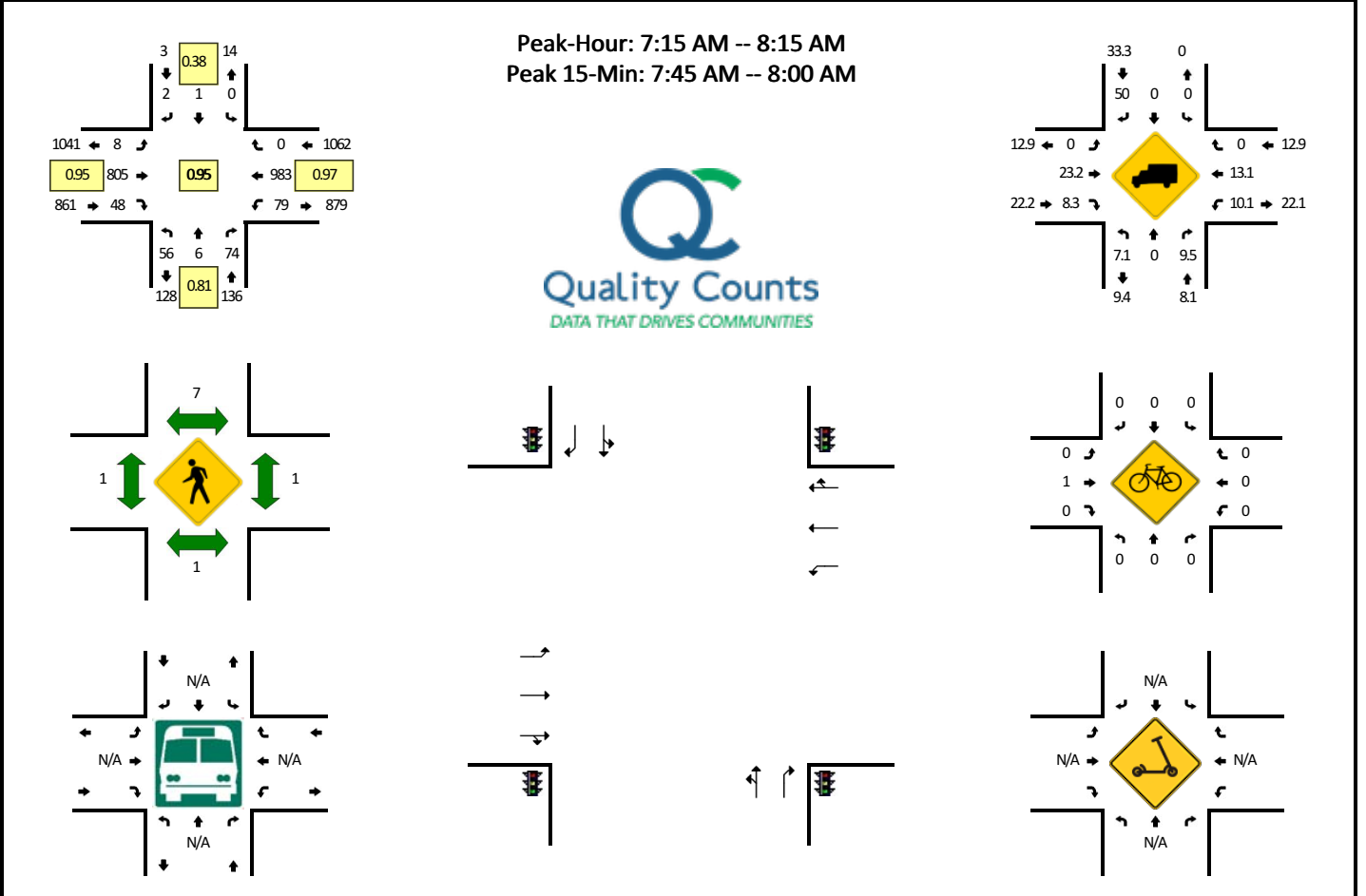


15-Min Count Period Beginning At	SW Boones Ferry Rd (Northbound)				SW Boones Ferry Rd (Southbound)				SW Sagert St (Eastbound)				SW Sagert St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	106	64	0	10	159	19	0	12	38	2	0	37	17	5	0	472	
4:15 PM	3	103	48	0	13	171	12	0	6	22	3	0	43	20	8	0	452	
4:30 PM	4	97	66	0	21	161	13	0	15	25	2	0	36	16	18	0	474	
4:45 PM	3	92	44	0	20	153	17	0	4	41	5	0	47	23	10	0	459	1857
5:00 PM	3	99	54	0	23	138	14	0	16	32	2	0	56	26	14	0	477	1862
5:15 PM	1	97	51	0	18	150	19	0	5	25	1	0	59	20	6	0	452	1862
5:30 PM	3	100	41	0	21	168	15	0	14	26	0	0	37	26	18	0	469	1857
5:45 PM	3	81	46	0	20	150	23	0	8	23	2	0	47	25	12	0	440	1838
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	12	396	216	0	92	552	56	0	64	128	8	0	224	104	56	0	1908	
Heavy Trucks	0	12	4		4	8	0		0	4	0		4	4	4		44	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

*Comments:*

**LOCATION:** SW 95th Ave -- Tualatin-Sherwood Rd  
**CITY/STATE:** Tualatin, OR

**QC JOB #:** 15473303  
**DATE:** Fri, Jun 11 2021



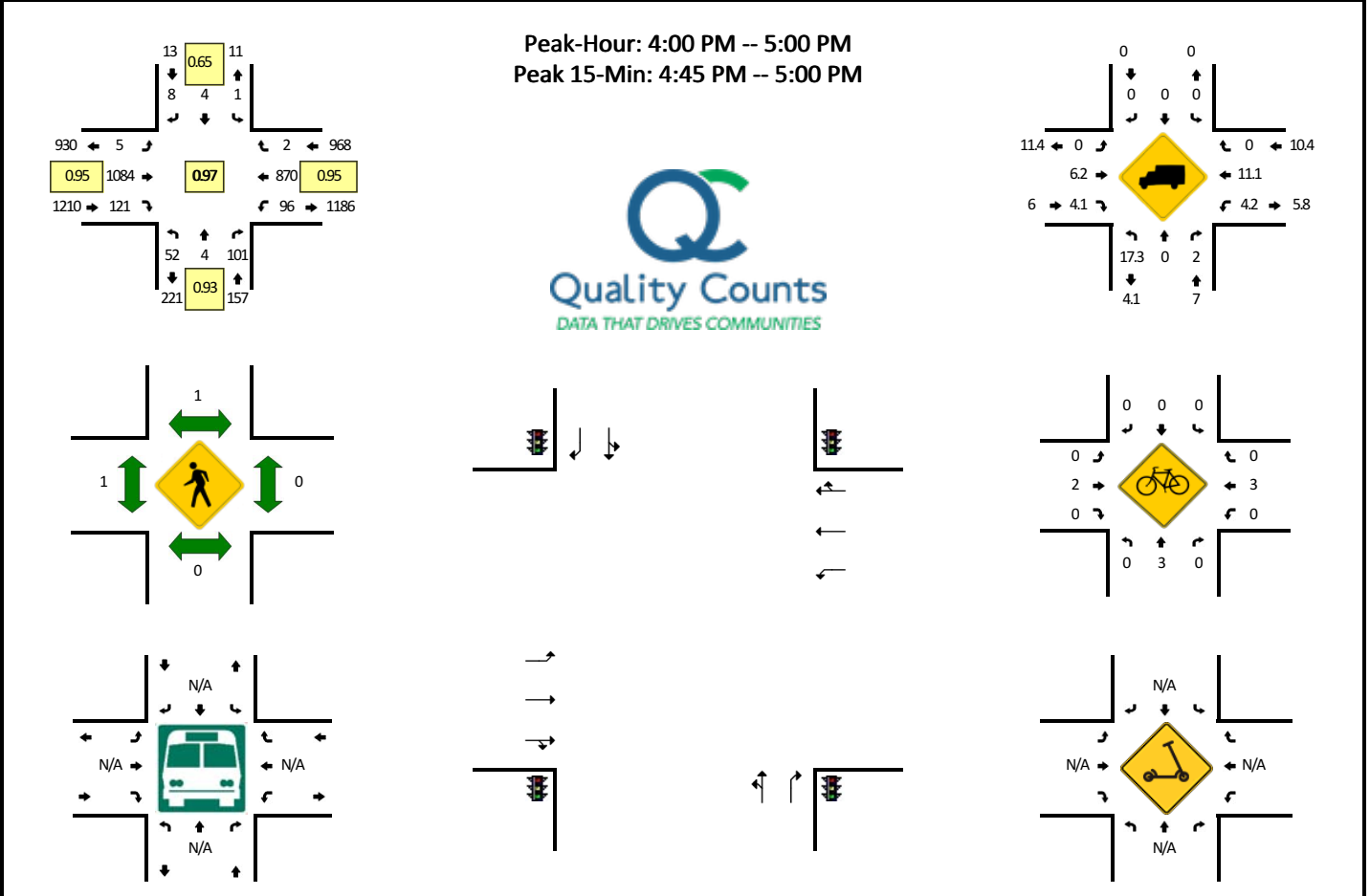
15-Min Count Period Beginning At	SW 95th Ave (Northbound)				SW 95th Ave (Southbound)				Tualatin-Sherwood Rd (Eastbound)				Tualatin-Sherwood Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	16	0	7	0	0	0	0	0	0	154	9	0	20	230	0	0	436	
7:15 AM	10	2	16	0	0	0	0	0	1	177	10	0	11	261	0	0	488	
7:30 AM	17	2	18	0	0	0	0	0	1	210	15	0	12	242	0	0	517	
7:45 AM	18	2	22	0	0	1	1	0	4	206	15	0	37	238	0	0	544	1985
8:00 AM	11	0	18	0	0	0	1	0	2	212	8	0	19	242	0	0	513	2062
8:15 AM	7	0	16	0	0	0	2	0	1	218	7	0	9	198	1	0	459	2033
8:30 AM	12	3	17	0	0	0	1	0	3	213	11	0	14	223	1	0	498	2014
8:45 AM	11	2	22	0	1	0	2	0	1	198	9	0	22	199	1	0	468	1938
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	72	8	88	0	0	4	4	0	16	824	60	0	148	952	0	0	2176	
Heavy Trucks	0	0	4		0	0	4		0	204	8		24	148	0		392	
Buses																		
Pedestrians		0				8				0				0			8	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

*Comments:*



**LOCATION:** SW 95th Ave -- Tualatin-Sherwood Rd  
**CITY/STATE:** Tualatin, OR

**QC JOB #:** 15473304  
**DATE:** Thu, Jun 10 2021



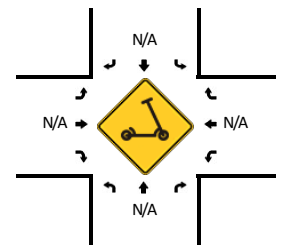
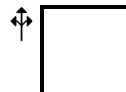
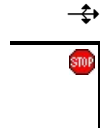
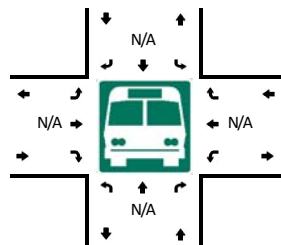
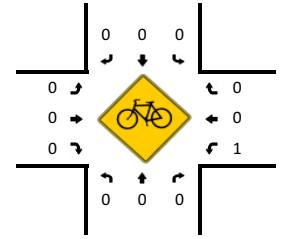
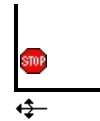
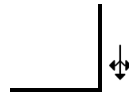
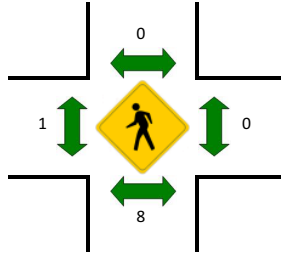
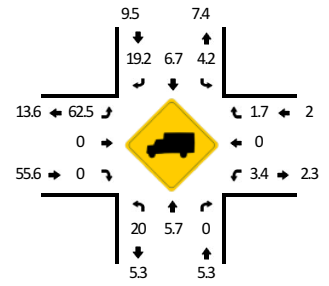
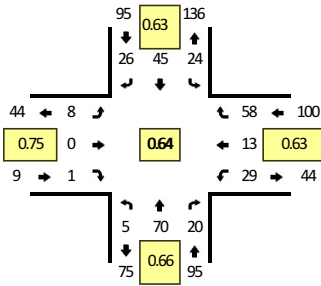
15-Min Count Period Beginning At	SW 95th Ave (Northbound)				SW 95th Ave (Southbound)				Tualatin-Sherwood Rd (Eastbound)				Tualatin-Sherwood Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	14	1	27	0	0	0	1	0	1	281	31	0	18	226	0	0	600	
4:15 PM	14	0	25	0	0	1	2	0	0	240	24	0	16	225	2	0	549	
4:30 PM	11	1	30	0	1	1	3	0	2	279	36	0	24	203	0	0	591	
4:45 PM	13	2	19	0	0	2	2	0	2	284	30	0	38	216	0	0	608	2348
5:00 PM	17	0	28	0	1	2	0	0	1	235	33	0	25	189	1	0	532	2280
5:15 PM	18	0	22	0	2	3	3	0	2	267	25	0	29	206	1	0	578	2309
5:30 PM	16	0	15	0	0	1	4	0	0	244	26	0	28	227	0	0	561	2279
5:45 PM	19	0	11	0	0	0	0	0	0	217	18	0	15	241	0	0	521	2192
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	52	8	76	0	0	8	8	0	8	1136	120	0	152	864	0	0	2432	
Heavy Trucks	4	0	0	0	0	0	0	0	0	80	12	0	0	104	0	0	200	
Buses																		
Pedestrians		0				0				4				0			4	
Bicycles	0	0	0		0	0	0		0	0	0		0	4	0		4	
Scooters																		

*Comments:*

**LOCATION:** SW 95th Ave -- SW Sagert St  
**CITY/STATE:** Tualatin, OR

**QC JOB #:** 15473305  
**DATE:** Fri, Jun 11 2021

**Peak-Hour: 7:15 AM -- 8:15 AM**  
**Peak 15-Min: 7:45 AM -- 8:00 AM**



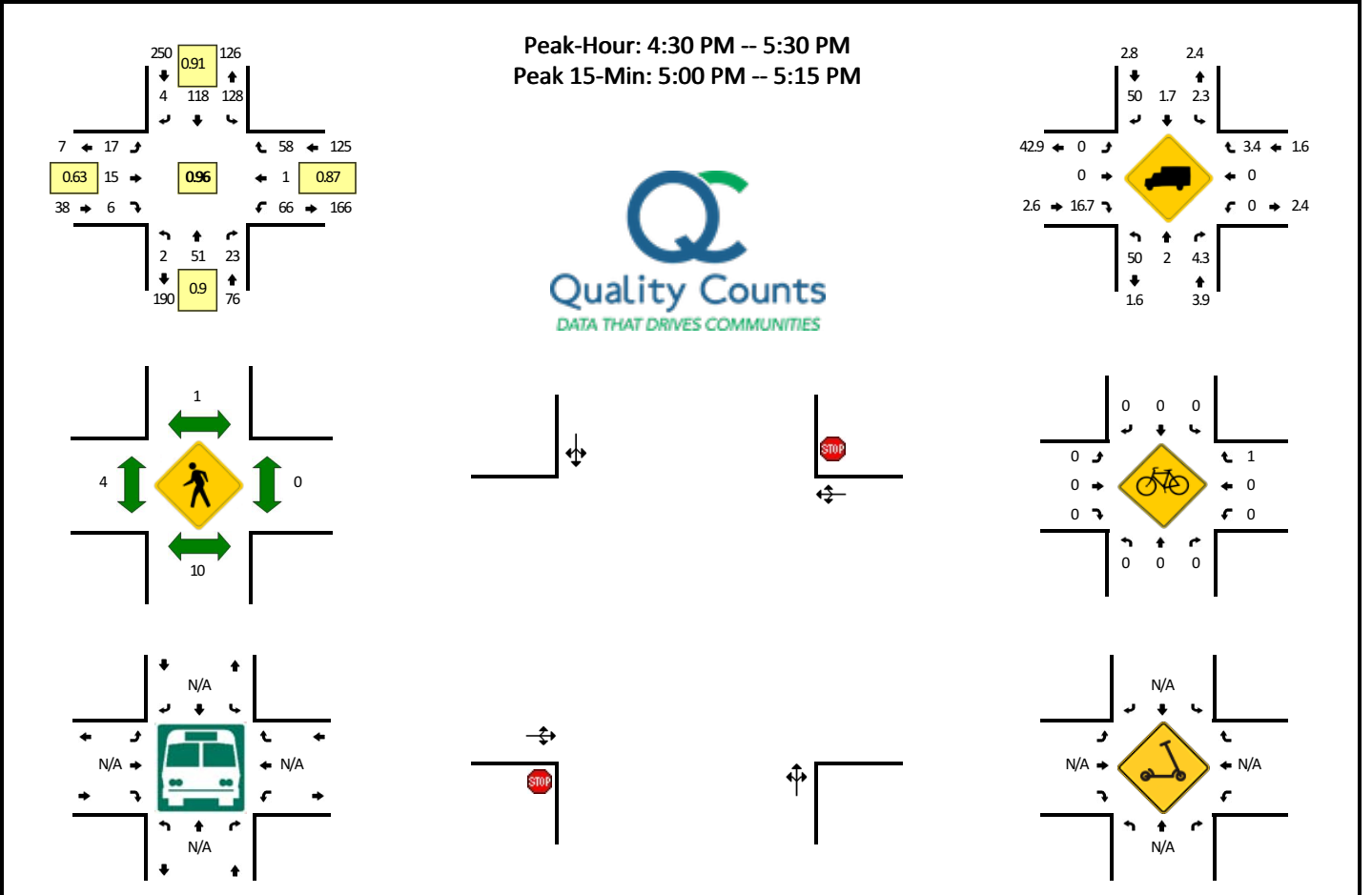
15-Min Count Period Beginning At	SW 95th Ave (Northbound)				SW 95th Ave (Southbound)				SW Sagert St (Eastbound)				SW Sagert St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	6	1	0	6	9	5	0	1	1	0	0	3	1	16	0	51	
7:15 AM	1	18	1	0	5	5	4	0	1	0	0	0	4	5	9	0	53	
7:30 AM	2	14	0	0	11	8	2	0	3	0	0	0	5	3	18	0	66	
7:45 AM	2	23	11	0	5	23	10	0	1	0	1	0	16	2	22	0	116	286
8:00 AM	0	15	8	0	3	9	10	0	3	0	0	0	4	3	9	0	64	299
8:15 AM	2	11	1	0	3	3	7	0	1	1	0	0	2	1	7	0	39	285
8:30 AM	1	14	1	0	8	6	2	0	3	3	2	0	5	1	15	0	61	280
8:45 AM	0	20	1	0	10	10	8	0	2	1	2	0	2	4	14	0	74	238

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	92	44	0	20	92	40	0	4	0	4	0	64	8	88	0	464	
Heavy Trucks	0	4	0		0	8	20		4	0	0		4	0	0		40	
Buses																		
Pedestrians		8				0				0				0				8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0			0
Scoters																		

Comments:

**LOCATION:** SW 95th Ave -- SW Sagert St  
**CITY/STATE:** Tualatin, OR

**QC JOB #:** 15473306  
**DATE:** Thu, Jun 10 2021



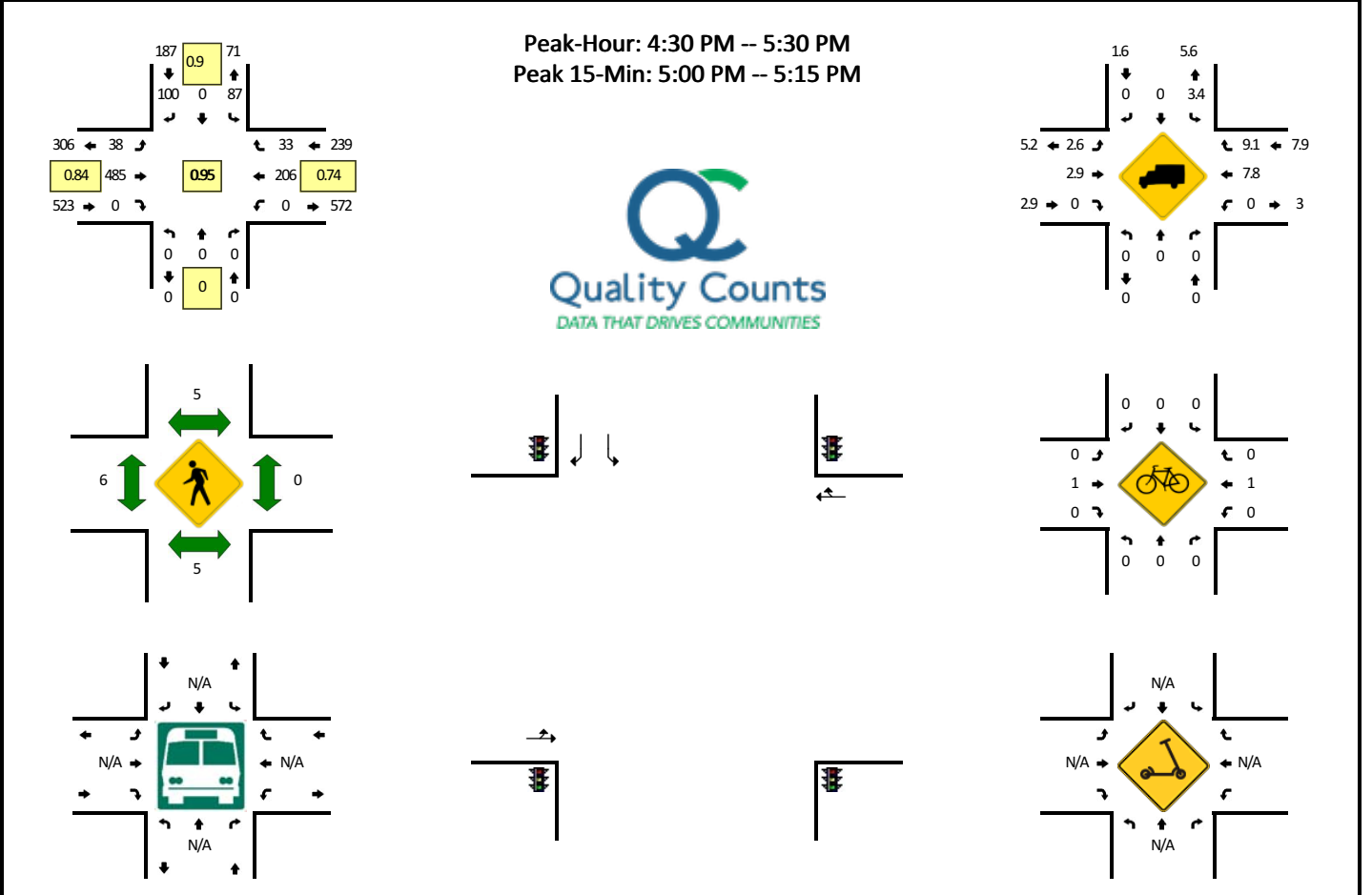
15-Min Count Period Beginning At	SW 95th Ave (Northbound)				SW 95th Ave (Southbound)				SW Sagert St (Eastbound)				SW Sagert St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	16	8	0	33	16	1	0	2	8	4	0	6	0	16	0	112	
4:15 PM	0	17	7	0	20	18	3	0	1	1	2	0	6	3	18	0	96	
4:30 PM	0	11	7	0	36	28	0	0	9	5	1	0	11	0	15	0	123	
4:45 PM	0	13	6	0	36	32	1	0	1	3	2	0	16	0	15	0	125	456
5:00 PM	1	15	5	0	32	29	1	0	5	7	1	0	21	0	11	0	128	472
5:15 PM	1	12	5	0	24	29	2	0	2	0	2	0	18	1	17	0	113	489
5:30 PM	2	11	2	0	28	23	1	0	2	6	2	0	4	0	16	0	97	463
5:45 PM	0	9	3	0	13	21	0	0	2	1	0	0	18	1	16	0	84	422
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	60	20	0	128	116	4	0	20	28	4	0	84	0	44	0	512	
Heavy Trucks	4	0	0		4	4	4		0	0	0		0	0	0		16	
Buses																		
Pedestrians		12				4				8				0			24	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:



**LOCATION:** SW 95th Ave -- SW Avery St  
**CITY/STATE:** Tualatin, OR

**QC JOB #:** 15473308  
**DATE:** Thu, Jun 10 2021



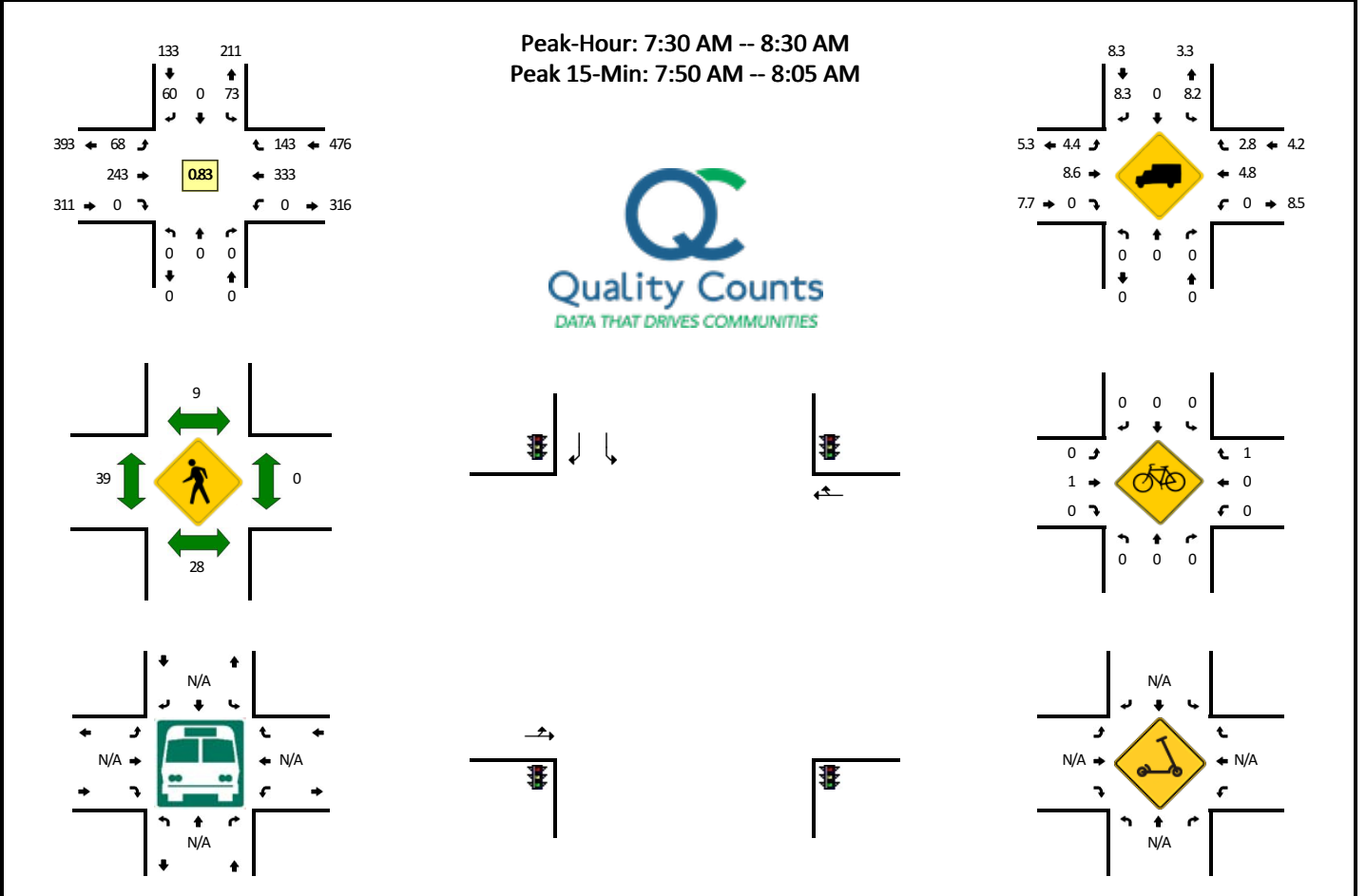
15-Min Count Period Beginning At	SW 95th Ave (Northbound)				SW 95th Ave (Southbound)				SW Avery St (Eastbound)				SW Avery St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	18	0	14	0	8	122	0	0	0	44	12	0	218	
4:15 PM	0	0	0	0	14	0	12	0	13	88	0	0	0	41	10	0	178	
4:30 PM	0	0	0	0	19	0	19	0	11	145	0	0	0	45	5	0	244	
4:45 PM	0	0	0	0	23	0	26	0	8	111	0	0	0	39	8	0	215	855
5:00 PM	0	0	0	0	20	0	32	0	12	124	0	0	0	54	7	0	249	886
5:15 PM	0	0	0	0	25	0	23	0	7	105	0	0	0	68	13	0	241	949
5:30 PM	0	0	0	0	17	0	12	0	5	98	0	0	0	47	7	0	186	891
5:45 PM	0	0	0	0	12	0	24	0	4	54	0	0	0	41	8	0	143	819
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	80	0	128	0	48	496	0	0	0	216	28	0	996	
Heavy Trucks	0	0	0	0	4	0	0	0	0	8	0	0	0	20	4	0	36	
Buses																		
Pedestrians		4				4				8				0			16	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

*Comments:*



**LOCATION:** SW 95th Ave -- SW Avery St  
**CITY/STATE:** Washington, OR

**QC JOB #:** 15109501  
**DATE:** Tue, Oct 29 2019

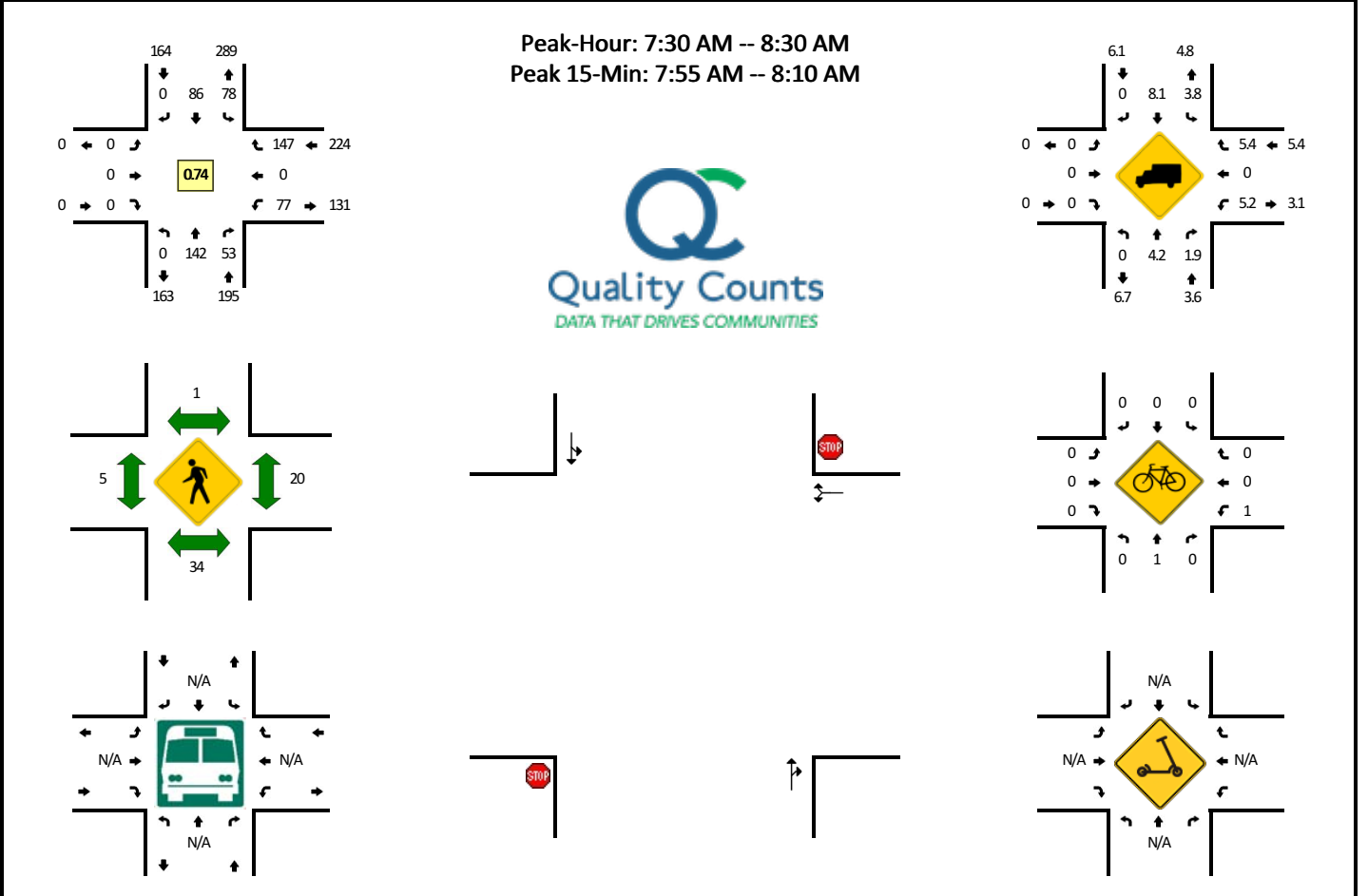


5-Min Count Period Beginning At	SW 95th Ave (Northbound)				SW 95th Ave (Southbound)				SW Avery St (Eastbound)				SW Avery St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:30 AM	0	0	0	0	1	0	5	0	6	18	0	0	0	32	9	0	71	
7:35 AM	0	0	0	0	7	0	3	0	6	23	0	0	0	46	17	0	102	
7:40 AM	0	0	0	0	8	0	2	0	4	24	0	0	0	25	17	0	80	
7:45 AM	0	0	0	0	6	0	3	0	7	25	0	0	0	24	10	0	75	
7:50 AM	0	0	0	0	14	0	5	0	10	15	0	0	0	35	24	0	103	
7:55 AM	0	0	0	0	12	0	2	0	9	19	0	0	0	26	19	0	87	
8:00 AM	0	0	0	0	9	0	10	0	7	18	0	0	0	29	15	0	88	
8:05 AM	0	0	0	0	11	0	11	0	4	26	0	0	0	29	9	0	90	
8:10 AM	0	0	0	0	1	0	9	0	2	26	0	0	0	19	8	0	65	
8:15 AM	0	0	0	0	3	0	1	0	5	21	0	0	0	24	4	0	58	
8:20 AM	0	0	0	0	0	0	3	0	4	17	0	0	0	24	4	0	52	
8:25 AM	0	0	0	0	1	0	6	0	4	11	0	0	0	20	7	0	49	920
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	140	0	68	0	104	208	0	0	0	360	232	0	1112	
Heavy Trucks	0	0	0	0	8	0	8	0	4	8	0	0	0	8	12	0	48	
Buses																		
Pedestrians		76				8				136				0			220	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	4		4	
Scoters																		

Comments:

**LOCATION:** SW 95th Ave -- SW Sagert St  
**CITY/STATE:** Washington, OR

**QC JOB #:** 15109504  
**DATE:** Tue, Oct 29 2019



5-Min Count Period Beginning At	SW 95th Ave (Northbound)				SW 95th Ave (Southbound)				SW Sagert St (Eastbound)				SW Sagert St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:30 AM	0	11	1	0	4	7	0	0	0	0	0	0	5	0	9	0	37	
7:35 AM	0	19	1	0	4	5	0	0	0	0	0	0	8	0	16	0	53	
7:40 AM	0	11	1	0	8	7	0	0	0	0	0	0	7	0	6	0	40	
7:45 AM	0	11	6	0	10	8	0	0	0	0	0	0	7	0	18	0	60	
7:50 AM	0	7	2	0	7	9	0	0	0	0	0	0	11	0	6	0	42	
7:55 AM	0	17	11	0	11	14	0	0	0	0	0	0	8	0	16	0	77	
8:00 AM	0	9	5	0	7	10	0	0	0	0	0	0	12	0	19	0	62	
8:05 AM	0	11	12	0	6	13	0	0	0	0	0	0	6	0	10	0	58	
8:10 AM	0	20	9	0	5	5	0	0	0	0	0	0	3	0	17	0	59	
8:15 AM	0	11	3	0	5	3	0	0	0	0	0	0	0	0	10	0	32	
8:20 AM	0	5	1	0	9	5	0	0	0	0	0	0	3	0	7	0	30	
8:25 AM	0	10	1	0	2	0	0	0	0	0	0	0	7	0	13	0	33	583
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	148	112	0	96	148	0	0	0	0	0	0	104	0	180	0	788	
Heavy Trucks Buses	0	8	4	0	8	16	0	0	0	0	0	0	0	0	12	0	48	
Pedestrians	0	20	0	0	0	0	0	0	0	8	0	0	0	8	0	0	36	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scooters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

## Appendix B Existing Operations

Tualatin Heights ZA-Existing Conditions

Vistro File: H:\...\26462\_AM.vistro  
Report File: H:\...\Existing\_AM.pdf

Scenario: Base Scenario  
9/2/2021

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	SW 95th Ave/Tualatin-Sherwood Rd	Signalized	HCM 6th Edition	NB Right	0.541	16.9	B
2	SW 95th Ave/SW Sagert St	Two-way stop	HCM 6th Edition	WB Left	0.292	22.9	C
3	Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St	Two-way stop	HCM 6th Edition	SB Thru	0.006	12.5	B
4	Tualatin Heights East Dwy/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.060	12.1	B
5	SW Boones Ferry Rd/SW Sagert St	Signalized	HCM 6th Edition	EB Right	0.855	32.5	C
6	SW 95th Ave/SW Avery St	Signalized	HCM 6th Edition	SB Left	0.553	6.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: SW 95th Ave/Tualatin-Sherwood Rd**

Control Type:	Signalized	Delay (sec / veh):	16.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.541

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↕↔			↔↕			↔↕↔			↔↕↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	100.00	100.00	100.00	120.00	100.00	100.00	400.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		



**Volumes**

Name												
Base Volume Input [veh/h]	56	6	74	1	1	2	9	861	84	137	1052	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	0.00	9.00	0.00	0.00	50.00	0.00	23.00	8.00	10.00	13.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	6	74	1	1	2	9	861	84	137	1052	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	2	19	0	0	1	2	227	22	36	277	1
Total Analysis Volume [veh/h]	59	6	78	1	1	2	9	906	88	144	1107	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	1			4			0			3		
v_di, Inbound Pedestrian Volume crossing major street	0			3			1			4		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street	1			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	5	0	0	5	0	5	10	0	10	10	0
Maximum Green [s]	0	35	0	0	35	0	20	65	0	20	65	0
Amber [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	41	0	0	41	0	25	74	0	25	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	50	50	50	50	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50	5.50	5.00	6.50	6.50	5.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50	3.50	3.00	4.50	4.50	3.00	4.50	4.50
g_i, Effective Green Time [s]	4	4	4	4	8	19	19	9	20	20
g / C, Green / Cycle	0.09	0.09	0.09	0.09	0.17	0.39	0.39	0.17	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.04	0.05	0.00	0.00	0.00	0.32	0.33	0.09	0.33	0.33
s, saturation flow rate [veh/h]	1620	1495	1826	974	1810	1555	1500	1667	1705	1704
c, Capacity [veh/h]	285	135	274	88	307	611	590	291	679	678
d1, Uniform Delay [s]	21.34	21.71	20.60	20.62	17.24	13.56	13.59	18.55	13.35	13.36
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.40	3.84	0.01	0.10	0.04	2.90	3.08	1.30	2.49	2.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.23	0.58	0.01	0.02	0.03	0.83	0.83	0.50	0.82	0.82
d, Delay for Lane Group [s/veh]	21.74	25.54	20.61	20.72	17.27	16.46	16.67	19.85	15.84	15.84
Lane Group LOS	C	C	C	C	B	B	B	B	B	B
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.68	0.94	0.02	0.02	0.08	4.59	4.49	1.44	4.92	4.92
50th-Percentile Queue Length [ft/ln]	17.06	23.46	0.50	0.55	2.02	114.86	112.23	36.09	123.11	123.05
95th-Percentile Queue Length [veh/ln]	1.23	1.69	0.04	0.04	0.15	8.11	7.96	2.60	8.56	8.56
95th-Percentile Queue Length [ft/ln]	30.72	42.23	0.91	0.98	3.63	202.74	199.10	64.97	214.09	214.01

**Movement, Approach, & Intersection Results**

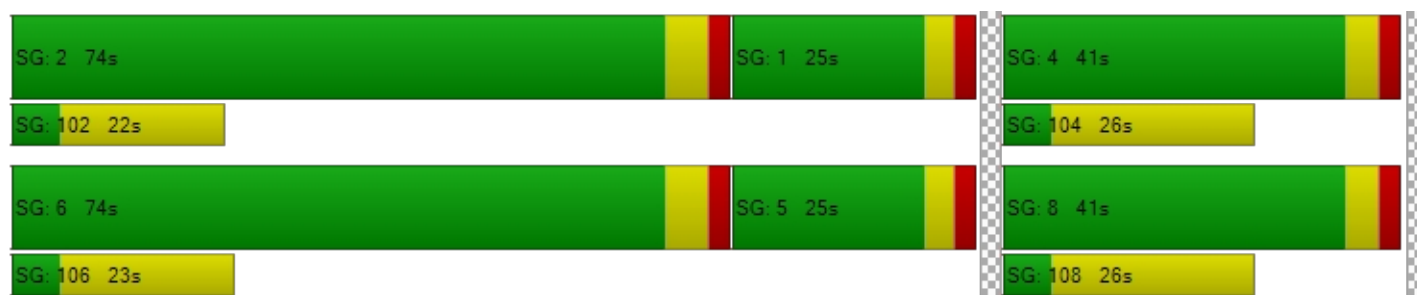
d_M, Delay for Movement [s/veh]	21.74	21.74	25.54	20.61	20.61	20.72	17.27	16.55	16.67	19.85	15.84	15.84
Movement LOS	C	C	C	C	C	C	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	23.82			20.67			16.57			16.30		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	16.87											
Intersection LOS	B											
Intersection V/C	0.541											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	9664.49	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	16.62	16.62	16.62	16.62
I_p,int, Pedestrian LOS Score for Intersection	2.032	1.917	2.777	2.708
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1431	1431	2721	2721
d_b, Bicycle Delay [s]	2.01	2.01	3.23	3.22
I_b,int, Bicycle LOS Score for Intersection	1.796	1.566	2.387	2.593
Bicycle LOS	A	A	B	B

**Sequence**

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 2: SW 95th Ave/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	22.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.292

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	142	53	78	86	0	0	0	0	77	0	147
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	4.00	8.00	0.00	0.00	0.00	0.00	5.00	0.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	142	53	78	86	0	0	0	0	77	0	147
Peak Hour Factor	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	48	18	26	29	0	0	0	0	26	0	50
Total Analysis Volume [veh/h]	0	192	72	105	116	0	0	0	0	104	0	199
Pedestrian Volume [ped/h]	34			1			5			20		



**Intersection Settings**

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.26
d_M, Delay for Movement [s/veh]	7.45	0.00	0.00	8.16	0.00	0.00	18.84	14.91	9.17	22.86	22.21	17.45
Movement LOS	A	A	A	A	A	A	C	B	A	C	C	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.28	0.28	0.28	0.00	0.00	0.00	3.33	3.33	3.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	6.91	6.91	6.91	0.00	0.00	0.00	83.22	83.22	83.22
d_A, Approach Delay [s/veh]	0.00			3.88			14.31			19.31		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	8.51											
Intersection LOS	C											

**Intersection Level Of Service Report**

**Intersection 3: Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	7	0	17	15	2	8	0	127	4	4	209	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	6.00	0.00	0.00	0.00	0.00	4.00	25.00	0.00	4.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	0	17	15	2	8	0	127	4	4	209	7
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	5	5	1	3	0	40	1	1	65	2
Total Analysis Volume [veh/h]	9	0	21	19	3	10	0	159	5	5	261	9
Pedestrian Volume [ped/h]	2			2			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.00	0.02	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.21	12.33	9.36	12.46	12.47	10.02	7.77	0.00	0.00	7.54	0.00	0.00
Movement LOS	B	B	A	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.13	0.18	0.18	0.18	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	3.25	3.25	3.25	4.46	4.46	4.46	0.00	0.00	0.00	0.26	0.26	0.26
d_A, Approach Delay [s/veh]	10.22			11.70			0.00			0.14		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.43											
Intersection LOS	B											

**Intersection Level Of Service Report**  
**Intersection 4: Tualatin Heights East Dwy/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	12.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.060

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↔		↕		↔	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	26	6	2	157	214	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	3.00	4.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	6	2	157	214	2
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	2	1	49	67	1
Total Analysis Volume [veh/h]	33	8	3	196	268	3
Pedestrian Volume [ped/h]	5		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.06	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.06	10.18	7.79	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.23	0.23	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.70	5.70	0.17	0.17	0.00	0.00
d_A, Approach Delay [s/veh]	11.69		0.12		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.98					
Intersection LOS	B					



**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	32.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.855

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵↱			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	20	549	244	31	295	65	42	42	99	117	139	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	40.00	5.00	9.00	6.00	7.00	0.00	5.00	2.00	12.00	11.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	549	244	31	295	65	42	42	99	117	139	40
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	165	73	9	89	20	13	13	30	35	42	12
Total Analysis Volume [veh/h]	24	661	294	37	355	78	51	51	119	141	167	48
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			1			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			1		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street	1			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	L	C	R	L	C	L	C
C, Cycle Length [s]	101	101	101	101	101	101	101	101	101
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	66	58	66	59	59	26	12	26	17
g / C, Green / Cycle	0.65	0.57	0.65	0.58	0.58	0.25	0.12	0.25	0.17
(v / s)_i Volume / Saturation Flow Rate	0.03	0.55	0.06	0.20	0.05	0.04	0.10	0.10	0.12
s, saturation flow rate [veh/h]	753	1730	670	1795	1580	1286	1664	1362	1754
c, Capacity [veh/h]	514	994	243	1045	920	302	201	338	301
d1, Uniform Delay [s]	6.78	20.34	21.13	10.95	9.23	29.55	43.34	31.19	39.36
k, delay calibration	0.19	0.43	0.04	0.19	0.19	0.04	0.04	0.13	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.06	18.43	0.11	0.33	0.07	0.10	3.71	0.97	2.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.05	0.96	0.15	0.34	0.08	0.17	0.84	0.42	0.71
d, Delay for Lane Group [s/veh]	6.85	38.77	21.23	11.28	9.30	29.65	47.05	32.16	41.84
Lane Group LOS	A	D	C	B	A	C	D	C	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.18	24.28	0.27	3.98	0.74	0.95	4.31	2.86	5.17
50th-Percentile Queue Length [ft/ln]	4.42	606.89	6.66	99.58	18.43	23.79	107.80	71.47	129.28
95th-Percentile Queue Length [veh/ln]	0.32	32.36	0.48	7.17	1.33	1.71	7.72	5.15	8.90
95th-Percentile Queue Length [ft/ln]	7.96	808.90	11.99	179.25	33.18	42.81	192.94	128.65	222.51

**Movement, Approach, & Intersection Results**

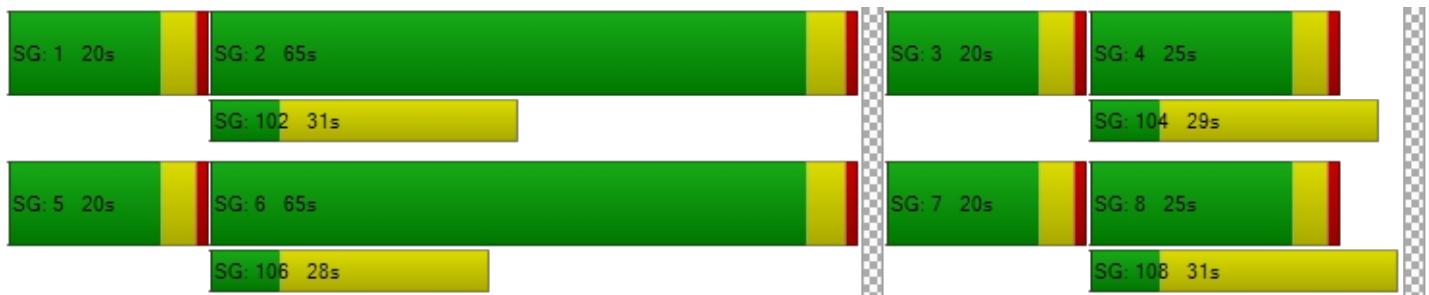
d_M, Delay for Movement [s/veh]	6.85	38.77	38.77	21.23	11.28	9.30	29.65	47.05	47.05	32.16	41.84	41.84
Movement LOS	A	D	D	C	B	A	C	D	D	C	D	D
d_A, Approach Delay [s/veh]	37.99			11.73			43.03			38.00		
Approach LOS	D			B			D			D		
d_I, Intersection Delay [s/veh]	32.45											
Intersection LOS	C											
Intersection V/C	0.855											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	39.89			39.89			39.89			39.89		
I_p,int, Pedestrian LOS Score for Intersection	2.492			2.450			2.125			2.216		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1193			1193			408			408		
d_b, Bicycle Delay [s]	8.18			8.19			31.88			31.88		
I_b,int, Bicycle LOS Score for Intersection	3.175			2.335			1.924			2.147		
Bicycle LOS	C			B			A			B		

**Sequence**

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





**Intersection Level Of Service Report  
Intersection 6: SW 95th Ave/SW Avery St**

Control Type:	Signalized	Delay (sec / veh):	6.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.553

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name						
Base Volume Input [veh/h]	73	60	68	243	333	143
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	8.00	8.00	4.00	9.00	5.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	73	60	68	243	333	143
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	18	20	73	100	43
Total Analysis Volume [veh/h]	88	72	82	293	401	172
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	3		4		0	
v_di, Inbound Pedestrian Volume crossing major street	4		3		0	
v_co, Outbound Pedestrian Volume crossing minor street	2		0		2	
v_ci, Inbound Pedestrian Volume crossing minor street	2		0		2	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		1	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	4	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	25	0	0	40	40	0
Amber [s]	3.5	0.0	0.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	3.0	3.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	R	C	C
C, Cycle Length [s]	26	26	26	26
L, Total Lost Time per Cycle [s]	4.50	4.50	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	3.00	3.00
g_i, Effective Green Time [s]	4	4	12	12
g / C, Green / Cycle	0.15	0.15	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.35	0.33
s, saturation flow rate [veh/h]	1695	1477	1068	1718
c, Capacity [veh/h]	252	220	685	828
d1, Uniform Delay [s]	9.83	9.78	4.84	5.18
k, delay calibration	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.83	0.86	0.68	1.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.35	0.33	0.55	0.69
d, Delay for Lane Group [s/veh]	10.65	10.64	5.52	6.23
Lane Group LOS	B	B	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.36	0.29	0.72	0.95
50th-Percentile Queue Length [ft/ln]	8.88	7.37	18.01	23.65
95th-Percentile Queue Length [veh/ln]	0.64	0.53	1.30	1.70
95th-Percentile Queue Length [ft/ln]	15.98	13.26	32.42	42.57

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	10.65	10.64	5.52	5.52	6.23	6.23
Movement LOS	B	B	A	A	A	A
d_A, Approach Delay [s/veh]	10.65		5.52		6.23	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.63					
Intersection LOS	A					
Intersection V/C	0.553					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	6701.16	3864.57	0.00
d_p, Pedestrian Delay [s]	4.23	4.23	4.23
I_p,int, Pedestrian LOS Score for Intersection	2.107	2.043	2.095
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1941	3106	3106
d_b, Bicycle Delay [s]	0.01	3.94	3.94
I_b,int, Bicycle LOS Score for Intersection	1.560	2.178	2.505
Bicycle LOS	A	B	B

**Sequence**

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





## Tualatin Heights ZA-Existing Conditions

Vistro File: H:\...\26462\_PM.vistro

Scenario: Base Scenario

Report File: H:\...\Existing\_PM.pdf

9/2/2021

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	SW 95th Ave/Tualatin-Sherwood Rd	Signalized	HCM 6th Edition	NB Right	0.550	17.6	B
2	SW 95th Ave/SW Sagert St	Two-way stop	HCM 6th Edition	WB Left	0.157	14.9	B
3	Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.032	12.5	B
4	Tualatin Heights East Dwy/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.054	11.5	B
5	SW Boones Ferry Rd/SW Sagert St	Signalized	HCM 6th Edition	EB Thru	0.697	19.0	B
6	SW 95th Ave/SW Avery St	Signalized	HCM 6th Edition	SB Right	0.536	6.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: SW 95th Ave/Tualatin-Sherwood Rd**

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.550

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↕↔			↕↔			↔↕			↔↕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	100.00	100.00	100.00	120.00	100.00	100.00	400.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	52	4	101	1	4	8	5	1084	121	96	870	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	17.00	0.00	2.00	0.00	0.00	0.00	0.00	6.00	4.00	4.00	11.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	4	101	1	4	8	5	1084	121	96	870	2
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	1	26	0	1	2	1	279	31	25	224	1
Total Analysis Volume [veh/h]	54	4	104	1	4	8	5	1118	125	99	897	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		1			0			0			
v_di, Inbound Pedestrian Volume crossing major street	0		0			0			1			
v_co, Outbound Pedestrian Volume crossing minor street	0		0			1			0			
v_ci, Inbound Pedestrian Volume crossing minor street	0		1			0			0			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	3		0			2			3			

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	5	0	0	5	0	5	10	0	10	10	0
Maximum Green [s]	0	35	0	0	35	0	20	65	0	20	65	0
Amber [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	41	0	0	41	0	25	74	0	25	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	52	52	52	52	52	52	52	52	52	52
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50	5.50	5.00	6.50	6.50	5.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50	3.50	3.00	4.50	4.50	3.00	4.50	4.50
g_i, Effective Green Time [s]	5	5	5	5	13	22	22	8	17	17
g / C, Green / Cycle	0.10	0.10	0.10	0.10	0.25	0.42	0.42	0.15	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.04	0.07	0.00	0.00	0.00	0.35	0.35	0.06	0.26	0.26
s, saturation flow rate [veh/h]	1599	1560	1860	1610	1810	1810	1738	1752	1735	1733
c, Capacity [veh/h]	293	155	268	160	450	768	737	259	561	560
d1, Uniform Delay [s]	21.66	22.44	21.03	21.08	14.64	13.17	13.23	19.90	15.98	15.98
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.33	4.95	0.03	0.13	0.01	2.29	2.49	0.93	2.72	2.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.20	0.67	0.02	0.05	0.01	0.82	0.83	0.38	0.80	0.80
d, Delay for Lane Group [s/veh]	21.99	27.39	21.05	21.20	14.65	15.46	15.71	20.83	18.70	18.71
Lane Group LOS	C	C	C	C	B	B	B	C	B	B
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.63	1.33	0.05	0.09	0.04	5.70	5.57	1.04	4.56	4.56
50th-Percentile Queue Length [ft/ln]	15.67	33.20	1.31	2.16	1.02	142.49	139.37	26.12	114.01	113.94
95th-Percentile Queue Length [veh/ln]	1.13	2.39	0.09	0.16	0.07	9.62	9.45	1.88	8.06	8.06
95th-Percentile Queue Length [ft/ln]	28.21	59.77	2.35	3.88	1.83	240.38	236.18	47.02	201.57	201.47



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	21.99	21.99	27.39	21.05	21.05	21.20	14.65	15.57	15.71	20.83	18.70	18.71
Movement LOS	C	C	C	C	C	C	B	B	B	C	B	B
d_A, Approach Delay [s/veh]	25.46			21.15			15.58			18.92		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	17.65											
Intersection LOS	B											
Intersection V/C	0.550											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	17.57	17.57	17.57	17.57
I_p,int, Pedestrian LOS Score for Intersection	2.039	1.920	2.779	2.707
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1377	1377	2618	2618
d_b, Bicycle Delay [s]	2.51	2.50	2.47	2.47
I_b,int, Bicycle LOS Score for Intersection	1.827	1.581	2.589	2.383
Bicycle LOS	A	A	B	B

**Sequence**

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 2: SW 95th Ave/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	14.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.157

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	53	23	143	124	0	0	0	0	66	0	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	50.00	2.00	4.00	2.00	2.00	50.00	0.00	0.00	17.00	0.00	0.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	53	23	143	124	0	0	0	0	66	0	59
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	14	6	37	32	0	0	0	0	17	0	15
Total Analysis Volume [veh/h]	0	55	24	149	129	0	0	0	0	69	0	61
Pedestrian Volume [ped/h]	10			1			4			0		

**Intersection Settings**

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.06
d_M, Delay for Movement [s/veh]	8.00	0.00	0.00	7.63	0.00	0.00	14.05	13.61	9.21	14.90	15.17	10.32
Movement LOS	A	A	A	A	A	A	B	B	A	B	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.33	0.33	0.33	0.00	0.00	0.00	0.83	0.83	0.83
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	8.14	8.14	8.14	0.00	0.00	0.00	20.73	20.73	20.73
d_A, Approach Delay [s/veh]	0.00			4.09			12.29			12.75		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	5.74											
Intersection LOS	B											

**Intersection Level Of Service Report**

**Intersection 3: Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.032

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	2	3	20	14	1	5	22	139	5	24	118	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	5.00	7.00	0.00	0.00	9.00	3.00	0.00	0.00	7.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	3	20	14	1	5	22	139	5	24	118	14
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	6	4	0	1	6	39	1	7	34	4
Total Analysis Volume [veh/h]	2	3	23	16	1	6	25	158	6	27	134	16
Pedestrian Volume [ped/h]	3			6			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.01	0.03	0.03	0.00	0.01	0.02	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	11.97	12.38	9.31	12.55	12.44	9.28	7.67	0.00	0.00	7.59	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.11	0.13	0.13	0.13	0.06	0.06	0.06	0.06	0.06	0.06
95th-Percentile Queue Length [ft/ln]	2.81	2.81	2.81	3.20	3.20	3.20	1.39	1.39	1.39	1.45	1.45	1.45
d_A, Approach Delay [s/veh]	9.83			11.69			1.01			1.16		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	2.26											
Intersection LOS	B											



**Intersection Level Of Service Report  
Intersection 4: Tualatin Heights East Dwy/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	11.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.054

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	T		↑		↑	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	28	11	20	153	145	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	3.00	6.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	11	20	153	145	28
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	3	6	43	41	8
Total Analysis Volume [veh/h]	32	13	23	174	165	32
Pedestrian Volume [ped/h]	4		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.05	0.02	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.49	9.60	7.66	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.05	0.05	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.56	5.56	1.27	1.27	0.00	0.00
d_A, Approach Delay [s/veh]	10.94		0.89		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.52					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.697

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵↻			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	13	391	212	77	623	56	41	120	12	182	85	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	8.00	3.00	4.00	5.00	4.00	2.00	0.00	2.00	17.00	5.00	5.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	391	212	77	623	56	41	120	12	182	85	50
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	100	54	20	159	14	10	31	3	46	22	13
Total Analysis Volume [veh/h]	13	399	216	79	636	57	42	122	12	186	87	51
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	4		1			4			0			
v_di, Inbound Pedestrian Volume crossing major street	4		0			4			1			
v_co, Outbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ci, Inbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	4		6			4			1			

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0



**Lane Group Calculations**

Lane Group	L	C	L	C	R	L	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	36	27	36	30	30	19	8	19	12
g / C, Green / Cycle	0.55	0.42	0.55	0.47	0.47	0.30	0.12	0.30	0.19
(v / s)_i Volume / Saturation Flow Rate	0.02	0.36	0.08	0.35	0.04	0.03	0.07	0.13	0.08
s, saturation flow rate [veh/h]	847	1726	956	1840	1547	1413	1828	1483	1696
c, Capacity [veh/h]	418	730	440	857	720	504	218	528	324
d1, Uniform Delay [s]	9.18	16.74	10.49	14.12	9.58	16.31	27.07	17.84	23.04
k, delay calibration	0.19	0.19	0.04	0.19	0.19	0.04	0.04	0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.05	4.60	0.07	2.20	0.08	0.03	1.05	0.15	0.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.03	0.84	0.18	0.74	0.08	0.08	0.61	0.35	0.43
d, Delay for Lane Group [s/veh]	9.23	21.34	10.56	16.33	9.66	16.34	28.12	17.99	23.37
Lane Group LOS	A	C	B	B	A	B	C	B	C
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.07	8.07	0.44	7.04	0.41	0.42	1.93	2.03	1.78
50th-Percentile Queue Length [ft/ln]	1.84	201.73	10.90	176.03	10.31	10.45	48.27	50.75	44.42
95th-Percentile Queue Length [veh/ln]	0.13	12.73	0.79	11.39	0.74	0.75	3.48	3.65	3.20
95th-Percentile Queue Length [ft/ln]	3.31	318.20	19.63	284.82	18.55	18.82	86.89	91.34	79.95

**Movement, Approach, & Intersection Results**

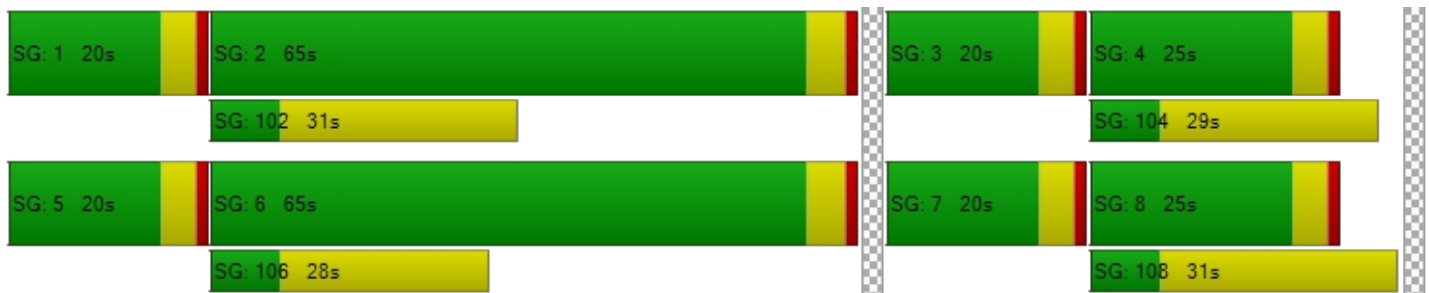
d_M, Delay for Movement [s/veh]	9.23	21.34	21.34	10.56	16.33	9.66	16.34	28.12	28.12	17.99	23.37	23.37
Movement LOS	A	C	C	B	B	A	B	C	C	B	C	C
d_A, Approach Delay [s/veh]	21.08			15.24			25.31			20.28		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	18.97											
Intersection LOS	B											
Intersection V/C	0.697											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	22.22			22.22			22.22			22.22		
I_p,int, Pedestrian LOS Score for Intersection	2.437			2.434			2.039			2.214		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1859			1859			635			635		
d_b, Bicycle Delay [s]	0.16			0.16			15.07			15.04		
I_b,int, Bicycle LOS Score for Intersection	2.596			2.833			1.850			2.094		
Bicycle LOS	B			C			A			B		

**Sequence**

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report  
Intersection 6: SW 95th Ave/SW Avery St**

Control Type:	Signalized	Delay (sec / veh):	6.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.536

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name						
Base Volume Input [veh/h]	88	101	38	490	208	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	0.00	3.00	3.00	8.00	9.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	101	38	490	208	33
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	27	10	129	55	9
Total Analysis Volume [veh/h]	93	106	40	516	219	35
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		1	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	4	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	25	0	0	40	40	0
Amber [s]	3.5	0.0	0.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	3.0	3.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0



**Lane Group Calculations**

Lane Group	L	R	C	C
C, Cycle Length [s]	23	23	23	23
L, Total Lost Time per Cycle [s]	4.50	4.50	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	3.00	3.00
g_i, Effective Green Time [s]	4	4	10	10
g / C, Green / Cycle	0.16	0.16	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.05	0.07	0.31	0.15
s, saturation flow rate [veh/h]	1767	1615	1810	1732
c, Capacity [veh/h]	286	262	940	740
d1, Uniform Delay [s]	8.58	8.70	5.42	4.44
k, delay calibration	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.65	1.01	0.60	0.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.32	0.41	0.59	0.34
d, Delay for Lane Group [s/veh]	9.23	9.70	6.02	4.72
Lane Group LOS	A	A	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.30	0.35	0.77	0.29
50th-Percentile Queue Length [ft/ln]	7.38	8.86	19.31	7.19
95th-Percentile Queue Length [veh/ln]	0.53	0.64	1.39	0.52
95th-Percentile Queue Length [ft/ln]	13.28	15.95	34.76	12.94

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	9.23	9.70	6.02	6.02	4.72	4.72
Movement LOS	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	9.48		6.02		4.72	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.37					
Intersection LOS	A					
Intersection V/C	0.536					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	3.12	3.12	3.12
I_p,int, Pedestrian LOS Score for Intersection	1.989	2.047	2.039
Crosswalk LOS	A	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	2175	3481	3481
d_b, Bicycle Delay [s]	0.09	6.30	6.30
I_b,int, Bicycle LOS Score for Intersection	1.560	2.477	1.979
Bicycle LOS	A	B	A

**Sequence**

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



## Appendix C Crash Data



ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSURING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION



CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)
1	OR-Y	VALID OREGON LICENSE
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY
3	SUSP	SUSPENDED/REVOKED
4	EXP	EXPIRED
8	N-VAL	OTHER NON-VALID LICENSE
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNEED FROM WRONG LANE
007	TO WRONG	TURNEED INTO WRONG LANE
008	ILLEG U	U-TURNEED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN

## EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)
135	RAIL OCC	INJURED OCCUPANT OF RAILWAY TRAIN, LIGHT RAIL, STREET CAR OR CABLE CAR



FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC CLASS	DESCRIPTION
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE
02	RURAL PRINCIPAL ARTERIAL - OTHER
06	RURAL MINOR ARTERIAL
07	RURAL MAJOR COLLECTOR
08	RURAL MINOR COLLECTOR
09	RURAL LOCAL
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP
14	URBAN PRINCIPAL ARTERIAL - OTHER
16	URBAN MINOR ARTERIAL
17	URBAN MAJOR COLLECTOR
18	URBAN MINOR COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEM
99	UNKNOWN URBAN NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUplet
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

**MOVEMENT TYPE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

**NON-MOTORIST LOCATION CODE TRANSLATION LIST**

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

**ROAD CHARACTER CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

**PARTICIPANT TYPE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYAL
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN (
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

**TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFGR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH









ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)
1	OR-Y	VALID OREGON LICENSE
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY
3	SUSP	SUSPENDED/REVOKED
4	EXP	EXPIRED
8	N-VAL	OTHER NON-VALID LICENSE
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNEED FROM WRONG LANE
007	TO WRONG	TURNEED INTO WRONG LANE
008	ILLEG U	U-TURNEED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN



## EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)
135	RAIL OCC	INJURED OCCUPANT OF RAILWAY TRAIN, LIGHT RAIL, STREET CAR OR CABLE CAR

FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC CLASS	DESCRIPTION
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE
02	RURAL PRINCIPAL ARTERIAL - OTHER
06	RURAL MINOR ARTERIAL
07	RURAL MAJOR COLLECTOR
08	RURAL MINOR COLLECTOR
09	RURAL LOCAL
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP
14	URBAN PRINCIPAL ARTERIAL - OTHER
16	URBAN MINOR ARTERIAL
17	URBAN MAJOR COLLECTOR
18	URBAN MINOR COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEM
99	UNKNOWN URBAN NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUplet
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

**MOVEMENT TYPE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

**NON-MOTORIST LOCATION CODE TRANSLATION LIST**

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

**ROAD CHARACTER CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

**PARTICIPANT TYPE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYAL
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN (
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

**TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFGR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION  
 TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT  
 CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at SW Sagert St & SW 95th Ave in Tualatin, OR  
 January 1, 2015 through December 31, 2019

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2016														
TURNING MOVEMENTS	0	2	0	2	0	2	0	0	2	2	0	2	0	0
2016 TOTAL	0	2	0	2	0	2	0	0	2	2	0	2	0	0
YEAR: 2015														
TURNING MOVEMENTS	0	1	0	1	0	2	0	1	0	0	1	1	0	0
2015 TOTAL	0	1	0	1	0	2	0	1	0	0	1	1	0	0
FINAL TOTAL	0	3	0	3	0	4	0	1	2	2	1	3	0	0

**Disclaimers:** Effective 2016, collection of “Property Damage Only” (PDO) crash data elements was reduced for vehicles and participants. Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see [https://www.oregon.gov/ODOT/Data/documents/Crash\\_Data\\_Disclaimers.pdf](https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf).



OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION  
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT  
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at SW Tualatin-Sherwood Rd & SW 95th Ave in Tualatin, OR  
January 1, 2015 through December 31, 2019

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2019														
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	2	0	2	0	2	0	1	1	2	0	2	0	0
2019 TOTAL	0	3	0	3	0	3	0	2	1	3	0	3	0	0
YEAR: 2018														
REAR-END	0	1	1	2	0	2	1	2	0	2	0	2	0	0
TURNING MOVEMENTS	0	3	0	3	0	4	0	2	1	2	1	3	0	0
2018 TOTAL	0	4	1	5	0	6	1	4	1	4	1	5	0	0
YEAR: 2017														
REAR-END	0	1	1	2	0	1	0	2	0	2	0	2	0	0
2017 TOTAL	0	1	1	2	0	1	0	2	0	2	0	2	0	0
YEAR: 2016														
ANGLE	0	0	1	1	0	0	0	1	0	1	0	1	0	0
REAR-END	0	1	3	4	0	1	0	3	1	4	0	4	0	0
TURNING MOVEMENTS	0	1	0	1	0	2	0	1	0	0	1	1	0	0
2016 TOTAL	0	2	4	6	0	3	0	5	1	5	1	6	0	0
YEAR: 2015														
TURNING MOVEMENTS	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2015 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
FINAL TOTAL	0	11	6	17	0	14	1	14	3	15	2	17	0	0

**Disclaimers:** Effective 2016, collection of “Property Damage Only” (PDO) crash data elements was reduced for vehicles and participants. Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see [https://www.oregon.gov/ODOT/Data/documents/Crash\\_Data\\_Disclaimers.pdf](https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf).

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION  
 TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT  
 CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Crashes on SW Sagert St between SW Boones Ferry Rd & SW 95th Ave in Tualatin, OR  
 January 1, 2015 through December 31, 2019

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2019														
REAR-END	0	1	0	1	0	1	0	1	0	1	0	0	0	0
2019 TOTAL	0	1	0	1	0	1	0	1	0	1	0	0	0	0
YEAR: 2017														
MISCELLANEOUS	0	0	1	1	0	0	0	0	1	1	0	0	0	0
2017 TOTAL	0	0	1	1	0	0	0	0	1	1	0	0	0	0
YEAR: 2016														
REAR-END	0	0	1	1	0	0	0	1	0	1	0	0	0	0
2016 TOTAL	0	0	1	1	0	0	0	1	0	1	0	0	0	0
FINAL TOTAL	0	1	2	3	0	1	0	2	1	3	0	0	0	0

**Disclaimers:** Effective 2016, collection of “Property Damage Only” (PDO) crash data elements was reduced for vehicles and participants. Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see [https://www.oregon.gov/ODOT/Data/documents/Crash\\_Data\\_Disclaimers.pdf](https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf).



ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUIING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING



DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)
1	OR-Y	VALID OREGON LICENSE
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY
3	SUSP	SUSPENDED/REVOKED
4	EXP	EXPIRED
8	N-VAL	OTHER NON-VALID LICENSE
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNEED FROM WRONG LANE
007	TO WRONG	TURNEED INTO WRONG LANE
008	ILLEG U	U-TURNEED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN

## EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

## EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)
135	RAIL OCC	INJURED OCCUPANT OF RAILWAY TRAIN, LIGHT RAIL, STREET CAR OR CABLE CAR

FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC CLASS	DESCRIPTION
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE
02	RURAL PRINCIPAL ARTERIAL - OTHER
06	RURAL MINOR ARTERIAL
07	RURAL MAJOR COLLECTOR
08	RURAL MINOR COLLECTOR
09	RURAL LOCAL
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP
14	URBAN PRINCIPAL ARTERIAL - OTHER
16	URBAN MINOR ARTERIAL
17	URBAN MAJOR COLLECTOR
18	URBAN MINOR COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEM
99	UNKNOWN URBAN NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUplet
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING



**MOVEMENT TYPE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

**NON-MOTORIST LOCATION CODE TRANSLATION LIST**

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

**ROAD CHARACTER CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

**PARTICIPANT TYPE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYAL
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN (
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

**TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST**

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFGR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION  
 TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT  
 CITY STREET LOCATIONS BY COUNTY - DRIVER BEHAVIOR FORMAT

Crashes on SW Sagert St between SW Boones Ferry Rd & SW 95th Ave in Tualatin, OR  
 January 1, 2015 through December 31, 2019

WASHINGTON COUNTY

SERIAL NO	DATE	TIME	DAY	*COUNTY OR CITY NAME	CRASH LOCATION	COLL TYPE	EVENT	CAUSE	ERROR	S U R F	T O T A L	PEOPLE					
												VEHICLE TYP/OWN	I L	I N	A L E		
03520	05/30/2016	3P	MO	Tualatin	SW SAGERT ST 200 FT E OF SW 95TH AVE	REAR		27		DRY	2	010	010	0	0	N	N
01270	03/06/2017	11A	MO	Tualatin	SW SAGERT ST 110 FT E OF SW APACHE DR	OTH	080	10		WET	2	010	010	0	0	N	N
04827	09/08/2019	11A	SU	Tualatin	SW SAGERT ST 200 FT W OF SW BOONES FERRY RD	REAR		29	026	DRY	2	011	011	0	1	N	N

VEHICLE OWNERSHIP CODES

Code	Short Description	Long Description
0	N/A	Not collected for PDO Crashes
1	PRVTE	Private
2	GOVMT	Government
3	PUBLIC	Public
4	RENTL	Rental vehicle
5	STOLN	Stolen vehicle
9	UNKN	Unknown ownership

## VEHICLE TYPE CODES

Code	Short Description	Long Description
00	PDO	Not collected for PDO Crashes
01	PSNGR CAR	Passenger car, pickup, light delivery, etc.
02	BOBTAIL	Truck tractor with no trailers (bobtail)
03	FARM TRCTR	Farm tractor or self-propelled farm equipment
04	SEMI TOW	Truck Tractor with trailer/mobile home in tow
05	TRUCK	Truck with non-detachable bed, panel, etc.
06	MOPED	Moped, minibike, seated motor scooter, motor bike
07	SCHL BUS	School bus (includes van)
08	OTH BUS	Other bus
09	MTRCYCLE	Motorcycle, dirt bike
10	OTHER	Other: forklift, backhoe, etc.
11	MOTRHOME	Motorhome
12	TROLLEY	Motorized Street Car/Trolley (no rails/wires)
13	ATV	ATV
14	MTRSCTR	Motorized scooter (standing)
15	SNOWMOBILE	Snowmobile
99	UNKNOWN	Unknown vehicle type

## CAUSE CODES

Code	Short Description	Medium Description	Long Description	Code Termination Date
00	NO CODE	NO CODE APPLICABLE	No cause associated at this level	
01	TOO-FAST	TOO FAST FOR COND	Too fast for conditions (not exceed posted speed)	
02	NO-YIELD	FAILED YIELD ROW	Did not yield right-of-way	
03	PAS-STOP	PASSED STOP SIGN	Passed stop sign or red flasher	
04	DIS SIG	DISREGRD TRAF SIGNAL	Disregarded traffic signal	
05	LEFT-CTR	LEFT OF CTR/STRADDLE	Drove left of center on two-way road; straddling	
06	IMP-OVER	IMPROPER PASSING	Improper overtaking	
07	TOO-CLOS	FOLLOW TOO CLOSE	Followed too closely	
08	IMP-TURN	IMPROPER TURN	Made improper turn	
09	DRINKING	ALC OR DRUGS	Alcohol or Drug Involved	12/31/2002
10	OTHR-IMP	OTHER DRIVE ERR	Other improper driving	
11	MECH-DEF	MECH DEFECT	Mechanical defect	
12	OTHER	OTHER	Other (not improper driving)	
13	IMP LN C	IMP LANE CHANGE	Improper change of traffic lanes	
14	DIS TCD	DISRG OTHR TCD	Disregarded other traffic control device	
15	WRNG WAY	WRONG WAY / 1-WAY RD	Wrong way on one-way road; wrong side divided road	
16	FATIGUE	DRIVER FATIGUED	Driver drowsy/fatigued/sleepy	
17	ILLNESS	PHYSICAL ILLNESS	Physical illness	
18	IN RDWY	ILLEGALLY IN RDWY	Non-motorist illegally in roadway	
19	NT VISBL	NOT VISIBLE	Non-motorist not visible; non-reflective clothing	
20	IMP PKNG	IMPROPER PARKING	Vehicle improperly parked	
21	DEF STER	DEFECTIVE STEERING	Defective steering mechanism	
22	DEF BRKE	DEFECTIVE BRAKES	Inadequate or no brakes	
24	LOADSHFT	LOAD SHIFTED	Vehicle lost load or load shifted	
25	TIREFAIL	TIRE FAILURE	Tire Failure	
26	PHANTOM	PHANTOM VEHICLE	Phantom / Non-contact Vehicle	
27	INATTENT	INATTENTION	Inattention	
28	NM INATT	NON-MTRST INATTENT	Non-Motorist Inattention	
29	F AVOID	FAIL AVOID VEH AHEAD	Failed to avoid vehicle ahead	
30	SPEED	EXCED POSTED SPEED	Driving in excess of posted speed	
31	RACING	SPEED RACING	Speed Racing (per PAR)	
32	CARELESS	CARELESS DRIVING	Careless Driving (per PAR)	
33	RECKLESS	RECKLESS DRIVING	Reckless Driving (per PAR)	
34	AGGRESV	AGGRESSIVE DRIVING	Aggressive Driving (per PAR)	
35	RD RAGE	ROAD RAGE	Road Rage (per PAR)	
40	VIEW OBS	VIEW OBSCURED	View obscured	
50	USED MDN	IMP USE MEDIAN/SHLDR	Improper use of median or shoulder	
51	FAIL LN	F MAINT LANE	Failed to maintain lane	12/31/2015
52	OFF RD	RAN OFF RD	Ran off road	12/31/2015



## ERR CODES

Code	Short Description	Medium Description	Long Description
000	NONE	NO ERROR	No error
001	WIDE TRN	WIDE TURN	Wide turn
002	CUT CORN	CUT CORNER	Cut corner on turn
003	FAIL TRN	F OBEY TRN	Failed to obey mandatory traffic turn signal, sign or lane markings
004	L IN TRF	LTRN FNT TRAF	Left turn in front of oncoming traffic
005	L PROHIB	LTRN PROHIB	Left turn where prohibited
006	FRM WRNG	T FRM WRNG LN	Turned from wrong lane
007	TO WRONG	T TO WRONG LN	Turned into wrong lane
008	ILLEG U	ILLEG U-TURN	U-turned illegally
009	IMP STOP	IMP STOP	Improperly stopped in traffic lane
010	IMP SIG	IMP/FAIL SIG	Improper signal or failure to signal
011	IMP BACK	IMP BACKING	Backing improperly (not parking)
012	IMP PARK	IMP PARKED	Improperly parked
013	UNPARK	IMP STRT PARK	Improper start leaving parked position
014	IMP STRT	IMP STRT STOP	Improper start from stopped position
015	IMP LGHT	IMP/NO LIGHTS	Improper or no lights (vehicle in traffic)
016	INATTENT	INATTENTION	Inattention (Failure to Dim Lights prior to 4/1/97)
017	UNSF VEH	DR UNSAFE VEH	Driving unsafe vehicle (no other error apparent)
018	OTH PARK	PRK MAN N/CLR	Entering/exiting parked position w/ insufficient clearance; other improper parking maneuver
019	DIS DRIV	DISRG DR SIG	Disregarded other driver's signal
020	DIS SGNL	DISRG TRF SIG	Disregarded traffic signal
021	RAN STOP	DISRG STP SGN	Disregarded stop sign or flashing red
022	DIS SIGN	DISRG WRN SGN	Disregarded warning sign, flares or flashing amber
023	DIS OFCR	DISRG POL/FLG	Disregarded police officer or flagman
024	DIS EMER	DISRG SIR/EMR	Disregarded siren or warning of emergency vehicle
025	DIS RR	DISRG RR SIG	Disregarded RR signal, RR sign, or RR flagman
026	REAR-END	F AVOID STP V	Failed to avoid stopped or parked vehicle ahead other than school bus
027	BIKE ROW	F/YLD ROW BIK	Did not have right-of-way over pedalcyclist
028	NO ROW	NO R-O-W	Did not have right-of-way
029	PED ROW	F/YLD ROW PED	Failed to yield right-of-way to pedestrian
030	PAS CURV	PASS ON CURVE	Passing on a curve
031	PAS WRNG	PASS WRNG SID	Passing on the wrong side
032	PAS TANG	PASS TANGENT	Passing on straight road under unsafe conditions
033	PAS X-WK	PASS STP4PED	Passed vehicle stopped at crosswalk for pedestrian
034	PAS INTR	PASS AT INTER	Passing at intersection
035	PAS HILL	PASS ON HILL	Passing on crest of hill
036	N/PAS ZN	PASS N/PASSNG	Passing in "No Passing" zone
037	PAS TRAF	PASS ONC TRAF	Passing in front of oncoming traffic
038	CUT-IN	CUTTING IN	Cutting in (two lanes - two way only)
039	WRNGSIDE	DR WRONG SIDE	Driving on wrong side of the road (2-way undivided roadways)
040	THRU MED	DR THRU MEDN	Driving through safety zone or over island
041	F/ST BUS	F/STP SCHLBUS	Failed to stop for school bus
042	F/SLO MV	F/SLO VEH	Failed to decrease speed for slower moving vehicle
043	TOO CLOSE	FOLLW TO CLOS	Following too closely (must be on officer's report)
044	STRDL LN	STRD/DR WRNG	Straddling or driving on wrong lanes
045	IMP CHG	IMP LANE CHG	Improper change of traffic lanes

## ERR CODES

Code	Short Description	Medium Description	Long Description
046	WRNG WAY	WRNG WY/1 WAY	Wrong way on one-way roadway; wrong side divided road
047	BASCRULE	V BASIC RULE	Driving too fast for conditions (not exceeding posted speed)
048	OPN DOOR	OPN DOOR TRAF	Opened door into adjacent traffic lane
049	IMPEDING	IMPEDING TRAF	Impeding Traffic
050	SPEED	SPEED	Driving in excess of posted speed
051	RECKLESS	RECKLSS DRVNG	Reckless driving (per PAR)
052	CARELESS	CARELSS DRVNG	Careless driving (per PAR)
053	RACING	RACING	Speed Racing (per PAR)
054	X N/SGNL	X-INT NO SGNL	Crossing at intersection, no traffic signal present
055	X W/SGNL	X-INT W/ SGNL	Crossing at intersection, traffic signal present
056	DIAGONAL	X-INT DIAGNL	Crossing at intersection - diagonally
057	BTWN INT	X-BTWN INTER	Crossing between intersections
059	W/TRAF-S	W SHLD W/TRAF	Walking, running, riding, etc., on shoulder WITH traffic
060	A/TRAF-S	W SHLD A/TRAF	Walking, running, riding, etc., on shoulder FACING traffic
061	W/TRAF-P	W PAVE W/TRAF	Walking, running, riding, etc., on pavement WITH traffic
062	A/TRAF-P	W PAVE A/TRAF	Walking, running, riding, etc., on pavement FACING traffic
063	PLAYINRD	PLAY IN RDWY	Playing in street or road
064	PUSH MV	PUSH MV IN RD	Pushing or working on vehicle in road or on shoulder
065	WORK IN RD	WORK IN RD	Working in roadway or along shoulder
070	LAY ON RD	LYING IN RD	Standing or lying in roadway
071	NM IMP USE	N-M IMP USE	Improper use of traffic lane by non-motorist
073	ELUDING	ELUDING	Eluding / Attempt to elude
079	F NEG CURV	FAIL NEG CURV	Failed to negotiate a curve
080	FAIL LN	F MAINT LANE	Failed to maintain lane
081	OFF RD	RAN OFF RD	Ran off road
082	NO CLEAR	MISJUDGE CLR	Driver misjudged clearance
083	OVRSTEER	OVERSTEER	Over-correcting
084	NOT USED	NOT USED	Code not in use
085	OVRLOAD	OVERLOAD	Overloading or improper loading of vehicle with cargo or passengers
097	UNA DIS TC	UNA DISRG TCD	Unable to determine which driver disregarded traffic control device

## EVENT CODES

Code	Short Description	Medium Description	Long Description
001	FEL/JUMP	FELL/JUMPED MV	Occupant fell, jumped or was ejected from moving vehicle
002	INTERFER	PSNGR INTERFERED	Passenger interfered with driver
003	BUG INTF	ANML INTERFERED	Animal or insect in vehicle interfered with driver
004	INDRCT PED	PED INDRCTLY INVLV	Pedestrian indirectly involved (not struck)
005	SUB-PED	SUBSEQUENT PED	"Sub-Ped": pedestrian injured subsequent to collision, etc.
006	INDRCT BIK	BIKE INDRCTLY INVLV	Pedalcyclist indirectly involved (not struck)
007	HITCHIKR	HITCHHIKER	Hitchhiker (soliciting a ride)
008	PSNGR TOW	PSNGR TOWED	Passenger or non-motorist being towed or pushed on conveyance
009	ON/OFF V	ON/OFF STOP VEH	Getting on/off stopped/parked vehicle (occupants only; must have physical contact w/ vehicle)
010	SUB OTRN	SUBSEQ OVERTURN	Overtuned after first harmful event
011	MV PUSHD	VEH BEING PUSHED	Vehicle being pushed
012	MV TOWED	VEH TOWED/TOWING	Vehicle towed or had been towing another vehicle
013	FORCED	FORCED BY IMPACT	Vehicle forced by impact into another vehicle, pedalcyclist or pedestrian
014	SET MOTN	MV SET IN MOTION	Vehicle set in motion by non-driver (child released brakes, etc.)
015	RR ROW	RAILROAD ROW	At or on railroad right-of-way (not Light Rail)
016	LT RL ROW	LIGHT RAIL ROW	At or on Light-Rail right-of-way
017	RR HIT V	TRAIN HIT VEH	Train struck vehicle
018	V HIT RR	VEH HIT TRAIN	Vehicle struck train
019	HIT RR CAR	VEH HIT RR CAR	Vehicle struck railroad car on roadway
020	JACKNIFE	JACKKNIFE	Jackknife; trailer or towed vehicle struck towing vehicle
021	TRL OTRN	TRAILER O'TURN	Trailer or towed vehicle overturned
022	CN BROKE	TRLR CONN BROKE	Trailer connection broke
023	DETACH TRL	DETCHD TRLR STRKNG	Detached trailing object struck other vehicle, non-motorist, or object
024	V DOOR OPN	V DOOR OPN IN TRAF	Vehicle door opened into adjacent traffic lane
025	WHEELOFF	WHEEL CAME OFF	Wheel came off
026	HOOD UP	HOOD FLEW UP	Hood flew up
028	LOAD SHIFT	LOAD SHIFTED	Lost load, load moved or shifted
029	TIREFAIL	TIRE FAILURE	Tire failure
030	PET	PET	Pet: cat, dog and similar
031	LVSTOCK	LIVESTOCK	Stock: cow, calf, bull, steer, sheep, etc.
032	HORSE	HORSE	Horse, mule, or donkey
033	HRSE&RID	HORSE & RIDER	Horse and rider
034	GAME	GAME NO DEER/ELK	Wild animal, game (includes birds; not deer or elk)
035	DEER ELK	DEER OR ELK	Deer or elk, wapiti
036	ANML VEH	ANIMAL-DRAWN VEH	Animal-drawn vehicle
037	CULVERT	CULVERT/MANHOLE	Culvert, open low or high manhole
038	ATENUATN	IMPACT CUSHION	Impact attenuator
039	PK METER	PARKING METER	Parking meter
040	CURB	CURB	Curb (also narrow sidewalks on bridges)
041	JIGGLE	JIGGLE BAR N/MED	Jiggle bar or traffic snake for channelization

## EVENT CODES

Code	Short Description	Medium Description	Long Description
042	GDRL END	GUARDRAIL END	Leading edge of guardrail
043	GARDRAIL	GUARDRAIL	Guard rail (not metal median barrier)
044	BARRIER	MEDIAN BARRIER	Median barrier (raised or metal)
045	WALL	WALL	Retaining wall or tunnel wall
046	BR RAIL	BRIDGE RAIL	Bridge railing or parapet (on bridge or approach)
047	BR ABUTMNT	BRIDGE ABUTMENT	Bridge abutment (included "approach end" thru 2013)
048	BR COLMN	BRIDGE COLUMN	Bridge pillar or column
049	BR GIRDR	BRIDGE GIRDER	Bridge girder (horizontal bridge structure overhead)
050	ISLAND	TRAFFIC ISLAND	Traffic raised island
051	GORE	GORE	Gore
052	POLE UNK	POLE-UNKNOWN	Pole – type unknown
053	POLE UTL	POLE-UTILITY	Pole – power or telephone
054	ST LIGHT	POLE-ST LIGHT	Pole – street light only
055	TRF SGNL	POLE-TRAF SIGNAL	Pole – traffic signal and ped signal only
056	SGN BRDG	POLE-SIGN BRIDGE	Pole – sign bridge
057	STOPSIGN	STOP/YIELD SIGN	Stop or yield sign
058	OTH SIGN	OTHER SIGN	Other sign, including street signs
059	HYDRANT	HYDRANT	Hydrant
060	MARKER	DELINEATOR	Delineator or marker (reflector posts)
061	MAILBOX	MAILBOX	Mailbox
062	TREE	TREE/STUMP	Tree, stump or shrubs
063	VEG OHED	VEGTN OVER RDWY	Tree branch or other vegetation overhead, etc.
064	WIRE/CBL	CABLE ACROSS RD	Wire or cable across or over the road
065	TEMP SGN	TEMP SIGN/BARR	Temporary sign or barricade in road, etc.
066	PERM SGN	PERM SIGN/BARR	Permanent sign or barricade in/off road
067	SLIDE	SLIDE/ROCKS	Slides, fallen or falling rocks
068	FRGN OBJ	FOREIGN OBJECT	Foreign obstruction/debris in road (not gravel)
069	EQP WORK	EQUIP WORKING	Equipment working in/off road
070	OTH EQP	OTHER EQUIPMENT	Other equipment in or off road (includes parked trailer, boat)
071	MAIN EQP	MAINTNCE EQUIP	Wrecker, street sweeper, snow plow or sanding equipment
072	OTHER WALL	OTHER WALL	Rock, brick or other solid wall
073	IRRGL PVMT	IRREGULAR PAVEMENT	Other bump (not speed bump), pothole or pavement irregularity (per PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJ	Other overhead object (highway sign, signal head, etc.); not bridge
075	CAVE IN	CAVE IN	Bridge or road cave in
076	HI WATER	HIGH WATER	High Water
077	SNO BANK	SNOW BANK	Snow Bank
078	LO-HI EDGE	LOW-HIGH PVMNT EDGE	Low or high shoulder at pavement edge
079	DITCH	CUT SLOPE/DITCH	Cut slope or ditch embankment
080	OBJ FRM MV	OBJ FRM OTHR VEH	Struck by rock or other object set in motion by other vehicle (incl. lost loads)
081	FLY-OBJ	OTHER MOVING OBJ	Struck by rock or other moving or flying object (not set in motion by vehicle)
082	VEH HID	VEH OBSCURE VIEW	Vehicle obscured view
083	VEG HID	VEG OBSCURE VIEW	Vegetation obscured view
084	BLDG HID	BLD OBSCURE VIEW	View obscured by fence, sign, phone booth, etc.

## EVENT CODES

Code	Short Description	Medium Description	Long Description
085	WIND GUST	WIND GUST	Wind Gust
086	IMMERSED	IMMERSION	Vehicle immersed in body of water
087	FIRE/EXP	FIRE/EXPLOSION	Fire or explosion
088	FENC/BLD	FENCE/BUILDING	Fence or building, etc.
089	OTHR CRASH	REFER OTHR CRASH	Crash related to another separate crash
090	TO 1 SIDE	TWO WAY ONE SIDE	Two-way traffic on divided roadway all routed to one side
091	BUILDING	BUILDING	Building or other structure
092	PHANTOM	PHANTOM VEH	Other (phantom) non-contact vehicle
093	CELL PHONE	CELL PHONE PER PAR	Cell phone (on PAR or driver in use)
094	VIOL GDL	VIOL GRAD DR LIC	Teenage driver in violation of graduated license pgm
095	GUY WIRE	GUY WIRE	Guy wire
096	BERM	BERM	Berm (earthen or gravel mound)
097	GRAVEL	GRAVEL IN RDWY	Gravel in roadway
098	ABR EDGE	ABRUPT EDGE	Abrupt edge
099	CELL WTNSD	CELL PHONE WITNESSED	Cell phone use witnessed by other participant
100	UNK FIXD	UNK FIX OBJ	Fixed object, unknown type.
101	OTHER OBJ	OTHER OBJ NOT FIXED	Non-fixed object, other or unknown type
102	TEXTING	TEXTING	Texting
103	WZ WORKER	WZ WORKER	Work Zone Worker
104	ON VEHICLE	RIDE ON VEH EXTERIOR	Passenger riding on vehicle exterior
105	PEDAL PSGR	PSNGR ON PEDALCYCLE	Passenger riding on pedalcycle
106	MAN WHLCHR	NONMOTOR WHEELCHAIR	Pedestrian in non-motorized wheelchair
107	MTR WHLCHR	MOTORIZED WHEELCHAIR	Pedestrian in motorized wheelchair
108	OFFICER	POLICE OFFICER	Law Enforcement / Police Officer
109	SUB-BIKE	SUBSEQUENT BICYCLIST	"Sub-Bike": pedalcyclist injured subsequent to collision, etc.
110	N-MTR	NM STR VEH	Non-motorist struck vehicle
111	S CAR VS V	ST CAR STRUCK VEH	Street Car/Trolley (on rails or overhead wire system) struck vehicle
112	V VS S CAR	VEH STRUCK ST CAR	Vehicle struck Street Car/Trolley (on rails or overhead wire system)
113	S CAR ROW	STREET CAR ROW	At or on street car or trolley right-of-way
114	RR EQUIP	VEH STRUCK RR EQUIP	Vehicle struck railroad equipment (not train) on tracks
115	DSTRCT GPS	DISTRACT GPS DEVICE	Distracted by navigation system or GPS device
116	DSTRCT OTH	DISTRACT OTHR DEVICE	Distracted by other electronic device
117	RR GATE	RR DROP-ARM GATE	Rail crossing drop-arm gate
118	EXPNSN JNT	EXPANSION JOINT	Expansion joint
119	JERSEY BAR	JERSEY BARRIER	Jersey barrier
120	WIRE BAR	WIRE BARRIER	Wire or cable median barrier
121	FENCE	FENCE	Fence
123	OBJ IN VEH	LOOSE OBJ IN VEHICLE	Loose object in vehicle struck occupant
124	SLIPPERY	SLIPPERY SURFACE	Sliding or swerving due to wet, icy, slippery or loose surface (not gravel)
125	SHLDR	SHLDR GAVE	Shoulder gave way
126	BOULDER	ROCKS / BOULDER	Rock(s), boulder (not gravel; not rock slide)
127	LAND SLIDE	ROCK OR LAND SLIDE	Rock slide or land slide
128	CURVE INV	CURVE PRESENT	Curve present at crash location

## EVENT CODES

Code	Short Description	Medium Description	Long Description
129	HILL INV	HILL PRESENT	Vertical grade / hill present at crash location
130	CURVE HID	CURVE OBSCURED VIEW	View obscured by curve
131	HILL HID	HILL OBSCURED VIEW	View obscured by vertical grade / hill
132	WINDOW HID	WINDOW VIEW OBSCURED	View obscured by vehicle window conditions
133	SPRAY HID	SPRAY OBSCURED VIEW	View obscured by water spray
134	TORRENTIAL	TORRENTIAL RAIN	Torrential Rain (exceptionally heavy rain)
135	RAIL OCC	RAIL/CABLE CAR OCC	Injured occupant of railway train, light rail, street car or cable car



## Appendix D 2040 Background Operations

## Tualatin Heights ZA-Existing Conditions

Vistro File: H:\...\26462\_AM.vistro

Scenario 3 Future Traffic Conditions\_notrips

Report File: H:\...\Future\_AM\_notrips.pdf

9/15/2021

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	SW 95th Ave/Tualatin-Sherwood Rd	Signalized	HCM 6th Edition	NB Right	0.672	19.6	B
2	SW 95th Ave/SW Sagert St	All-way stop	HCM 6th Edition	WB Right	0.605	15.1	C
3	Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.056	14.1	B
4	Tualatin Heights East Dwy/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.084	13.3	B
5	SW Boones Ferry Rd/SW Sagert St	Signalized	HCM 6th Edition	NB Thru	1.094	102.8	F
6	SW 95th Ave/SW Avery St	Signalized	HCM 6th Edition	SB Left	0.639	7.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: SW 95th Ave/Tualatin-Sherwood Rd**

Control Type:	Signalized	Delay (sec / veh):	19.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.672

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	100.00	100.00	100.00	120.00	100.00	100.00	400.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	72	8	95	1	1	3	12	1104	108	176	1349	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	0.00	9.00	0.00	0.00	50.00	0.00	23.00	8.00	10.00	13.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	72	8	95	1	1	3	12	1104	108	176	1349	3
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	2	25	0	0	1	3	291	28	46	355	1
Total Analysis Volume [veh/h]	76	8	100	1	1	3	13	1162	114	185	1420	3
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		1			4			0			3	
v_di, Inbound Pedestrian Volume crossing major street		0			3			1			4	
v_co, Outbound Pedestrian Volume crossing minor street		0			0			1			1	
v_ci, Inbound Pedestrian Volume crossing minor street		1			1			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			1			0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	5	0	0	5	0	5	10	0	10	10	0
Maximum Green [s]	0	35	0	0	35	0	20	65	0	20	65	0
Amber [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	41	0	0	41	0	25	74	0	25	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	63	63	63	63	63	63	63	63	63	63
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50	5.50	5.00	6.50	6.50	5.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50	3.50	3.00	4.50	4.50	3.00	4.50	4.50
g_i, Effective Green Time [s]	6	6	6	6	9	30	30	10	30	30
g / C, Green / Cycle	0.10	0.10	0.10	0.10	0.15	0.48	0.48	0.15	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.05	0.07	0.00	0.00	0.01	0.42	0.42	0.11	0.42	0.42
s, saturation flow rate [veh/h]	1579	1496	1813	974	1810	1555	1500	1667	1705	1704
c, Capacity [veh/h]	270	152	270	99	272	739	713	255	815	814
d1, Uniform Delay [s]	26.65	27.22	25.43	25.48	22.90	14.84	14.92	25.42	14.73	14.73
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.65	4.74	0.01	0.12	0.07	3.48	3.81	3.93	3.12	3.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.31	0.66	0.01	0.03	0.05	0.88	0.88	0.73	0.87	0.87
d, Delay for Lane Group [s/veh]	27.31	31.96	25.44	25.61	22.98	18.32	18.73	29.35	17.84	17.86
Lane Group LOS	C	C	C	C	C	B	B	C	B	B
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.18	1.57	0.03	0.04	0.16	7.68	7.56	2.76	8.33	8.33
50th-Percentile Queue Length [ft/ln]	29.44	39.31	0.66	1.05	4.05	191.91	189.04	68.89	208.13	208.14
95th-Percentile Queue Length [veh/ln]	2.12	2.83	0.05	0.08	0.29	12.22	12.07	4.96	13.06	13.06
95th-Percentile Queue Length [ft/ln]	53.00	70.75	1.19	1.89	7.29	305.50	301.79	124.01	326.43	326.45



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	27.31	27.31	31.96	25.44	25.44	25.61	22.98	18.50	18.73	29.35	17.85	17.86
Movement LOS	C	C	C	C	C	C	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	29.83			25.54			18.57			19.17		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	19.57											
Intersection LOS	B											
Intersection V/C	0.672											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	6209.66	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	23.08	23.08	23.08	23.08
I_p,int, Pedestrian LOS Score for Intersection	2.081	1.933	2.935	2.844
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1129	1129	2147	2147
d_b, Bicycle Delay [s]	5.96	5.96	0.17	0.17
I_b,int, Bicycle LOS Score for Intersection	1.863	1.568	2.623	2.886
Bicycle LOS	A	A	B	C

**Sequence**

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 2: SW 95th Ave/SW Sagert St**

Control Type:	All-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.605

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	188	70	103	114	0	0	0	0	102	0	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	4.00	8.00	0.00	0.00	0.00	0.00	5.00	0.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	188	70	103	114	0	0	0	0	102	0	195
Peak Hour Factor	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	64	24	35	39	0	0	0	0	34	0	66
Total Analysis Volume [veh/h]	0	254	95	139	154	0	0	0	0	138	0	264
Pedestrian Volume [ped/h]	34			1			5			20		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	656	615	547	664
Degree of Utilization, x	0.53	0.48	0.00	0.61

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	3.15	2.57	0.00	4.09
95th-Percentile Queue Length [ft]	78.84	64.24	0.00	102.28
Approach Delay [s/veh]	14.56	14.08	0.00	16.38
Approach LOS	B	B	A	C
Intersection Delay [s/veh]	15.13			
Intersection LOS	C			

**Intersection Level Of Service Report**

**Intersection 3: Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	14.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.056

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	9	0	21	19	2	10	0	158	5	5	260	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	5.00	0.00	0.00	0.00	0.00	3.00	20.00	0.00	3.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	0	21	19	2	10	0	158	5	5	260	9
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	7	6	1	3	0	49	2	2	81	3
Total Analysis Volume [veh/h]	11	0	26	24	3	13	0	198	6	6	325	11
Pedestrian Volume [ped/h]	2			2			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.03	0.00	0.03	0.06	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.64	13.52	9.68	14.09	13.81	10.70	7.93	0.00	0.00	7.63	0.00	0.00
Movement LOS	B	B	A	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.18	0.26	0.26	0.26	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	4.50	4.50	4.50	6.61	6.61	6.61	0.00	0.00	0.00	0.33	0.33	0.33
d_A, Approach Delay [s/veh]	10.85			12.96			0.00			0.13		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.55											
Intersection LOS	B											

**Intersection Level Of Service Report**  
**Intersection 4: Tualatin Heights East Dwy/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.084

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↔		↕		↔	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	32	7	2	193	263	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	3.00	3.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	7	2	193	263	2
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	2	1	60	82	1
Total Analysis Volume [veh/h]	40	9	3	241	329	3
Pedestrian Volume [ped/h]	5		0		0	



**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.08	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.35	10.85	7.94	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.32	0.32	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.01	8.01	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	12.89		0.10		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.05					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	102.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.094

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵↻			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	28	774	344	44	416	92	59	59	140	165	196	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	40.00	5.00	9.00	6.00	7.00	0.00	5.00	2.00	12.00	11.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	774	344	44	416	92	59	59	140	165	196	56
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	215	96	12	116	26	16	16	39	46	54	16
Total Analysis Volume [veh/h]	31	860	382	49	462	102	66	66	156	183	218	62
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		0			1			0			0	
v_di, Inbound Pedestrian Volume crossing major street		0			0			0			1	
v_co, Outbound Pedestrian Volume crossing minor street		0			0			1			1	
v_ci, Inbound Pedestrian Volume crossing minor street		1			1			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			1			0			0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	L	C	R	L	C	L	C
C, Cycle Length [s]	111	111	111	111	111	111	111	111	111
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	68	60	68	61	61	33	17	33	24
g / C, Green / Cycle	0.62	0.54	0.62	0.55	0.55	0.30	0.15	0.30	0.22
(v / s)_i Volume / Saturation Flow Rate	0.04	0.72	0.09	0.26	0.06	0.05	0.13	0.14	0.16
s, saturation flow rate [veh/h]	695	1730	556	1795	1580	1214	1664	1325	1755
c, Capacity [veh/h]	410	934	204	982	864	297	252	350	380
d1, Uniform Delay [s]	9.94	25.58	25.56	15.35	12.17	29.78	46.20	31.91	40.57
k, delay calibration	0.19	0.50	0.10	0.19	0.19	0.04	0.19	0.39	0.31
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	155.74	0.53	0.60	0.10	0.14	15.49	4.28	7.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.08	1.33	0.24	0.47	0.12	0.22	0.88	0.52	0.74
d, Delay for Lane Group [s/veh]	10.08	181.32	26.08	15.95	12.27	29.92	61.69	36.18	48.15
Lane Group LOS	B	F	C	B	B	C	E	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.30	63.29	0.48	7.04	1.23	1.30	7.05	4.28	7.89
50th-Percentile Queue Length [ft/ln]	7.47	1582.24	12.00	175.91	30.69	32.48	176.24	106.96	197.15
95th-Percentile Queue Length [veh/ln]	0.54	93.19	0.86	11.39	2.21	2.34	11.40	7.67	12.49
95th-Percentile Queue Length [ft/ln]	13.45	2329.73	21.60	284.67	55.23	58.46	285.10	191.77	312.29

**Movement, Approach, & Intersection Results**

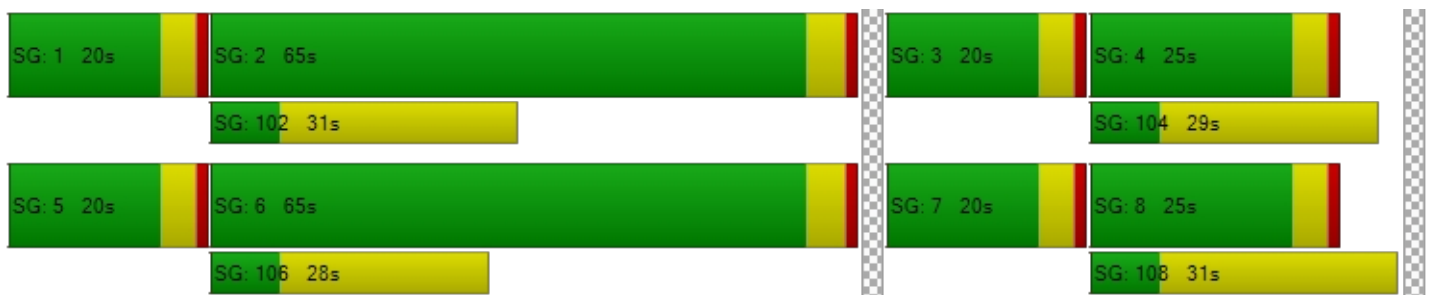
d_M, Delay for Movement [s/veh]	10.08	181.32	181.32	26.08	15.95	12.27	29.92	61.69	61.69	36.18	48.15	48.15
Movement LOS	B	F	F	C	B	B	C	E	E	D	D	D
d_A, Approach Delay [s/veh]	177.15			16.15			54.41			43.42		
Approach LOS	F			B			D			D		
d_I, Intersection Delay [s/veh]	102.84											
Intersection LOS	F											
Intersection V/C	1.094											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	45.03			45.03			45.03			45.03		
I_p,int, Pedestrian LOS Score for Intersection	2.668			2.553			2.183			2.301		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1081			1081			369			369		
d_b, Bicycle Delay [s]	11.70			11.71			36.88			36.88		
I_b,int, Bicycle LOS Score for Intersection	3.660			2.571			2.035			2.324		
Bicycle LOS	D			B			B			B		

**Sequence**

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





**Intersection Level Of Service Report**  
**Intersection 6: SW 95th Ave/SW Avery St**

Control Type:	Signalized	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.639

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↵↶		↶		↶	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name						
Base Volume Input [veh/h]	88	72	82	293	401	172
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	8.00	8.00	4.00	9.00	5.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	72	82	293	401	172
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	22	25	88	121	52
Total Analysis Volume [veh/h]	106	87	99	353	483	207
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	3		4		0	
v_di, Inbound Pedestrian Volume crossing major street	4		3		0	
v_co, Outbound Pedestrian Volume crossing minor street	2		0		2	
v_ci, Inbound Pedestrian Volume crossing minor street	2		0		2	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		1	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	4	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	25	0	0	40	40	0
Amber [s]	3.5	0.0	0.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	3.0	3.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	R	C	C
C, Cycle Length [s]	32	32	32	32
L, Total Lost Time per Cycle [s]	4.50	4.50	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	3.00	3.00
g_i, Effective Green Time [s]	5	5	18	18
g / C, Green / Cycle	0.14	0.14	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.44	0.40
s, saturation flow rate [veh/h]	1695	1476	1038	1719
c, Capacity [veh/h]	244	213	716	955
d1, Uniform Delay [s]	12.36	12.29	5.01	5.22
k, delay calibration	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.21	1.26	0.93	1.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.43	0.41	0.63	0.72
d, Delay for Lane Group [s/veh]	13.57	13.55	5.94	6.27
Lane Group LOS	B	B	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.61	0.50	1.29	1.46
50th-Percentile Queue Length [ft/ln]	15.22	12.60	32.26	36.59
95th-Percentile Queue Length [veh/ln]	1.10	0.91	2.32	2.63
95th-Percentile Queue Length [ft/ln]	27.39	22.68	58.07	65.86

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	13.57	13.55	5.94	5.94	6.27	6.27
Movement LOS	B	B	A	A	A	A
d_A, Approach Delay [s/veh]	13.57		5.94		6.27	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	7.21					
Intersection LOS	A					
Intersection V/C	0.639					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	4848.67	3007.54	0.00
d_p, Pedestrian Delay [s]	6.77	6.77	6.77
I_p,int, Pedestrian LOS Score for Intersection	2.177	2.147	2.209
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1576	2522	2522
d_b, Bicycle Delay [s]	0.71	1.08	1.08
I_b,int, Bicycle LOS Score for Intersection	1.560	2.305	2.698
Bicycle LOS	A	B	B

**Sequence**

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



## Tualatin Heights ZA-Existing Conditions

Vistro File: H:\...\26462\_PM.vistro

Scenario 3 Future Traffic Conditions\_notrips

Report File: H:\...\Future\_PM\_notrips.pdf

9/15/2021

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	SW 95th Ave/Tualatin-Sherwood Rd	Signalized	HCM 6th Edition	NB Right	0.655	21.4	C
2	SW 95th Ave/SW Sagert St	All-way stop	HCM 6th Edition	SB Left	0.411	9.9	A
3	Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.038	13.9	B
4	Tualatin Heights East Dwy/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.062	12.5	B
5	SW Boones Ferry Rd/SW Sagert St	Signalized	HCM 6th Edition	NB Thru	0.907	45.1	D
6	SW 95th Ave/SW Avery St	Signalized	HCM 6th Edition	SB Right	0.638	6.7	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.



**Intersection Level Of Service Report**  
**Intersection 1: SW 95th Ave/Tualatin-Sherwood Rd**

Control Type:	Signalized	Delay (sec / veh):	21.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.655

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	100.00	100.00	100.00	120.00	100.00	100.00	400.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	113	7	152	1	5	13	7	1304	154	100	1154	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	17.00	0.00	2.00	0.00	0.00	0.00	0.00	6.00	4.00	4.00	11.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	113	7	152	1	5	13	7	1304	154	100	1154	2
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	2	39	0	1	3	2	336	40	26	297	1
Total Analysis Volume [veh/h]	116	7	157	1	5	13	7	1344	159	103	1190	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		1			0			0			
v_di, Inbound Pedestrian Volume crossing major street	0		0			0			1			
v_co, Outbound Pedestrian Volume crossing minor street	0		0			1			0			
v_ci, Inbound Pedestrian Volume crossing minor street	0		1			0			0			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	3		0			2			3			

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	5	0	0	5	0	5	10	0	10	10	0
Maximum Green [s]	0	35	0	0	35	0	20	65	0	20	65	0
Amber [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	41	0	0	41	0	25	74	0	25	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	67	67	67	67	67	67	67	67	67	67
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50	5.50	5.00	6.50	6.50	5.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50	3.50	3.00	4.50	4.50	3.00	4.50	4.50
g_i, Effective Green Time [s]	9	9	9	9	15	33	33	9	27	27
g / C, Green / Cycle	0.13	0.13	0.13	0.13	0.22	0.49	0.49	0.13	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.08	0.10	0.00	0.01	0.00	0.42	0.43	0.06	0.34	0.34
s, saturation flow rate [veh/h]	1536	1563	1874	1611	1810	1810	1735	1752	1735	1734
c, Capacity [veh/h]	310	210	314	216	393	881	845	223	688	688
d1, Uniform Delay [s]	27.27	28.08	25.38	25.51	20.77	15.34	15.53	27.33	18.71	18.71
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.82	5.27	0.02	0.11	0.02	2.68	3.14	1.49	3.45	3.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.40	0.75	0.02	0.06	0.02	0.86	0.88	0.46	0.87	0.87
d, Delay for Lane Group [s/veh]	28.09	33.35	25.41	25.62	20.79	18.02	18.66	28.83	22.16	22.17
Lane Group LOS	C	C	C	C	C	B	B	C	C	C
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.84	2.63	0.08	0.18	0.08	9.49	9.45	1.56	8.30	8.30
50th-Percentile Queue Length [ft/ln]	46.05	65.72	2.06	4.54	2.12	237.35	236.32	39.12	207.54	207.48
95th-Percentile Queue Length [veh/ln]	3.32	4.73	0.15	0.33	0.15	14.55	14.49	2.82	13.03	13.02
95th-Percentile Queue Length [ft/ln]	82.89	118.29	3.70	8.17	3.81	363.68	362.37	70.42	325.68	325.59

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	28.09	28.09	33.35	25.41	25.41	25.62	20.79	18.30	18.66	28.83	22.17	22.17
Movement LOS	C	C	C	C	C	C	C	B	B	C	C	C
d_A, Approach Delay [s/veh]	31.04			25.56			18.35			22.70		
Approach LOS	C			C			B			C		
d_I, Intersection Delay [s/veh]	21.35											
Intersection LOS	C											
Intersection V/C	0.655											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	25.30	25.30	25.30	25.30
I_p,int, Pedestrian LOS Score for Intersection	2.105	1.938	3.003	2.834
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1054	1054	2003	2003
d_b, Bicycle Delay [s]	7.56	7.55	0.00	0.00
I_b,int, Bicycle LOS Score for Intersection	2.022	1.591	2.805	2.628
Bicycle LOS	B	A	C	B

**Sequence**

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 2: SW 95th Ave/SW Sagert St**

Control Type:	All-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.411

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	1	117	41	184	119	1	1	1	1	62	1	91
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	50.00	2.00	4.00	2.00	2.00	50.00	0.00	0.00	17.00	0.00	0.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	117	41	184	119	1	1	1	1	62	1	91
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	30	11	48	31	0	0	0	0	16	0	24
Total Analysis Volume [veh/h]	1	122	43	192	124	1	1	1	1	65	1	95
Pedestrian Volume [ped/h]	10			1			4			0		



**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	784	771	685	750
Degree of Utilization, x	0.21	0.41	0.00	0.21

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.80	2.02	0.01	0.81
95th-Percentile Queue Length [ft]	19.93	50.58	0.33	20.28
Approach Delay [s/veh]	8.82	10.89	8.28	9.11
Approach LOS	A	B	A	A
Intersection Delay [s/veh]	9.90			
Intersection LOS	A			

**Intersection Level Of Service Report**

**Intersection 3: Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.038

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	2	3	20	14	1	5	22	199	5	24	147	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	5.00	7.00	0.00	0.00	9.00	2.00	0.00	0.00	5.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	3	20	14	1	5	22	199	5	24	147	14
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	6	4	0	1	6	57	1	7	42	4
Total Analysis Volume [veh/h]	2	3	23	16	1	6	25	226	6	27	167	16
Pedestrian Volume [ped/h]	3			6			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.01	0.03	0.04	0.00	0.01	0.02	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	13.17	13.46	9.73	13.91	13.56	9.54	7.75	0.00	0.00	7.74	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.13	0.15	0.15	0.15	0.06	0.06	0.06	0.06	0.06	0.06
95th-Percentile Queue Length [ft/ln]	3.13	3.13	3.13	3.71	3.71	3.71	1.43	1.43	1.43	1.54	1.54	1.54
d_A, Approach Delay [s/veh]	10.38			12.75			0.75			1.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.90											
Intersection LOS	B											

**Intersection Level Of Service Report**  
**Intersection 4: Tualatin Heights East Dwy/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.062

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↔		↕		↔	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	28	11	20	213	174	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	5.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	11	20	213	174	28
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	3	6	61	49	8
Total Analysis Volume [veh/h]	32	13	23	242	198	32
Pedestrian Volume [ped/h]	4		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.06	0.02	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.48	9.89	7.73	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.25	0.25	0.05	0.05	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.29	6.29	1.31	1.31	0.00	0.00
d_A, Approach Delay [s/veh]	11.73		0.67		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.31					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	45.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.907

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵↶			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		



**Volumes**

Name												
Base Volume Input [veh/h]	21	569	362	110	883	76	44	151	15	235	106	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	8.00	3.00	4.00	5.00	4.00	2.00	0.00	2.00	17.00	5.00	5.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	569	362	110	883	76	44	151	15	235	106	55
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	145	92	28	225	19	11	39	4	60	27	14
Total Analysis Volume [veh/h]	21	581	369	112	901	78	45	154	15	240	108	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	4		1			4			0			
v_di, Inbound Pedestrian Volume crossing major street	4		0			4			1			
v_co, Outbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ci, Inbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	4		6			4			1			

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	L	C	R	L	C	L	C
C, Cycle Length [s]	112	112	112	112	112	112	112	112	112
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	69	60	69	62	62	33	14	33	25
g / C, Green / Cycle	0.62	0.53	0.62	0.56	0.56	0.30	0.13	0.30	0.22
(v / s)_i Volume / Saturation Flow Rate	0.03	0.55	0.16	0.49	0.05	0.03	0.09	0.16	0.10
s, saturation flow rate [veh/h]	668	1715	701	1840	1549	1350	1829	1471	1705
c, Capacity [veh/h]	250	915	222	1022	860	394	231	429	380
d1, Uniform Delay [s]	19.47	26.23	25.76	21.76	11.68	28.87	47.27	32.73	37.56
k, delay calibration	0.19	0.49	0.50	0.42	0.19	0.04	0.04	0.50	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.25	39.97	8.02	9.37	0.08	0.05	1.67	5.20	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.08	1.04	0.51	0.88	0.09	0.11	0.73	0.56	0.43
d, Delay for Lane Group [s/veh]	19.72	66.20	33.78	31.13	11.76	28.91	48.94	37.93	37.84
Lane Group LOS	B	F	C	C	B	C	D	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.21	32.99	1.57	22.00	0.92	0.88	4.65	5.92	3.91
50th-Percentile Queue Length [ft/ln]	5.22	824.72	39.34	550.03	22.93	22.10	116.15	148.04	97.63
95th-Percentile Queue Length [veh/ln]	0.38	43.75	2.83	29.69	1.65	1.59	8.18	9.91	7.03
95th-Percentile Queue Length [ft/ln]	9.40	1093.71	70.81	742.35	41.27	39.78	204.52	247.81	175.73

**Movement, Approach, & Intersection Results**

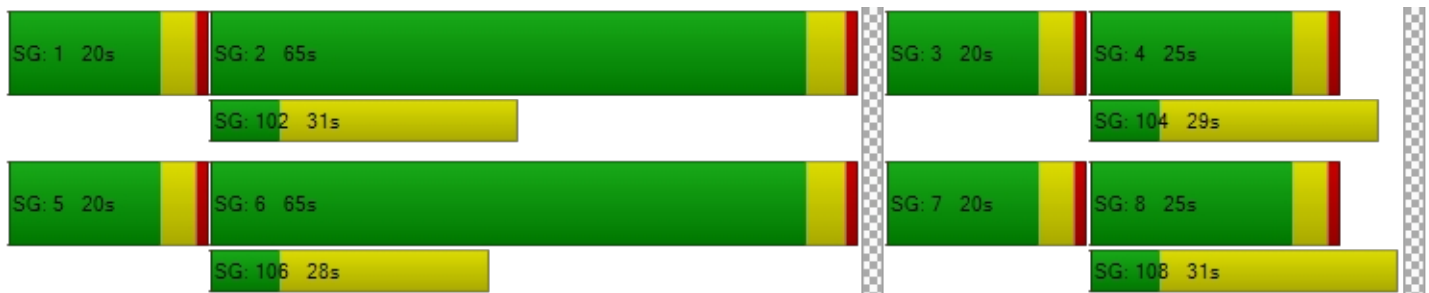
d_M, Delay for Movement [s/veh]	19.72	66.20	66.20	33.78	31.13	11.76	28.91	48.94	48.94	37.93	37.84	37.84
Movement LOS	B	E	E	C	C	B	C	D	D	D	D	D
d_A, Approach Delay [s/veh]	65.19			30.02			44.73			37.90		
Approach LOS	E			C			D			D		
d_I, Intersection Delay [s/veh]	45.13											
Intersection LOS	D											
Intersection V/C	0.907											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	45.68			45.68			45.68			45.68		
I_p,int, Pedestrian LOS Score for Intersection	2.691			2.589			2.105			2.376		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1069			1069			365			365		
d_b, Bicycle Delay [s]	12.20			12.21			37.59			37.53		
I_b,int, Bicycle LOS Score for Intersection	3.162			3.360			1.913			2.226		
Bicycle LOS	C			C			A			B		

**Sequence**

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 6: SW 95th Ave/SW Avery St**

Control Type:	Signalized	Delay (sec / veh):	6.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.638

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↵↶		↶		↶	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name						
Base Volume Input [veh/h]	88	94	80	586	231	69
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	0.00	3.00	3.00	8.00	9.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	94	80	586	231	69
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	25	21	154	61	18
Total Analysis Volume [veh/h]	93	99	84	617	243	73
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		1	



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	4	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	25	0	0	40	40	0
Amber [s]	3.5	0.0	0.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	3.0	3.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	R	C	C
C, Cycle Length [s]	26	26	26	26
L, Total Lost Time per Cycle [s]	4.50	4.50	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	3.00	3.00
g_i, Effective Green Time [s]	4	4	13	13
g / C, Green / Cycle	0.15	0.15	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.40	0.19
s, saturation flow rate [veh/h]	1767	1615	1738	1701
c, Capacity [veh/h]	260	238	998	824
d1, Uniform Delay [s]	9.90	9.99	5.62	4.21
k, delay calibration	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.83	1.16	0.91	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.36	0.42	0.70	0.38
d, Delay for Lane Group [s/veh]	10.73	11.15	6.54	4.50
Lane Group LOS	B	B	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.38	0.42	1.16	0.38
50th-Percentile Queue Length [ft/ln]	9.44	10.45	28.89	9.45
95th-Percentile Queue Length [veh/ln]	0.68	0.75	2.08	0.68
95th-Percentile Queue Length [ft/ln]	16.99	18.81	52.00	17.01

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	10.73	11.15	6.54	6.54	4.50	4.50
Movement LOS	B	B	A	A	A	A
d_A, Approach Delay [s/veh]	10.94		6.54		4.50	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.70					
Intersection LOS	A					
Intersection V/C	0.638					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	4.24	4.24	4.24
I_p,int, Pedestrian LOS Score for Intersection	2.088	2.139	2.130
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1938	3101	3101
d_b, Bicycle Delay [s]	0.01	3.91	3.91
I_b,int, Bicycle LOS Score for Intersection	1.560	2.716	2.081
Bicycle LOS	A	B	B

**Sequence**

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



## Appendix E 2040 Rezone Operations

Vistro File: H:\...\26462\_AM.vistro  
Report File: H:\...\Future\_AM.pdf

## Tualatin Heights ZA-Existing Conditions

Scenario 2 2 Future Traffic Conditions\_scenario1  
9/15/2021**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	SW 95th Ave/Tualatin-Sherwood Rd	Signalized	HCM 6th Edition	NB Right	0.678	19.9	B
2	SW 95th Ave/SW Sagert St	All-way stop	HCM 6th Edition	WB Right	0.639	16.0	C
3	Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.109	15.0	C
4	Tualatin Heights East Dwy/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.088	13.7	B
5	SW Boones Ferry Rd/SW Sagert St	Signalized	HCM 6th Edition	NB Thru	1.100	104.9	F
6	SW 95th Ave/SW Avery St	Signalized	HCM 6th Edition	SB Right	0.642	7.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: SW 95th Ave/Tualatin-Sherwood Rd**

Control Type:	Signalized	Delay (sec / veh):	19.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	100.00	100.00	100.00	120.00	100.00	100.00	400.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		



**Volumes**

Name												
Base Volume Input [veh/h]	77	8	101	1	1	3	12	1104	110	178	1349	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	0.00	9.00	0.00	0.00	50.00	0.00	23.00	8.00	10.00	13.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	77	8	101	1	1	3	12	1104	110	178	1349	3
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	2	27	0	0	1	3	291	29	47	355	1
Total Analysis Volume [veh/h]	81	8	106	1	1	3	13	1162	116	187	1420	3
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		1			4			0			3	
v_di, Inbound Pedestrian Volume crossing major street		0			3			1			4	
v_co, Outbound Pedestrian Volume crossing minor street		0			0			1			1	
v_ci, Inbound Pedestrian Volume crossing minor street		1			1			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			1			0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	5	0	0	5	0	5	10	0	10	10	0
Maximum Green [s]	0	35	0	0	35	0	20	65	0	20	65	0
Amber [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	41	0	0	41	0	25	74	0	25	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	64	64	64	64	64	64	64	64	64	64
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50	5.50	5.00	6.50	6.50	5.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50	3.50	3.00	4.50	4.50	3.00	4.50	4.50
g_i, Effective Green Time [s]	7	7	7	7	10	30	30	10	30	30
g / C, Green / Cycle	0.11	0.11	0.11	0.11	0.15	0.48	0.48	0.15	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.06	0.07	0.00	0.00	0.01	0.42	0.42	0.11	0.42	0.42
s, saturation flow rate [veh/h]	1571	1496	1812	974	1810	1555	1499	1667	1705	1704
c, Capacity [veh/h]	275	159	277	104	271	740	713	252	814	813
d1, Uniform Delay [s]	26.81	27.40	25.50	25.55	23.22	15.03	15.12	25.87	14.95	14.95
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.68	4.73	0.01	0.11	0.07	3.50	3.85	4.26	3.15	3.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.32	0.67	0.01	0.03	0.05	0.88	0.88	0.74	0.87	0.87
d, Delay for Lane Group [s/veh]	27.49	32.14	25.51	25.66	23.30	18.54	18.97	30.12	18.10	18.11
Lane Group LOS	C	C	C	C	C	B	B	C	B	B
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.26	1.68	0.03	0.04	0.16	7.83	7.71	2.85	8.48	8.49
50th-Percentile Queue Length [ft/ln]	31.58	42.07	0.67	1.05	4.11	195.64	192.69	71.26	212.12	212.13
95th-Percentile Queue Length [veh/ln]	2.27	3.03	0.05	0.08	0.30	12.41	12.26	5.13	13.26	13.26
95th-Percentile Queue Length [ft/ln]	56.84	75.73	1.20	1.89	7.40	310.34	306.52	128.27	331.55	331.56

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	27.49	27.49	32.14	25.51	25.51	25.66	23.30	18.73	18.97	30.12	18.10	18.11
Movement LOS	C	C	C	C	C	C	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	30.02			25.60			18.79			19.50		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	19.88											
Intersection LOS	B											
Intersection V/C	0.678											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	6025.03	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	23.46	23.46	23.46	23.46
I_p,int, Pedestrian LOS Score for Intersection	2.086	1.933	2.944	2.847
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1116	1116	2121	2121
d_b, Bicycle Delay [s]	6.22	6.22	0.12	0.12
I_b,int, Bicycle LOS Score for Intersection	1.881	1.568	2.625	2.888
Bicycle LOS	A	A	B	C

**Sequence**

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 2: SW 95th Ave/SW Sagert St**

Control Type:	All-way stop	Delay (sec / veh):	16.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.639

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	188	71	107	114	0	0	0	0	105	0	206
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	4.00	8.00	0.00	0.00	0.00	0.00	5.00	0.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	188	71	107	114	0	0	0	0	105	0	206
Peak Hour Factor	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	64	24	36	39	0	0	0	0	35	0	70
Total Analysis Volume [veh/h]	0	254	96	145	154	0	0	0	0	142	0	278
Pedestrian Volume [ped/h]	34			1			5			20		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	644	604	536	658
Degree of Utilization, x	0.54	0.49	0.00	0.64

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	3.28	2.74	0.00	4.59
95th-Percentile Queue Length [ft]	82.01	68.53	0.00	114.79
Approach Delay [s/veh]	15.05	14.65	0.00	17.63
Approach LOS	C	B	A	C
Intersection Delay [s/veh]	15.95			
Intersection LOS	C			



**Intersection Level Of Service Report**

**Intersection 3: Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	15.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.109

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	9	0	21	36	2	24	5	158	5	5	260	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	5.00	0.00	0.00	0.00	0.00	3.00	20.00	0.00	3.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	0	21	36	2	24	5	158	5	5	260	15
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	7	11	1	8	2	49	2	2	81	5
Total Analysis Volume [veh/h]	11	0	26	45	3	30	6	198	6	6	325	19
Pedestrian Volume [ped/h]	2			2			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.03	0.00	0.03	0.11	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.23	13.80	9.70	15.05	14.74	11.44	7.96	0.00	0.00	7.63	0.00	0.00
Movement LOS	B	B	A	C	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.19	0.19	0.19	0.56	0.56	0.56	0.01	0.01	0.01	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	4.65	4.65	4.65	13.91	13.91	13.91	0.37	0.37	0.37	0.33	0.33	0.33
d_A, Approach Delay [s/veh]	11.05			13.65			0.23			0.13		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.32											
Intersection LOS	C											

**Intersection Level Of Service Report**  
**Intersection 4: Tualatin Heights East Dwy/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	T		↑		T	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	32	7	2	210	269	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	3.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	7	2	210	269	2
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	2	1	66	84	1
Total Analysis Volume [veh/h]	40	9	3	263	336	3
Pedestrian Volume [ped/h]	5		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.09	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.71	10.96	7.96	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.33	0.33	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.32	8.32	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	13.20		0.09		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.03					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	104.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.100

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵↱			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	31	774	344	44	416	94	65	62	148	165	197	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	40.00	5.00	9.00	6.00	7.00	0.00	5.00	2.00	12.00	11.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	774	344	44	416	94	65	62	148	165	197	56
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	215	96	12	116	26	18	17	41	46	55	16
Total Analysis Volume [veh/h]	34	860	382	49	462	104	72	69	164	183	219	62
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		0			1			0			0	
v_di, Inbound Pedestrian Volume crossing major street		0			0			0			1	
v_co, Outbound Pedestrian Volume crossing minor street		0			0			1			1	
v_ci, Inbound Pedestrian Volume crossing minor street		1			1			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			1			0			0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0



**Lane Group Calculations**

Lane Group	L	C	L	C	R	L	C	L	C
C, Cycle Length [s]	112	112	112	112	112	112	112	112	112
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	68	60	68	61	61	34	18	34	24
g / C, Green / Cycle	0.61	0.54	0.61	0.54	0.54	0.30	0.16	0.30	0.22
(v / s)_i Volume / Saturation Flow Rate	0.05	0.72	0.09	0.26	0.07	0.06	0.14	0.14	0.16
s, saturation flow rate [veh/h]	697	1730	556	1795	1580	1218	1663	1312	1756
c, Capacity [veh/h]	406	927	203	972	856	304	262	347	384
d1, Uniform Delay [s]	10.28	26.00	25.69	15.85	12.58	29.70	46.22	31.82	40.66
k, delay calibration	0.19	0.50	0.10	0.19	0.19	0.04	0.22	0.40	0.31
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	160.16	0.56	0.62	0.11	0.15	18.00	4.56	7.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.08	1.34	0.24	0.48	0.12	0.24	0.89	0.53	0.73
d, Delay for Lane Group [s/veh]	10.43	186.16	26.25	16.47	12.69	29.85	64.23	36.38	48.16
Lane Group LOS	B	F	C	B	B	C	E	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.34	64.22	0.49	7.21	1.28	1.42	7.62	4.30	7.95
50th-Percentile Queue Length [ft/ln]	8.42	1605.60	12.33	180.37	32.12	35.56	190.56	107.56	198.83
95th-Percentile Queue Length [veh/ln]	0.61	94.79	0.89	11.62	2.31	2.56	12.15	7.70	12.58
95th-Percentile Queue Length [ft/ln]	15.16	2369.73	22.19	290.49	57.82	64.01	303.75	192.60	314.45

**Movement, Approach, & Intersection Results**

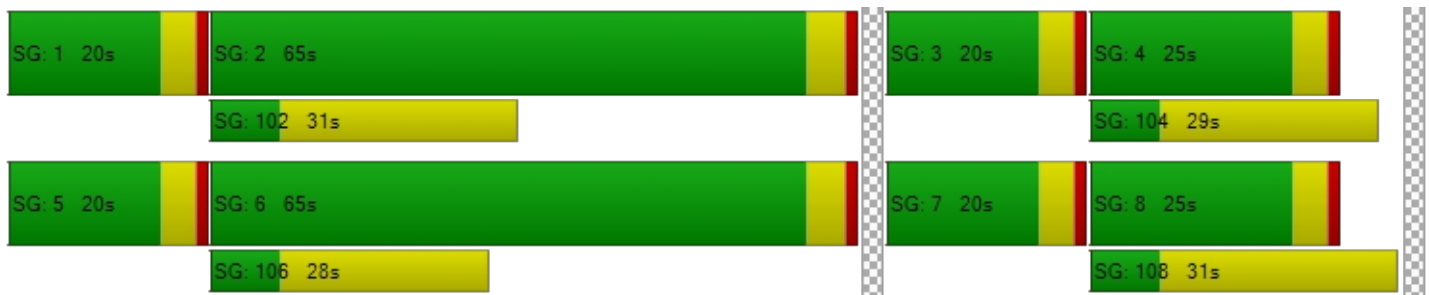
d_M, Delay for Movement [s/veh]	10.43	186.16	186.16	26.25	16.47	12.69	29.85	64.23	64.23	36.38	48.16	48.16
Movement LOS	B	F	F	C	B	B	C	E	E	D	D	D
d_A, Approach Delay [s/veh]	181.48			16.61			56.11			43.51		
Approach LOS	F			B			E			D		
d_I, Intersection Delay [s/veh]	104.92											
Intersection LOS	F											
Intersection V/C	1.100											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	45.44			45.44			45.44			45.44		
I_p,int, Pedestrian LOS Score for Intersection	2.674			2.558			2.193			2.303		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1073			1073			367			367		
d_b, Bicycle Delay [s]	12.00			12.01			37.28			37.28		
I_b,int, Bicycle LOS Score for Intersection	3.665			2.574			2.063			2.325		
Bicycle LOS	D			B			B			B		

**Sequence**




Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 6: SW 95th Ave/SW Avery St**

Control Type:	Signalized	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.642

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name						
Base Volume Input [veh/h]	89	74	83	293	401	172
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	8.00	8.00	4.00	9.00	5.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	74	83	293	401	172
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	22	25	88	121	52
Total Analysis Volume [veh/h]	107	89	100	353	483	207
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	3		4		0	
v_di, Inbound Pedestrian Volume crossing major street	4		3		0	
v_co, Outbound Pedestrian Volume crossing minor street	2		0		2	
v_ci, Inbound Pedestrian Volume crossing minor street	2		0		2	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		1	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	4	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	25	0	0	40	40	0
Amber [s]	3.5	0.0	0.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	3.0	3.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	R	C	C
C, Cycle Length [s]	32	32	32	32
L, Total Lost Time per Cycle [s]	4.50	4.50	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	3.00	3.00
g_i, Effective Green Time [s]	5	5	18	18
g / C, Green / Cycle	0.14	0.14	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.44	0.40
s, saturation flow rate [veh/h]	1695	1476	1035	1719
c, Capacity [veh/h]	245	213	714	956
d1, Uniform Delay [s]	12.40	12.34	5.03	5.22
k, delay calibration	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.22	1.30	0.94	1.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.44	0.42	0.63	0.72
d, Delay for Lane Group [s/veh]	13.62	13.64	5.97	6.27
Lane Group LOS	B	B	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.62	0.52	1.31	1.47
50th-Percentile Queue Length [ft/ln]	15.44	12.98	32.65	36.80
95th-Percentile Queue Length [veh/ln]	1.11	0.93	2.35	2.65
95th-Percentile Queue Length [ft/ln]	27.78	23.36	58.77	66.24

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	13.62	13.64	5.97	5.97	6.27	6.27
Movement LOS	B	B	A	A	A	A
d_A, Approach Delay [s/veh]	13.63		5.97		6.27	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	7.24					
Intersection LOS	A					
Intersection V/C	0.642					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	4819.85	2986.76	0.00
d_p, Pedestrian Delay [s]	6.82	6.82	6.82
I_p,int, Pedestrian LOS Score for Intersection	2.180	2.149	2.210
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1571	2513	2513
d_b, Bicycle Delay [s]	0.73	1.05	1.05
I_b,int, Bicycle LOS Score for Intersection	1.560	2.307	2.698
Bicycle LOS	A	B	B

**Sequence**

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Tualatin Heights ZA-Existing Conditions

Vistro File: H:\...\26462\_PM.vistro

Scenario 2 2 Future Traffic Conditions

Report File: H:\...\Future\_PM\_v2.pdf

9/15/2021

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	SW 95th Ave/Tualatin-Sherwood Rd	Signalized	HCM 6th Edition	NB Right	0.662	21.7	C
2	SW 95th Ave/SW Sagert St	All-way stop	HCM 6th Edition	SB Left	0.429	10.1	B
3	Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.071	14.9	B
4	Tualatin Heights East Dwy/SW Sagert St	Two-way stop	HCM 6th Edition	SB Left	0.065	12.8	B
5	SW Boones Ferry Rd/SW Sagert St	Signalized	HCM 6th Edition	NB Thru	0.911	46.3	D
6	SW 95th Ave/SW Avery St	Signalized	HCM 6th Edition	SB Right	0.635	6.7	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: SW 95th Ave/Tualatin-Sherwood Rd**

Control Type:	Signalized	Delay (sec / veh):	21.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.662

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	100.00	100.00	100.00	120.00	100.00	100.00	400.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	116	7	156	1	5	13	7	1304	159	106	1154	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	17.00	0.00	2.00	0.00	0.00	0.00	0.00	6.00	4.00	4.00	11.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	7	156	1	5	13	7	1304	159	106	1154	2
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	2	40	0	1	3	2	336	41	27	297	1
Total Analysis Volume [veh/h]	120	7	161	1	5	13	7	1344	164	109	1190	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		1			0			0			
v_di, Inbound Pedestrian Volume crossing major street	0		0			0			1			
v_co, Outbound Pedestrian Volume crossing minor street	0		0			1			0			
v_ci, Inbound Pedestrian Volume crossing minor street	0		1			0			0			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	3		0			2			3			

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	5	0	0	5	0	5	10	0	10	10	0
Maximum Green [s]	0	35	0	0	35	0	20	65	0	20	65	0
Amber [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	41	0	0	41	0	25	74	0	25	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	3.5	0.0	3.0	4.5	0.0	3.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	68	68	68	68	68	68	68	68	68	68
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50	5.50	5.00	6.50	6.50	5.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50	3.50	3.00	4.50	4.50	3.00	4.50	4.50
g_i, Effective Green Time [s]	9	9	9	9	15	33	33	9	27	27
g / C, Green / Cycle	0.14	0.14	0.14	0.14	0.22	0.49	0.49	0.13	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.08	0.10	0.00	0.01	0.00	0.42	0.43	0.06	0.34	0.34
s, saturation flow rate [veh/h]	1533	1563	1874	1611	1810	1810	1733	1752	1735	1734
c, Capacity [veh/h]	311	213	317	220	398	883	845	224	687	686
d1, Uniform Delay [s]	27.64	28.46	25.66	25.78	20.96	15.57	15.77	27.82	19.07	19.07
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.86	5.36	0.02	0.11	0.02	2.71	3.19	1.63	3.51	3.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.41	0.75	0.02	0.06	0.02	0.87	0.88	0.49	0.87	0.87
d, Delay for Lane Group [s/veh]	28.50	33.82	25.68	25.89	20.98	18.28	18.96	29.45	22.58	22.59
Lane Group LOS	C	C	C	C	C	B	B	C	C	C
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.94	2.74	0.08	0.18	0.09	9.74	9.70	1.69	8.49	8.49
50th-Percentile Queue Length [ft/ln]	48.47	68.59	2.09	4.61	2.15	243.43	242.47	42.36	212.28	212.21
95th-Percentile Queue Length [veh/ln]	3.49	4.94	0.15	0.33	0.15	14.85	14.81	3.05	13.27	13.27
95th-Percentile Queue Length [ft/ln]	87.24	123.46	3.76	8.29	3.87	371.37	370.16	76.24	331.75	331.67

**Movement, Approach, & Intersection Results**

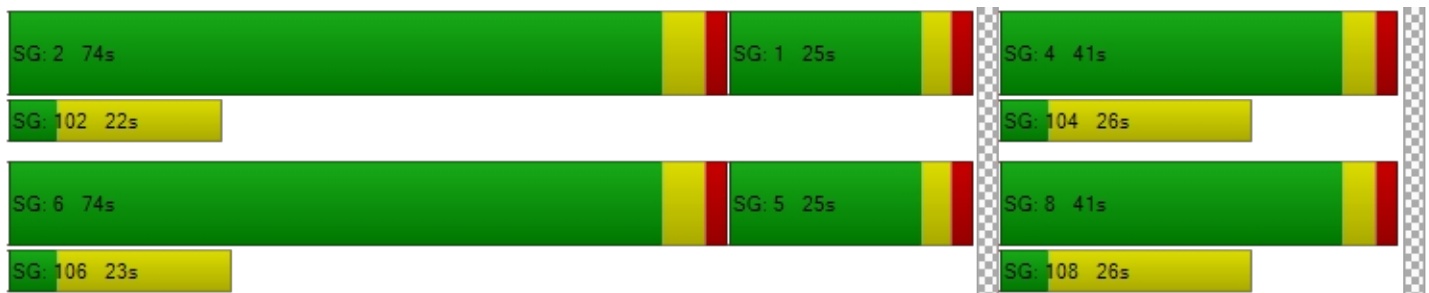
d_M, Delay for Movement [s/veh]	28.50	28.50	33.82	25.68	25.68	25.89	20.98	18.57	18.96	29.45	22.58	22.59
Movement LOS	C	C	C	C	C	C	C	B	B	C	C	C
d_A, Approach Delay [s/veh]	31.47			25.83			18.62			23.16		
Approach LOS	C			C			B			C		
d_I, Intersection Delay [s/veh]	21.74											
Intersection LOS	C											
Intersection V/C	0.662											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	25.83	25.83	25.83	25.83
I_p,int, Pedestrian LOS Score for Intersection	2.112	1.939	3.012	2.836
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1037	1037	1972	1972
d_b, Bicycle Delay [s]	7.95	7.94	0.01	0.01
I_b,int, Bicycle LOS Score for Intersection	2.035	1.591	2.809	2.633
Bicycle LOS	B	A	C	B

**Sequence**

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 2: SW 95th Ave/SW Sagert St**

Control Type: All-way stop  
 Analysis Method: HCM 6th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 10.1  
 Level Of Service: B  
 Volume to Capacity (v/c): 0.429

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	1	117	44	195	119	1	1	1	1	64	1	98
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	50.00	2.00	4.00	2.00	2.00	50.00	0.00	0.00	17.00	0.00	0.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	117	44	195	119	1	1	1	1	64	1	98
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	30	11	51	31	0	0	0	0	17	0	26
Total Analysis Volume [veh/h]	1	122	46	203	124	1	1	1	1	67	1	102
Pedestrian Volume [ped/h]	10			1			4			0		



**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	778	765	677	745
Degree of Utilization, x	0.22	0.43	0.00	0.23

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.82	2.16	0.01	0.88
95th-Percentile Queue Length [ft]	20.58	54.12	0.33	21.90
Approach Delay [s/veh]	8.90	11.19	8.34	9.25
Approach LOS	A	B	A	A
Intersection Delay [s/veh]	10.11			
Intersection LOS	B			

**Intersection Level Of Service Report**

**Intersection 3: Tualatin Heights West Dwy/SW 93rd Ave/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	14.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.071

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	+			+			+			+		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	2	3	20	25	1	14	36	199	5	24	147	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	5.00	4.00	0.00	0.00	6.00	2.00	0.00	0.00	5.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	3	20	25	1	14	36	199	5	24	147	31
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	6	7	0	4	10	57	1	7	42	9
Total Analysis Volume [veh/h]	2	3	23	28	1	16	41	226	6	27	167	35
Pedestrian Volume [ped/h]	3			6			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.01	0.03	0.07	0.00	0.02	0.03	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	13.96	14.17	9.74	14.86	14.52	9.97	7.79	0.00	0.00	7.74	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.13	0.30	0.30	0.30	0.10	0.10	0.10	0.06	0.06	0.06
95th-Percentile Queue Length [ft/ln]	3.21	3.21	3.21	7.57	7.57	7.57	2.38	2.38	2.38	1.54	1.54	1.54
d_A, Approach Delay [s/veh]	10.52			13.12			1.17			0.91		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.46											
Intersection LOS	B											

**Intersection Level Of Service Report**  
**Intersection 4: Tualatin Heights East Dwy/SW Sagert St**

Control Type:	Two-way stop	Delay (sec / veh):	12.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.065

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	T		↑		↑	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	28	11	20	224	191	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	4.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	11	20	224	191	28
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	3	6	64	54	8
Total Analysis Volume [veh/h]	32	13	23	255	217	32
Pedestrian Volume [ped/h]	4		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.06	0.02	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.83	10.05	7.78	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.26	0.26	0.05	0.05	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.56	6.56	1.33	1.33	0.00	0.00
d_A, Approach Delay [s/veh]	12.03		0.64		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.26					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	46.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.911

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵↻			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	29	569	362	110	883	82	48	153	20	235	109	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	8.00	3.00	4.00	5.00	4.00	2.00	0.00	2.00	17.00	5.00	5.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	569	362	110	883	82	48	153	20	235	109	55
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	145	92	28	225	21	12	39	5	60	28	14
Total Analysis Volume [veh/h]	30	581	369	112	901	84	49	156	20	240	111	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	4		1			4			0			
v_di, Inbound Pedestrian Volume crossing major street	4		0			4			1			
v_co, Outbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ci, Inbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	4		6			4			1			



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	L	C	R	L	C	L	C
C, Cycle Length [s]	113	113	113	113	113	113	113	113	113
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	69	60	69	62	62	34	15	34	25
g / C, Green / Cycle	0.62	0.53	0.62	0.55	0.55	0.30	0.13	0.30	0.22
(v / s)_i Volume / Saturation Flow Rate	0.04	0.55	0.16	0.49	0.05	0.04	0.10	0.16	0.10
s, saturation flow rate [veh/h]	679	1715	702	1840	1548	1348	1818	1463	1707
c, Capacity [veh/h]	250	911	221	1008	848	395	237	426	384
d1, Uniform Delay [s]	20.27	26.49	25.84	22.66	12.21	28.84	47.31	32.67	37.61
k, delay calibration	0.19	0.50	0.50	0.42	0.19	0.04	0.04	0.50	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.36	41.61	8.08	10.48	0.09	0.05	1.74	5.32	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.12	1.04	0.51	0.89	0.10	0.12	0.74	0.56	0.43
d, Delay for Lane Group [s/veh]	20.64	68.10	33.92	33.14	12.29	28.89	49.05	37.98	37.90
Lane Group LOS	C	F	C	C	B	C	D	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.30	33.41	1.59	22.83	1.02	0.97	4.87	5.93	3.99
50th-Percentile Queue Length [ft/ln]	7.62	835.34	39.80	570.80	25.50	24.13	121.66	148.34	99.83
95th-Percentile Queue Length [veh/ln]	0.55	44.41	2.87	30.67	1.84	1.74	8.48	9.93	7.19
95th-Percentile Queue Length [ft/ln]	13.72	1110.35	71.64	766.70	45.90	43.43	212.10	248.22	179.69

**Movement, Approach, & Intersection Results**

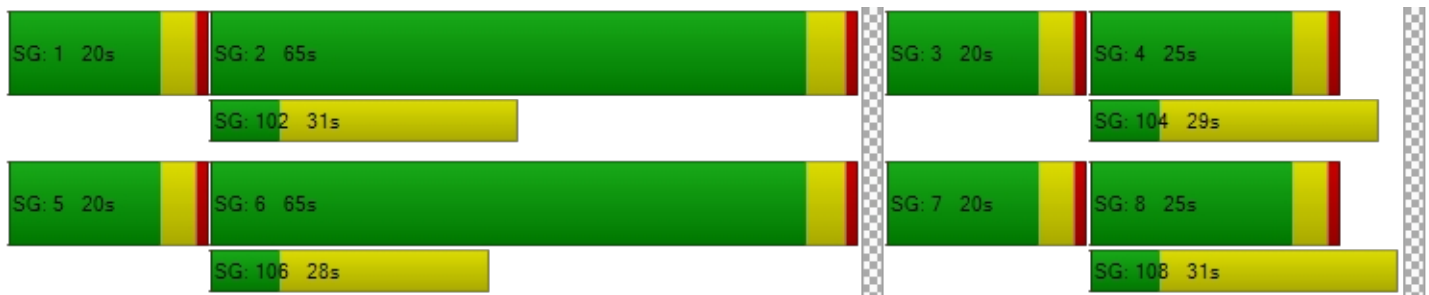
d_M, Delay for Movement [s/veh]	20.64	68.10	68.10	33.92	33.14	12.29	28.89	49.05	49.05	37.98	37.90	37.90
Movement LOS	C	E	E	C	C	B	C	D	D	D	D	D
d_A, Approach Delay [s/veh]	66.65			31.62			44.66			37.95		
Approach LOS	E			C			D			D		
d_I, Intersection Delay [s/veh]	46.32											
Intersection LOS	D											
Intersection V/C	0.911											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	45.95			45.95			45.95			45.95		
I_p,int, Pedestrian LOS Score for Intersection	2.697			2.593			2.121			2.378		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1064			1064			363			363		
d_b, Bicycle Delay [s]	12.39			12.40			37.85			37.79		
I_b,int, Bicycle LOS Score for Intersection	3.177			3.370			1.931			2.231		
Bicycle LOS	C			C			A			B		

**Sequence**




Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 6: SW 95th Ave/SW Avery St**

Control Type:	Signalized	Delay (sec / veh):	6.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name						
Base Volume Input [veh/h]	89	95	82	586	231	70
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	0.00	3.00	3.00	8.00	9.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	95	82	586	231	70
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	25	22	154	61	18
Total Analysis Volume [veh/h]	94	100	86	617	243	74
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		1	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	7.00

**Phasing & Timing**

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	4	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	25	0	0	40	40	0
Amber [s]	3.5	0.0	0.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	0
Pedestrian Clearance [s]	14	0	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	3.0	3.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	R	C	C
C, Cycle Length [s]	26	26	26	26
L, Total Lost Time per Cycle [s]	4.50	4.50	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	3.00	3.00
g_i, Effective Green Time [s]	4	4	13	13
g / C, Green / Cycle	0.15	0.15	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.40	0.19
s, saturation flow rate [veh/h]	1767	1615	1750	1700
c, Capacity [veh/h]	262	240	1008	828
d1, Uniform Delay [s]	9.98	10.07	5.60	4.22
k, delay calibration	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.83	1.15	0.89	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.36	0.42	0.70	0.38
d, Delay for Lane Group [s/veh]	10.81	11.23	6.48	4.51
Lane Group LOS	B	B	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.38	0.42	1.17	0.39
50th-Percentile Queue Length [ft/ln]	9.58	10.60	29.30	9.63
95th-Percentile Queue Length [veh/ln]	0.69	0.76	2.11	0.69
95th-Percentile Queue Length [ft/ln]	17.25	19.08	52.74	17.33



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	10.81	11.23	6.48	6.48	4.51	4.51
Movement LOS	B	B	A	A	A	A
d_A, Approach Delay [s/veh]	11.02		6.48		4.51	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.69					
Intersection LOS	A					
Intersection V/C	0.635					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	4.30	4.30	4.30
I_p,int, Pedestrian LOS Score for Intersection	2.093	2.141	2.132
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1929	3086	3086
d_b, Bicycle Delay [s]	0.02	3.82	3.82
I_b,int, Bicycle LOS Score for Intersection	1.560	2.720	2.083
Bicycle LOS	A	B	B

**Sequence**

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



## Appendix F 2040 Mitigation Operations

**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	37.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.876

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	28	774	344	44	416	92	59	59	140	165	196	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	40.00	5.00	9.00	6.00	7.00	0.00	5.00	2.00	12.00	11.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	774	344	44	416	92	59	59	140	165	196	56
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	233	104	13	125	28	18	18	42	50	59	17
Total Analysis Volume [veh/h]	34	933	414	53	501	111	71	71	169	199	236	67
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	4		1			4			0			
v_di, Inbound Pedestrian Volume crossing major street	4		0			4			1			
v_co, Outbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ci, Inbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	0		1			0			0			

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Cycle Length [s]	115	115	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	69	60	60	69	61	61	37	20	37	28
g / C, Green / Cycle	0.60	0.52	0.52	0.60	0.53	0.53	0.32	0.17	0.32	0.24
(v / s)_i Volume / Saturation Flow Rate	0.05	0.51	0.28	0.08	0.28	0.07	0.06	0.15	0.15	0.17
s, saturation flow rate [veh/h]	676	1825	1495	692	1795	1579	1187	1635	1303	1755
c, Capacity [veh/h]	369	949	777	209	945	831	306	282	360	423
d1, Uniform Delay [s]	11.88	27.20	18.36	25.88	17.94	13.89	29.22	46.34	31.57	40.19
k, delay calibration	0.19	0.46	0.19	0.04	0.19	0.19	0.04	0.27	0.50	0.39
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.18	24.26	1.00	0.26	0.82	0.12	0.14	16.20	6.03	8.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.09	0.98	0.53	0.25	0.53	0.13	0.23	0.85	0.55	0.72
d, Delay for Lane Group [s/veh]	12.06	51.46	19.36	26.14	18.76	14.01	29.37	62.53	37.60	48.20
Lane Group LOS	B	D	B	C	B	B	C	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.37	30.19	7.34	0.57	8.73	1.49	1.41	7.91	4.86	8.78
50th-Percentile Queue Length [ft/ln]	9.27	754.67	183.54	14.14	218.27	37.22	35.13	197.77	121.49	219.59
95th-Percentile Queue Length [veh/ln]	0.67	39.20	11.79	1.02	13.58	2.68	2.53	12.52	8.47	13.64
95th-Percentile Queue Length [ft/ln]	16.68	979.93	294.64	25.45	339.41	67.00	63.23	313.09	211.87	341.11

**Movement, Approach, & Intersection Results**

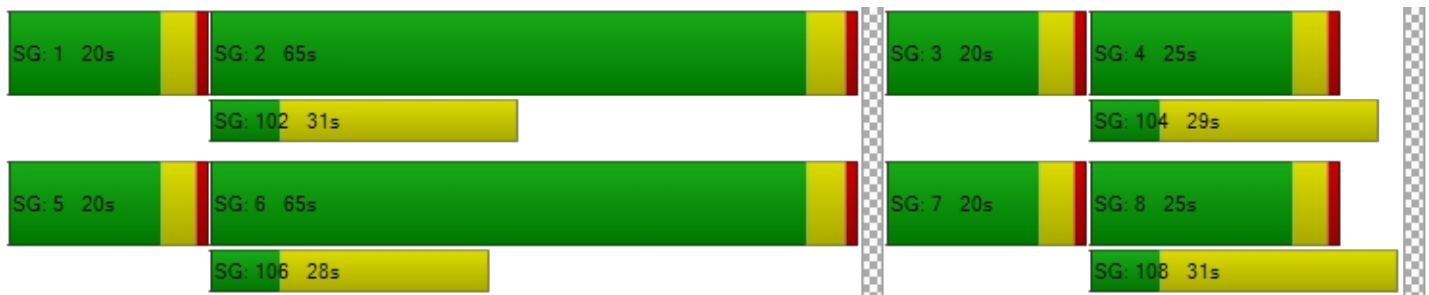
d_M, Delay for Movement [s/veh]	12.06	51.46	19.36	26.14	18.76	14.01	29.37	62.53	62.53	37.60	48.20	48.20
Movement LOS	B	D	B	C	B	B	C	E	E	D	D	D
d_A, Approach Delay [s/veh]	40.87		18.56		54.96		44.00					
Approach LOS	D		B		D		D					
d_I, Intersection Delay [s/veh]	37.76											
Intersection LOS	D											
Intersection V/C	0.876											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	47.15	47.15	47.15	47.15
I_p,int, Pedestrian LOS Score for Intersection	2.745	2.592	2.203	2.437
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1041	1041	356	356
d_b, Bicycle Delay [s]	13.24	13.25	38.95	38.95
I_b,int, Bicycle LOS Score for Intersection	3.838	2.657	2.073	2.388
Bicycle LOS	D	B	B	B

**Sequence**

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	38.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.885

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	31	774	344	44	416	94	65	62	148	165	197	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	40.00	5.00	9.00	6.00	7.00	0.00	5.00	2.00	12.00	11.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	774	344	44	416	94	65	62	148	165	197	56
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	233	104	13	125	28	20	19	45	50	59	17
Total Analysis Volume [veh/h]	37	933	414	53	501	113	78	75	178	199	237	67
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		4			1			4			0	
v_di, Inbound Pedestrian Volume crossing major street		4			0			4			1	
v_co, Outbound Pedestrian Volume crossing minor street		3			1			1			3	
v_ci, Inbound Pedestrian Volume crossing minor street		3			1			1			3	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			1			0			0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Cycle Length [s]	115	115	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	69	60	60	69	61	61	37	20	37	27
g / C, Green / Cycle	0.59	0.52	0.52	0.59	0.53	0.53	0.32	0.17	0.32	0.24
(v / s)_i Volume / Saturation Flow Rate	0.05	0.51	0.28	0.08	0.28	0.07	0.07	0.15	0.15	0.17
s, saturation flow rate [veh/h]	678	1825	1495	692	1795	1579	1194	1635	1294	1756
c, Capacity [veh/h]	369	948	777	209	942	828	308	283	350	418
d1, Uniform Delay [s]	11.97	27.29	18.42	25.92	18.10	14.03	29.35	46.72	31.74	40.57
k, delay calibration	0.19	0.46	0.19	0.05	0.19	0.19	0.04	0.31	0.50	0.40
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.20	24.52	1.00	0.27	0.83	0.13	0.16	22.59	6.57	8.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.10	0.98	0.53	0.25	0.53	0.14	0.25	0.89	0.57	0.73
d, Delay for Lane Group [s/veh]	12.17	51.82	19.43	26.18	18.94	14.16	29.51	69.31	38.32	49.14
Lane Group LOS	B	D	B	C	B	B	C	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.41	30.34	7.37	0.57	8.79	1.53	1.55	8.85	4.90	8.91
50th-Percentile Queue Length [ft/ln]	10.16	758.45	184.23	14.21	219.87	38.22	38.76	221.16	122.41	222.86
95th-Percentile Queue Length [veh/ln]	0.73	39.37	11.82	1.02	13.66	2.75	2.79	13.72	8.53	13.81
95th-Percentile Queue Length [ft/ln]	18.28	984.28	295.54	25.57	341.46	68.79	69.78	343.11	213.14	345.28

**Movement, Approach, & Intersection Results**

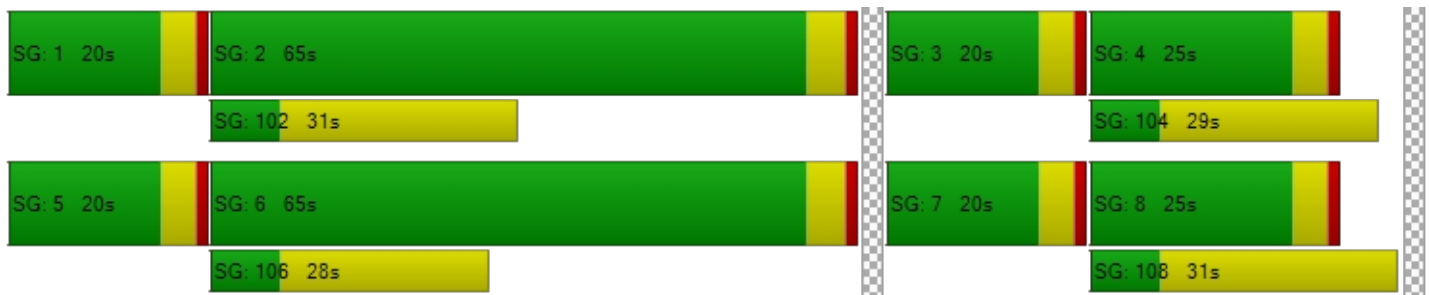
d_M, Delay for Movement [s/veh]	12.17	51.82	19.43	26.18	18.94	14.16	29.51	69.31	69.31	38.32	49.14	49.14
Movement LOS	B	D	B	C	B	B	C	E	E	D	D	D
d_A, Approach Delay [s/veh]	41.07			18.70			59.93			44.86		
Approach LOS	D			B			E			D		
d_I, Intersection Delay [s/veh]	38.72											
Intersection LOS	D											
Intersection V/C	0.885											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	47.23			47.23			47.23			47.23		
I_p,int, Pedestrian LOS Score for Intersection	2.748			2.597			2.214			2.438		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1040			1040			355			355		
d_b, Bicycle Delay [s]	13.30			13.31			39.03			39.03		
I_b,int, Bicycle LOS Score for Intersection	3.843			2.660			2.106			2.390		
Bicycle LOS	D			B			B			B		

**Sequence**

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	26.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.822

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	21	569	362	110	883	76	44	151	15	235	106	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	8.00	3.00	4.00	5.00	4.00	2.00	0.00	2.00	17.00	5.00	5.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	569	362	110	883	76	44	151	15	235	106	55
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	145	92	28	225	19	11	39	4	60	27	14
Total Analysis Volume [veh/h]	21	581	369	112	901	78	45	154	15	240	108	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	4		1			4			0			
v_di, Inbound Pedestrian Volume crossing major street	4		0			4			1			
v_co, Outbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ci, Inbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	4		6			4			1			



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Cycle Length [s]	99	99	99	99	99	99	99	99	99	99
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	59	50	50	59	52	52	30	13	30	22
g / C, Green / Cycle	0.60	0.50	0.50	0.60	0.53	0.53	0.31	0.13	0.31	0.23
(v / s)_i Volume / Saturation Flow Rate	0.03	0.31	0.24	0.12	0.49	0.05	0.03	0.09	0.16	0.10
s, saturation flow rate [veh/h]	677	1855	1537	927	1840	1548	1355	1829	1470	1705
c, Capacity [veh/h]	245	933	773	478	974	819	424	236	454	385
d1, Uniform Delay [s]	18.64	17.78	15.98	11.52	21.49	11.53	24.69	41.30	28.03	32.81
k, delay calibration	0.19	0.19	0.19	0.21	0.35	0.19	0.04	0.04	0.43	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.26	1.17	0.79	0.48	11.99	0.09	0.04	1.51	3.75	0.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.09	0.62	0.48	0.23	0.93	0.10	0.11	0.71	0.53	0.43
d, Delay for Lane Group [s/veh]	18.90	18.95	16.77	12.00	33.48	11.62	24.73	42.82	31.78	33.09
Lane Group LOS	B	B	B	B	C	B	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.19	9.40	5.36	1.04	20.96	0.84	0.75	4.01	4.96	3.36
50th-Percentile Queue Length [ft/ln]	4.78	234.94	134.01	26.06	524.02	21.07	18.72	100.24	124.07	84.04
95th-Percentile Queue Length [veh/ln]	0.34	14.43	9.16	1.88	28.47	1.52	1.35	7.22	8.62	6.05
95th-Percentile Queue Length [ft/ln]	8.60	360.63	228.93	46.90	711.73	37.92	33.70	180.43	215.40	151.27

**Movement, Approach, & Intersection Results**

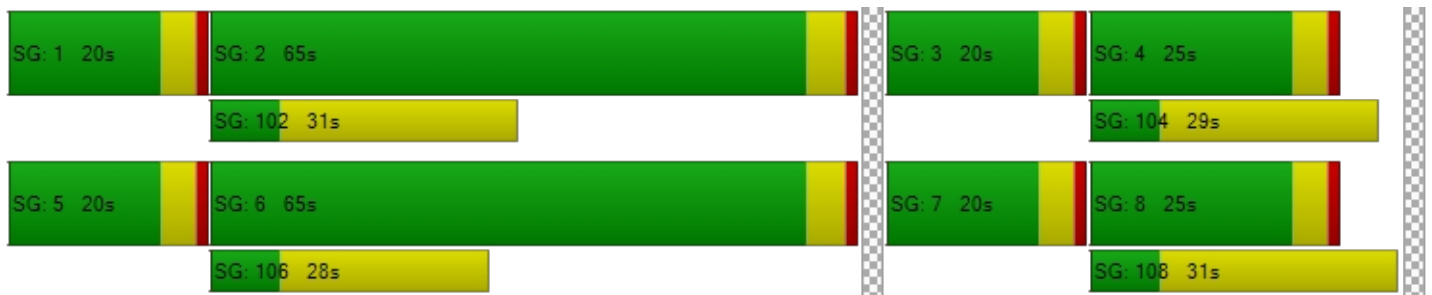
d_M, Delay for Movement [s/veh]	18.90	18.95	16.77	12.00	33.48	11.62	24.73	42.82	42.82	31.78	33.09	33.09
Movement LOS	B	B	B	B	C	B	C	D	D	C	C	C
d_A, Approach Delay [s/veh]	18.12			29.71			39.01			32.31		
Approach LOS	B			C			D			C		
d_I, Intersection Delay [s/veh]	26.65											
Intersection LOS	C											
Intersection V/C	0.822											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	38.98			38.98			38.98			38.98		
I_p,int, Pedestrian LOS Score for Intersection	2.705			2.583			2.098			2.472		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1215			1215			415			415		
d_b, Bicycle Delay [s]	7.62			7.62			31.06			31.01		
I_b,int, Bicycle LOS Score for Intersection	3.162			3.360			1.913			2.226		
Bicycle LOS	C			C			A			B		

**Sequence**

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 5: SW Boones Ferry Rd/SW Sagert St**

Control Type:	Signalized	Delay (sec / veh):	27.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.825

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	125.00	100.00	210.00	90.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name												
Base Volume Input [veh/h]	29	569	362	110	883	82	48	153	20	235	109	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	8.00	3.00	4.00	5.00	4.00	2.00	0.00	2.00	17.00	5.00	5.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	569	362	110	883	82	48	153	20	235	109	55
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	145	92	28	225	21	12	39	5	60	28	14
Total Analysis Volume [veh/h]	30	581	369	112	901	84	49	156	20	240	111	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	4		1			4			0			
v_di, Inbound Pedestrian Volume crossing major street	4		0			4			1			
v_co, Outbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ci, Inbound Pedestrian Volume crossing minor street	3		1			1			3			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	4		6			4			1			

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	14.00

**Phasing & Timing**

Control Type	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	6	0	5	6	0
Maximum Green [s]	15	60	0	15	60	0	15	20	0	15	20	0
Amber [s]	3.5	4.0	0.0	3.5	4.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	65	0	20	65	0	20	25	0	20	25	0
Vehicle Extension [s]	2.0	4.5	0.0	2.0	4.5	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	22	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Cycle Length [s]	102	102	102	102	102	102	102	102	102	102
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	61	52	52	61	53	53	31	13	31	23
g / C, Green / Cycle	0.60	0.51	0.51	0.60	0.53	0.53	0.31	0.13	0.31	0.23
(v / s)_i Volume / Saturation Flow Rate	0.04	0.31	0.24	0.12	0.49	0.05	0.04	0.10	0.16	0.10
s, saturation flow rate [veh/h]	686	1855	1537	924	1840	1548	1352	1818	1462	1707
c, Capacity [veh/h]	247	941	780	476	968	814	420	241	446	387
d1, Uniform Delay [s]	19.46	17.99	16.17	11.73	22.39	12.06	25.39	42.38	28.80	33.69
k, delay calibration	0.19	0.19	0.19	0.23	0.37	0.19	0.04	0.04	0.46	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	1.16	0.77	0.53	13.00	0.09	0.05	1.61	4.23	0.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.12	0.62	0.47	0.24	0.93	0.10	0.12	0.73	0.54	0.43
d, Delay for Lane Group [s/veh]	19.84	19.15	16.94	12.26	35.39	12.16	25.44	43.99	33.03	33.97
Lane Group LOS	B	B	B	B	D	B	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.28	9.63	5.49	1.08	22.02	0.95	0.84	4.32	5.16	3.54
50th-Percentile Queue Length [ft/ln]	7.09	240.79	137.29	27.03	550.49	23.79	21.09	107.90	128.94	88.38
95th-Percentile Queue Length [veh/ln]	0.51	14.72	9.33	1.95	29.72	1.71	1.52	7.72	8.88	6.36
95th-Percentile Queue Length [ft/ln]	12.76	368.04	233.37	48.66	742.88	42.83	37.96	193.08	222.05	159.09



**Movement, Approach, & Intersection Results**

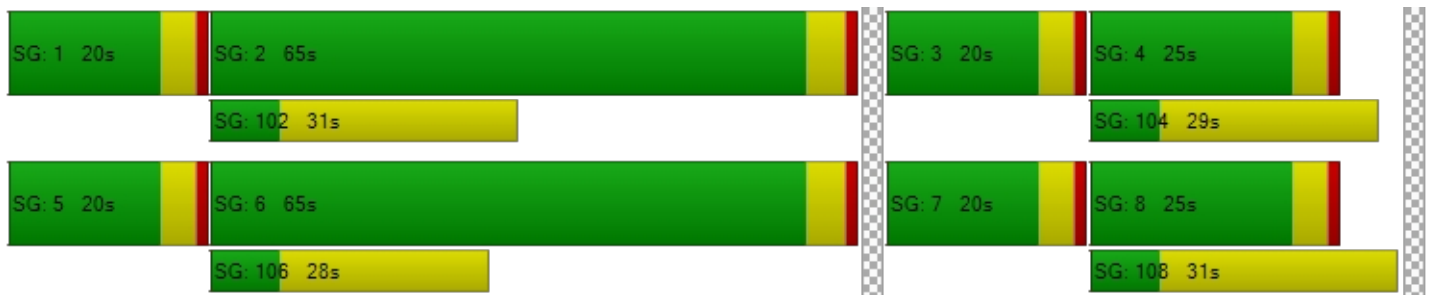
d_M, Delay for Movement [s/veh]	19.84	19.15	16.94	12.26	35.39	12.16	25.44	43.99	43.99	33.03	33.97	33.97
Movement LOS	B	B	B	B	D	B	C	D	D	C	C	C
d_A, Approach Delay [s/veh]	18.34			31.25			39.95			33.42		
Approach LOS	B			C			D			C		
d_I, Intersection Delay [s/veh]	27.63											
Intersection LOS	C											
Intersection V/C	0.825											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	40.39			40.39			40.39			40.39		
I_p,int, Pedestrian LOS Score for Intersection	2.711			2.588			2.115			2.475		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1181			1181			404			404		
d_b, Bicycle Delay [s]	8.53			8.54			32.43			32.38		
I_b,int, Bicycle LOS Score for Intersection	3.177			3.370			1.931			2.231		
Bicycle LOS	C			C			A			B		

**Sequence**

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



January 4, 2022

Project #: 26462

Steve Koper and Keith Leonard  
City of Tualatin  
10699 SW Herman Road  
Tualatin, OR 97062-8233

***RE: Tualatin Heights Plan Map Amendment– Response to December 23, 2021 Transportation Impact Analysis Comments***

Dear Steve and Keith,

This letter provides supplemental transportation-related information and a response to comments provided in the City of Tualatin’s technical review of our September 16, 2021 *Tualatin Heights Plan Map Amendment* traffic analysis (herein referred to as the “September report”). The details addressed herein respond specifically to comments provided by DKS on December 23, 2021, on behalf of City staff. For ease of review, the individual DKS comments are shown below in italics followed by our response to each.

***Comment***

*The trip distribution estimate for the proposed project is stated that it is based on review of travel characteristics from the count data. However, no distribution percentages are described or presented in a figure. The analysis should include, at minimum, a description of the trip distribution percentages in the study area.*

**Response**

The trip distribution and trip assignment figures were inadvertently left out when the September report was compiled. Figures showing the site-generated trips and their assignment onto the study area network as an attachment to this memo. In general, the overall trip distribution percentages were calculated based on existing travel patterns at the Terrace Heights site driveways and the location of regional destinations within the larger study area.

***Comment***

*Regarding the distribution, no new trips are assigned to the eastern site driveway. The study states that the new trips are distributed between the two site accesses.*

## Response

The existing Tualatin Heights apartment complex has two full access site driveways within close proximity to one another along SW Sagert Street. Based on discussions with the Applicant, the site may expand with a higher number of units oriented closer to the western access; as such, all of the new site generated trips were assigned to the westernmost driveway for conservative purposes.

## Comment

*To obtain background volumes for horizon year 2040, the Metro travel demand models for 2015 and 2040 were used. The procedure used to forecast volumes was a bit vague on the methodology used. At minimum, a description of what equivalent annual percent growth is assumed at the study intersections would be appropriate.*

## Response

The year 2040 background traffic forecast volumes were developed primarily on travel forecasting data from the Metro Regional Travel Demand Model using model runs supplied by Washington County staff. The standard NCHRP 765 methodology was used to post-process future turning movement volumes at the study intersections using 2015 base year model volumes, forecast year 2040 model output, and 2019 and 2021 existing volume counts. A copy of the spreadsheet that follows the NCHRP 765 methodology is available upon request.

The resulting volumes used in the 2040 base year operations are reflective of annual growth rates ranging from 1.5% (SW 95<sup>th</sup> Avenue corridor) to 2.2% (SW Boones Ferry Road corridor).

## Conclusions

Based on our review, the comments provided by City staff clarify the findings of our September report but do not change any of the analyses nor the conclusions. Please let us know if you need any additional information as part of your review of the application.

Sincerely,  
KITTELSON & ASSOCIATES, INC.

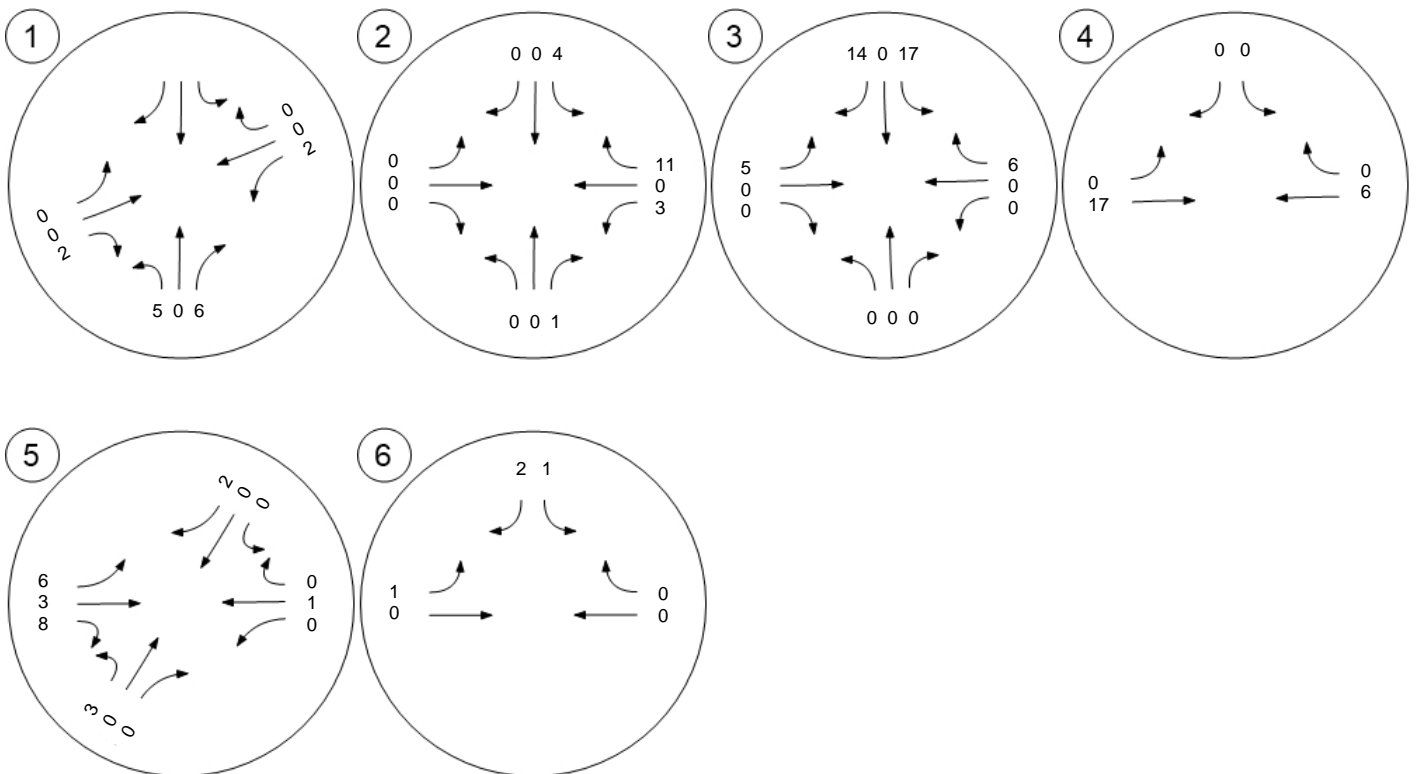
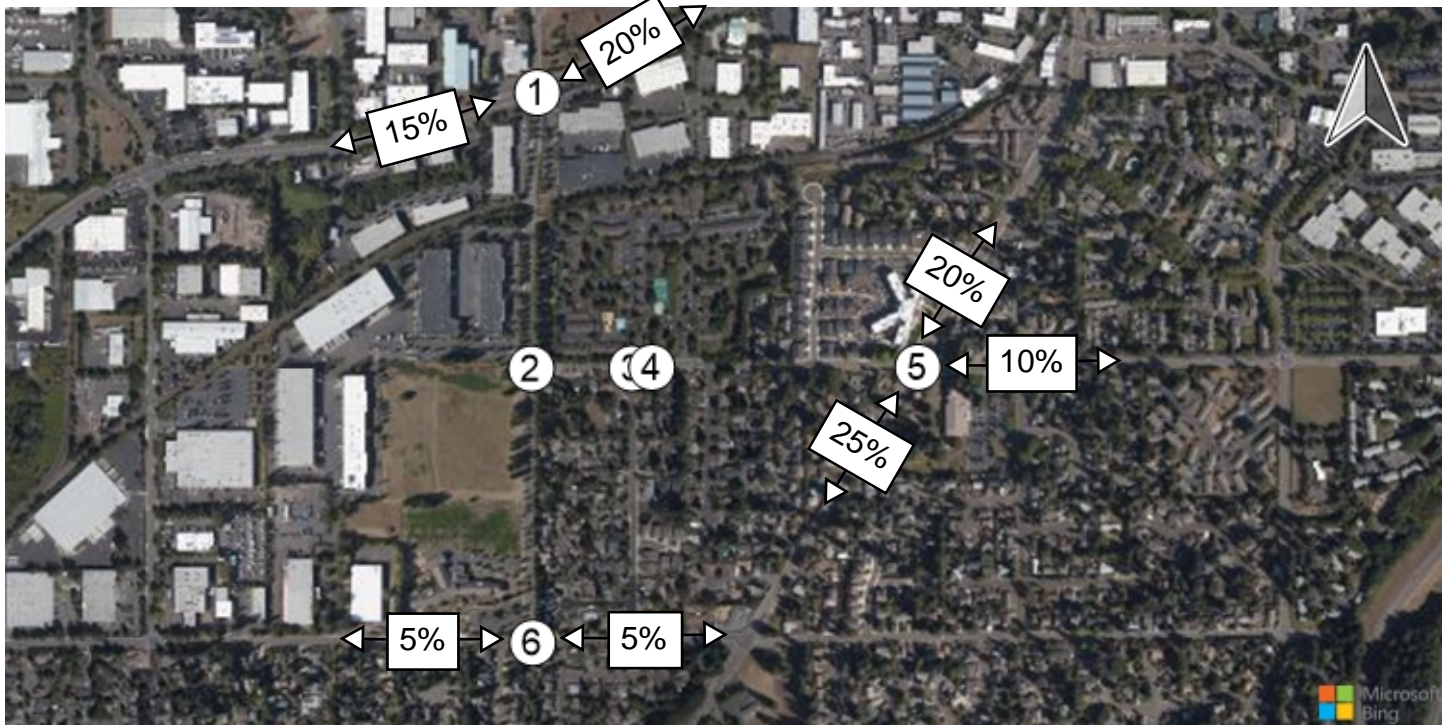


Matt Hughart, AICP  
Principal Planner



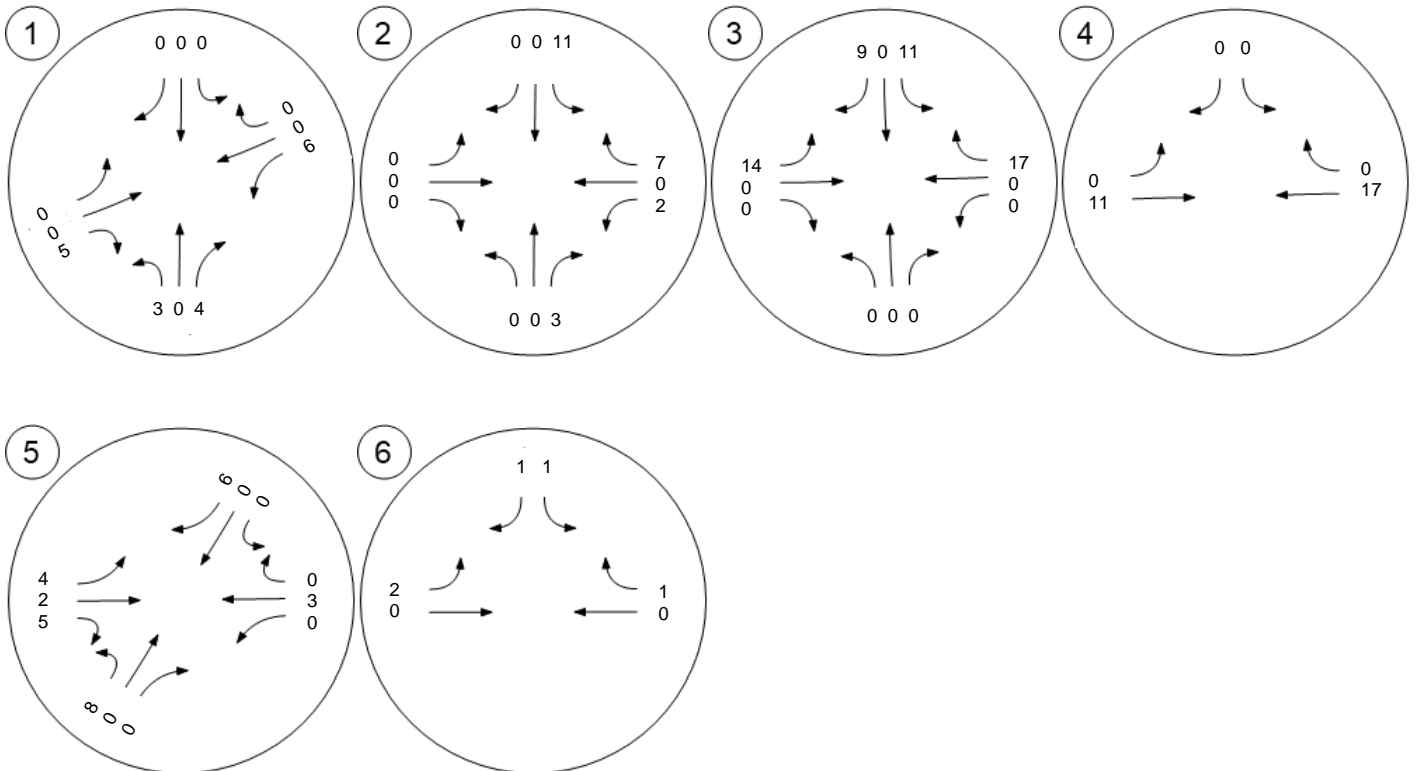
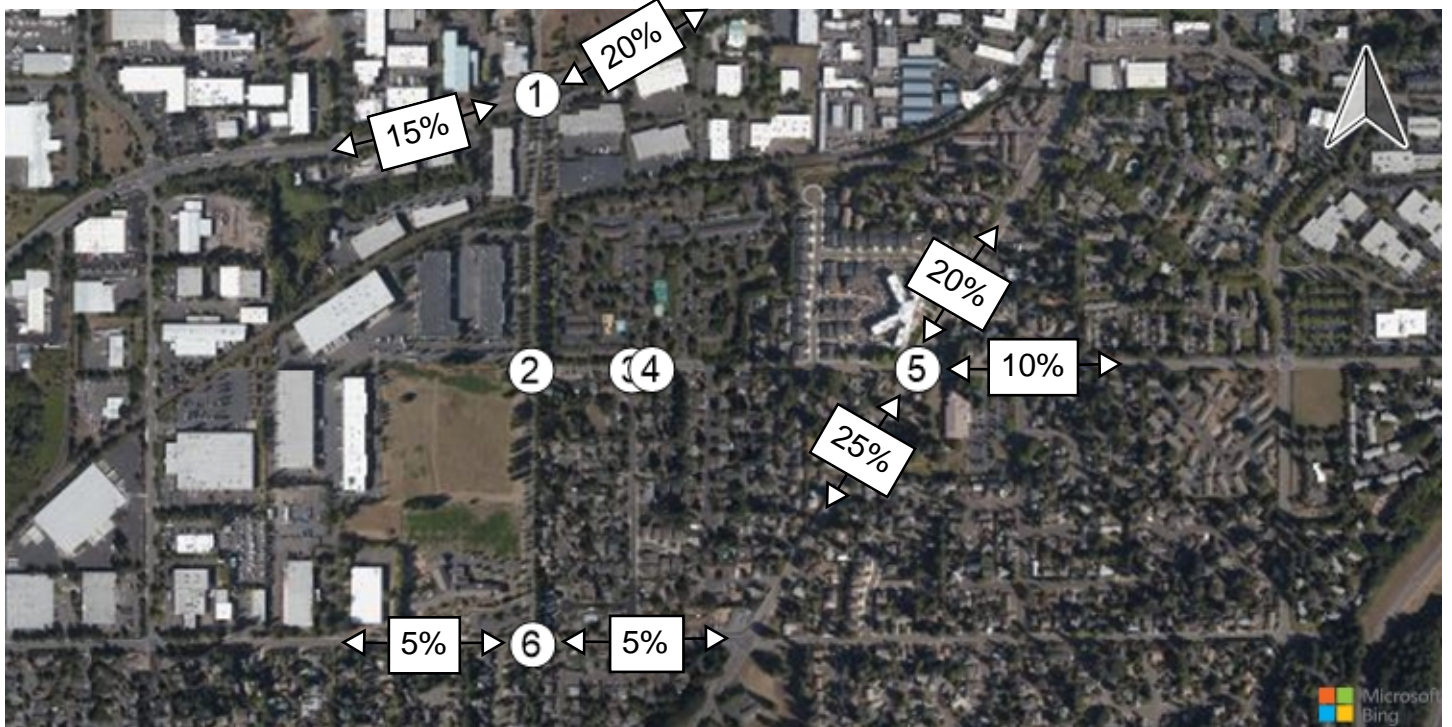
Julia Kuhn, P.E.  
Senior Principal Engineer

Traffic Volume - Base Volume





Traffic Volume - Base Volume





DATE: January 10, 2022

REQUEST: Tualatin Heights Up-zone Transportation Review

TASK NO: Tualatin On-Call Task 3 (P#21208-003)

REVIEWER: Amanda Deering, PE and Randy Johnson, PE, PTOE, DKS Associates

---

DKS Associates has reviewed the transportation planning rule (TPR) analysis<sup>1</sup> and the comment response<sup>2</sup> for the Tualatin Heights Up-zone. The proposed zone change amendment would upgrade the current zoning from residential medium low (RML) zoning to residential medium high-density (RMH) zoning, which would allow for up to 116 additional multi-family units to be built in addition to the existing 220 units. The Tualatin Heights apartment complex is located at 9301 SW Sagert Street in Tualatin, Oregon. The general comments are based on a review of the TPR analysis.

## TPR ANALYSIS REVIEW

Key comments and issues related to the proposed zone change analysis include:

- The proposed zone change would allow for the construction of an additional 116 multifamily dwelling units. This is based on the upgrade from 10 to 15 dwelling units per acre under the proposed zoning.
- The proposed zone change would result in additional vehicle trips: 42 (11 in/31 out) AM peak hour vehicle trips, 51 (31 in/20 out) PM peak hour vehicle trips and 630 weekday trips. Note that ITE Land Use of Multi-Family Housing Mid-Rise was used for the multifamily units.
- Public street access to the site includes two existing accesses on Sagert Street at 93<sup>rd</sup> Avenue.
- Based on review of the last 5 years of available ODOT crash history database, Sagert Street/95<sup>th</sup> Avenue has a crash rate less than one per million entering vehicles, but greater than the 90<sup>th</sup> percentile crash rate for similar intersections. Most of the crashes were of the collision type “turning”, which would likely be mitigated by the planned project at the location. All other intersections showed no safety concerns.
- The trip distribution estimate for the proposed project is stated that it is based on review of travel characteristics from the count data. The comment response provides the trip distribution

---

<sup>1</sup> Tualatin Heights Plan Map Amendment, Kittelson and Associates, September 16, 2021.

<sup>2</sup> Tualatin Heights Plan Map Amendment – Response to December 23, 2021 Transportation Impact Analysis Comments, Kittelson and Associates, January 4, 2022.

figures. These show 35 percent of trips using Tualatin-Sherwood Road, 45 percent using Boones Ferry Road, and the remaining 20 percent using Sagert St and Avery Street.

- Regarding the distribution, no new trips are assigned to the eastern site driveway.
- Traffic counts collected in June 2021 were used for this analysis. Historical data from 2019 was used to factor up volumes to adjust for impacts from COVID-19.
- To obtain background volumes for horizon year 2040, the Metro travel demand models for 2015 and 2040 were used. The comment response elaborates that NCHRP 765 methods were used to post-process future volumes.
- All study intersections except for Sagert Street/Boones Ferry Road would operate at an acceptable level of service during all three AM and PM peak hour scenarios. In the AM peak hour, Sagert Street/Boones Ferry Road at LOS F with a v/c ratio of 1.09 and 1.10 under Future Background and Future Rezone conditions, respectively.
- The proposed mitigation is to install a northbound right turn lane at Sagert Street/Boones Ferry Road. This capacity improvement is not in the planned improvements but was studied in the 2015 Tualatin Transportation System Plan update. The mitigation would result in the intersection operations meeting standards in both the future scenarios.



**From:** [Tim G](#)  
**To:** [Ext - Planning](#)  
**Subject:** Fwd: re: PMA 21-0001 (corrected copy)  
**Date:** Wednesday, December 15, 2021 5:21:06 PM

---

Corrected copy with minor mistakes fixed from original email:

Dear Tualatin Planning Commission (city employees only)

References:

- a. [www.tualatinoregon.gov/planning/pma-21-0001-tualatin-heights-apartments](http://www.tualatinoregon.gov/planning/pma-21-0001-tualatin-heights-apartments)
- b. Tualatin Heights Apartment Site Plan, 8/27/21
- c. Kittleson & Associated Parking Assessment, 8/16/21

I write this with sincerity and concern regarding the move to push forward on substantially increasing the number of residential units at the Tualatin Heights apartment complex without sufficient consideration of the impact to the surrounding neighborhood.

It is also my view that this submission is clearly skewed to move the proposal from concept to approval as quickly as possible, disregarding our concerns as homeowners which were previously stated.

I reviewed the submitted planning documents and believe the Exhibit C parking study is - plain and simple - hogwash. On the site plan, the proposed new Building A has 24 new units and five new parking spaces. The proposed Building B has 108 new units and 100 new parking spaces. Simple math - 132 new units and only 105 new parking spots. Simple translation is 27 units will not have parking which will overflow into the surrounding neighborhood - and that is assuming (incorrectly) that each new unit occupant will only have one vehicle. If we consider that half of those new units will have two vehicles, than it is obvious that the surrounding neighborhood will become congested in front of homeowners' houses with over 90 - yes, NINETY - tenant vehicles congesting our streets on SW Sagert, SW Apache, SW 93rd, SW Umat, and beyond. This is unacceptable.

The parking study is flawed because it does not address this type of information stated above, and because it was conducted by a group hired by the developer to put the best light on the current situation - for the developer's sake - and disregard or wash over stated/pollled concerns of homeowners in the area.

Simply put, we do not want our streets in the surrounding neighborhood congested even more with overflow vehicles from the Tualatin Heights apartment complex. It is less than tolerable now, and will be INSUFFERABLE if this development is allowed to proceed without identifying additional parking space on the Tualatin Heights land itself.

I will attempt to rally other homeowners to fight this development - tooth and nail - if it continues to proceed as a rubber-stamped, preordained process without sufficiently addressing our concerns as homeowners in the area.

Tim G  
SW Tonopah Street

PS: I do not wish to hear back from any organization hired by the developer in response to this email. This is addressed to the city workers in the Tualatin Planning Commission.

January 9, 2022

Attention Keith Leonard:

Thank you for this opportunity to comment on the application to rezone Tualatin Heights Apartments at 9301 SW Sagert Street - to higher density. Let me start out by saying I fully support the City of Tualatin's Housing Needs Analysis (HNA) and this project's ability to help meet the city's housing needs. My concern is over traffic and public safety at the intersection of 93<sup>rd</sup> and Sagert. Below is my description of the problems and my suggested solutions. It's already a crowded intersection and a new housing development in the immediate vicinity will make it worse. And the added traffic from this apartment expansion proposal will make it far worse.

### **Background**

The proposal would add 116 units of additional multi-family housing on top of the current 220 units for a total of 336 units. Tualatin Heights is right across the street from the intersection of Sagert and 93<sup>rd</sup> (the street I live down). The area already experiences problems at the intersection of 93<sup>rd</sup> and Sagert and I've seen extremely high speeding 60+mph vehicles traveling north on 93<sup>rd</sup> as motorists try to take shortcut routes to avoid traffic that backs up on Avery street west of Boones Ferry road and similarly drivers trying to avoid backups on Boones Ferry, they'll exit on Sagert and take 93<sup>rd</sup> south.

### **Ditch and lack of sidewalk**

*Problem* – On the east side corner of 93<sup>rd</sup> and Sagert, there is a fairly deep ditch along 93<sup>rd</sup> with no sidewalk. When I'm traveling north on 93<sup>rd</sup> near the stop sign, I must be extra cautious around that area – especially if there is a westbound driver turning left onto 93<sup>rd</sup> from Sagert and they are cutting the corner just as I am arriving to the stop sign at Sagert. The only way I can avoid the vehicle cutting across my stop line is to quickly swerve toward the ditch at the last second.

*Proposed Solution* - Fill in the ditch and add a sidewalk similar to work recently completed on the west side of 93<sup>rd</sup>'s corner.

### **Parking on south side of Sagert near 93<sup>rd</sup>**

*Problem* - Drivers trying to turn right or left from 93<sup>rd</sup> have difficulty seeing traffic coming from either direction because vehicles are allowed to park too close to the corners on Sagert. It has recently been a bit better with improvements on the SW corner, but the SE corner sometimes has vehicles parked past the corner – protruding into 93<sup>rd</sup>. This forces drivers from 93<sup>rd</sup> to carefully inch out past the stop sign, keep looking both ways and slam their brakes if a car is suddenly coming.

*Proposed Solution* – Paint the Sagert curb yellow on the SE corner of Sagert and 93<sup>rd</sup> and disallow parking on Sagert near that corner.

### **Exiting vehicles from the apartment complex**

*Problem* - As if the aforementioned problems aren't enough for drivers to navigate near the stop sign on 93<sup>rd</sup> - as they attempt to turn left or right onto Sagert, they must also contend with trying to guess when and which way vehicles are turning as they exit Tualatin Heights from its two exits on either side of them. Currently a driver stopped at the 93<sup>rd</sup> and Sagert stop sign must take into account the possibility of vehicles coming at them from 4 different directions:

- 1) Eastbound Sagert drivers
- 2) Drivers in front of them exiting the west side driveway of Tualatin Heights
- 3) Drivers in front of them exiting the east side driveway of Tualatin Heights
- 4) Westbound Sagert drivers

As a driver stopped at the 93<sup>rd</sup> stop sign, I often have to guess what all these drivers are intending to do. Did they forget to turn their blinker on or off – are they are going to turn onto 93<sup>rd</sup> or will they keep going? Is the driver coming out of the west side driveway of Tualatin Heights crossing Sagert to get directly onto 93<sup>rd</sup> or will they turn right toward 92<sup>nd</sup> or left and drive in front of me on Sagert? By the time I'm done figuring it out, there's often another car coming.

*Several Proposed Solutions:*

- Make the stop signs normal-sized for traffic exiting Tualatin Heights.
- It has become a de facto 4-way intersection at 93<sup>rd</sup> and Sagert – with 93<sup>rd</sup> practically in line with the west side drive way of Tualatin Heights. So the city should make it official by making it a true 4-way stop at that intersection. As part of added density construction at Tualatin Heights, require that the west side driveway align better with 93<sup>rd</sup> so it's more clearly a 4-way intersection.
- If the city does agree to make it an official 4-way stop, then remove the 3-way stop on Sagert at the Apache Dr intersection. Leave only 1 stop sign for Apache Dr. It is ridiculous that the city forces drivers on Sagert to stop at Apache Dr. I have lived in Tualatin for 15+ years and not once has there been a vehicle stopped at the Apache Dr stop sign while I am stopped going east or west on Sagert. Because of this, many people never come to a complete stop going east and west on Sagert - and many motorists just sort of coast through it because it's such a joke. The city should consider why it continues to have stop signs on Sagert there. I'm sure if the city used technology to measure simultaneous stops, it would learn it is unnecessary to continue stopping Sagert traffic at Apache Dr. There is far more traffic currently coming in and out of Tualatin Heights than Apache Dr. And after the higher density allowance there will be even great traffic coming in and out of the apartment complex.
- If the city chooses not to create an official 4-way stop at 93<sup>rd</sup> and Sagert, then:
  - Do not remove the 3-way stop at Apache Dr. because that at least helps slow down Sagert motorists to some degree.
  - Consider requiring Tualatin Heights exiting vehicles to only exit from the east side driveway. The east side could be for entering and exiting vehicles, but the west side driveway would be entrance only. From Sagert and 93<sup>rd</sup>, the driveway's signage should make it clear it is one way traffic so it's clear it is not an exit. The west side driveway is directly across from 93<sup>rd</sup> and that is what makes it a de facto 4-way stop. If the city won't make it official, then don't allow vehicles to enter onto Sagert from that driveway.

Thank you,

Gerry Preston

Resident within 1,000 feet of increased density project

**From:** [corsage.vogues\\_01@icloud.com](mailto:corsage.vogues_01@icloud.com)  
**To:** [Nicole J. Morris](#)  
**Subject:** Tualatin Heights Apartment City Council Meeting  
**Date:** Monday, January 24, 2022 3:29:21 PM

---

Hello!

I am so glad that my neighbor found your information via the Internet as your contact information was not included in the flyer sent out to our complex!

This expansion of Tualatin Heights seems to be one that was hastily drawn and not thought about when it comes to residents of both the complex, in addition to the residents of Sagert and 53rd. I highly suggest that this be rethought. We are one of the only green spaces in any of the complexes and it has been nice having space. I don't actually understand why two new three-story buildings need to be erected and in such awful placements. I feel sorry for the residents of Sagert who will have to look at these eyesores.

Not to mention, none of the residents signing these leases agreed to losing the garage spaces in favor of some parking which will still not help our current parking headache. Please don't approve this!

**From:** [corsage.vogues\\_0l@icloud.com](mailto:corsage.vogues_0l@icloud.com)  
**To:** [Nicole J. Morris](#)  
**Subject:** PMA 21-0001 Tualatin Heights Apartments  
**Date:** Monday, January 24, 2022 3:21:49 PM

---

To whom it may concern,

We received a letter a week ago about the planned updates to the Tualatin Heights complex. On the letter we given the person to contact to write comments/concerns however it was very interesting to see that no contact information was included. I had to look up this information myself.

I am an extremely concerned resident as the complex and its officials already cannot manage the amount of residents it currently houses yet is looking to expand further? During covid times, they expected the entire apartment community to crowd into one of their two pools and refused to open another yet considered this to be best practice? The parking is atrocious as it stands and nothing is monitored even though it is a "permit only" complex. Guests have to park on the street as the maybe 10 guest spots for the \*entire\* complex are taken always thus crowding the residential parking. This just seems like an excessive venture to add more units. In addition, residents of 53rd are concerned about the traffic as it stand...yet UDR wants to add more traffic? This does not seem to be well thought out, the opposite in fact.

Concerned Resident

## Keith Leonard

---

**From:** Lindsay Marshall <ljmarshall07@gmail.com>  
**Sent:** Monday, January 24, 2022 4:34 PM  
**To:** Nicole J. Morris  
**Subject:** Fwd: Tualatin Heights Apartments Public Hearing 1.24.2022

Council –

I am writing in response to the following January 24, 2022 meeting agenda item:

*Consideration of Approval of a Plan Map Amendment (PMA-21-0001) and Adoption of Ordinance No. 1464-22 to Rezone the Tualatin Heights Apartments Site Located at 9301 SW Sagert Street (Tax Map 2S123DC, Tax Lot 600) from the Medium Low Residential (RML) Zoning District to the Medium High Density Residential (RMH) Zoning District*

I am a Tualatin resident whose home is within 1,000 feet of the Tualatin Heights Apartments.

However, my concern is not with the rezoning of the district – I believe that creating relatively affordable attached single-family housing and multi-family housing should be a priority of the City.

### Concern:

My concern focuses on the parking calculations (as provided by the parking study provided by Angelo Planning Group), which will undoubtedly impact both residents of Tualatin Heights Apartments and neighboring residents (SW Sagert, SW 93rd and streets off of SW 93<sup>rd</sup>, and SW Apache and streets off of SW Apache).

1. Currently, Tualatin Heights Apartments allows one parking space free of charge per each dwelling unit, additional parking for \$25/month. If Tualatin Heights Apartments are considered to be “affordable” housing, residents may not be able to spare the extra \$300/year for an extra parking space. Therefore, they may (and many do) choose to park along the streets of nearby residential neighborhoods. This reduces parking for the residential neighborhoods, who then cannot find parking close to their homes.
2. If Tualatin Heights Apartments are considered “affordable” housing, they should be affordable in all ways. In the proposal, Angelo Planning Group cites the HNA’s demographic trends in “relatively affordable housing”:



- The key demographic trends that will affect Tualatin’s future housing needs are: (1) Baby Boomers 2) Millennials, and 3) Growth in the number of Latinx households, which are more likely to be larger than average, with more children and possibly with multigenerational households. (Source: 2019 HNA)
  - Considering these demographics (households with aging members and households with multiple drivers and potentially small children), parking close to the home would be of extra importance.
3. The parking study provided by Angelo Planning Group and Kittelsen and Associates found:
    - Peak apartment complex parking utilization was 79% during a mid-weekday and 81% on a Saturday, but segments of SW Sagert Street (between SW 95th Ave and SW 93rd Ave) experience parking occupancy levels at 100% or close to 100% for most study hours.
    - However – these numbers do not delineate between the type of parking spaces available in the complex (assigned with unit, extra cost, or guest). What was the utilization percentage of those parking spaces that come with the each unit (1 per unit)? Comparatively, what was the utilization rate of those spaces that are technically available, but only for an extra monthly charge? It may very well be that the 1 space per unit parking was 100% full, but additional charge parking was relatively empty, which can skew the overall final usage percentage.
    - If residents are not able to pay for extra parking space, utilizing free on-street parking on neighboring streets makes sense (and happens).
  4. At the Neighborhood/Developer Meeting that was held in June 2021, parking was a major concern from apartment residents and neighbors. Given that parking is already an essential issue with the number of current units, the proposal to add more units should focus very specifically on working to address these concerns – rather than saying that everything is adequate according to numbers. Simply because the numbers on the page say something, actual lived experiences from residents and neighbors often tell a vastly different story – one that should be a high priority to address in terms of quality of life.
  5. The proposal shows that there are nine (9) bus stops located within a quarter mile from the site. It can take approximately 6-10 minutes to walk – longer if people have mobility issues, when carrying heavy loads, or with small children. These bus stops are across and along major intersections (Boones Ferry and Tualatin Sherwood Road), which may not feel safe or easily accessible. A bus stop along Sagert St should be considered, as having a bus stop within 100-500 feet of the apartments would drastically increase the usage of public transportation and perhaps help to alleviate the need for vehicle parking for some residents of the apartments (as well as residents of the surrounding neighborhoods).
  6. The proposal cites Title 12 – Protection of Residential Neighborhoods protects existing residential neighborhoods from pollution, noise, crime, and provides adequate levels of public services and reports that it has been addressed. Extra parking nearby neighboring homes could result in increased pollution from additional cars starting and idling in front of homes.

7. Tualatin is a suburban city. While public transportation is available, we are still very much vehicle based. Residents – anywhere in the City – should have access to reliable and close by parking, regardless of income.

Thank you for your consideration. To reiterate, affordable housing should be a major priority for the city – but the livability of that housing should be a key component of that process.

L.M - Resident of Tonopah St

----- Original Message -----

From: Tim G <[hadasaugh@comcast.net](mailto:hadasaugh@comcast.net)>

To: Keith Leonard <[kleonard@tualatin.gov](mailto:kleonard@tualatin.gov)>

Date: 02/03/2022 7:34 PM

Subject: PMA21-0001 additional input prior to 14 February 2022 meeting

Dear Tualatin Planning Commission:

Thank you for delaying the vote on the PMA21-0001 development proposal of Tualatin Heights at 9301 SW Sagert. There is much more to address about the parking issue overflowing onto the surrounding streets that has not been adequately addressed by the developer and/or representative for the owner of that complex.

First, it must be made clear that parking within the Tualatin Heights complex is fee-based when the owner representatives are discussing unoccupied parking spaces presently on their lot. I don't believe that was adequately conveyed during the last meeting when it was stated that something like 20% parking remains available. That 20% parking likely represents individuals who do not want to pay for parking and for units that are presently unoccupied. Full disclosure of facts needs to be conveyed by all parties, instead of cherry-picking details.

Second, I have attached photos that show common areas where tenant vehicles from Tualatin Heights park on both SW 93rd and SW Sagert (I've witnessed individuals walking to and from those cars from the Tualatin Heights complex). I've also attached a photo of "creative" homeowner solutions to keep their curbs clear of congestion on both SW 93rd and SW Sagert, by spreading out their garbage containers and leaving them on the street permanently. Last year, one homeowner left large branches on the street and curb in front of his house for over three months to ensure there was parking for his family and friends. This shouldn't be necessary, but this is what is happening now, and has been happening for the past year or more. All photos were taken on Sunday, 30 January 2022, mid-morning.

Third. Referring to the planning documents, it is still quite obvious that there will not be enough parking to accommodate the proposed new buildings. Count the spaces and compare them to the new units. There is a clear deficiency. And this deficiency does not factor in tenants with multiple vehicles and overflow parking for THEIR guests.

Fourth. If this proposal is approved, there will need to be consideration for overflow parking during construction as well. This, to my knowledge, has yet to be discussed. That overflow parking should not burden the surrounding neighborhood; it should be a burden placed on the owner and his representatives to resolve and to provide adequate alternative solutions for their tenants.

Fifth and final. It is my belief that an independent parking survey and study should be conducted which not only addresses congestion of Tualatin Heights tenants parking on our streets, but also addresses shortfalls within the Tualatin Heights complex itself, and looks for solutions to address it inside the

borders of their property - and not on our streets (i.e., underground parking beneath the proposed large apartment building, or clearing of additional areas to free up more space on their lot).

If nothing is done to address the parking issue now, it will become a major problem in the future if this development is approved as is presently outlined and planned.

Sincerely and respectfully,

Tim G

SW Tonopah Street

(photo attachments)



"Creative measures" by homeowners on SW 93rd and SW Sagert to ensure parking is available for family and guest at their homes. Sunday, 30 January 2022



Cars on SW 93rd on Sunday, 30 Jan 2022. This is a common area where residents from Tualatin Heights park (personally witnessed)



Cars from Tualatin Heights along SW Sagert at the corner of SW Apache on Sunday, 30 January 2022. SW Sagert, SW Apache and SW 93rd presently receive the bulk of the congested parking (regardless of the "study" provided).









## NOTICE OF PUBLIC HEARING AND OPPORTUNITY TO COMMENT CITY OF TUALATIN, OREGON

NOTICE IS HEREBY GIVEN that a public hearing before the **City Council** will be held:

**Monday, January 24, 2022**

**5:00 pm**

**Juanita Pohl Center  
8513 SW Tualatin Road  
Tualatin, OR 97062**

**Type IV-A Quasi-Judicial Procedure, PMA21-0001, Tualatin Heights Apartments Plan Map Amendment (PMA)**

**The property is located at: 9301 SW Sagerf Street,  
Tax Lot #2S123DC-00600**

**Comments and questions can be submitted to:**

**Planning Division  
Attn: Keith Leonard  
City of Tualatin  
18880 SW Martinazzi Avenue  
Tualatin, OR 97062-7092  
503-691-3029**

- **Project Description:** Request to rezone property located at 9301 SW Sagerf Street from Residential Medium-Low Density Residential (RML) zone to Medium-High Density Residential (RMH) zone. If the PMA is approved, the proposal would increase the allowable development density of 10 dwelling units per acre to 15 dwelling units per acre.
- **Criteria:** Applicable Oregon Statewide Planning Goals; Oregon Administrative Rules Chapter 660 Division 9 and 12; Metro Urban Growth Management Functional Plan Chapter 3.07; and Tualatin Development Code Sections 32.240 and 33.070.

- **Print copies of the application:** all documents and evidence relied upon by the applicant and applicable criteria are available for inspection at no cost and copies will be provided at a reasonable cost.

- **Staff report:** A copy of the staff report, and supporting documents will be available for inspection at no cost at least seven days prior to



the hearing and will be provided at reasonable cost at the Tualatin Planning Division.

- **Individuals wishing to comment** may do so in writing to the Planning Division prior to the hearing and/or present written and/or verbal testimony to the City Council at the hearing. Hearings begin with a staff presentation, followed by testimony by proponents, testimony by opponents, and rebuttal. The time of individual testimony may be limited. If a participant requests, before the hear-



City of Tualatin  
18880 SW Martinazzi Ave  
Tualatin, OR 97062

- ing is closed, the record shall remain open for at least 7 days after the hearing.
- Failure of an issue to be raised in the hearing, in person, or by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals (LUBA) based on that issue. The failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to the decision maker to respond to the issue precludes an action for damages in circuit court.

You received this mailing because you own property within 1,000 feet (ft) of the site or within a residential subdivision which is partly within 1,000 ft.

To view the application materials visit [www.tualatinoregon.gov/projects](http://www.tualatinoregon.gov/projects).

**For additional information contact:**

Keith Leonard, 503-691-3029

TLID	OWNER1
2S123D002400	ZIAN LP
2S124CC90982	ZHU HE
2S124CC91131	WOOTEN SHAWN
2S124CC91031	WOOLFE JANIE L
2S126AB05400	WOLFE CHRISTIAN B & WOLFE KRISTIN
2S126AB01600	WISBEY KEITH E & WISBEY TRACEY R
2S124CC91102	WINTERS TERRY M
2S124CC90841	WILSON BYRON
2S126AB13100	WILSON NICHOLAS & CHERNOBELSKY ELANA
2S126AB05600	WILLMING CHARLES O & WILLMING VERNELLE D
2S126AB09500	WILLIAMS GREGORY J & WILLIAMS STEPHANIE A
2S123DD02400	WILLAMETTE GRAYSTONE LLC
2S126AA09300	WHITNEY MICHAEL ALAN
2S124CC90161	WHITEMAN BETTY J
2S124CC90851	WHITE SUZANNE B LIVING TRUST
2S126AA00900	WHEELER CANDI
2S126AB00801	WHEATCROFT PAUL R & WHEATCROFT AMY L
2S123DD04200	WEST THOMAS B JR & WEST AMY R
2S124CC91042	WEST TREVOR M
2S123CA00700	WENZEL GENE SCOTT & VICKI SANDRA REV LIV TRUST
2S124CC90951	WENDT GLADYS T LIVING TRUST
2S126AB08900	WELLONS LAURA
2S126AB06600	WELLER LINDA
2S123DC00300	WATUMULL PROPERTIES CORP
2S126AB07900	WATROBA MICHAEL P & CUMMINGS CAROL A
2S123DC00900	WASHINGTON COUNTY FACILITIES MGMT
2S124CC90171	WARNEKE SPENCER
2S124CC90531	VONTUNGEIN RITA K
2S124CC90011	VITERITTI TRACY A
2S126AB09800	VETTER LEA ANN & VETTER CRAIG B
2S124CC90221	VENTI KATHERINE M
2S124CC91291	VALENTIN RODOLFO
2S126AB05800	UNDERHILL LYNN
2S126AB12000	TWEDT JAMES R & TWEDT PEGGY A
2S126AA09400	TUTTLE STEPHEN R & LEHMAN BARBARA L
2S124CC90401	TUCKER SHERRY D
2S123CA01200	TUALATIN INDUSTRIAL INVESTORS LLC
2S123CA90000	TUALATIN-SHERWOOD INDUSTRIAL CONDO HOA
2S123CD01000	TUALATIN LLC
2S123DA01500	TUALATIN SHERWOOD LLC
2S123DB00300	TUALATIN VALLEY FIRE & RESCUE
2S123DD00501	TUALATIN LTC PROPERTIES II LLC
2S124CC90000	TUALATIN VILLAGE CONDO PH II OWNERS OF UNITS
2S123D002200	T-S 90 LLC
2S124CC90831	TRYSIL MAYA & FLANAGAN CHRISTOPHER
2S126AB01300	TRUONG LUU NGOC & TRUONG KHANH NGOC & TRUONG BAO NGOC ET AL
2S126AB07800	TRAPP CHET D & TRAPP DAWN K
2S123DC90010	TRACY LAUREN MARIE & HENKLE PETER ANDREW
2S126AB13200	TOSUNTIKOOL NEIL & DIAZ DANIELA
2S124CC00300	TODD VILLAGE-285 LLC
2S123DC00451	TLF LOGISTICS II TUALATIN CORPORATE CENTER LLC
2S123CD00800	TINWOOD LLC
2S126BA00102	TIGARD-TUALATIN SCHOOL DISTRICT #23J
2S123DA01701	THREE LITTLE BEARS LLC
2S126AA08700	THORSON ERIC R & THORSON JEAN M
2S123CD00900	THOLE PROPERTIES LLC
2S123DA00800	TGOC LLC
2S124CC91251	TEWINPAGTI ITTI
2S126AB05200	TEUTSCH HOLLY B
2S124CC90341	TEEL SHELLEY A
2S124CC91171	TAFUA COLETTE L

## Exhibit D.

OWNERADDR	OWNERCITY	OWNERSTATE	OWNERZIP
6712 N CUTTER CIR	PORTLAND	OR	97217
8320 SW MOHAWK ST	TUALATIN	OR	97062
8310 SW MOHAWK ST	TUALATIN	OR	97062
8330 SW MOHAWK ST	TUALATIN	OR	97062
9236 SW CREE CIR	TUALATIN	OR	97062
9150 SW APACHE DR	TUALATIN	OR	97062
8304 SW MOHAWK ST	TUALATIN	OR	97062
8370 SW MOHAWK ST	TUALATIN	OR	97062
20254 SW 93RD AVE	TUALATIN	OR	97062
1125 MCGEE CT NE APT 251	KEIZER	OR	97303
9350 SW UMIAT ST	TUALATIN	OR	97062
3490 PIEDMONT RD NE STE 1300	ATLANTA	GA	30305
20285 SW COMANCHE TER	TUALATIN	OR	97062
5185 CARMAN DR	LAKE OSWEGO	OR	97035
8368 SW MOHAWK ST	TUALATIN	OR	97062
20310 SW BOONES FERRY RD	TUALATIN	OR	97062
20230 SW 93RD AVE	TUALATIN	OR	97062
8678 SW LOGAN LN	TUALATIN	OR	97062
8332 SW MOHAWK ST	TUALATIN	OR	97062
11520 SW GRABHORN RD	BEAVERTON	OR	97007
8336 SW MOHAWK ST	TUALATIN	OR	97062
9369 SW UMIAT ST	TUALATIN	OR	97062
9250 SW APACHE DR	TUALATIN	OR	97062
307 LEWERS ST FL 6	HONOLULU	HI	96815
9101 SW RARITAN CT	TUALATIN	OR	97062
169 N 1ST AVE #42	HILLSBORO	OR	97124
8456 SW MOHAWK ST	TUALATIN	OR	97062
8448 SW MOHAWK ST	TUALATIN	OR	97062
8344 SW MOHAWK ST	TUALATIN	OR	97062
20267 SW 93RD AVE	TUALATIN	OR	97062
8486 SW MOHAWK ST	TUALATIN	OR	97062
3809 NE 73RD AVE	PORTLAND	OR	97213
9220 SW CREE CIR	TUALATIN	OR	97062
20244 SW 93RD AVE	TUALATIN	OR	97062
20275 SW COMANCHE TER	TUALATIN	OR	97062
8522 SW MOHAWK ST	TUALATIN	OR	97062
1211 SW 5TH AVE STE 2185	PORTLAND	OR	97204
		OR	00000
688 6TH ST	LAKE OSWEGO	OR	97035
5611 NE COLUMBIA BLVD	PORTLAND	OR	97218
11945 SW 70TH AVE	TIGARD	OR	97223
4560 SE INTERNATIONAL WAY #100	MILWAUKIE	OR	97222
		OR	00000
1508 DIVISION ST #15	OREGON CITY	OR	97045
8372 SW MOHAWK ST	TUALATIN	OR	97062
9200 SW APACHE DR	TUALATIN	OR	97062
9063 SW RARITAN CT	TUALATIN	OR	97062
9089 SW SAGERT ST	TUALATIN	OR	97062
20258 SW 93RD AVE	TUALATIN	OR	97062
9500 SW BARBUR BLVD STE 300	PORTLAND	OR	97219
851 SW 6TH AVE STE 1200	PORTLAND	OR	97204
19749 SW CHAPMAN RD	SHERWOOD	OR	97140
6960 SW SANDBURG ST	TIGARD	OR	97223
8620 SW MIAMI ST	WILSONVILLE	OR	97070
20320 SW COMANCHE TER	TUALATIN	OR	97062
25070 N GRAHAM RD	AURORA	OR	97002
PO BOX 2237	TUALATIN	OR	97062
1220 SW 3RD AVE RM 1616	PORTLAND	OR	97204
9242 SW CREE CIR	TUALATIN	OR	97062
8510 SW MOHAWK ST	TUALATIN	OR	97062
8274 SW MOHAWK ST	TUALATIN	OR	97062

2S123DA01300 SWT LLC  
2S124CC90961 SWANSON LEGACY IRREV TRUST  
2S126AB08100 STRIPLING PERRY L & STRIPLING JANICE L  
2S126AB00701 STONE JONATHAN & STONE MARLENE  
2S124CC91322 STELL THOMAS C & STELL DAWN R  
2S123CD01200 STEIN TUALATIN LLC  
2S126BA00600 STE200 LLC  
2S124CC90741 STARK MYLON K  
2S124CC91311 STANLEY MATTHEW E  
2S126AB09600 SPEERS KAREN K  
2S123DD02800 SOLTERO ALFONSO & SANCHEZ FRANCISCO SOLTERO  
2S126AB11800 SNOWBERGER MICHAEL & SNOWBERGER MELISSA  
2S124CC90731 SNELL SUSAN E  
2S126AB14100 SMITHERS CRYSTAL & TIMSON ANTHONY  
2S126AA01000 SKOGLUND DAVID K  
2S126AB06700 SKILES FRANKLIN W  
2S123DD00700 SIMPSON SHELLEY  
2S126AB13700 SCHOENHEIT DIANE M  
2S126AB12400 SCHERMAN MICHAEL & SCHERMAN ASHLEY  
2S124CC90881 SCHEER HILARY JANAYE  
2S126AB06400 SAUER JOHN C & SAUER LOELIA ANN  
2S126AA09800 SANTMYER ROSE MARIE  
2S124CC91122 SANTA GYORGYI  
2S126AB05500 SALGADO MICHAEL EARL & SALGADO BRITTANY ANN  
2S126AB04500 SAGERT GROVE LLC  
2S123DC01200 SADLER GERALD H & SADLER REBEKAH E  
2S126AA08800 RUSSELL JAMES L & RUSSELL MARILYN & CADY TINA LYNN  
2S126AA00800 RULE BRADLEY I & RULE LORINDA M  
2S126AB12300 ROWE DANIEL L  
2S126AA08500 RHODES BRADLEY E & RHODES ELAINE D  
2S124CC90721 REID MICHAEL ALLEN & REID KRISTI R  
2S123DC90000 REBECCA WOODS CONDO UNIT OWNERS  
2S126AB11500 RAMIREZ MINERVA & RAMIREZ JUAN MIGUEL  
2S123DA00700 RALF LEOPOLD INVESTMENTS LLC  
2S124CC90821 RADANOVIC DIANNE M  
2S126AA01100 R&B PROPERTIES TUALATIN LLC  
2S124CC90591 PRESTON WILLIAM M & WOOD CLINTON A  
2S126AB14200 PRESTON GERALD & PRESTON AMY  
2S124CC91142 PRESLEY TIMOTHY RYAN & PRESLEY TEMARA ELIZABETH  
2S124CC91202 PRESLEY TIM R & PRESLEY TEMARA E  
2S124CC90141 POOLE KIMBELRY K  
2S126AB04200 PLAGMAN PROPERTIES LLC  
2S123DD00900 PLAGGMIER JOHN R JR TRUST  
2S123DD01700 PINTOS ROBERTO B  
2S123DA02200 PIETKA PROPERTIES LLC  
2S123DD03900 PETERSON PAUL M & PETERSON CASSANDRA D  
2S124CC91091 PETERSON MARTHA K  
2S123DD03700 PEREZ LUIS G & PEREZ LUCINA M  
2S123DD04300 PATEL SAAJAN & VYAS HANSINI  
2S124CC91231 PATEL REV TRUST  
2S126AB01800 PATELZICK DANA L & PATELZICK ROSALIE  
2S126AB02300 PARK MIRAN  
2S126AB04400 PARENT JOHN O & PARENT STACEY L  
2S123DD03500 PACKARD LIVING TRUST  
2S123DB00100 PACIFIC NW PROPERTIES LP  
2S123DB00600 PACIFIC WEST CONSTRUCTION INC  
2S124CC91071 OUSTERHOUT SALLY M & OUSTERHOUT GERALD C  
2S123DA01000 OSWEGO WEST LLC  
2S124CC90891 OSMOSYS LLC  
2S124CC90110 OSBORNE JUDITH E  
2S126AB05700 OSBORN CHRISTIANNE  
2S124CC90761 ORSBURN ANITA J & GARRIETY SUSAN J

2233 NW 23RD AVE	PORTLAND	OR	97210
8334 SW MOWHAWK ST	TUALATIN	OR	97062
9177 SW RARITAN CT	TUALATIN	OR	97062
9260 SW SAGERT ST	TUALATIN	OR	97062
8280 SW MOHAWK ST	TUALATIN	OR	97062
13001 CLACKAMAS RIVER DR STE 200	OREGON CITY	OR	97045
20215 SW 95TH AVE	TUALATIN	OR	97062
8384 SW MOHAWK ST	TUALATIN	OR	97062
8278 SW MOHAWK ST	TUALATIN	OR	97062
9334 UMIAT CT	TUALATIN	OR	97062
19760 SW BOONES FERRY RD	TUALATIN	OR	97062
20236 SW 93RD AVE	TUALATIN	OR	97062
20487 SW 69TH AVE	TUALATIN	OR	97062
9255 SW SAPONI LN	TUALATIN	OR	97062
PO BOX 642	TUALATIN	OR	97062
9260 SW APACHE DR	TUALATIN	OR	97062
PO BOX 824	TUALATIN	OR	97062
20365 SW 93RD AVE	TUALATIN	OR	97062
9360 SW SAGERT ST	TUALATIN	OR	97062
8354 SW MOHAWK ST	TUALATIN	OR	97062
9230 SW APACHE DR	TUALATIN	OR	97062
20190 SW BOONES FERRY RD	TUALATIN	OR	97062
4214 WOODSIDE CIR	LAKE OSWEGO	OR	97035
9232 SW CREE CIR	TUALATIN	OR	97062
12670 SW 68TH AVE STE 400	TIGARD	OR	97223
9035 SW SAGERT ST	TUALATIN	OR	97062
20350 SW COMANCHE TER	TUALATIN	OR	97062
20340 SW BOONES FERRY RD	TUALATIN	OR	97062
9380 SW SAGERT ST	TUALATIN	OR	97062
20300 SW COMANCHE TER	TUALATIN	OR	97062
8398 SW MOHAWK ST	TUALATIN	OR	97062
		OR	00000
6300 W LONE MOUNTAIN RD	LAS VEGAS	NV	89130
19460 SW 89TH AVE	TUALATIN	OR	97062
8374 SW MOHAWK ST	TUALATIN	OR	97062
20495 SW BOONES FERRY RD	TUALATIN	OR	97062
20300 SW NANCY LN	BEAVERTON	OR	97007
PO BOX 8075	PORTLAND	OR	97207
10335 SW HOODVIEW DR	TIGARD	OR	97224
10335 SW HOODVIEW DR	TIGARD	OR	97224
8442 SW MOHAWK ST	TUALATIN	OR	97062
20105 SW 93RD AVE	TUALATIN	OR	97062
19740 SW BOONES FERRY RD	TUALATN	OR	97062
8735 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 1696	BEAVERTON	OR	97075
8609 SW LOGAN LN	TUALATIN	OR	97062
8302 SW MOHAWK ST	TUALATIN	OR	97062
8667 SW LOGAN LN	TUALATIN	OR	97062
8700 SW LOGAN LN	TUALATIN	OR	97062
28916 LA CARRETERA	LAGUNA NIGUEL	CA	92677
23096 S BLAND CIR	WEST LINN	OR	97068
9155 SW APACHE DR	TUALATIN	OR	97062
9400 SW SAGERT ST	TUALATIN	OR	97062
8675 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 2206	BEAVERTON	OR	97075
PO BOX 219	HUBBARD	OR	97032
5167 METOLIUS AVE SE	SALEM	OR	97306
15938 QUARRY RD STE B-6	LAKE OSWEGO	OR	97035
7415 SW 37TH AVE	PORTLAND	OR	97219
8428 SW MOHAWK ST	TUALATIN	OR	97062
9224 SW CREE CIR	TUALATIN	OR	97062
8388 SW MOHAWK ST	TUALATIN	OR	97062

## Exhibit G.

2S126AB05100 O'RILEY KEVIN & O'RILEY WENDY  
 1S135CB00800 OREGON STATE OF DEPT OF TRANSPORTATION  
 2S124CC90252 NIELSON CRYSTAL DAWN  
 2S124CC90871 NIELSON DARCY  
 2S123DC90007 NETTER RON & DAY-NETTER ROSEMARY  
 2S126AB07500 NERO CHARLES & NERO VICTORIA  
 2S126AB10200 MURRAY CHERIE R  
 2S124CC90432 MURPHY BYRON K & WIKSTROM SAMANTHA A  
 2S126AA01700 MUNOZ ZAIDA & MUNOZ CLAUDIA  
 2S124CC91282 MUILENBURG SCOTT E & MUILENBURG MARILYN  
 2S124CB03400 MUELLER KURT & IVERSON LAURA  
 2S126AB06000 MUELLER RONALD B  
 2S123DC01000 MOYER HAROLD & MOYER SHANNON  
 2S124CC90352 MOTA MIGUEL JAQUIZ  
 2S123DC90002 MORRIS CRESLYNN S  
 2S124CC90481 MORGAN MICHAEL  
 2S124CC91242 MORGAN JAY C & MORGAN AIKO  
 2S126AB12700 MORAN DAVID K  
 2S126AB05000 MORALES LUIS & MORALES NATASHA  
 2S126AB07600 MOMARLS LLC  
 2S124CC90241 MITSVOTAI MELANIE E  
 2S126AB14800 MISSION WOODS OWNERS OF LOTS 1-6 8  
 2S126AB02200 MIRANDA RODNEY QUEMA  
 2S124CC90601 MILLS SANDRA M  
 2S126AA09500 MILLS MICHAEL C & MILLS BEVERLY  
 2S126AB00800 MILLS MELANIE FRANCES  
 2S124CC90321 MILLER DAVID JOHN  
 2S124CC90512 MILLER SANDRA K & HOLT TROY M  
 2S126AA08300 MILLER DIANE M LIV TRUST  
 2S126AB12500 MILLER MICHAEL S  
 2S124CC90021 MERRIMAN KEVIN LEE  
 2S124CC90811 MERCADO GUILLERMINA  
 2S124CC90631 MELLAND MICHELE M  
 2S124CC90452 MCSWAIN DAVID CORNELL II  
 2S123DC00200 MCLELLAN ESTATE CO  
 2S126AB07100 MCGINTY JEFFREY M  
 2S124CC90571 MCGEORGE JO ANN REV TRUST  
 2S126AB08200 MCCLELLAN MICHELLE K & LUNDGREN MARTIN K  
 2S124CC90381 MCCLANAHAN MATTHEW E  
 2S124CC91211 MCCAUSLAND MAUREEN E  
 2S126AB10000 MAYERNIK ANTHONY K  
 2S126AB12100 MARTIN SHARI R  
 2S123DA01700 MARSH JEFFREY O JR & KING JOHN J  
 2S126AB07300 MARSH CHRISTOPHER L REV TRUST  
 2S126AB06500 MARKS RACHEL L  
 2S123DC01100 MARCH TREVOR C & MARCH JEANINE M  
 2S126AB01500 MANLEY MATTHEW A & MCKINNEY GINA M  
 2S124CC90031 MALOS NORINE E  
 2S126AB02000 MALHI RAMANDEEP K  
 2S126AB02500 MALHI GAGANDEEP  
 2S126AB09000 LUDWICK STEPHEN J TRUST  
 2S126AA09100 LOVELAND GREGORY & LOVELAND HEATHER  
 2S126AB11000 LOPEZ JEFFREY G & LOPEZ CINDY L  
 2S123DD04400 LOGAN HOUSE ESTATES HOA  
 2S124CC90751 LOCKHART JANET L  
 2S126AA01600 LIVING SAVIOR LUTHERAN CHURCH  
 2S126AA02100 LITTLE RUSSELL D & LITTLE DIANA M  
 2S123DC90001 LINKER MARY ELIZABETH & YBARRA HENRY R  
 2S126AB07000 LINDLEY JUSTIN  
 2S124CC90232 LINDHOLM BRENT M & LINDHOLM TIFFANY R  
 2S124CC90120 LEWIS SANDRA  
 2S126AB10400 LEININGER MATT & LEININGER SZU YU



9244 SW CREE CIR	TUALATIN	OR	97062
4040 FAIRVIEW INDUSTRIAL DR SE MS #2	SALEM	OR	97302
8492 SW MOHAWK ST	TUALATIN	OR	97062
8352 SW MOHAWK ST	TUALATIN	OR	97062
9083 SW SAGERT ST	TUALATIN	OR	97062
9211 SW CREE CIR	TUALATIN	OR	97062
9337 SW TONOPAH ST	TUALATIN	OR	97062
601 QUAIL DR	NEWBERG	OR	97132
20085 SW BOONES FERRY RD	TUALATIN	OR	97062
1619 SE 176TH AVE	PORTLAND	OR	97223
16850 SW UPPER BOONES FERRY RD STE A	TIGARD	OR	97224
9212 SW CREE CIR	TUALATIN	OR	97062
9055 SW SAGERT ST	TUALATIN	OR	97062
8512 SW MOHAWK ST	TUALATIN	OR	97062
9063 SW SAGERT ST	TUALATIN	OR	97062
8462 SW MOHAWK ST	TUALATIN	OR	97062
8264 SW MOHAWK ST	TUALATIN	OR	97062
9280 SW APACHE DR	TUALATIN	OR	97062
9248 SW CREE CIR	TUALATIN	OR	97062
8525 SW 165TH AVE	BEAVERTON	OR	97007
8490 SW MOHAWK ST	TUALATIN	OR	97062
		OR	00000
9030 SW APACHE DR	TUALATIN	OR	97062
8414 SW MOHAWK ST	TUALATIN	OR	97062
20255 SW COMANCHE TER	TUALATIN	OR	97062
20228 SW 93RD AVE	TUALATIN	OR	97062
8179 RAINIER LN N	MAPLE GROVE	OR	55311
8460 SW MOHAWK ST	TUALATIN	OR	97062
8770 SW COMANCHE WAY	TUALATIN	OR	97062
20055 SW 93RD AVE	TUALATIN	OR	97062
8346 SW MOHAWK ST	TUALATIN	OR	97062
8376 SW MOHAWK ST	TUALATIN	OR	97062
19165 SW 51ST AVE	TUALATIN	OR	97062
8472 SW MOHAWK ST	TUALATIN	OR	97062
707 OLD COUNTY RD	BELMONT	CA	94002
9255 SW CREE CIR	TUALATIN	OR	97062
8436 SW MOHAWK ST	TUALATIN	OR	97062
9180 SW RARITAN CT	TUALATIN	OR	97062
8518 SW MOHAWK ST	TUALATIN	OR	97062
8266 SW MOHAWK ST	TUALATIN	OR	97062
9329 SW TONOPAH ST	TUALATIN	OR	97062
20248 SW 93RD AVE	TUALATIN	OR	97062
8810 SW TUALATIN SHERWOOD RD	TUALATIN	OR	97062
17367 LAKE HAVEN DR	LAKE OSWEGO	OR	97035
9240 SW APACHE DR	TUALATIN	OR	97062
8685 SW WOLDS DR	BEAVERTON	OR	97007
9170 SW APACHE DR	TUALATIN	OR	97062
8348 SW MOHAWK ST	TUALATIN	OR	97062
9090 SW APACHE DR	TUALATIN	OR	97062
25083 SW QUARRYVIEW RD	WILSONVILLE	OR	97070
9385 SW UMIAT ST	TUALATIN	OR	97062
20345 SW COMANCHE TER	TUALATIN	OR	97062
9360 SW TONOPAH ST	TUALATIN	OR	97062
		OR	00000
8386 SW MOHAWK ST	TUALATIN	OR	97062
8740 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 1006	TUALATIN	OR	97062
9061 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 3052	TUALATIN	OR	97062
8488 SW MOHAWK ST	TUALATIN	OR	97062
1532 SUNLIGHT DR	FAIRBANKS	AK	99709
9347 SW TONOPAH ST	TUALATIN	OR	97062

2S124CC90272 LAZAR GABRIEL  
2S124CC90081 LARSON ROBERT F & LARSON ASHLEY N  
2S123DD00800 LARSEN MARIO K & LARSEN REBECCA L  
2S123DD01100 LARSEN DWAYNE L & LARSEN KAREN G ESTATE OF  
2S126AB13600 LANE DAVID R & LANE MARY L  
2S124CC90151 KRUSINSKI JANICE L  
2S123DC90004 KREBS TANA  
2S124CC90551 KRAUSE DERALD E  
2S126AA08200 KNAPP STACI R & KNAPP ERIK A  
2S124CC91051 KLUPENGER MORGAN WATKINS  
2S126AB09700 KLEINT JAKOB W & FAHLMAN ANNE E  
2S126AB13500 KINZER ZACHARY S  
2S123DD03600 KIMMER WILLIAM D & KIMMER PATSY A  
2S126AB12800 KIEL JAMES & KIEL PATRICIA A  
2S126AA02000 KELLY JEREMY & KELLY CECELIA  
2S124CC91002 KEEN ANNETTE M  
2S124CC91222 KAUFFMAN SHAWNA DAY  
2S126AA01902 KANE BENJAMIN B & KANE BROOKE M  
2S123D003900 KAISER FOUNDATION HEALTH PLAN OF THE NORTHWEST  
2S123CD00700 KAADY CHARLES  
2S123DA00900 JVTC EXPLORATIONS LLC  
2S124CC90392 JOHNSON SCOTT GLENN & JOHNSON SHELLEY L  
2S124CC90661 JOHNSON JAMIE A & DRAKE DAVID A  
2S126AB07400 JOHNSON GERALD A & JOHNSON BARBARA J  
2S126AB09200 JOHNSTON LISA  
2S126AB10100 JOHNSTON PATRICK D & JOHNSTON TAMMY L  
2S126AB10300 JOHNSON BRIAN R & JOHNSON MIECKE LARSON  
2S123DA00500 JKM PROPERTIES LLC  
2S126AB10900 JENKINS DEREK R & JENKINS SANDRA L  
2S124CC91271 JAMES TYLER & JAMES KELSEY  
2S124CC90781 JACKSON KRYSTAL L  
2S123DA01800 J C MOTORS OF TUALATIN LLC  
2S124CC90051 INGMAN SCOTT M  
2S124CC90041 HUTCHINS CALVIN & LARAYNE REV LIV TRUST  
2S126AB08000 HUDSON RONALD R  
2S123DD02900 HOUSTON BRENDA L  
2S124CC90711 HORN MARTHA JENEANE  
2S126AB02400 HOLLMANN GEORGE E  
2S126AB01900 HESS CRAIG & HESS REBECCA  
2S124CC90421 HERKOMER TAMMI  
2S126AB11700 HENDERSON RYAN J  
2S126AB12600 HENDERSON-BROWN CHERYL L  
2S126AB09300 HEINRICH ELEONORE ERNA REV TRUST  
2S124CC91162 HEBERT GERALD & HEBERT HUNG CHEN  
2S123DC90003 HAYES LISA L  
2S126AB05900 HAYES PAMELA JO  
2S124CC90611 HAVEN HOMES II LLC  
2S126AB10600 HANSEN SANDI J  
2S126AB14700 HANEY LINDSEY L  
2S124CC90212 HAMILTON MARY A  
2S126AB14400 HAM FAMILY TRUST  
2S126AB13800 HALLEY COURT OWNERS OF LOTS 1-5  
2S126AB07700 HALL CHANDA & HALL BRENT  
2S126AB00101 HAAS ROBERT E & MERRILY S REV TRUST  
2S124CC90911 GUTIERREZ DAVID & GUTIERREZ NORMA  
2S124CC90971 GUPTA SAMIR  
2S124CC90361 GUDEKUNST ELAINE  
2S124CC90100 GRUEN MARY M  
2S123DC90006 GRIMM ROSS M & GRIMM MELINDA L  
2S126AB00300 GREEAR CHAD M & GREEAR BETH  
2S126AA10100 GRAHAM ALBERTA  
2S126AA10200 GRAHAM ALBERTA

## Exhibit J.

1481 NW 13TH AVE APT 732	PORTLAND	OR	97209
14919 NE LAWNVIEW CIR	AURORA	OR	97002
19738 SW BOONES FERRY RD	TUALATIN	OR	97062
19770 SW BOONES FERRY RD	TUALATIN	OR	97062
3077 SE CAMWAL DR	HILLSBORO	OR	97123
8444 SW MOHAWK ST	TUALATIN	OR	97062
9073 SW SAGERT ST	TUALATIN	OR	97062
8452 SW MOHAWK ST	TUALATIN	OR	97062
8775 SW COMANCHE WAY	TUALATIN	OR	97062
8298 SW MOHAWK ST	TUALATIN	OR	97062
20243 SW 93RD AVE	TUALATIN	OR	97062
9350 SW GERTZ LN	TUALATIN	OR	97062
10344 SW BROADMOOR PL	TIGARD	OR	97223
9250 SW SAGERT ST	TUALATIN	OR	97062
20195 SW BOONES FERRY RD	TUALATIN	OR	97062
11970 SW HAZELWOOD LOOP	TIGARD	OR	97223
8268 SW MOHAWK ST	TUALATIN	OR	97062
8940 SW SAGERT ST	TUALATIN	OR	97062
500 NE MULTNOMAH ST	PORTLAND	OR	97232
2545 SW SPRING GARDEN ST #200	PORTLAND	OR	97219
19463 SW 89TH AVE	TUALATIN	OR	97062
8520 SW MOHAWK ST	TUALATIN	OR	97062
8408 SW MOHAWK ST	TUALATIN	OR	97062
9207 SW CREE CIR	TUALATIN	OR	97062
9397 SW UMIAT ST	TUALATIN	OR	97062
9331 SW TONOPAH ST	TUALATIN	OR	97062
9341 SW TONOPAH ST	TUALATIN	OR	97062
20135 S IMPALA LN	OREGON CITY	OR	97045
9366 SW TONOPAH ST	TUALATIN	OR	97062
21711 SW MARTINAZZI AVE	TUALATIN	OR	97062
8392 SW MOHAWK ST	TUALATIN	OR	97062
19401 SW MOHAVE CT	TUALATIN	OR	97062
8364 SW MOHAWK ST	TUALATIN	OR	97062
17547 N SOMERSET DR	SURPRISE	AZ	85374
16715 SW CAMBRIDGE DR	DURHAM	OR	97224
20532 SW 84TH CT	TUALATIN	OR	97062
8400 SW MOHAWK ST	TUALATIN	OR	97062
9105 SW APACHE DR	TUALATIN	OR	97062
9110 SW APACHE DR	TUALATIN	OR	97062
8474 SW MOHAWK ST	TUALATIN	OR	97062
20232 SW 93RD AVE	TUALATIN	OR	97062
9200 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 623	BEAVERTON	OR	97075
21885 NE ALTON ST	FAIRVIEW	OR	97024
9067 SW SAGERT ST	TUALATIN	OR	97062
9216 SW CREE CIR	TUALATIN	OR	97062
12424 SE WINTER CREEK CT	HAPPY VALLEY	OR	97086
9359 SW TONOPAH ST	TUALATIN	OR	97062
20340 SW 93RD AVE	TUALATIN	OR	97062
8484 SW MOHAWK ST	TUALATIN	OR	97062
9220 SW SAPONI LN	TUALATIN	OR	97062
		OR	00000
20385 SW BOONES FERRY RD	TUALATIN	OR	97062
20887 SW WILLAPA WAY	TUALATIN	OR	97062
8360 SW MOHAWK ST	TUALATIN	OR	97062
104 SOUTH ASPEN CT	CHANDLER	AZ	85226
8514 SW MOHAWK ST	TUALATIN	OR	97062
8426 SW MOHAWK ST	TUALATIN	OR	97062
9077 SW SAGERT ST	TUALATIN	OR	97062
9100 SW SAGERT ST	TUALATIN	OR	97062
8920 SW SAGERT ST	TUALATIN	OR	97062
8920 SW SAGERT ST	TUALATIN	OR	97062

2S126AB09900 GRADT TIMOTHY R  
2S124CC90641 GOLDSBY KATHLEEN M  
2S126AB00700 GOHEEN GORDON G & GOHEEN LAVILLE M  
2S124CC90941 GODARD JIMMY J & GODARD STA'CEE A  
2S126AB08500 GIZA BRYNN & GIZA JORDAN  
2S123DD04100 GEORGE AUGUSTINE & ROSE REV LIV TRUST  
2S126AB10500 GEORGE WINFRED & GEORGE NICHOLE MARIE  
2S126AB08800 GENSMAN MONTE  
2S126AB10700 GENSMAN MARK D  
2S126AB10800 GENSMAN MITCHELL E  
2S126AB11100 GENSMAN MONTE LEE  
2S126AA01300 GENDE DAVID PAUL III & GENDE ANGELA JOY  
2S124CC90671 GARRISON ROBERT A & GARRISON LORI L  
2S124CC90071 GARNER SYLVIA E  
2S126AB06300 GARIBAY BENJAMIN & GARIBAY EMILIA & VASQUEZ MARIBEL  
2S123DD90000 GARDEN COURT CONDO UNIT OWNERS  
2S124CC90681 GALLAGHER RONALD A & GALLAGHER KATIE L  
2S124CC90521 FURTNEY JOSEPH C  
2S123DD01400 FROST AARON R  
2S123DB00200 FRONTIER COMMUNICATIONS NORTHWEST INC  
2S124CC90701 FRANKS JONNIE A JR  
2S124CC91151 FLANNERY FAMILY TRUST  
2S126AB07200 FISHER CURTIS J  
2S126AB13000 FISHER RYAN D & FISHER CHRISTINA M  
2S126AB08600 FERRASCI-O'MALLEY KEVIN MICHAEL & FERRASCI-O'MALLEY KATHRYN C  
2S124CC90901 FEHLMAN STEVEN D & FEHLMAN MELISSA J  
2S124CC90561 FECHNER ROBERT J  
2S124CC90192 FARRELL DONALD L & FARRELL MARIETTA L  
2S124CC90651 FANTA CAROL C  
2S124CC90292 FAIRCHILD DENA  
2S124CC90441 FAGERQUIST AMBRE  
2S123DD00600 FABRYCKI HAL  
2S126AB06800 EVONUK MATTHEW  
2S123CD01100 EVANS FAMILY INVESTMENTS LLC  
2S126AB02600 EVANS RICK A  
2S126AB14300 EVANS BRIAN WAYNE & EVANS KELLE ANN  
2S123DD00400 ENVOY CHELAN LLC & REALVEST CHELAN LLC  
2S124CC90501 ELLIOTT RAYMOND  
2S124CC90281 EISERT CLARK L & EISERT STEPHANIE  
2S124CC91182 EISERT STEPHANIE  
2S126AB12900 EICHENBERGER MICHAEL G  
2S126AA01703 EDWARDS DONALD J  
2S126AB04800 EDGINGTON JAMES N & HIVALE VIDYA E  
2S126AA01801 EATON TYLER & EATON KATHRYN  
2S124CC91082 DUNNING ROWAN KATHERINE WALKER  
2S126AB05300 DRYDEN SERENA & JORDAN TRAVIS  
2S126AB00103 DOUVILLE THOMAS A  
2S126AA08400 DORAN PAUL ANTHONY  
2S126AB14600 DONNELLY JOHN & DONNELLY CAROL  
2S124CC90991 DONALDSON AMY L  
2S124CC90621 DOBBINS 1998 FAMILY TRUST  
2S126AA08600 DIRKSEN DOUGLAS & DIRKSEN MARY  
2S126AA01702 DINGMAN DELORES JEAN LIV TRUST  
2S123DD03800 DEVICH NICHOLAS FRANKLIN  
2S126AB00102 DESKINS DANIEL & DESKINS ASHLEY  
2S126AB06200 DENYSE CLINT  
2S126AB08700 DENIS PAUL  
2S124CC90372 DAVIS ROBERT M & DAVIS BARBARA K  
2S126AB14500 DAVIDSON FAMILY TRUST  
2S124CC90461 DALTON SHARON LYNN TR  
2S124CC90931 DALLAL CLAIRE Y  
2S123DD04000 DA YEE FAMILY TRUST

9323 SW TONOPAH ST	TUALATIN	OR	97062
8487 SW CHELAN CT	TUALATIN	OR	97062
285 HOLDER LN SE	SALEM	OR	97306
16745 SW STELLAR DR	SHERWOOD	OR	97140
9072 SW RARITAN CT	TUALATIN	OR	97062
8652 SW LOGAN LN	TUALATIN	OR	97062
9351 SW TONOPAH ST	TUALATIN	OR	97062
9352 SW TONOPAH ST	TUALATIN	OR	97062
PO BOX 1903	TUALATIN	OR	97062
PO BOX 1626	SHERWOOD	OR	97140
9352 SW TONOPAH ST	TUALATIN	OR	97062
20160 SW BOONES FERRY RD	TUALATIN	OR	97062
8410 SW MOHAWK ST	TUALATIN	OR	97062
8380 SW MOHAWK ST	TUALATIN	OR	97062
9220 SW APACHE DR	TUALATIN	OR	97062
12550 SE 93RD AVE STE #300	CLACKAMAS	OR	97015
8412 SW MOHAWK ST	TUALATIN	OR	97062
8446 SW MOHAWK ST	TUALATIN	OR	97062
19840 SW BOONES FERRY RD	TUALATIN	OR	97062
PO BOX 619015	DALLAS	TX	75261
8402 SW MOHAWK ST	TUALATIN	OR	97062
8314 SW MOHAWK ST	TUALATIN	OR	97062
9235 SW APACHE DR	TUALATIN	OR	97062
20250 SW 93RD AVE	TUALATIN	OR	97062
9317 SW UMIAT ST	TUALATIN	OR	97062
8358 SW MOHAWK ST	TUALATIN	OR	97062
8438 SW MOHAWK ST	TUALATIN	OR	97062
8480 SW MOHAWK ST	TUALATIN	OR	97062
8406 SW MOHAWK ST	TUALATIN	OR	97062
8500 SW MOHAWK ST	TUALATIN	OR	97062
8470 SW MOHAWK ST	TUALATIN	OR	97062
16543 S HARDING RD	OREGON CITY	OR	97045
9235 SW CREE CIR	TUALATIN	OR	97062
PO BOX 2295	EUGENE	OR	97402
23544 SW GAGE RD	WILSONVILLE	OR	97070
9235 SW SAPONI LN	TUALATIN	OR	97062
2727 LBJ FREEWAY STE 806	DALLAS	TX	75234
8458 SW MOHAWK ST	TUALATIN	OR	97062
10685 SW CLAY	SHERWOOD	OR	97140
10685 SW CLAY ST	SHERWOOD	OR	97140
333 W CALLE MONTERO	SAHUARITA	AZ	85629
8850 SW SAGERT ST	TUALATIN	OR	97062
9265 SW APACHE DR	TUALATIN	OR	97062
8910 SW SAGERT ST	TUALATIN	OR	97062
8296 SW MOHAWK ST	TUALATIN	OR	97062
9240 SW CREE CIR	TUALATIN	OR	97062
9040 SW SAGERT ST	TUALATIN	OR	97062
20290 SW COMANCHE TER	TUALATIN	OR	97062
20380 SW 93RD AVE	TUALATIN	OR	97062
4165 IMPERIAL DR	WEST LINN	OR	97068
8418 SW MOHAWK ST	TUALATIN	OR	97062
20310 SW COMANCHE TER	TUALATIN	OR	97062
20155 SW BOONES FERRY RD	TUALATIN	OR	97062
8631 SW LOGAN LN	TUALATIN	OR	97062
9030 SW SAGERT ST	TUALATIN	OR	97062
9204 SW CREE CIR	TUALATIN	OR	97062
9335 SW UMIAT ST	TUALATIN	OR	97062
18264 HOLLY LN	OREGON CITY	OR	97045
9240 SW SAPONI LN	TUALATIN	OR	97062
8466 SW MOHAWK ST	TUALATIN	OR	97062
8340 SW MOHAWK ST	TUALATIN	OR	97062
8614 SW LOGAN LN	TUALATIN	OR	97062

2S126AB04600 CUNNINGTON J MATTHEW & CUNNINGTON KATHLEEN  
2S124CC90332 CUELLO DAMIEN C JR  
2S126AB09100 CROSBY KEITH  
2S126AB06100 CROMIE JOSEPH A & CROMIE JANICE C  
2S124CC90312 CRISMON RACHEL  
2S126AB08400 CREEK AMANDA & CREEK COLLIN  
2S126AB02800 COPELAND SUNDARA & COPELAND ALLEN  
2S124CC90801 COOKE GLENNA A  
2S126AA09000 COMANCHE TERRACE LLC  
2S123DD02701 COLUMBIA SELF-STOR LLC  
2S126AA09200 COLLINS WILLIAM HENRY III  
2S123DB00500 COIL PROPERTIES LLC  
2S126AB00100 COHEN WILLIAM S & COHEN LORELEI L  
2S126AA08900 COCHRAN RONALD & CHERYLL REV LIV TRUST  
2S126AB02100 CLIFFORD THOMAS C & CLIFFORD DONNA K  
2S124CC90492 CHRISTENSEN IAN  
2S126AA01701 CHERNOBERSKY NAUM & CHERNOBERSKY DEENA  
2S126AA01800 CASTRO TOMMY C & CASTRO KRYSTIN M  
2S124CC90131 CASTILE TIGEST  
2S123DA01400 CASCADE FUNERAL DIRECTORS INC  
2S126AB00200 CARROLL JILL STRADER  
2S124CC91191 CARR JANET STEIGER  
2S123DC90009 CAMP DREW & CAMP ELISE  
2S123DD03400 CAFFALL CURT & LESLIE REV LIV TRUST  
2S124CC91302 BUTCHER BOYD  
2S123DD04600 BUSSANICH BRIAN & BUSSANICH HOA LE  
2S126AB04900 BUJANSKI DEBORAH  
2S126AB14000 BRYSON ANDREW & BRYSON VICTORIA  
2S123DC90008 BRYAN WILLIAM JR & WALSH ERIN  
2S124CC90691 BROWN SHERRI LYNN  
2S126AA01900 BROWN ELIZABETH J  
2S126AB11900 BROWN ROBERT J & BROWN JOANNE  
2S123DC90005 BRIGGS STEVEN P  
2S126AB11400 BRICKEL GERALD M & BRICKEL REYNA S  
2S126AA01400 BRANDT RACHEL A  
2S126AA01500 BRANDT DWAIN C & BRANDT RACHEL A  
2S126AB01700 BOWMAN DALE T & DAWSON ROBBIE L  
2S126AA09600 BODEN KATIE ELIZABETH  
2S126AB08300 BIXLER BRIAN & FINEFROCK SARAH  
2S124CC90061 BISON DAVID P  
2S124CC90771 BERRY KATHIE A  
2S126AB09400 BELL RYAN J & BELL SARA K  
2S124CC90301 BEES DANIEL & BEES ROYALETTA  
2S126AB03201 BEDIENT DARYL M & BEDIENT NOBUE  
2S124CC90581 BAXTER KARA  
2S124CC90861 BATES DEBRA M  
2S126AB13400 BASTON LIVING TRUST  
2S124CC90791 BASSETT JEFFREY E  
2S123DB00400 BARON HOLDINGS LLC & OLIVER HOLDINGS LLC  
2S124CC90181 BALDUS ANN E  
2S126AB06900 BALBOA DANIEL J & BALBOA JUANA  
2S124CC90090 BAILEY SUSANNE J  
2S123DA01100 B3 MANAGEMENT LLC  
2S123DA01200 B3 MANAGEMENT LLC  
2S126AB13300 AVERY G WILLIAM  
2S126AB11200 AUSLAND HAYDEN & MARSHALL LINDSAY  
2S126AB11300 AUSLAND RANDI E & AUSLAND ALICE L  
2S124CC90541 AUGUST MICHELLE L & AUGUST JAMES WILLIAM  
2S124CC91111 ASHIMINE ELLIOTT SEIJI & ASHIMINE CORINNE  
2S124CC90261 ANTHONY WILMA  
2S126AB02700 ANDERSON ANTHONY  
2S123DD01000 AN IVETH ELIZHBA & GARFIAS MIRNA G MONTIEL

Exhibit N.

9285 SW APACHE DR	TUALATIN	OR	97062
8508 SW MOHAWK ST	TUALATIN	OR	97062
9393 SW UMIAT ST	TUALATIN	OR	97062
9208 SW CREE CIR	TUALATIN	OR	97062
8504 SW MOHAWK ST	TUALATIN	OR	97062
9098 SW RARITAN CT	TUALATIN	OR	97062
9025 SW APACHE DR	TUALATIN	OR	97062
8378 SW MOHAWK ST	TUALATIN	OR	97062
3545 UPPER DR	LAKE OSWEGO	OR	97035
17480 HOLY NAMES DR #206	LAKE OSWEGO	OR	97034
20335 SW COMANCHE TER	TUALATIN	OR	97062
2495 PALISADES CREST DR	LAKE OSWEGO	OR	97034
9050 SW SAGERT ST	TUALATIN	OR	97062
20395 SW COMANCHE TER	TUALATIN	OR	97062
9070 SW APACHE DR	TUALATIN	OR	97062
14330 SW BELL RD	SHERWOOD	OR	97140
6530 SW 89TH PL	TIGARD	OR	97223
8900 SW SAGERT ST	TUALATIN	OR	97062
8440 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 3570	TUALATIN	OR	97062
9070 SW SAGERT ST	TUALATIN	OR	97062
8270 SW MOHAWK ST	TUALATIN	OR	97062
9087 SW SAGERT ST	TUALATIN	OR	97062
8685 SW SAGERT ST	TUALATIN	OR	97062
8284 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 4183	TUALATIN	OR	97062
9252 SW CREE CIR	TUALATIN	OR	97062
9265 SW SAPONI LN	TUALATIN	OR	97062
9085 SW SAGERT ST	TUALATIN	OR	97062
8404 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 1338	TUALATIN	OR	97062
20238 SW 93RD AVE	TUALATIN	OR	97062
9075 SW SAGERT ST	TUALATIN	OR	97062
9322 SW TONOPAH ST	TUALATIN	OR	97062
20130 SW BOONES FERRY RD	TUALATIN	OR	97062
20100 SW BOONES FERRY RD	TUALATIN	OR	97062
9140 SW APACHE DR	TUALATIN	OR	97062
20245 SW COMANCHE TER	TUALATIN	OR	97062
9142 SW RARITAN CT	TUALATIN	OR	97062
8366 SW MOHAWK ST	TUALATIN	OR	97062
8390 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 181	TUALATIN	OR	97062
8502 SW MOHAWK ST	TUALATIN	OR	97062
20389 SW BOONES FERRY RD	TUALATIN	OR	97062
8434 SW MOHAWK ST	TUALATIN	OR	97062
8350 SW MOHAWK ST	TUALATIN	OR	97062
9341 SW GERTZ LN	TUALATIN	OR	97062
8394 SW MOHAWK ST	TUALATIN	OR	97062
900 SW 5TH AVE, 17TH FLOOR	PORTLAND	OR	97204
8478 SW MOHAWK ST	TUALATIN	OR	97062
9247 SW CREE CIR	TUALATIN	OR	97062
8424 SW MOHAWK ST	TUALATIN	OR	97062
1726 SE CUTTER LN	VANCOUVER	WA	98661
1726 SE CUTTER LN	VANCOUVER	WA	98661
9327 SW GERTZ LN	TUALATIN	OR	97062
9330 SW TONOPAH ST	TUALATIN	OR	97062
9328 SW TONOPAH ST	TUALATIN	OR	97062
8450 SW MOHAWK ST	TUALATINH	OR	97062
8306 SW MOHAWK ST	TUALATIN	OR	97062
8494 SW MOHAWK	TUALATIN	OR	97062
10850 SW BANNOCH ST	TUALATIN	OR	97062
19790 SW BOONES FERRY RD	TUALATIN	OR	97062



2S124CC90921 AMINI MITRA  
2S123DC00600 AMERICAN APARTMENT COMMUNITIES II LP  
2S124CC90472 AHREND MINDY L  
2S126AB04700 AHRENS REBECCA ELIZABETH & JUREVICIUS PAULIUS  
2S123DC00100 AG PROPERTIES LLC  
2S124CC91062 ADAMS ERIKKA  
2S124CC90201 8482 MOHAWK LLC  
2S124CC91262 8292 MOHAWK LLC  
2S123CA00200 2010 WA HOLDINGS LLC 2010 WA HOLDINGS LLC  
2S123DD00200 19545 & 19605 SW BOONES FERRY RD PROPERTY LLC &

## Exhibit P.

8342 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 4900	SCOTTSDALE	AZ	85261
8468 SW MOHAWK ST	TUALATIN	OR	97062
9275 SW APACHE DR	TUALATIN	OR	97062
PO BOX 989	EUGENE	OR	97440
8300 SW MOHAWK ST	TUALATIN	OR	97062
18725 SW BOONES FERRY RD	TUALATIN	OR	97062
8324 SW MAXINE LN UNIT #46	WILSONVILLE	OR	97070
700 N SAN VINCENE BLVD STE #G860	WEST HOLLYWOOD	CA	90069

Exhibit Q.

United Dominion Realty, L.P

1745 Shea Center Dr.

STE 200

Highlands Ranch, Co 80129

Angelo Planning Group

921 SW Washington St.

STE 468

Portland OR 97205

Exhibit R.



CIO Board of Directors List

Updated 11/30/2021  
[tualatincio@gmail.com](mailto:tualatincio@gmail.com)

	Name	Term	Address	City	State	Zip	Phone	Email
<b>Riverpark</b>								<a href="mailto:riverparkcio@gmail.com">riverparkcio@gmail.com</a>
President	Janine Wilson	Elected 11/2021	18325 SW 135th Terrace	Tualatin	OR	97062	541-761-0705	<a href="mailto:jasuw7@gmail.com">jasuw7@gmail.com</a>
Vice President	Chris Tunstall	Elected 11/2021	17400 SW Cheyenne Way	Tualatin	OR	97062	503-789-9143	<a href="mailto:famtunstall1@frontier.com">famtunstall1@frontier.com</a>
Land Use Officer	Dan Hardy	Elected 11/2021	23070 SW Lodgepole Ave	Tualatin	OR	97062	503-332-8905	<a href="mailto:dan@danhardyproperties.com">dan@danhardyproperties.com</a>
Secretary	Kate Pinamonti	Elected 11/2021	10240 SW Fulton Drive	Tualatin	OR	97062	503-709-7466	<a href="mailto:katepinamonti@hotmail.com">katepinamonti@hotmail.com</a>
Treasurer	Jeanne Raikoglo	Elected 11/2021	17630 SW Shawnee Trail	Tualatin	OR	97062	503-803-7047	<a href="mailto:iraikoglo@aol.com">iraikoglo@aol.com</a>
At-Large	Daniel Bachhuber		10205 SW Casteel Ct	Tualatin	OR	97062	971-998-5407	<a href="mailto:daniel@bachhuber.co">daniel@bachhuber.co</a>
<b>East Tualatin</b>								<a href="mailto:cio.east.west@gmail.com">cio.east.west@gmail.com</a>
President	Doug Ulmer	Interim (08/2021)	7149 SW Sagert St., Unit 105	Tualatin	OR	97062	503-522-0504	<a href="mailto:doug_ulmer@comcast.net">doug_ulmer@comcast.net</a>
Vice President								
Land Use Officer	Dana Holland	Interim (11/2021)	7237 SW Delaware Ct.	Tualatin	OR	97062	503-243-1111	<a href="mailto:dana476@gmail.com">dana476@gmail.com</a>
Treasurer								
Secretary	Margarita Crowell	Interim (11/2021)	7237 SW Delaware Ct.	Tualatin	OR	97062	508-243-11143	<a href="mailto:mcrowell248@comcast.net">mcrowell248@comcast.net</a>
<b>Midwest Tualatin</b>								<a href="mailto:tualatinmidwestcio@gmail.com">tualatinmidwestcio@gmail.com</a>
President								
Vice President								
Land Use Officer								
Secretary	Tammy Palumbo	Elected 4/2021	9510 SW Siuslaw Ln	Tualatin	OR	97062	503-793-6179	<a href="mailto:tmppgarden@comcast.net">tmppgarden@comcast.net</a>
Treasurer								
<b>Martinazzi Woods</b>								<a href="mailto:MartinazziWoodsCIO@gmail.com">MartinazziWoodsCIO@gmail.com</a>
President	Sallie Olson	Reelected 11/2021	8960 SW Arapaho Rd	Tualatin	OR	97062	503-484-8056	<a href="mailto:solson.1827@gmail.com">solson.1827@gmail.com</a>
Vice President	Del Moore	Reelected 11/2020	8790 SW Nisqually Ct	Tualatin	OR	97062	503-807-2762	<a href="mailto:delmoore@frontier.com">delmoore@frontier.com</a>
Land Use Officer	Jamison Shields	Elected 11/2021	8182 SW Palute	Tualatin	OR	97062	804-385-2695	<a href="mailto:jamison.l.shields@gmail.com">jamison.l.shields@gmail.com</a>
Secretary	Claudia Sterling	Elected 11/2021	20600 SW Shoshone Dr	Tualatin	OR	97062	503-701-5793	<a href="mailto:claudia.sterling@comcast.net">claudia.sterling@comcast.net</a>
Treasurer	Janet Gilkey	Reelected 11/2020	21132 SW 86th Ct	Tualatin	OR	97062	503-307-6712	<a href="mailto:janet7531@gmail.com">janet7531@gmail.com</a>
At-Large	Roy Loop		20190 SW 86th Ct	Tualatin	OR	97062	503-969-2701	<a href="mailto:roydloop@gmail.com">roydloop@gmail.com</a>
<b>Ibach</b>								
President	Ed Casey		22255 SW 102nd Pl.	Tualatin	OR	97062	503-692-0513	<a href="mailto:edkcnw@comcast.net">edkcnw@comcast.net</a>
Vice President								
Land Use Officer								
Secretary	Julie Makarowsky		10775 SW Willow St.	Tualatin	OR	97062	503-351-8344	<a href="mailto:lmakarowsky@comcast.net">lmakarowsky@comcast.net</a>
Treasurer								
<b>Byrom</b>								<a href="mailto:byromcio@gmail.com">byromcio@gmail.com</a>
President	Alex Thurber		9875 SW Iowa Dr	Tualatin	OR	97062	503-880-2450	<a href="mailto:pdalex@icloud.com">pdalex@icloud.com</a>
Vice President								
Land Use Officer	Mary Lyn Westenhaver	Interim (08/2021)	9845 SW Iowa Dr	Tualatin	OR	97062	503-341-1936	<a href="mailto:mwestenhaver@hotmail.com">mwestenhaver@hotmail.com</a>
Secretary	Susan Humphrey	Interim (08/2021)	8801 SW Stono Dr.	Tualatin	OR	97063	503-830-2132	<a href="mailto:humphreysusan10@gmail.com">humphreysusan10@gmail.com</a>
Treasurer	Deb Fant		22680 SW Eno Pl.	Tualatin	OR	97062	408-391-8582	<a href="mailto:deb.fant@gmail.com">deb.fant@gmail.com</a>
<b>Commercial</b>								<a href="mailto:tualatincommercialcio@gmail.com">tualatincommercialcio@gmail.com</a>
President	Cathy Holland	2023	10740 SW Lucas Dr.	Tualatin	OR	97062	503-691-1813	<a href="mailto:tualatincommercialcio@gmail.com">tualatincommercialcio@gmail.com</a>
Vice President	Scott Miller	2023	12976 SW Hillside Terrace	Tualatin	OR	97223	971-275-0341	<a href="mailto:scottm@capacitycommercial.com">scottm@capacitycommercial.com</a>
Land Use Officer	Scott Miller	2023	12976 SW Hillside Terrace	Tualatin	OR	97223	971-275-0341	<a href="mailto:scottm@capacitycommercial.com">scottm@capacitycommercial.com</a>
Secretary								
Treasurer	Chris Tunstall	2023	17400 SW Cheyenne Way	Tualatin	OR	97062	503-789-9143	<a href="mailto:famtunstall1@frontier.com">famtunstall1@frontier.com</a>



TLID	OWNER1
2S123D002400	ZIAN LP
2S124CC90982	ZHU HE
2S124CC91131	WOOTEN SHAWN
2S124CC91031	WOOLFE JANIE L
2S126AB05400	WOLFE CHRISTIAN B & WOLFE KRISTIN
2S126AB01600	WISBEY KEITH E & WISBEY TRACEY R
2S124CC91102	WINTERS TERRY M
2S124CC90841	WILSON BYRON
2S126AB13100	WILSON NICHOLAS & CHERNOBELSKY ELANA
2S126AB05600	WILLMING CHARLES O & WILLMING VERNELLE D
2S126AB09500	WILLIAMS GREGORY J & WILLIAMS STEPHANIE A
2S123DD02400	WILLAMETTE GRAYSTONE LLC
2S126AA09300	WHITNEY MICHAEL ALAN
2S124CC90161	WHITEMAN BETTY J
2S124CC90851	WHITE SUZANNE B LIVING TRUST
2S126AA00900	WHEELER CANDI
2S126AB00801	WHEATCROFT PAUL R & WHEATCROFT AMY L
2S123DD04200	WEST THOMAS B JR & WEST AMY R
2S124CC91042	WEST TREVOR M
2S123CA00700	WENZEL GENE SCOTT & VICKI SANDRA REV LIV TRUST
2S124CC90951	WENDT GLADYS T LIVING TRUST
2S126AB08900	WELLONS LAURA
2S126AB06600	WELLER LINDA
2S123DC00300	WATUMULL PROPERTIES CORP
2S126AB07900	WATROBA MICHAEL P & CUMMINGS CAROL A
2S123DC00900	WASHINGTON COUNTY FACILITIES MGMT
2S124CC90171	WARNEKE SPENCER
2S124CC90531	VONTUNGEIN RITA K
2S124CC90011	VITERITTI TRACY A
2S126AB09800	VETTER LEA ANN & VETTER CRAIG B
2S124CC90221	VENTI KATHERINE M
2S124CC91291	VALENTIN RODOLFO
2S126AB05800	UNDERHILL LYNN
2S126AB12000	TWEDT JAMES R & TWEDT PEGGY A
2S126AA09400	TUTTLE STEPHEN R & LEHMAN BARBARA L
2S124CC90401	TUCKER SHERRY D
2S123CA01200	TUALATIN INDUSTRIAL INVESTORS LLC
2S123CA90000	TUALATIN-SHERWOOD INDUSTRIAL CONDO HOA
2S123CD01000	TUALATIN LLC
2S123DA01500	TUALATIN SHERWOOD LLC
2S123DB00300	TUALATIN VALLEY FIRE & RESCUE
2S123DD00501	TUALATIN LTC PROPERTIES II LLC
2S124CC90000	TUALATIN VILLAGE CONDO PH II OWNERS OF UNITS
2S123D002200	T-S 90 LLC
2S124CC90831	TRYSIL MAYA & FLANAGAN CHRISTOPHER
2S126AB01300	TRUONG LUU NGOC & TRUONG KHANH NGOC & TRUONG BAO I
2S126AB07800	TRAPP CHET D & TRAPP DAWN K
2S123DC90010	TRACY LAUREN MARIE & HENKLE PETER ANDREW
2S126AB13200	TOSUNTIKOOL NEIL & DIAZ DANIELA
2S124CC00300	TODD VILLAGE-285 LLC
2S123DC00451	TLF LOGISTICS II TUALATIN CORPORATE CENTER LLC
2S123CD00800	TINWOOD LLC
2S126BA00102	TIGARD-TUALATIN SCHOOL DISTRICT #23J
2S123DA01701	THREE LITTLE BEARS LLC
2S126AA08700	THORSON ERIC R & THORSON JEAN M
2S123CD00900	THOLE PROPERTIES LLC
2S123DA00800	TGOC LLC
2S124CC91251	TEWINPAGTI ITTI
2S126AB05200	TEUTSCH HOLLY B
2S124CC90341	TEEL SHELLEY A
2S124CC91171	TAFUA COLETTE L

OWNERADDR	OWNERCITY	OWNERSTATE	OWNERZIP
6712 N CUTTER CIR	PORTLAND	OR	97217
8320 SW MOHAWK ST	TUALATIN	OR	97062
8310 SW MOHAWK ST	TUALATIN	OR	97062
8330 SW MOHAWK ST	TUALATIN	OR	97062
9236 SW CREE CIR	TUALATIN	OR	97062
9150 SW APACHE DR	TUALATIN	OR	97062
8304 SW MOHAWK ST	TUALATIN	OR	97062
8370 SW MOHAWK ST	TUALATIN	OR	97062
20254 SW 93RD AVE	TUALATIN	OR	97062
1125 MCGEE CT NE APT 251	KEIZER	OR	97303
9350 SW UMIAT ST	TUALATIN	OR	97062
3490 PIEDMONT RD NE STE 1300	ATLANTA	GA	30305
20285 SW COMANCHE TER	TUALATIN	OR	97062
5185 CARMAN DR	LAKE OSWEGO	OR	97035
8368 SW MOHAWK ST	TUALATIN	OR	97062
20310 SW BOONES FERRY RD	TUALATIN	OR	97062
20230 SW 93RD AVE	TUALATIN	OR	97062
8678 SW LOGAN LN	TUALATIN	OR	97062
8332 SW MOHAWK ST	TUALATIN	OR	97062
11520 SW GRABHORN RD	BEAVERTON	OR	97007
8336 SW MOHAWK ST	TUALATIN	OR	97062
9369 SW UMIAT ST	TUALATIN	OR	97062
9250 SW APACHE DR	TUALATIN	OR	97062
307 LEWERS ST FL 6	HONOLULU	HI	96815
9101 SW RARITAN CT	TUALATIN	OR	97062
169 N 1ST AVE #42	HILLSBORO	OR	97124
8456 SW MOHAWK ST	TUALATIN	OR	97062
8448 SW MOHAWK ST	TUALATIN	OR	97062
8344 SW MOHAWK ST	TUALATIN	OR	97062
20267 SW 93RD AVE	TUALATIN	OR	97062
8486 SW MOHAWK ST	TUALATIN	OR	97062
3809 NE 73RD AVE	PORTLAND	OR	97213
9220 SW CREE CIR	TUALATIN	OR	97062
20244 SW 93RD AVE	TUALATIN	OR	97062
20275 SW COMANCHE TER	TUALATIN	OR	97062
8522 SW MOHAWK ST	TUALATIN	OR	97062
1211 SW 5TH AVE STE 2185	PORTLAND	OR	97204
		OR	00000
688 6TH ST	LAKE OSWEGO	OR	97035
5611 NE COLUMBIA BLVD	PORTLAND	OR	97218
11945 SW 70TH AVE	TIGARD	OR	97223
4560 SE INTERNATIONAL WAY #100	MILWAUKIE	OR	97222
		OR	00000
1508 DIVISION ST #15	OREGON CITY	OR	97045
8372 SW MOHAWK ST	TUALATIN	OR	97062
9200 SW APACHE DR	TUALATIN	OR	97062
9063 SW RARITAN CT	TUALATIN	OR	97062
9089 SW SAGERT ST	TUALATIN	OR	97062
20258 SW 93RD AVE	TUALATIN	OR	97062
9500 SW BARBUR BLVD STE 300	PORTLAND	OR	97219
851 SW 6TH AVE STE 1200	PORTLAND	OR	97204
19749 SW CHAPMAN RD	SHERWOOD	OR	97140
6960 SW SANDBURG ST	TIGARD	OR	97223
8620 SW MIAMI ST	WILSONVILLE	OR	97070
20320 SW COMANCHE TER	TUALATIN	OR	97062
25070 N GRAHAM RD	AURORA	OR	97002
PO BOX 2237	TUALATIN	OR	97062
1220 SW 3RD AVE RM 1616	PORTLAND	OR	97204
9242 SW CREE CIR	TUALATIN	OR	97062
8510 SW MOHAWK ST	TUALATIN	OR	97062
8274 SW MOHAWK ST	TUALATIN	OR	97062



2S123DA01300 SWT LLC  
 2S124CC90961 SWANSON LEGACY IRREV TRUST  
 2S126AB08100 STRIPLING PERRY L & STRIPLING JANICE L  
 2S126AB00701 STONE JONATHAN & STONE MARLENE  
 2S124CC91322 STELL THOMAS C & STELL DAWN R  
 2S123CD01200 STEIN TUALATIN LLC  
 2S126BA00600 STE200 LLC  
 2S124CC90741 STARK MYLON K  
 2S124CC91311 STANLEY MATTHEW E  
 2S126AB09600 SPEERS KAREN K  
 2S123DD02800 SOLTERO ALFONSO & SANCHEZ FRANCISCO SOLTERO  
 2S126AB11800 SNOWBERGER MICHAEL & SNOWBERGER MELISSA  
 2S124CC90731 SNELL SUSAN E  
 2S126AB14100 SMITHERS CRYSTAL & TIMSON ANTHONY  
 2S126AA01000 SKOGLUND DAVID K  
 2S126AB06700 SKILES FRANKLIN W  
 2S123DD00700 SIMPSON SHELLEY  
 2S126AB13700 SCHOENHEIT DIANE M  
 2S126AB12400 SCHERMAN MICHAEL & SCHERMAN ASHLEY  
 2S124CC90881 SCHEER HILARY JANAYE  
 2S126AB06400 SAUER JOHN C & SAUER LOELIA ANN  
 2S126AA09800 SANTMYER ROSE MARIE  
 2S124CC91122 SANTA GYORGYI  
 2S126AB05500 SALGADO MICHAEL EARL & SALGADO BRITTANY ANN  
 2S126AB04500 SAGERT GROVE LLC  
 2S123DC01200 SADLER GERALD H & SADLER REBEKAH E  
 2S126AA08800 RUSSELL JAMES L & RUSSELL MARILYN & CADY TINA LYNN  
 2S126AA00800 RULE BRADLEY I & RULE LORINDA M  
 2S126AB12300 ROWE DANIEL L  
 2S126AA08500 RHODES BRADLEY E & RHODES ELAINE D  
 2S124CC90721 REID MICHAEL ALLEN & REID KRISTI R  
 2S123DC90000 REBECCA WOODS CONDO UNIT OWNERS  
 2S126AB11500 RAMIREZ MINERVA & RAMIREZ JUAN MIGUEL  
 2S123DA00700 RALF LEOPOLD INVESTMENTS LLC  
 2S124CC90821 RADANOVIC DIANNE M  
 2S126AA01100 R&B PROPERTIES TUALATIN LLC  
 2S124CC90591 PRESTON WILLIAM M & WOOD CLINTON A  
 2S126AB14200 PRESTON GERALD & PRESTON AMY  
 2S124CC91142 PRESLEY TIMOTHY RYAN & PRESLEY TEMARA ELIZABETH  
 2S124CC91202 PRESLEY TIM R & PRESLEY TEMARA E  
 2S124CC90141 POOLE KIMBELRY K  
 2S126AB04200 PLAGMAN PROPERTIES LLC  
 2S123DD00900 PLAGGMIER JOHN R JR TRUST  
 2S123DD01700 PINTOS ROBERTO B  
 2S123DA02200 PIETKA PROPERTIES LLC  
 2S123DD03900 PETERSON PAUL M & PETERSON CASSANDRA D  
 2S124CC91091 PETERSON MARTHA K  
 2S123DD03700 PEREZ LUIS G & PEREZ LUCINA M  
 2S123DD04300 PATEL SAAJAN & VYAS HANSINI  
 2S124CC91231 PATEL REV TRUST  
 2S126AB01800 PATELZICK DANA L & PATELZICK ROSALIE  
 2S126AB02300 PARK MIRAN  
 2S126AB04400 PARENT JOHN O & PARENT STACEY L  
 2S123DD03500 PACKARD LIVING TRUST  
 2S123DB00100 PACIFIC NW PROPERTIES LP  
 2S123DB00600 PACIFIC WEST CONSTRUCTION INC  
 2S124CC91071 OUSTERHOUT SALLY M & OUSTERHOUT GERALD C  
 2S123DA01000 OSWEGO WEST LLC  
 2S124CC90891 OSMOSYS LLC  
 2S124CC90110 OSBORNE JUDITH E  
 2S126AB05700 OSBORN CHRISTIANNE  
 2S124CC90761 ORSBURN ANITA J & GARRIETY SUSAN J

2233 NW 23RD AVE	PORTLAND	OR	97210
8334 SW MOWHAWK ST	TUALATIN	OR	97062
9177 SW RARITAN CT	TUALATIN	OR	97062
9260 SW SAGERT ST	TUALATIN	OR	97062
8280 SW MOHAWK ST	TUALATIN	OR	97062
13001 CLACKAMAS RIVER DR STE 200	OREGON CITY	OR	97045
20215 SW 95TH AVE	TUALATIN	OR	97062
8384 SW MOHAWK ST	TUALATIN	OR	97062
8278 SW MOHAWK ST	TUALATIN	OR	97062
9334 UMIAT CT	TUALATIN	OR	97062
19760 SW BOONES FERRY RD	TUALATIN	OR	97062
20236 SW 93RD AVE	TUALATIN	OR	97062
20487 SW 69TH AVE	TUALATIN	OR	97062
9255 SW SAPONI LN	TUALATIN	OR	97062
PO BOX 642	TUALATIN	OR	97062
9260 SW APACHE DR	TUALATIN	OR	97062
PO BOX 824	TUALATIN	OR	97062
20365 SW 93RD AVE	TUALATIN	OR	97062
9360 SW SAGERT ST	TUALATIN	OR	97062
8354 SW MOHAWK ST	TUALATIN	OR	97062
9230 SW APACHE DR	TUALATIN	OR	97062
20190 SW BOONES FERRY RD	TUALATIN	OR	97062
4214 WOODSIDE CIR	LAKE OSWEGO	OR	97035
9232 SW CREE CIR	TUALATIN	OR	97062
12670 SW 68TH AVE STE 400	TIGARD	OR	97223
9035 SW SAGERT ST	TUALATIN	OR	97062
20350 SW COMANCHE TER	TUALATIN	OR	97062
20340 SW BOONES FERRY RD	TUALATIN	OR	97062
9380 SW SAGERT ST	TUALATIN	OR	97062
20300 SW COMANCHE TER	TUALATIN	OR	97062
8398 SW MOHAWK ST	TUALATIN	OR	97062
		OR	00000
6300 W LONE MOUNTAIN RD	LAS VEGAS	NV	89130
19460 SW 89TH AVE	TUALATIN	OR	97062
8374 SW MOHAWK ST	TUALATIN	OR	97062
20495 SW BOONES FERRY RD	TUALATIN	OR	97062
20300 SW NANCY LN	BEAVERTON	OR	97007
PO BOX 8075	PORTLAND	OR	97207
10335 SW HOODVIEW DR	TIGARD	OR	97224
10335 SW HOODVIEW DR	TIGARD	OR	97224
8442 SW MOHAWK ST	TUALATIN	OR	97062
20105 SW 93RD AVE	TUALATIN	OR	97062
19740 SW BOONES FERRY RD	TUALATIN	OR	97062
8735 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 1696	BEAVERTON	OR	97075
8609 SW LOGAN LN	TUALATIN	OR	97062
8302 SW MOHAWK ST	TUALATIN	OR	97062
8667 SW LOGAN LN	TUALATIN	OR	97062
8700 SW LOGAN LN	TUALATIN	OR	97062
28916 LA CARRETERA	LAGUNA NIGUEL	CA	92677
23096 S BLAND CIR	WEST LINN	OR	97068
9155 SW APACHE DR	TUALATIN	OR	97062
9400 SW SAGERT ST	TUALATIN	OR	97062
8675 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 2206	BEAVERTON	OR	97075
PO BOX 219	HUBBARD	OR	97032
5167 METOLIUS AVE SE	SALEM	OR	97306
15938 QUARRY RD STE B-6	LAKE OSWEGO	OR	97035
7415 SW 37TH AVE	PORTLAND	OR	97219
8428 SW MOHAWK ST	TUALATIN	OR	97062
9224 SW CREE CIR	TUALATIN	OR	97062
8388 SW MOHAWK ST	TUALATIN	OR	97062

2S126AB05100 O'RILEY KEVIN & O'RILEY WENDY  
 1S135CB00800 OREGON STATE OF DEPT OF TRANSPORTATION  
 2S124CC90252 NIELSON CRYSTAL DAWN  
 2S124CC90871 NIELSON DARCY  
 2S123DC90007 NETTER RON & DAY-NETTER ROSEMARY  
 2S126AB07500 NERO CHARLES & NERO VICTORIA  
 2S126AB10200 MURRAY CHERIE R  
 2S124CC90432 MURPHY BYRON K & WIKSTROM SAMANTHA A  
 2S126AA01700 MUNOZ ZAIDA & MUNOZ CLAUDIA  
 2S124CC91282 MUILENBURG SCOTT E & MUILENBURG MARILYN  
 2S124CB03400 MUELLER KURT & IVERSON LAURA  
 2S126AB06000 MUELLER RONALD B  
 2S123DC01000 MOYER HAROLD & MOYER SHANNON  
 2S124CC90352 MOTA MIGUEL JAQUIZ  
 2S123DC90002 MORRIS CRESLYNN S  
 2S124CC90481 MORGAN MICHAEL  
 2S124CC91242 MORGAN JAY C & MORGAN AIKO  
 2S126AB12700 MORAN DAVID K  
 2S126AB05000 MORALES LUIS & MORALES NATASHA  
 2S126AB07600 MOMARLS LLC  
 2S124CC90241 MITSVOTAI MELANIE E  
 2S126AB14800 MISSION WOODS OWNERS OF LOTS 1-6 8  
 2S126AB02200 MIRANDA RODNEY QUEMA  
 2S124CC90601 MILLS SANDRA M  
 2S126AA09500 MILLS MICHAEL C & MILLS BEVERLY  
 2S126AB00800 MILLS MELANIE FRANCES  
 2S124CC90321 MILLER DAVID JOHN  
 2S124CC90512 MILLER SANDRA K & HOLT TROY M  
 2S126AA08300 MILLER DIANE M LIV TRUST  
 2S126AB12500 MILLER MICHAEL S  
 2S124CC90021 MERRIMAN KEVIN LEE  
 2S124CC90811 MERCADO GUILLERMINA  
 2S124CC90631 MELLAND MICHELE M  
 2S124CC90452 MCSWAIN DAVID CORNELL II  
 2S123DC00200 MCLELLAN ESTATE CO  
 2S126AB07100 MCGINTY JEFFREY M  
 2S124CC90571 MCGEORGE JO ANN REV TRUST  
 2S126AB08200 MCCLELLAN MICHELLE K & LUNDGREN MARTIN K  
 2S124CC90381 MCCLANAHAN MATTHEW E  
 2S124CC91211 MCCAUSLAND MAUREEN E  
 2S126AB10000 MAYERNIK ANTHONY K  
 2S126AB12100 MARTIN SHARI R  
 2S123DA01700 MARSH JEFFREY O JR & KING JOHN J  
 2S126AB07300 MARSH CHRISTOPHER L REV TRUST  
 2S126AB06500 MARKS RACHEL L  
 2S123DC01100 MARCH TREVOR C & MARCH JEANINE M  
 2S126AB01500 MANLEY MATTHEW A & MCKINNEY GINA M  
 2S124CC90031 MALOS NORINE E  
 2S126AB02000 MALHI RAMANDEEP K  
 2S126AB02500 MALHI GAGANDEEP  
 2S126AB09000 LUDWICK STEPHEN J TRUST  
 2S126AA09100 LOVELAND GREGORY & LOVELAND HEATHER  
 2S126AB11000 LOPEZ JEFFREY G & LOPEZ CINDY L  
 2S123DD04400 LOGAN HOUSE ESTATES HOA  
 2S124CC90751 LOCKHART JANET L  
 2S126AA01600 LIVING SAVIOR LUTHERAN CHURCH  
 2S126AA02100 LITTLE RUSSELL D & LITTLE DIANA M  
 2S123DC90001 LINKER MARY ELIZABETH & YBARRA HENRY R  
 2S126AB07000 LINDLEY JUSTIN  
 2S124CC90232 LINDHOLM BRENT M & LINDHOLM TIFFANY R  
 2S124CC90120 LEWIS SANDRA  
 2S126AB10400 LEININGER MATT & LEININGER SZU YU

9244 SW CREE CIR	TUALATIN	OR	97062
4040 FAIRVIEW INDUSTRIAL DR SE MS #	SALEM	OR	97302
8492 SW MOHAWK ST	TUALATIN	OR	97062
8352 SW MOHAWK ST	TUALATIN	OR	97062
9083 SW SAGERT ST	TUALATIN	OR	97062
9211 SW CREE CIR	TUALATIN	OR	97062
9337 SW TONOPAH ST	TUALATIN	OR	97062
601 QUAIL DR	NEWBERG	OR	97132
20085 SW BOONES FERRY RD	TUALATIN	OR	97062
1619 SE 176TH AVE	PORTLAND	OR	97223
16850 SW UPPER BOONES FERRY RD S	TIGARD	OR	97224
9212 SW CREE CIR	TUALATIN	OR	97062
9055 SW SAGERT ST	TUALATIN	OR	97062
8512 SW MOHAWK ST	TUALATIN	OR	97062
9063 SW SAGERT ST	TUALATIN	OR	97062
8462 SW MOHAWK ST	TUALATIN	OR	97062
8264 SW MOHAWK ST	TUALATIN	OR	97062
9280 SW APACHE DR	TUALATIN	OR	97062
9248 SW CREE CIR	TUALATIN	OR	97062
8525 SW 165TH AVE	BEAVERTON	OR	97007
8490 SW MOHAWK ST	TUALATIN	OR	97062
		OR	00000
9030 SW APACHE DR	TUALATIN	OR	97062
8414 SW MOHAWK ST	TUALATIN	OR	97062
20255 SW COMANCHE TER	TUALATIN	OR	97062
20228 SW 93RD AVE	TUALATIN	OR	97062
8179 RAINIER LN N	MAPLE GROVE	OR	55311
8460 SW MOHAWK ST	TUALATIN	OR	97062
8770 SW COMANCHE WAY	TUALATIN	OR	97062
20055 SW 93RD AVE	TUALATIN	OR	97062
8346 SW MOHAWK ST	TUALATIN	OR	97062
8376 SW MOHAWK ST	TUALATIN	OR	97062
19165 SW 51ST AVE	TUALATIN	OR	97062
8472 SW MOHAWK ST	TUALATIN	OR	97062
707 OLD COUNTY RD	BELMONT	CA	94002
9255 SW CREE CIR	TUALATIN	OR	97062
8436 SW MOHAWK ST	TUALATIN	OR	97062
9180 SW RARITAN CT	TUALATIN	OR	97062
8518 SW MOHAWK ST	TUALATIN	OR	97062
8266 SW MOHAWK ST	TUALATIN	OR	97062
9329 SW TONOPAH ST	TUALATIN	OR	97062
20248 SW 93RD AVE	TUALATIN	OR	97062
8810 SW TUALATIN SHERWOOD RD	TUALATIN	OR	97062
17367 LAKE HAVEN DR	LAKE OSWEGO	OR	97035
9240 SW APACHE DR	TUALATIN	OR	97062
8685 SW WOLDS DR	BEAVERTON	OR	97007
9170 SW APACHE DR	TUALATIN	OR	97062
8348 SW MOHAWK ST	TUALATIN	OR	97062
9090 SW APACHE DR	TUALATIN	OR	97062
25083 SW QUARRYVIEW RD	WILSONVILLE	OR	97070
9385 SW UMIAT ST	TUALATIN	OR	97062
20345 SW COMANCHE TER	TUALATIN	OR	97062
9360 SW TONOPAH ST	TUALATIN	OR	97062
		OR	00000
8386 SW MOHAWK ST	TUALATIN	OR	97062
8740 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 1006	TUALATIN	OR	97062
9061 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 3052	TUALATIN	OR	97062
8488 SW MOHAWK ST	TUALATIN	OR	97062
1532 SUNLIGHT DR	FAIRBANKS	AK	99709
9347 SW TONOPAH ST	TUALATIN	OR	97062

2S124CC90272 LAZAR GABRIEL  
 2S124CC90081 LARSON ROBERT F & LARSON ASHLEY N  
 2S123DD00800 LARSEN MARIO K & LARSEN REBECCA L  
 2S123DD01100 LARSEN DWAYNE L & LARSEN KAREN G ESTATE OF  
 2S126AB13600 LANE DAVID R & LANE MARY L  
 2S124CC90151 KRUSINSKI JANICE L  
 2S123DC90004 KREBS TANA  
 2S124CC90551 KRAUSE DERALD E  
 2S126AA08200 KNAPP STACI R & KNAPP ERIK A  
 2S124CC91051 KLUPENGER MORGAN WATKINS  
 2S126AB09700 KLEINT JAKOB W & FAHLMAN ANNE E  
 2S126AB13500 KINZER ZACHARY S  
 2S123DD03600 KIMMER WILLIAM D & KIMMER PATSY A  
 2S126AB12800 KIEL JAMES & KIEL PATRICIA A  
 2S126AA02000 KELLY JEREMY & KELLY CECELIA  
 2S124CC91002 KEEN ANNETTE M  
 2S124CC91222 KAUFFMAN SHAWNA DAY  
 2S126AA01902 KANE BENJAMIN B & KANE BROOKE M  
 2S123D003900 KAISER FOUNDATION HEALTH PLAN OF THE NORTHWEST  
 2S123CD00700 KAADY CHARLES  
 2S123DA00900 JVTC EXPLORATIONS LLC  
 2S124CC90392 JOHNSON SCOTT GLENN & JOHNSON SHELLEY L  
 2S124CC90661 JOHNSON JAMIE A & DRAKE DAVID A  
 2S126AB07400 JOHNSON GERALD A & JOHNSON BARBARA J  
 2S126AB09200 JOHNSTON LISA  
 2S126AB10100 JOHNSTON PATRICK D & JOHNSTON TAMMY L  
 2S126AB10300 JOHNSON BRIAN R & JOHNSON MIECKE LARSON  
 2S123DA00500 JKM PROPERTIES LLC  
 2S126AB10900 JENKINS DEREK R & JENKINS SANDRA L  
 2S124CC91271 JAMES TYLER & JAMES KELSEY  
 2S124CC90781 JACKSON KRYSTAL L  
 2S123DA01800 J C MOTORS OF TUALATIN LLC  
 2S124CC90051 INGMAN SCOTT M  
 2S124CC90041 HUTCHINS CALVIN & LARAYNE REV LIV TRUST  
 2S126AB08000 HUDSON RONALD R  
 2S123DD02900 HOUSTON BRENDA L  
 2S124CC90711 HORN MARTHA JENEANE  
 2S126AB02400 HOLLMANN GEORGE E  
 2S126AB01900 HESS CRAIG & HESS REBECCA  
 2S124CC90421 HERKOMER TAMMI  
 2S126AB11700 HENDERSON RYAN J  
 2S126AB12600 HENDERSON-BROWN CHERYL L  
 2S126AB09300 HEINRICH ELEONORE ERNA REV TRUST  
 2S124CC91162 HEBERT GERALD & HEBERT HUNG CHEN  
 2S123DC90003 HAYES LISA L  
 2S126AB05900 HAYES PAMELA JO  
 2S124CC90611 HAVEN HOMES II LLC  
 2S126AB10600 HANSEN SANDI J  
 2S126AB14700 HANEY LINDSEY L  
 2S124CC90212 HAMILTON MARY A  
 2S126AB14400 HAM FAMILY TRUST  
 2S126AB13800 HALLEY COURT OWNERS OF LOTS 1-5  
 2S126AB07700 HALL CHANDA & HALL BRENT  
 2S126AB00101 HAAS ROBERT E & MERRILY S REV TRUST  
 2S124CC90911 GUTIERREZ DAVID & GUTIERREZ NORMA  
 2S124CC90971 GUPTA SAMIR  
 2S124CC90361 GUDEKUNST ELAINE  
 2S124CC90100 GRUEN MARY M  
 2S123DC90006 GRIMM ROSS M & GRIMM MELINDA L  
 2S126AB00300 GREEAR CHAD M & GREEAR BETH  
 2S126AA10100 GRAHAM ALBERTA  
 2S126AA10200 GRAHAM ALBERTA

1481 NW 13TH AVE APT 732	PORTLAND	OR	97209
14919 NE LAWNVIEW CIR	AURORA	OR	97002
19738 SW BOONES FERRY RD	TUALATIN	OR	97062
19770 SW BOONES FERRY RD	TUALATIN	OR	97062
3077 SE CAMWAL DR	HILLSBORO	OR	97123
8444 SW MOHAWK ST	TUALATIN	OR	97062
9073 SW SAGERT ST	TUALATIN	OR	97062
8452 SW MOHAWK ST	TUALATIN	OR	97062
8775 SW COMANCHE WAY	TUALATIN	OR	97062
8298 SW MOHAWK ST	TUALATIN	OR	97062
20243 SW 93RD AVE	TUALATIN	OR	97062
9350 SW GERTZ LN	TUALATIN	OR	97062
10344 SW BROADMOOR PL	TIGARD	OR	97223
9250 SW SAGERT ST	TUALATIN	OR	97062
20195 SW BOONES FERRY RD	TUALATIN	OR	97062
11970 SW HAZELWOOD LOOP	TIGARD	OR	97223
8268 SW MOHAWK ST	TUALATIN	OR	97062
8940 SW SAGERT ST	TUALATIN	OR	97062
500 NE MULTNOMAH ST	PORTLAND	OR	97232
2545 SW SPRING GARDEN ST #200	PORTLAND	OR	97219
19463 SW 89TH AVE	TUALATIN	OR	97062
8520 SW MOHAWK ST	TUALATIN	OR	97062
8408 SW MOHAWK ST	TUALATIN	OR	97062
9207 SW CREE CIR	TUALATIN	OR	97062
9397 SW UMIAT ST	TUALATIN	OR	97062
9331 SW TONOPAH ST	TUALATIN	OR	97062
9341 SW TONOPAH ST	TUALATIN	OR	97062
20135 S IMPALA LN	OREGON CITY	OR	97045
9366 SW TONOPAH ST	TUALATIN	OR	97062
21711 SW MARTINAZZI AVE	TUALATIN	OR	97062
8392 SW MOHAWK ST	TUALATIN	OR	97062
19401 SW MOHAVE CT	TUALATIN	OR	97062
8364 SW MOHAWK ST	TUALATIN	OR	97062
17547 N SOMERSET DR	SURPRISE	AZ	85374
16715 SW CAMBRIDGE DR	DURHAM	OR	97224
20532 SW 84TH CT	TUALATIN	OR	97062
8400 SW MOHAWK ST	TUALATIN	OR	97062
9105 SW APACHE DR	TUALATIN	OR	97062
9110 SW APACHE DR	TUALATIN	OR	97062
8474 SW MOHAWK ST	TUALATIN	OR	97062
20232 SW 93RD AVE	TUALATIN	OR	97062
9200 SW SAGERT ST	TUALATIN	OR	97062
PO BOX 623	BEAVERTON	OR	97075
21885 NE ALTON ST	FAIRVIEW	OR	97024
9067 SW SAGERT ST	TUALATIN	OR	97062
9216 SW CREE CIR	TUALATIN	OR	97062
12424 SE WINTER CREEK CT	HAPPY VALLEY	OR	97086
9359 SW TONOPAH ST	TUALATIN	OR	97062
20340 SW 93RD AVE	TUALATIN	OR	97062
8484 SW MOHAWK ST	TUALATIN	OR	97062
9220 SW SAPONI LN	TUALATIN	OR	97062
		OR	00000
20385 SW BOONES FERRY RD	TUALATIN	OR	97062
20887 SW WILLAPA WAY	TUALATIN	OR	97062
8360 SW MOHAWK ST	TUALATIN	OR	97062
104 SOUTH ASPEN CT	CHANDLER	AZ	85226
8514 SW MOHAWK ST	TUALATIN	OR	97062
8426 SW MOHAWK ST	TUALATIN	OR	97062
9077 SW SAGERT ST	TUALATIN	OR	97062
9100 SW SAGERT ST	TUALATIN	OR	97062
8920 SW SAGERT ST	TUALATIN	OR	97062
8920 SW SAGERT ST	TUALATIN	OR	97062

2S126AB09900 GRADT TIMOTHY R  
 2S124CC90641 GOLDSBY KATHLEEN M  
 2S126AB00700 GOHEEN GORDON G & GOHEEN LAVILLE M  
 2S124CC90941 GODARD JIMMY J & GODARD STA'CEE A  
 2S126AB08500 GIZA BRYNN & GIZA JORDAN  
 2S123DD04100 GEORGE AUGUSTINE & ROSE REV LIV TRUST  
 2S126AB10500 GEORGE WINFRED & GEORGE NICHOLE MARIE  
 2S126AB08800 GENSMAN MONTE  
 2S126AB10700 GENSMAN MARK D  
 2S126AB10800 GENSMAN MITCHELL E  
 2S126AB11100 GENSMAN MONTE LEE  
 2S126AA01300 GENDE DAVID PAUL III & GENDE ANGELA JOY  
 2S124CC90671 GARRISON ROBERT A & GARRISON LORI L  
 2S124CC90071 GARNER SYLVIA E  
 2S126AB06300 GARIBAY BENJAMIN & GARIBAY EMILIA & VASQUEZ MARIBEL  
 2S123DD90000 GARDEN COURT CONDO UNIT OWNERS  
 2S124CC90681 GALLAGHER RONALD A & GALLAGHER KATIE L  
 2S124CC90521 FURTNEY JOSEPH C  
 2S123DD01400 FROST AARON R  
 2S123DB00200 FRONTIER COMMUNICATIONS NORTHWEST INC  
 2S124CC90701 FRANKS JONNIE A JR  
 2S124CC91151 FLANNERY FAMILY TRUST  
 2S126AB07200 FISHER CURTIS J  
 2S126AB13000 FISHER RYAN D & FISHER CHRISTINA M  
 2S126AB08600 FERRASCI-O'MALLEY KEVIN MICHAEL & FERRASCI-O'MALLEY KA  
 2S124CC90901 FEHLMAN STEVEN D & FEHLMAN MELISSA J  
 2S124CC90561 FECHNER ROBERT J  
 2S124CC90192 FARRELL DONALD L & FARRELL MARIETTA L  
 2S124CC90651 FANTA CAROL C  
 2S124CC90292 FAIRCHILD DENA  
 2S124CC90441 FAGERQUIST AMBRE  
 2S123DD00600 FABRYCKI HAL  
 2S126AB06800 EVONUK MATTHEW  
 2S123CD01100 EVANS FAMILY INVESTMENTS LLC  
 2S126AB02600 EVANS RICK A  
 2S126AB14300 EVANS BRIAN WAYNE & EVANS KELLE ANN  
 2S123DD00400 ENVOY CHELAN LLC & REALVEST CHELAN LLC  
 2S124CC90501 ELLIOTT RAYMOND  
 2S124CC90281 EISERT CLARK L & EISERT STEPHANIE  
 2S124CC91182 EISERT STEPHANIE  
 2S126AB12900 EICHENBERGER MICHAEL G  
 2S126AA01703 EDWARDS DONALD J  
 2S126AB04800 EDGINGTON JAMES N & HIVALE VIDYA E  
 2S126AA01801 EATON TYLER & EATON KATHRYN  
 2S124CC91082 DUNNING ROWAN KATHERINE WALKER  
 2S126AB05300 DRYDEN SERENA & JORDAN TRAVIS  
 2S126AB00103 DOUVILLE THOMAS A  
 2S126AA08400 DORAN PAUL ANTHONY  
 2S126AB14600 DONNELLY JOHN & DONNELLY CAROL  
 2S124CC90991 DONALDSON AMY L  
 2S124CC90621 DOBBINS 1998 FAMILY TRUST  
 2S126AA08600 DIRKSEN DOUGLAS & DIRKSEN MARY  
 2S126AA01702 DINGMAN DELORES JEAN LIV TRUST  
 2S123DD03800 DEVICH NICHOLAS FRANKLIN  
 2S126AB00102 DESKINS DANIEL & DESKINS ASHLEY  
 2S126AB06200 DENYSE CLINT  
 2S126AB08700 DENIS PAUL  
 2S124CC90372 DAVIS ROBERT M & DAVIS BARBARA K  
 2S126AB14500 DAVIDSON FAMILY TRUST  
 2S124CC90461 DALTON SHARON LYNN TR  
 2S124CC90931 DALLAL CLAIRE Y  
 2S123DD04000 DA YEE FAMILY TRUST



9323 SW TONOPAH ST	TUALATIN	OR	97062
8487 SW CHELAN CT	TUALATIN	OR	97062
285 HOLDER LN SE	SALEM	OR	97306
16745 SW STELLAR DR	SHERWOOD	OR	97140
9072 SW RARITAN CT	TUALATIN	OR	97062
8652 SW LOGAN LN	TUALATIN	OR	97062
9351 SW TONOPAH ST	TUALATIN	OR	97062
9352 SW TONOPAH ST	TUALATIN	OR	97062
PO BOX 1903	TUALATIN	OR	97062
PO BOX 1626	SHERWOOD	OR	97140
9352 SW TONOPAH ST	TUALATIN	OR	97062
20160 SW BOONES FERRY RD	TUALATIN	OR	97062
8410 SW MOHAWK ST	TUALATIN	OR	97062
8380 SW MOHAWK ST	TUALATIN	OR	97062
9220 SW APACHE DR	TUALATIN	OR	97062
12550 SE 93RD AVE STE #300	CLACKAMAS	OR	97015
8412 SW MOHAWK ST	TUALATIN	OR	97062
8446 SW MOHAWK ST	TUALATIN	OR	97062
19840 SW BOONES FERRY RD	TUALATIN	OR	97062
PO BOX 619015	DALLAS	TX	75261
8402 SW MOHAWK ST	TUALATIN	OR	97062
8314 SW MOHAWK ST	TUALATIN	OR	97062
9235 SW APACHE DR	TUALATIN	OR	97062
20250 SW 93RD AVE	TUALATIN	OR	97062
9317 SW UMIAT ST	TUALATIN	OR	97062
8358 SW MOHAWK ST	TUALATIN	OR	97062
8438 SW MOHAWK ST	TUALATIN	OR	97062
8480 SW MOHAWK ST	TUALATIN	OR	97062
8406 SW MOHAWK ST	TUALATIN	OR	97062
8500 SW MOHAWK ST	TUALATIN	OR	97062
8470 SW MOHAWK ST	TUALATIN	OR	97062
16543 S HARDING RD	OREGON CITY	OR	97045
9235 SW CREE CIR	TUALATIN	OR	97062
PO BOX 2295	EUGENE	OR	97402
23544 SW GAGE RD	WILSONVILLE	OR	97070
9235 SW SAPONI LN	TUALATIN	OR	97062
2727 LBJ FREEWAY STE 806	DALLAS	TX	75234
8458 SW MOHAWK ST	TUALATIN	OR	97062
10685 SW CLAY	SHERWOOD	OR	97140
10685 SW CLAY ST	SHERWOOD	OR	97140
333 W CALLE MONTERO	SAHUARITA	AZ	85629
8850 SW SAGERT ST	TUALATIN	OR	97062
9265 SW APACHE DR	TUALATIN	OR	97062
8910 SW SAGERT ST	TUALATIN	OR	97062
8296 SW MOHAWK ST	TUALATIN	OR	97062
9240 SW CREE CIR	TUALATIN	OR	97062
9040 SW SAGERT ST	TUALATIN	OR	97062
20290 SW COMANCHE TER	TUALATIN	OR	97062
20380 SW 93RD AVE	TUALATIN	OR	97062
4165 IMPERIAL DR	WEST LINN	OR	97068
8418 SW MOHAWK ST	TUALATIN	OR	97062
20310 SW COMANCHE TER	TUALATIN	OR	97062
20155 SW BOONES FERRY RD	TUALATIN	OR	97062
8631 SW LOGAN LN	TUALATIN	OR	97062
9030 SW SAGERT ST	TUALATIN	OR	97062
9204 SW CREE CIR	TUALATIN	OR	97062
9335 SW UMIAT ST	TUALATIN	OR	97062
18264 HOLLY LN	OREGON CITY	OR	97045
9240 SW SAPONI LN	TUALATIN	OR	97062
8466 SW MOHAWK ST	TUALATIN	OR	97062
8340 SW MOHAWK ST	TUALATIN	OR	97062
8614 SW LOGAN LN	TUALATIN	OR	97062

2S126AB04600 CUNNINGTON J MATTHEW & CUNNINGTON KATHLEEN  
 2S124CC90332 CUELLO DAMIEN C JR  
 2S126AB09100 CROSBY KEITH  
 2S126AB06100 CROMIE JOSEPH A & CROMIE JANICE C  
 2S124CC90312 CRISMON RACHEL  
 2S126AB08400 CREEK AMANDA & CREEK COLLIN  
 2S126AB02800 COPELAND SUNDARA & COPELAND ALLEN  
 2S124CC90801 COOKE GLENNA A  
 2S126AA09000 COMANCHE TERRACE LLC  
 2S123DD02701 COLUMBIA SELF-STOR LLC  
 2S126AA09200 COLLINS WILLIAM HENRY III  
 2S123DB00500 COIL PROPERTIES LLC  
 2S126AB00100 COHEN WILLIAM S & COHEN LORELEI L  
 2S126AA08900 COCHRAN RONALD & CHERYLL REV LIV TRUST  
 2S126AB02100 CLIFFORD THOMAS C & CLIFFORD DONNA K  
 2S124CC90492 CHRISTENSEN IAN  
 2S126AA01701 CHERNOBERSKY NAUM & CHERNOBERSKY DEENA  
 2S126AA01800 CASTRO TOMMY C & CASTRO KRYSTIN M  
 2S124CC90131 CASTILE TIGEST  
 2S123DA01400 CASCADE FUNERAL DIRECTORS INC  
 2S126AB00200 CARROLL JILL STRADER  
 2S124CC91191 CARR JANET STEIGER  
 2S123DC90009 CAMP DREW & CAMP ELISE  
 2S123DD03400 CAFFALL CURT & LESLIE REV LIV TRUST  
 2S124CC91302 BUTCHER BOYD  
 2S123DD04600 BUSSANICH BRIAN & BUSSANICH HOA LE  
 2S126AB04900 BUJANSKI DEBORAH  
 2S126AB14000 BRYSON ANDREW & BRYSON VICTORIA  
 2S123DC90008 BRYAN WILLIAM JR & WALSH ERIN  
 2S124CC90691 BROWN SHERRI LYNN  
 2S126AA01900 BROWN ELIZABETH J  
 2S126AB11900 BROWN ROBERT J & BROWN JOANNE  
 2S123DC90005 BRIGGS STEVEN P  
 2S126AB11400 BRICKEL GERALD M & BRICKEL REYNA S  
 2S126AA01400 BRANDT RACHEL A  
 2S126AA01500 BRANDT DWAIN C & BRANDT RACHEL A  
 2S126AB01700 BOWMAN DALE T & DAWSON ROBBIE L  
 2S126AA09600 BODEN KATIE ELIZABETH  
 2S126AB08300 BIXLER BRIAN & FINEFROCK SARAH  
 2S124CC90061 BISON DAVID P  
 2S124CC90771 BERRY KATHIE A  
 2S126AB09400 BELL RYAN J & BELL SARA K  
 2S124CC90301 BEES DANIEL & BEES ROYALETTA  
 2S126AB03201 BEDIENT DARYL M & BEDIENT NOBUE  
 2S124CC90581 BAXTER KARA  
 2S124CC90861 BATES DEBRA M  
 2S126AB13400 BASTON LIVING TRUST  
 2S124CC90791 BASSETT JEFFREY E  
 2S123DB00400 BARON HOLDINGS LLC & OLIVER HOLDINGS LLC  
 2S124CC90181 BALDUS ANN E  
 2S126AB06900 BALBOA DANIEL J & BALBOA JUANA  
 2S124CC90090 BAILEY SUSANNE J  
 2S123DA01100 B3 MANAGEMENT LLC  
 2S123DA01200 B3 MANAGEMENT LLC  
 2S126AB13300 AVERY G WILLIAM  
 2S126AB11200 AUSLAND HAYDEN & MARSHALL LINDSAY  
 2S126AB11300 AUSLAND RANDI E & AUSLAND ALICE L  
 2S124CC90541 AUGUST MICHELLE L & AUGUST JAMES WILLIAM  
 2S124CC91111 ASHIMINE ELLIOTT SEIJI & ASHIMINE CORINNE  
 2S124CC90261 ANTHONY WILMA  
 2S126AB02700 ANDERSON ANTHONY  
 2S123DD01000 AN IVETH ELIZHBA & GARFIAS MIRNA G MONTIEL

9285 SW APACHE DR	TUALATIN	OR	97062
8508 SW MOHAWK ST	TUALATIN	OR	97062
9393 SW UMIAT ST	TUALATIN	OR	97062
9208 SW CREE CIR	TUALATIN	OR	97062
8504 SW MOHAWK ST	TUALATIN	OR	97062
9098 SW RARITAN CT	TUALATIN	OR	97062
9025 SW APACHE DR	TUALATIN	OR	97062
8378 SW MOHAWK ST	TUALATIN	OR	97062
3545 UPPER DR	LAKE OSWEGO	OR	97035
17480 HOLY NAMES DR #206	LAKE OSWEGO	OR	97034
20335 SW COMANCHE TER	TUALATIN	OR	97062
2495 PALISADES CREST DR	LAKE OSWEGO	OR	97034
9050 SW SAGERT ST	TUALATIN	OR	97062
20395 SW COMANCHE TER	TUALATIN	OR	97062
9070 SW APACHE DR	TUALATIN	OR	97062
14330 SW BELL RD	SHERWOOD	OR	97140
6530 SW 89TH PL	TIGARD	OR	97223
8900 SW SAGERT ST	TUALATIN	OR	97062
8440 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 3570	TUALATIN	OR	97062
9070 SW SAGERT ST	TUALATIN	OR	97062
8270 SW MOHAWK ST	TUALATIN	OR	97062
9087 SW SAGERT ST	TUALATIN	OR	97062
8685 SW SAGERT ST	TUALATIN	OR	97062
8284 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 4183	TUALATIN	OR	97062
9252 SW CREE CIR	TUALATIN	OR	97062
9265 SW SAPONI LN	TUALATIN	OR	97062
9085 SW SAGERT ST	TUALATIN	OR	97062
8404 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 1338	TUALATIN	OR	97062
20238 SW 93RD AVE	TUALATIN	OR	97062
9075 SW SAGERT ST	TUALATIN	OR	97062
9322 SW TONOPAH ST	TUALATIN	OR	97062
20130 SW BOONES FERRY RD	TUALATIN	OR	97062
20100 SW BOONES FERRY RD	TUALATIN	OR	97062
9140 SW APACHE DR	TUALATIN	OR	97062
20245 SW COMANCHE TER	TUALATIN	OR	97062
9142 SW RARITAN CT	TUALATIN	OR	97062
8366 SW MOHAWK ST	TUALATIN	OR	97062
8390 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 181	TUALATIN	OR	97062
8502 SW MOHAWK ST	TUALATIN	OR	97062
20389 SW BOONES FERRY RD	TUALATIN	OR	97062
8434 SW MOHAWK ST	TUALATIN	OR	97062
8350 SW MOHAWK ST	TUALATIN	OR	97062
9341 SW GERTZ LN	TUALATIN	OR	97062
8394 SW MOHAWK ST	TUALATIN	OR	97062
900 SW 5TH AVE, 17TH FLOOR	PORTLAND	OR	97204
8478 SW MOHAWK ST	TUALATIN	OR	97062
9247 SW CREE CIR	TUALATIN	OR	97062
8424 SW MOHAWK ST	TUALATIN	OR	97062
1726 SE CUTTER LN	VANCOUVER	WA	98661
1726 SE CUTTER LN	VANCOUVER	WA	98661
9327 SW GERTZ LN	TUALATIN	OR	97062
9330 SW TONOPAH ST	TUALATIN	OR	97062
9328 SW TONOPAH ST	TUALATIN	OR	97062
8450 SW MOHAWK ST	TUALATINH	OR	97062
8306 SW MOHAWK ST	TUALATIN	OR	97062
8494 SW MOHAWK	TUALATIN	OR	97062
10850 SW BANNOCH ST	TUALATIN	OR	97062
19790 SW BOONES FERRY RD	TUALATIN	OR	97062

2S124CC90921 AMINI MITRA  
2S123DC00600 AMERICAN APARTMENT COMMUNITIES II LP  
2S124CC90472 AHREND MINDY L  
2S126AB04700 AHRENS REBECCA ELIZABETH & JUREVICIUS PAULIUS  
2S123DC00100 AG PROPERTIES LLC  
2S124CC91062 ADAMS ERIKKA  
2S124CC90201 8482 MOHAWK LLC  
2S124CC91262 8292 MOHAWK LLC  
2S123CA00200 2010 WA HOLDINGS LLC 2010 WA HOLDINGS LLC  
2S123DD00200 19545 & 19605 SW BOONES FERRY RD PROPERTY LLC &

8342 SW MOHAWK ST	TUALATIN	OR	97062
PO BOX 4900	SCOTTSDALE	AZ	85261
8468 SW MOHAWK ST	TUALATIN	OR	97062
9275 SW APACHE DR	TUALATIN	OR	97062
PO BOX 989	EUGENE	OR	97440
8300 SW MOHAWK ST	TUALATIN	OR	97062
18725 SW BOONES FERRY RD	TUALATIN	OR	97062
8324 SW MAXINE LN UNIT #46	WILSONVILLE	OR	97070
700 N SAN VINCENE BLVD STE #G860	WEST HOLLYWOOD CA		90069



### CIO Board of Directors List

**Updated 11/30/2021**

Always copy:  
 tualatincio@gmail.com,  
 mgeorge@tualatin.gov, and  
 brief@tualatin.gov

	Name	Term	Address	City	State	Zip	Phone	Email
<b>Riverpark</b>								
President	Janine Wilson	Elected 11/2021	18325 SW 135th Terrace	Tualatin	OR	97062	541-761-0705	<a href="mailto:riverparkcio@gmail.com">riverparkcio@gmail.com</a>
Vice President	Chris Tunstall	Elected 11/2021	17400 SW Cheyenne Way	Tualatin	OR	97062	503-789-9143	<a href="mailto:famtunstall1@frontier.com">famtunstall1@frontier.com</a>
Land Use Officer	Dan Hardy	Elected 11/2021	23070 SW Lodgepole Ave	Tualatin	OR	97062	503-332-8905	<a href="mailto:dan@danhardyproperties.com">dan@danhardyproperties.com</a>
Secretary	Kate Pinamonti	Elected 11/2021	10240 SW Fulton Drive	Tualatin	OR	97062	503-709-7466	<a href="mailto:katepinamonti@hotmail.com">katepinamonti@hotmail.com</a>
Treasurer	Jeanne Raikoglo	Elected 11/2021	17630 SW Shawnee Trail	Tualatin	OR	97062	503-803-7047	<a href="mailto:iraikoglo@aol.com">iraikoglo@aol.com</a>
At-Large	Daniel Bachhuber		10205 SW Casteel Ct	Tualatin	OR	97062	971-998-5407	<a href="mailto:daniel@bachhuber.co">daniel@bachhuber.co</a>
<b>East Tualatin</b>								
President	Doug Ulmer	Interim (08/2021)	7149 SW Sagert St., Unit 105	Tualatin	OR	97062	503-522-0504	<a href="mailto:cio.east.west@gmail.com">cio.east.west@gmail.com</a>
Vice President								
Land Use Officer	Dana Holland	Interim (11/2021)	7237 SW Delaware Ct.	Tualatin	OR	97062	503-243-1111	<a href="mailto:dana476@gmail.com">dana476@gmail.com</a>
Treasurer								
Secretary	Margarita Crowell	Interim (11/2021)	7237 SW Delaware Ct.	Tualatin	OR	97062	508-243-11143	<a href="mailto:mcrowell248@comcast.net">mcrowell248@comcast.net</a>
<b>Midwest Tualatin</b>								
President								<a href="mailto:tualatinmidwestcio@gmail.com">tualatinmidwestcio@gmail.com</a>
Vice President								
Land Use Officer								
Secretary	Tammy Palumbo	Elected 4/2021	9510 SW Siuslaw Ln	Tualatin	OR	97062	503-793-6179	<a href="mailto:tmppgarden@comcast.net">tmppgarden@comcast.net</a>
Treasurer								
<b>Martinazzi Woods</b>								
President	Sallie Olson	Reelected 11/2021	8960 SW Arapaho Rd	Tualatin	OR	97062	503-484-8056	<a href="mailto:solson.1827@gmail.com">solson.1827@gmail.com</a>
Vice President	Del Moore	Reelected 11/2020	8790 SW Nisqually Ct	Tualatin	OR	97062	503-807-2762	<a href="mailto:delmoore@frontier.com">delmoore@frontier.com</a>
Land Use Officer	Jamison Shields	Elected 11/2021	8182 SW Palute	Tualatin	OR	97062	804-385-2695	<a href="mailto:jamison.l.shields@gmail.com">jamison.l.shields@gmail.com</a>
Secretary	Claudia Sterling	Elected 11/2021	20600 SW Shoshone Dr	Tualatin	OR	97062	503-701-5793	<a href="mailto:claudia.sterling@comcast.net">claudia.sterling@comcast.net</a>
Treasurer	Janet Gilkey	Reelected 11/2020	21132 SW 86th Ct	Tualatin	OR	97062	503-307-6712	<a href="mailto:janet7531@gmail.com">janet7531@gmail.com</a>
At-Large	Roy Loop		20190 SW 86th Ct	Tualatin	OR	97062	503-969-2701	<a href="mailto:roydloop@gmail.com">roydloop@gmail.com</a>
<b>Ibach</b>								
President	Ed Casey		22255 SW 102nd Pl.	Tualatin	OR	97062	503-692-0513	<a href="mailto:edkcnw@comcast.net">edkcnw@comcast.net</a>
Vice President								
Land Use Officer								
Secretary	Julie Makarowsky		10775 SW Willow St.	Tualatin	OR	97062	503-351-8344	<a href="mailto:lmakarowsky@comcast.net">lmakarowsky@comcast.net</a>
Treasurer								
<b>Byrom</b>								
President	Alex Thurber		9875 SW Iowa Dr	Tualatin	OR	97062	503-880-2450	<a href="mailto:byromcio@gmail.com">byromcio@gmail.com</a>
Vice President								
Land Use Officer	Mary Lyn Westenhaver	Interim (08/2021)	9845 SW Iowa Dr	Tualatin	OR	97062	503-341-1936	<a href="mailto:mwestenhaver@hotmail.com">mwestenhaver@hotmail.com</a>
Secretary	Susan Humphrey	Interim (08/2021)	8801 SW Stono Dr.	Tualatin	OR	97063	503-830-2132	<a href="mailto:humphreysusan10@gmail.com">humphreysusan10@gmail.com</a>
Treasurer	Deb Fant		22680 SW Eno Pl.	Tualatin	OR	97062	408-391-8582	<a href="mailto:deb.fant@gmail.com">deb.fant@gmail.com</a>
<b>Commercial</b>								
President	Cathy Holland	2023	10740 SW Lucas Dr.	Tualatin	OR	97062	503-691-1813	<a href="mailto:tualatincommercialcio@gmail.com">tualatincommercialcio@gmail.com</a>
Vice President	Scott Miller	2023	12976 SW Hillside Terrace	Tualatin	OR	97223	971-275-0341	<a href="mailto:scottm@capacitycommercial.com">scottm@capacitycommercial.com</a>
Land Use Officer	Scott Miller	2023	12976 SW Hillside Terrace	Tualatin	OR	97223	971-275-0341	<a href="mailto:scottm@capacitycommercial.com">scottm@capacitycommercial.com</a>
Secretary								
Treasurer	Chris Tunstall	2023	17400 SW Cheyenne Way	Tualatin	OR	97062	503-789-9143	<a href="mailto:famtunstall1@frontier.com">famtunstall1@frontier.com</a>



## NOTICE OF PUBLIC HEARING AND OPPORTUNITY TO COMMENT CITY OF TUALATIN, OREGON

**NOTICE IS HEREBY GIVEN** that a **continued** public hearing for a Type IV-A Quasi-Judicial Procedure, PMA21-0001, Tualatin Heights Apartments Plan Map Amendment, continued from January 24, 2022, will be heard on:

**Monday, February 14, 2022 at 7:00 pm**

**In Person: Juanita Pohl Center  
8513 SW Tualatin Road  
Tualatin, OR 97062**

or

**Via Zoom:**

**Link will be available 7 days before the hearing at:  
<https://www.tualatinoregon.gov/citycouncil/city-council-meeting-336>**

**The property is located at: 9301 SW Sagert Street, Tax Lot #2S123DC-00600**

**Comments and questions can be submitted to:**

**Planning Division  
Attn: Keith Leonard  
City of Tualatin  
10699 SW Herman Road  
Tualatin, OR 97062  
[kleonard@tualatin.gov](mailto:kleonard@tualatin.gov) or 503-691-3029**

- **Project Description:** Request to rezone property located at 9301 SW Sagert Street from Medium-Low Density Residential (RML) zone to Medium-High Density Residential (RMH) zone. If the PMA is approved, the proposal would increase the allowable development density of 10 dwelling units per acre to 15 dwelling units per acre.
- **Criteria:** Applicable Oregon Statewide Planning Goals; Oregon Administrative Rules Chapter 660 Division 9 and 12; Metro Urban Growth Management Functional Plan Chapter 3.07; and Tualatin Development Code Sections 32.240 and 33.070.
- **Print copies of the application:** all documents and evidence relied upon by the applicant and applicable criteria are available for inspection at no cost and copies will be provided at a reasonable cost.
- **Staff report:** A copy of the staff report, and supporting documents will be available for inspection at no cost at least seven days prior to the hearing and will be provided at reasonable cost at the Tualatin Planning Division.



- **Individuals wishing to comment** may do so in writing to the Planning Division prior to the hearing and/or present written and/or verbal testimony to the City Council at the hearing. Hearings begin with a staff presentation, followed by testimony by proponents, testimony by opponents, and rebuttal. The time of individual testimony may be limited. If a participant requests, before the hear-

proponents, testimony by opponents, and rebuttal. The time of individual testimony may be limited. If a participant requests, before the hear-



## NOTICE OF PUBLIC HEARING AND OPPORTUNITY TO COMMENT CITY OF TUALATIN, OREGON

**NOTICE IS HEREBY GIVEN** that a **continued** public hearing for a Type IV-A Quasi-Judicial Procedure, PMA21-0001, Tualatin Heights Apartments Plan Map Amendment, continued from January 24, 2022, will be heard on:

**Monday, February 14, 2022 at 7:00 pm**

**In Person: Juanita Pohl Center  
8513 SW Tualatin Road  
Tualatin, OR 97062**

or

**Via Zoom:**

**Link will be available 7 days before the hearing at:  
<https://www.tualatinoregon.gov/citycouncil/city-council-meeting-336>**

**The property is located at: 9301 SW Sagert Street, Tax Lot #2S123DC-00600**

**Comments and questions can be submitted to:**

**Planning Division  
Attn: Keith Leonard  
City of Tualatin  
10699 SW Herman Road  
Tualatin, OR 97062  
[kleonard@tualatin.gov](mailto:kleonard@tualatin.gov) or 503-691-3029**

- **Project Description:** Request to rezone property located at 9301 SW Sagert Street from Medium-Low Density Residential (RML) zone to Medium-High Density Residential (RMH) zone. If the PMA is approved, the proposal would increase the allowable development density of 10 dwelling units per acre to 15 dwelling units per acre.
- **Criteria:** Applicable Oregon Statewide Planning Goals; Oregon Administrative Rules Chapter 660 Division 9 and 12; Metro Urban Growth Management Functional Plan Chapter 3.07; and Tualatin Development Code Sections 32.240 and 33.070.
- **Print copies of the application:** all documents and evidence relied upon by the applicant and applicable criteria are available for inspection at no cost and copies will be provided at a reasonable cost.
- **Staff report:** A copy of the staff report, and supporting documents will be available for inspection at no cost at least seven days prior to the hearing and will be provided at reasonable cost at the Tualatin Planning Division.



- **Individuals wishing to comment** may do so in writing to the Planning Division prior to the hearing and/or present written and/or verbal testimony to the City Council at the hearing. Hearings begin with a staff presentation, followed by testimony by

proponents, testimony by opponents, and rebuttal. The time of individual testimony may be limited. If a participant requests, before the hear-





City of Tualatin  
18880 SW Martinazzi Ave  
Tualatin, OR 97062

---

ing is closed, the record shall remain open for at least 7 days after the hearing.

- Failure of an issue to be raised in the hearing, in person, or by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals (LUBA) based on that issue. The failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to the decision maker to respond to the issue precludes an action for damages in circuit court.

You received this mailing notifying you of this public hearing which will be held on February 14, 2022, which was continued from January 24, 2022, because you own property within 1,000 feet (ft) of the site or within a residential subdivision which is partly within 1,000 ft.

To view the application materials visit [www.tualatinoregon.gov/projects](http://www.tualatinoregon.gov/projects).

**For additional information contact:**

Keith Leonard, Associate Planner - Phone 503-691-3029 or Email [kleonard@tualatin.gov](mailto:kleonard@tualatin.gov)



City of Tualatin  
18880 SW Martinazzi Ave  
Tualatin, OR 97062

---

ing is closed, the record shall remain open for at least 7 days after the hearing.

- Failure of an issue to be raised in the hearing, in person, or by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals (LUBA) based on that issue. The failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to the decision maker to respond to the issue precludes an action for damages in circuit court.

You received this mailing notifying you of this public hearing which will be held on February 14, 2022, which was continued from January 24, 2022, because you own property within 1,000 feet (ft) of the site or within a residential subdivision which is partly within 1,000 ft.

To view the application materials visit [www.tualatinoregon.gov/projects](http://www.tualatinoregon.gov/projects).

**For additional information contact:**

Keith Leonard, Associate Planner - Phone 503-691-3029 or Email [kleonard@tualatin.gov](mailto:kleonard@tualatin.gov)

**NOTICE OF HEARING  
CITY OF TUALATIN, OREGON**

NOTICE IS HEREBY GIVEN that a public hearing will be held before the City of Tualatin City Council at 7:00 p.m., Monday, January 24, 2022, streamed online and additionally accessible at the Juanita Pohl Center (8513 SW Tualatin Road, Tualatin, OR 97062).

**You are invited to attend and** participate in the public hearing. Under consideration is **File No. PMA 21-0001**: To consider a Plan Map Amendment (PMA) to change the existing zoning of Medium-Low Density Residential (RML) to Medium-High Density Residential (RMH). If the PMA is approved, the proposal would increase the allowable development density of 10 dwelling units per acre to 15 dwelling units per acre. The property owner, Andrew Lavaux of UDR, Inc., is being represented by Frank Angelo of Angelo Planning Group.

The location of this proposed map change is at 9301 SW Sagert Street, including Tax Map 2S123DC, Lots 600.



No specific development or construction proposal is being reviewed as part of this application. Any additional development or redevelopment of the subject property would require submittal, review, and approval of an Architectural Review application.

**The public is invited to comment by e-mail, writing, or by testifying at the hearing.** Written comments can be made and sent by email to Keith Leonard at [kleonard@tualatin.gov](mailto:kleonard@tualatin.gov) or submitted at the hearing. Failure to raise an issue at the hearing or in writing or to provide sufficient specificity to allow the City Council to respond to the issue precludes appeal to the Land Use Board of Appeals (LUBA). Legislative hearings begin with the Mayor opening the hearing, presentation of the staff report, public testimony, questions of staff or anyone who testified by Council, after which the Mayor closes the public hearing, and Council may then deliberate to a decision and a motion would be made to either approve, deny or continue the public hearing. The time of individual testimony may be limited.

For those who would prefer to make a verbal comment at the hearing, there are two options:

- Zoom teleconference. Instructions on how to provide comments will be provided during the meeting itself.
  - o Full instructions and a current link are available at: <https://www.tualatinoregon.gov/citycouncil/council-meetings>
- Attend in person at the Juanita Pohl Center. Masking guidelines will be followed physical distancing measures will be implemented for those attending in person, and City staff will be available to answer any questions.

**To view the application materials visit:** <https://www.tualatinoregon.gov/planning/pma-21-0001-tualatin-heights-apartments> (also navigable from [www.tualatinoregon.gov/projects](https://www.tualatinoregon.gov/projects))

A staff report will available seven days prior to the public hearing. This meeting and any materials being considered can be made accessible upon request.

**If approved, File No. PMA 21-0001** would modify the Zoning and Comprehensive Plan Map designations from Medium-Low Density Residential (RML) to Medium-High Density Residential (RMH).

**To grant the amendment,** Council must find the proposal meets the applicable criteria of the Oregon Statewide Planning Goals, Oregon Administrative Rules, Metro Code, and the Tualatin Comprehensive Plan and Development Code, including Tualatin Development Code Sections 32.240 and 33.070.



City of Tualatin

## CITY OF TUALATIN Staff Report

**TO:** Honorable Mayor and Members of the City Council

**THROUGH:** Sherilyn Lombos, City Manager

**FROM:** Keith Leonard, AICP, Associate Planner  
Steve Koper, AICP, Assistant Community Development Director

**DATE:** February 14, 2022

---

### **SUBJECT:**

Consideration of Ordinance No. 1465-22, requesting the annexation of 10.6 acres of land located 11345 SW Herman Road (Tax Map 2S122D000550) into the City of Tualatin and simultaneously withdrawing the territory from the Washington County Enhanced Sheriff Patrol District and Urban Roads Maintenance District (File No. ANN 21-0002).

### **RECOMMENDATION:**

Staff recommends that Council approve the Annexation (ANN 21-0002) and adopt Ordinance No. 1465-22.

### **EXECUTIVE SUMMARY:**

This matter is a quasi-judicial public hearing.

Property owners Gary and Ricky Walgraeve, represented by AAI Engineering, request approval to annex 10.6 acres of land located at 11345 SW Herman Road (Tax Map/Lot 2S122D000550) into the City of Tualatin. The land is within Tualatin's Urban Planning Area and is designated as General Manufacturing (MG). The property is currently undeveloped; no development is proposed at this time. Any development of the property would require a separately approved Architectural Review.

Before granting the proposed annexation, the City Council must find that the annexation conforms to the applicable criteria of TDC Section 33.010, Metro Code Section 3.09, and ORS 222. The Analysis and Findings (Exhibit 3) demonstrate that the proposal complies with the applicable criteria for granting an annexation.

### **OUTCOMES OF RECOMMENDATION:**

Approval of the Annexation (ANN 21-0002) and adoption of Ordinance No. 1465-22 will result in the following:

- Annexation of the property into the City of Tualatin and withdrawal of the property from the Washington County Enhanced Sheriff Patrol District and Urban Roads Maintenance District.
- Application of the City's General Manufacturing (MG) Zoning District to the property.

### **ALTERNATIVES TO RECOMMENDATION:**

The alternatives to the staff recommendation include:

- Continuation of the hearing to a date certain in the future; or

- Denial of the annexation request.

**FINANCIAL IMPLICATIONS:**

The City will receive an increased share in property tax revenue.

---

**ATTACHMENTS:**

Attachment 1: City Council Presentation

Attachment 2: Ord 1465-22 Property Annexation

Exhibit 1. Legal Description

Exhibit 2. Map

Exhibit 3. Analysis, Findings, and Exhibits

Exhibit A: Application, Petition and Supporting Materials

Exhibit B: Comprehensive Plan Map 8-1 (Functional Classification and Traffic Signal Plan)

Exhibit C: Comprehensive Plan Map 9-1 (Water System Master Plan)

Exhibit D: Comprehensive Plan Map 9-2 (Sewer System Master Plan)

Exhibit E: Comprehensive Plan Map 10-1 (Zoning)

# ANN 21-0002

## 11345 SW Herman Road Annexation

FEBRUARY 14, 2022



CITY OF

**TUALATIN** OREGON

# OVERVIEW

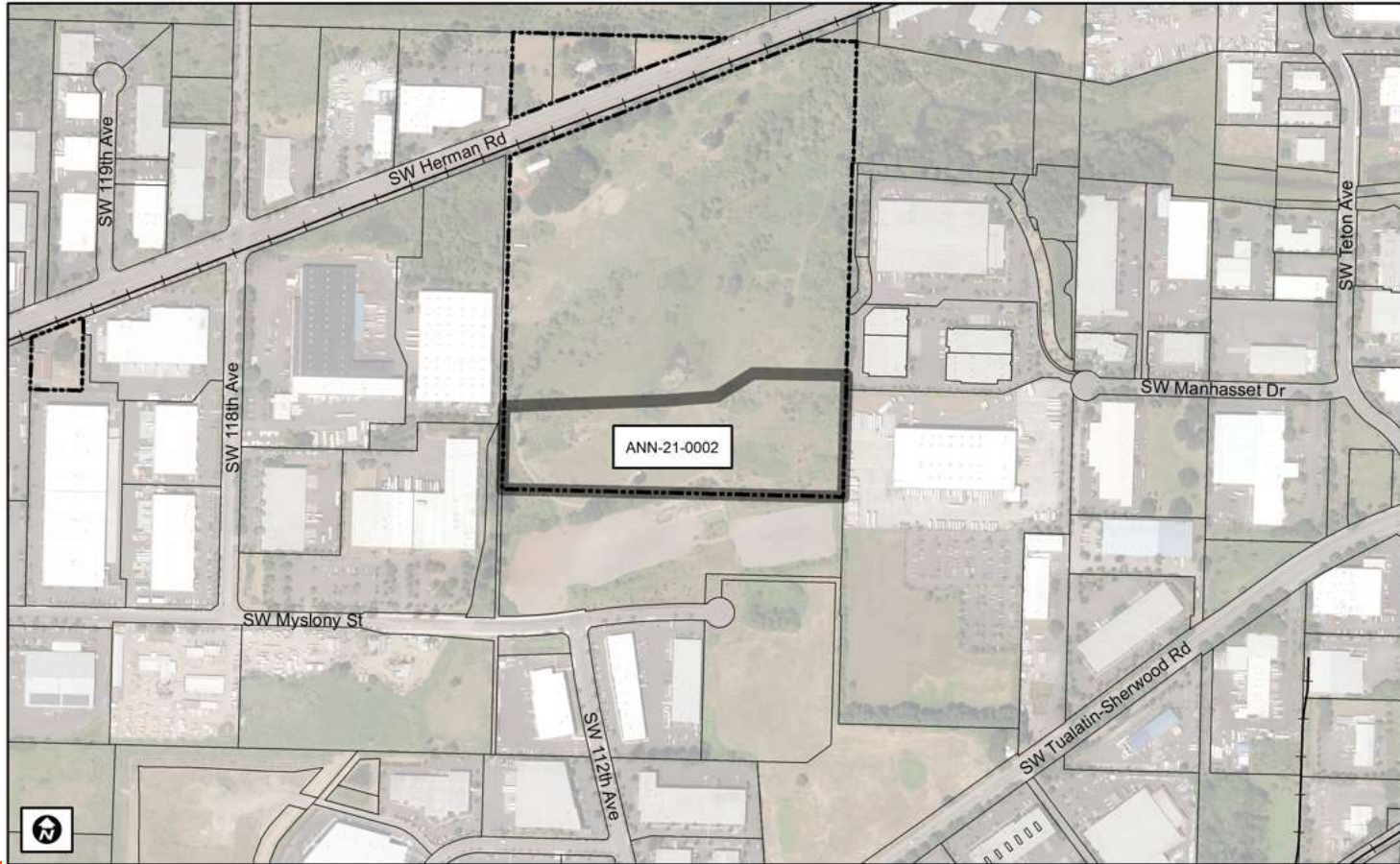
- Consideration of a request to approve an Annexation to the City of Tualatin for a 10.6 acre vacant property located at 11345 SW Herman Road.
- The property is designated as General Manufacturing (MG).
- Future development of the property will require a separate Architectural Review and approval. Applicable Development Code criteria would be reviewed at that time.



CITY OF

**TUALATIN** OREGON

# LOCATION







# APPLICABLE CRITERIA

- TDC 33.010 Annexations:
  - Within Urban Growth Boundary
  - Owner has petitioned to be annexed
  - Meets Metro Code 3.09
    - Adjacent to urban services (sewer, stormwater, water, roads) or services can be extended
  - Meets ORS Chapter 222
    - Adjacent to the City to which the property is being annexed and not within another city
- Note: No development proposed. Future development subject to Architectural Review and application of approval criteria in Development Code.



# CONCLUSION & RECOMMENDATION

*The Findings and Analysis demonstrate that proposed annexation complies with applicable Oregon Revised Statutes, Metro Code, and TDC.*

*Staff recommends City Council approve File No. ANN 21-0002 and adoption of Ordinance 1465-22.*



ORDINANCE NO. 1465-22

AN ORDINANCE ANNEXING TERRITORY AT 11345 SW HERMAN ROAD TAX MAP 2S122D LOT 550, INTO THE CITY OF TUALATIN; WITHDRAWING THE TERRITORY FROM THE WASHINGTON COUNTY ENHANCED SHERIFF PATROL DISTRICT AND URBAN ROADS MAINTENANCE DISTRICT (ANN 21-0002)

WHEREAS, Gary and Ricky Walgraeve (owners) as represented by AAI Engineering, submitted a petition for annexation of approximately 10.6 acres of land located at 11345 SW Herman Road, Tax Map 2S122D Lot 550, hereafter called the "Property," into the City of Tualatin;

WHEREAS, the City of Tualatin is authorized to annex territory under ORS Chapter 222 and Metro Code Chapter 3.09;

WHEREAS, the annexation of the Property has been requested by 100 percent of the property owners, 100 percent of the electors, and qualifies for annexation under ORS 222.125;

WHEREAS, Washington County has not opposed the annexation in accordance with the Urban Growth Management Agreement between the County and the City;

WHEREAS, Metro does not oppose the annexation;

WHEREAS, under ORS 199.510(2)(c), when a city receives services from a district and is part of that district, any territory annexed to the city is to be included in the boundaries of the district and subject to all liabilities of the district in the same manner and to the same extent as other territory included in the district;

WHEREAS, the City receives sewer, storm, and surface water management services from Clean Water Services and is part of the Clean Water Services district, as referenced ORS 199.510(2)(c);

WHEREAS, the Property is in the Washington County Enhanced Sheriff Patrol District;

WHEREAS, the Property is in the Urban Roads Maintenance District;

WHEREAS, ORS 222.520(1) authorizes cities to withdraw territory from districts concurrent with the annexation decision;

WHEREAS, notice of public hearing on the annexation petition was given as required by Tualatin Development Code 32.260;

WHEREAS, the Council conducted a public hearing relating to the annexation where Council heard and considered the testimony and evidence presented by the City staff, the applicant, and those appearing at the public hearing;

THE CITY OF TUALATIN ORDAINS AS FOLLOWS:

**Section 1.** The Property identified in the legal description attached as Exhibit 1 and as more fully depicted in the map in Exhibit 2, which are both incorporated by reference, is hereby annexed to and made a part of the City of Tualatin.

**Section 2.** The findings attached as Exhibit 3, which are incorporated herein by reference, are hereby adopted.

**Section 3.** The City Recorder is directed to forward copies of this Ordinance to the Oregon Department of Revenue.

**Section 4.** Within five days of receipt of the required information from the Oregon State Department of Revenue, the City Recorder is directed to send copies of this Ordinance and the approval from the Oregon Department of Revenue to Metro for filing with the Oregon Secretary of State.

**Section 5.** The annexation of the Property is effective from the date the annexation is filed with the Oregon Secretary of State, as provided in ORS 222.180.

**Section 6.** On the effective date of the annexation, the Property is withdrawn from the Washington County Enhanced Sheriff Patrol District and the Urban Roads Maintenance District.

**Section 7.** On the effective date of the annexation, under ORS 199.510(2)(c), the property will continue to be within the boundaries of Clean Water Services for the provision of sanitary sewer, storm, and surface water management.

**Section 8.** The City Recorder is directed to forward copies of this Ordinance and all other required materials to all public utilities and telecommunications utilities operating within the City in accordance with ORS 222.005.

Adopted by the City Council this 14<sup>th</sup> day of February, 2022.

CITY OF TUALATIN, OREGON

BY \_\_\_\_\_  
Mayor

ATTEST:

BY \_\_\_\_\_  
City Recorder





1" = 200'

**ANNEXATION CERTIFIED**

BY VF

**DEC 09 2021**

**WASHINGTON COUNTY A & T  
CARTOGRAPHY**

# ANNEXATION

SITUATED IN THE SOUTHEAST 1/4 OF SECTION 22,  
TOWNSHIP 2 SOUTH, RANGE 1 WEST, W.M.,  
WASHINGTON COUNTY, OREGON

DECEMBER 8, 2021

W A L G R A E V E S

P.O.B.

N57°45'52"E

161.78'

S88°29'13"E

340.99'

N85°36'07"E

187.62'

N88°06'57"E

588.38'

S01°33'00"W

449.13'

TRACT 2  
2006-090121

N01°23'38"E

305.55'

ANNEXATION AREA  
462,318 S.F.  
(10.613 ACRES)

WASHINGTON COUNTY

N88°30'34"W

1248.54'

CITY OF TUALATIN

FOUND 5/8" REBAR  
WITH RED PLASTIC CAP  
"RYAN LS 58833" SET  
SN 30,526

FOUND 5/8" REBAR  
WITH RED PLASTIC CAP  
"RYAN LS 58833" SET  
SN 30,526

TRACT 1  
2006-090121

PARCEL 1  
PARTITION PLAT  
NO. 2003-082

MANHASSET DRIVE  
INDUSTRIAL CONDOMINIUM  
2005-058166

FOUND 5/8" REBAR WITH  
YELLOW PLASTIC CAP  
"TETSUKA ASSOC INC."  
SET PP 2003-082



SW MYSLONY STREET

PREPARED BY  
**KC DEVELOPMENT**  
360.834.2519

REGISTERED

PROFESSIONAL  
LAND SURVEYOR



OREGON  
JULY 11, 2000  
**CINDY A. HALCUMB**  
58928 LS

EXPIRATION 06/30/23

PREPARED FOR  
**PHELAN  
DEVELOPMENT**





## ANALYSIS AND FINDINGS

Case #: ANN 21-0002

---

Location:	11345 SW Herman Road; Tax ID 2S122D000550
Owner:	Gary and Ricky Walgraeve
Applicant:	AAI Engineering, Beth Zauner
Representative:	AAI Engineering, Beth Zauner

---

### Introduction

#### A. Applicable Criteria

Annexations are reviewed under Tualatin Development Code (TDC) Chapter 33.010, *Annexations*. This code refers to Metro Code 3.09, *Local Government Boundary Changes*, and the applicable provisions of ORS Chapter 222, which also govern annexations.

#### B. Project Description

The subject territory is 10.6 acres and is located at 11345 SW Herman Road. The land is within Tualatin's Urban Planning Area and is designated as General Manufacturing (MG). The subject territory is located south of SW Herman Road and east of the SW 118th Avenue and SW Myslony Street intersection and north of the SW 112th Avenue and SW Myslony Street Intersection. SW Myslony Street terminates in a cul-de-sac south of the subject territory. The subject territory is within unincorporated Washington County, and is bordered to the east, west and south by the existing City of Tualatin City Limits. The northern portion of Tax Lot 550, which abuts SW Herman Road, will remain within Washington County.

The property owner has petitioned for annexation into the City of Tualatin. The scope of this review is limited to the suitability of annexing the property into the City of Tualatin. The subject territory is already within the Clean Water Services District, Tualatin Valley Fire and Rescue, TriMet, and the Tigard-Tualatin School District. The annexation would prompt withdrawal from the Washington County Enhanced Sheriff Patrol District and the Washington County Urban Road Maintenance District.

This application does not approve new development or construction of any buildings, it is solely an annexation application. If annexed, future development would be subject to all applicable requirements of the Tualatin Municipal and Development Codes.

## **Exhibit 3. Analysis and Findings**

### **C. Site Description**

The subject territory is a vacant rectangular property comprised of 10.6 acres and is bordered on the east, west and south by City of Tualatin's City Limits. The property is undeveloped and has been previously utilized for various agricultural crops and grazing for cattle. The subject territory is bordered by industrial uses to the east, west and south.

### **Exhibits**

Exhibit A: Application, Petition and Supporting Materials

Exhibit B: Comprehensive Plan Map 8-1 (Functional Classification and Traffic Signal Plan)

Exhibit C: Comprehensive Plan Map 9-1 (Water System Master Plan)

Exhibit D: Comprehensive Plan Map 9-2 (Sewer System Master Plan)

Exhibit E: Comprehensive Plan Map 10-1 (Zoning)

## Exhibit 3. Analysis and Findings

### TDC Chapter 33, Applications and Approval Criteria

#### Section 33.010 Annexations

To grant an annexation application, the Council must find:

**(5) Approval Criteria. To grant an annexation application, the Council must find:**

**(a) The territory to be annexed is within the Metro Urban Growth Boundary;**

**Finding:**

*As shown in Exhibit E, the subject territory is within the Metro Urban Growth Boundary and within Tualatin's Urban Planning Area. This standard is met.*

**(b) The owners of the territory to be annexed have petitioned to be annexed;**

**Finding:**

*As shown in Exhibit A, the property owners, Gary and Ricky Walgraeve, have petitioned to have the territory annexed into the City of Tualatin. This standard is met.*

**(c) The application conforms to the applicable criteria in Metro Code 3.09; and**

#### Chapter 3.09 Local Government Boundary Changes

#### Chapter 3.09.050 Hearing and Decision Requirements for Decisions Other Than Expedited Decisions

[...]

**B. Not later than 15 days prior to the date set for a hearing the reviewing entity shall make available to the public a report that addresses the criteria identified in subsection (D) and includes the following information:**

**1. The extent to which urban services are available to serve the affected territory, including any extra territorial extensions of service;**

**Finding:**

*The subject territory has adequate sanitary sewer, stormwater sewer, potable water to the south of the property and will be accessed from an existing public street SW Myslony Street. The subject territory is already within the Clean Water Services District, Tualatin Valley Fire and Rescue, TriMet, and the Tigard-Tualatin School District. As a result of the proposed annexation, the property would be withdrawn from the Washington County Enhanced Sheriff Patrol District and the Washington County Urban Road Maintenance District.*

**Sanitary Sewer:**

*The City of Tualatin Sewer Master Plan (Exhibit D) illustrates sewer connections are available in the vicinity of the subject territory. A 21" sanitary sewer main is located in SW 112<sup>th</sup> Avenue that extends onto the subject territory.*

**Stormwater:**

### **Exhibit 3. Analysis and Findings**

*There is an 18" stormwater main in SW Myslony Street that will provide service to the subject territory. Tualatin and Clean Water Services additionally implement stormwater management standards as required by the National Pollution Discharge Elimination System (NPDES) and Municipal Separate Storm Sewer System (MS4) permits. Stormwater facilities, including on-site detention facilities consistent with City and CWS standards, will be required with any future development.*

*The proposed annexation is consistent with the 1972 Tualatin Drainage Plan and Tualatin Comprehensive Plan Chapter 9.*

#### **Potable Water:**

*The City of Tualatin Water System Master Plan (Exhibit C) shows an existing transmission line in the vicinity of the subject territory. A 16" water main is located in SW Myslony Street with a 12" pipe leading to the subject territory. As a result, the property is able to connect to water service consistent with the City's Water Master Plan.*

#### **Transportation and Streets:**

*The subject site is provided with public street access from SW Myslony Street, which is classified as a Collector and Industrial Connector (Exhibit B) and is under the City of Tualatin's jurisdiction. Future road frontage improvements would be reviewed in conjunction with a future Architectural Review application for development on the site.*

*The territory is currently within the TriMet transit district and would continue to be so upon annexation. The property is located south of the current route for TriMet bus line 94 (SW Pacific Highway) and north of line 97 (SW Tualatin Sherwood Road).*

#### **Additional Services:**

*As a result of the proposed annexation, the property would be withdrawn from the Washington County Enhanced Sheriff Patrol District and the Washington County Urban Road Maintenance District.*

*The territory is currently within the Tualatin Valley Fire and Rescue district, and would continue to be so upon annexation into the City.*

*The territory is currently within the Tigard-Tualatin School District and would be continue to be so upon annexation.*

*The subject territory is not currently within an independent parks district, and would be served by the City of Tualatin for parks services and facilities upon annexation. This standard is met.*

**2. Whether the proposed boundary change will result in the withdrawal of the affected territory from the legal boundary of any necessary party; and**

## Exhibit 3. Analysis and Findings

### **Finding:**

*The proposed boundary change will withdraw the property from Washington County's jurisdiction for planning, zoning, building, and related services and transfer jurisdiction for those services to the City of Tualatin. This standard is met.*

### **3. The proposed effective date of the boundary change.**

[...]

### **Finding:**

*The annexation of the subject territory will be effective on the date the annexation is filed with the Oregon Secretary of State, as provided in ORS 222.180. This standard is met.*

**D. To approve a boundary change, the reviewing entity shall apply the criteria and consider the factors set forth in subsections (D) and (E) of section 3.09.045.**

### **Finding:**

*These standards are addressed below.*

### **3.09.045 Expedited Decisions**

**D. To approve a boundary change through an expedited process, the city shall:**

**1. Find that the change is consistent with expressly applicable provisions in:**

**a. Any applicable urban service agreement adopted pursuant to ORS 195.065;**

### **Finding:**

*ORS 195.065 considers urban services agreements pertaining to sanitary sewer, water, fire protection, parks, open space, recreation, and streets, roads, and mass transit.*

*The City of Tualatin has an established Urban Planning Area Agreement (UPAA) with Washington County, which currently has jurisdiction over the subject territory. The UPAA acknowledges that the City of Tualatin is responsible for comprehensive planning, including public facility planning, within the Urban Planning Area. It also establishes a process for determining the likely provider for urban services through concept planning; this is generally the City except where the City holds Intergovernmental Agreements (IGAs) with other service providers.*

*The subject territory is currently within, and would remain within, the Tualatin Valley Fire and Rescue district. Additionally the subject territory is currently within, and would remain within, the Tigard-Tualatin School district. The territory is not within an independent parks, open space or recreation district other than Metro, of which it will remain a part.*

*The City of Tualatin has an established IGA with CWS delineating responsibilities for public sanitary sewer and stormwater management. The subject territory is already within the Clean Water Services District.*

*No additional urban services agreements apply. This standard is met.*

### Exhibit 3. Analysis and Findings

**b. Any applicable annexation plan adopted pursuant to ORS 195.205;**

**Finding:**

*No applicable annexation plan exists for this area. This standard is not applicable.*

**c. Any applicable cooperative planning agreement adopted pursuant to ORS 195.020(2) between the affected entity and a necessary party;**

**Finding:**

*No applicable cooperative planning agreement exists for this area. This standard is not applicable.*

**d. Any applicable public facility plan adopted pursuant to a statewide planning goal on public facilities and services;**

**Finding:**

*The City's Transportation System Plan, Sewer Master Plan and Water Master Plan are all contained in the Comprehensive Plan and applicable to the subject territory. These plans are discussed below in greater detail.*

***Transportation System Plan:***

*The City of Tualatin Transportation System Plan (Exhibit B) identifies SW Myslony Street as a Major Collector and Industrial Connector. The subject site will have public street access to SW Myslony Street via property to the south. The property is able to connect to the transportation network consistent with the City's TSP.*

***Sewer Master Plan:***

*The City of Tualatin Sewer Master Plan (Exhibit D) illustrates sewer connection is available in the vicinity of the subject territory. A 21" sanitary sewer main is located in SW 112th Avenue that extends onto the subject territory. The subject territory is already within the Clean Water Services district and the City's sewer district.*

***Water Master Plan:***

*The City of Tualatin Water System Master Plan (Exhibit C) shows an existing transmission line in the vicinity of the subject territory. A 16" water main is located in SW Myslony Street with a 12" pipe leading to the subject territory. The property is able to connect to water service consistent with the City's Water Master Plan.*

*The proposed annexation is consistent with these plans. This standard is met.*

**e. Any applicable comprehensive plan;**

**Finding:**

*The City of Tualatin's Comprehensive Plan contains the Comprehensive Plan Map 10-1, (Exhibit E) showing this territory as part of the Urban Planning Area and indicating that the property is zoned General Manufacturing (MG).*

### Exhibit 3. Analysis and Findings

*Comprehensive Plan Chapters 8 Transportation, and 9 Public Facilities Services provide details about service provision in this vicinity. Map 9-1 (Exhibit C) outlines the future provision of water service over the subject territory. Map 9-2 (Exhibit D) shows connections and future provision for sewer service to the subject territory. Chapter 9 establishes a method for cooperation with DEQ and Clean Water Services with the Storm Water Management Ordinance applied at the time of future development.*

*This standard is met.*

#### **f. Any applicable concept plan; and**

##### **Finding:**

*The subject territory is not within a concept planning area. The property is subject to a land use designation of General Manufacturing (MG) illustrated on Comprehensive Plan Map 10-1 (Exhibit E). This standard is met.*

#### **2. Consider whether the boundary change would:**

- a. Promote the timely, orderly and economic provision of public facilities and services;**
- b. Affect the quality and quantity of urban services; and**
- c. Eliminate or avoid unnecessary duplication of facilities or services.**

##### **Finding:**

*Given the property is adjacent to existing urban services, including utilities and transportation access on SW Myslony Street, this annexation would not interfere with the timely, orderly, and economic provision of public facilities and services, nor would it necessitate the duplication of services. The progression toward additional transportation and utility improvements associated with any future development would be timely. Annexation is a necessary first step to future development and related public improvements. Standards A through C are met.*

#### **E. A city may not annex territory that lies outside the UGB, except it may annex a lot or parcel that lies partially within and partially outside the UGB.**

##### **Finding:**

*The subject territory is wholly within the Urban Growth Boundary (UGB). This standard is met.*

#### **(d) The application is consistent with applicable provisions of ORS Chapter 222.**

**ORS 222.111(1) When a proposal containing the terms of annexation is approved in the manner provided by the charter of the annexing city or by ORS 222.111 to 222.180 or 222.840 to 222.915, the boundaries of any city may be extended by the annexation of territory that is not within a city and that is contiguous to the city or separated from it only by a public right of way or a stream, bay, lake or other body of water. Such territory may lie either wholly or partially within or without the same county in which the city lies.”**

##### **Finding:**



### **Exhibit 3. Analysis and Findings**

*As shown on the Comprehensive Plan Map 10-1 (Exhibit E), the subject territory is not within a city and is contiguous to the City of Tualatin. This standard is met.*

**ORS 222.520(1)** Whenever a part less than the entire area of a district named in ORS 222.510 becomes incorporated as or annexed to a city in accordance with law, the city may cause that part to be withdrawn from the district in the manner set forth in ORS 222.120 or at any time after such incorporation or annexation in the manner set forth in ORS 222.524. Until so withdrawn, the part of such a district incorporated or annexed into a city shall continue to be a part of the district.

**Finding:**

*The subject territory is within the Tigard-Tualatin School District, Tualatin Valley Fire & Rescue, and TriMet districts and will remain so. Police services will be provided by the City of Tualatin. Because the proposed boundary change is consistent with state and local law, this standard is met.*

**Conclusion and Recommendation:**

*Based on the application and the above analysis and findings, the proposed annexation complies with applicable Oregon Revised Statutes, Metro Code, and TDC. Accordingly, staff recommends City Council approval of File No. ANN 21-0002 and adoption of Ordinance No. 1465-22.*



**CITY OF TUALATIN**  
Planning Division

## Land Use Application

Project Information		
Project Title: <b>Walgraevs Industrial Park</b>		
Brief Description: <b>Annexation of a portion of property that will have access via SW Myslony Street.</b>		
Property Information		
Address: <b>11345 SW Herman Road, Tualatin OR</b>		
Assessor's Map Number and Tax Lots: <b>2S122D000550</b>		
Applicant/Primary Contact		
Name: <b>Beth Zauner</b>	Company Name: <b>AAI Engineering</b>	
Address: <b>4875 SW Griffith Dr. #300</b>		
City: <b>Beaverton</b>	State: <b>Oregon</b>	ZIP: <b>97005</b>
Phone: <b>503-620-3030</b>	Email: <b>bethz@aaieng.com</b>	
Property Owner		
Name: <b>GARY A. WALGRAEVE, Ricky A Walgraev</b>		
Address: <b>11345 SW HERMAN RD.</b>		
City: <b>TUALATIN</b>	State: <b>OR.</b>	ZIP: <b>97062</b>
Phone: <b>503-692-0766</b>	Email: <b>farmerboys@comcast.net</b>	
Property Owner's Signature: <b>Gary A. Walgraev, Ricky A Walgraev</b>		Date: <b>Sept 1 '21</b>
<small>(Note: Letter of authorization is required if not signed by owner.)</small>		
<b>AS THE PERSON RESPONSIBLE FOR THIS APPLICATION, I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION IN AND INCLUDED WITH THIS APPLICATION IN ITS ENTIRETY IS CORRECT. I AGREE TO COMPLY WITH ALL APPLICABLE CITY AND COUNTY ORDINANCES AND STATE LAWS REGARDING BUILDING CONSTRUCTION AND LAND USE.</b>		
Applicant's Signature: <b>Beth Zauner</b>		Date: <b>11/22/2021</b>
Land Use Application Type:		
<input checked="" type="checkbox"/> Annexation (ANN)	<input type="checkbox"/> Historic Landmark (HIST)	<input type="checkbox"/> Minor Architectural Review (MAR)
<input checked="" type="checkbox"/> Architectural Review (AR)	<input type="checkbox"/> Industrial Master Plan (IMP)	<input type="checkbox"/> Minor Variance (MVAR)
<input type="checkbox"/> Architectural Review—Single Family (ARSF)	<input type="checkbox"/> Plan Map Amendment (PMA)	<input type="checkbox"/> Sign Variance (SVAR)
<input type="checkbox"/> Architectural Review—ADU (ARADU)	<input type="checkbox"/> Plan Text Amendment (PTA)	<input type="checkbox"/> Variance (VAR)
<input type="checkbox"/> Conditional Use (CUP)	<input type="checkbox"/> Tree Removal/Review (TCP)	
Office Use		
Case No:	Date Received:	Received by:
Fee:	Receipt No:	

# Walgraeves Industrial Park

## Annexation Application

**Prepared for:**  
City of Tualatin  
18880 SW Martinazzi Avenue  
Tualatin, Oregon 97062

**Prepared by:**  
AAI Engineering  
4875 SW Griffith Drive Suite 300  
Beaverton, OR 97005  
(503) 352-7678  
(503) 620-5539, fax  
Email: [bethz@aaieng.com](mailto:bethz@aaieng.com)

**October 2021**

## General Information

Submitted to: City of Tualatin Planning Division  
18800 SW Martinazzi Avenue  
Tualatin, OR 97062

Applicants: Phelan Development Company  
6750 SW Bradbury Ct.  
Portland, OR 97224

Property Owner: Walgraeves  
11345 SW Herman Rd.  
Tualatin, OR 97062

Applicant's Consultant: AAI Engineering  
4875 SW Griffith Dr.#100  
Beaverton, OR 97005

Contact: Beth Zauner  
Email: bethz@aaieng.com  
Phone: (503) 563-6151

Site Location: Southern portion of 11345 SW Herman Rd.

Assessor's Map: Washington County Assessor's Map 2S122D000550

Site Size: An annexation request affecting +/- 10.6 acres

Land Use District: Washington County zoning: FD-10  
After annexation: MG - General Manufacturing

# Narrative

---

---

## PROJECT DESCRIPTION

### ANNEXATION:

The project site is currently located in Washington County. A Property line Adjustment is currently being processed through Washington County and the City of Tualatin. The property line adjustment will facilitate the annexation of only the project site area. The portion of the property that will not be owned or developed as part of this project, will not be annexed.

Following this Annexation application, the project will be submitted for Architectural Review in the City of Tualatin.

## SITE DESCRIPTION

The property is located at 11345 SW Herman Road. After the Property Line Adjustments and Annexation, the project site will be approximately 10.6 acres. The project will take access from SW Myslony St. The property is vacant with no significant vegetation; however, wetlands do exist of the site and will be mitigated as required. It is anticipated that after annexation, the property will be zoned MG – General Manufacturing.

## APPLICABLE STANDARDS

The following narrative addresses the proposal's consistency with the City of Tualatin Development Code (TDC), and applicable state, regional, and local policies and review criteria.

### **Tualatin Development Code:**

CHAPTER 33 - Applications and Approval Criteria

33.010. - Annexations.

### **Metro Code**

CHAPTER 3.09 – Local Government Boundardy Changes

### **ORS**

CHAPTER 222

## ATTACHMENTS:

Exhibit A: City of Tualatin Annexation Application

Exhibit B: Certification of Property Ownership and Certification of Registered Voters.

Exhibit C: Property Owner Information

Exhibit D: Measure 37 & 49 Waiver of Rights and Remedies

Exhibit E: Annexation Property Information Sheet

Exhibit F: Petition to Annex

Exhibit G: Legal Description

Exhibit H: Quarter Section Map

Exhibit I: Certification of Legal Description and Map Form

Exhibit J: Neighborhood/Developer Meeting Information

**TUALATIN DEVELOPMENT CODE**

**Chapter 33 – Applications and Approval Criteria**

33.010. - Annexations.

(5) Approval Criteria.

To grant an annexation application, the Council must find:

- (a) The territory to be annexed is within the Metro Urban Growth Boundary;

**Response: The property to be annexed is within the Metro Urban Growth Boundary.**

- (b) The owners of the territory to be annexed have petitioned to be annexed;

**Response: he owners of the property have made a petition for annexation.**

- (c) The application conforms to the applicable criteria in Metro Code 3.09; and

**Response: The application conforms to the applicable criteria in Metro Code 3.09, as described in this narrative document.**

- (d) The application is consistent with applicable provisions of ORS Chapter 222.

**Response: The application conforms to the applicable provisions of ORS Chapter 222, as described in this narrative document.**

**Metro Code**

CHAPTER 3.09 – Local Government Boundardy Changes

3.09.050 Hearing and Decision Requirements for Decisions Other Than Expedited Decisions

B. Not later than 15 days prior to the date set for a hearing the reviewing entity shall make available to the public a report that addresses the criteria identified in subsection (D) and includes the following information:

1. The extent to which urban services are available to serve the affected territory, including any extra territorial extensions of service;

**Finding: The subject property is a single parcel of 10.6 acres surrounded by developed residential and industrial land within the City of Tualatin. The subject property will take access off of SW Myslony which is being extended and improved to City of Tualatin standards. Adjacent Industrial development ensures adequate utilities will also be available. This standard is met.**

2. Whether the proposed boundary change will result in the withdrawal of the affected territory from the legal boundary of any necessary party; and

**Finding: The proposed boundary change will withdraw the property from the Washington County Enhanced Sheriff Patrol District. This standard is met.**

3. The proposed effective date of the boundary change.

**Finding: The annexation of the subject property is effective from the date the annexation is filed with the Oregon Secretary of State, as provided in ORS 222.180. This standard is met.**

D. To approve a boundary change, the reviewing entity shall apply the criteria and consider the factors set forth in subsections (D) and (E) of section 3.09.045.

**Finding: These standards are addressed below.**

3.09.045 Expedited Decisions

D. To approve a boundary change through an expedited process, the city shall:

1. Find that the change is consistent with expressly applicable provisions in:
  - a. Any applicable urban service agreement adopted pursuant to ORS 195.065;

**Finding: The Urban Planning Area Agreement between Washington County and the City of Tualatin acknowledges this property as part of the City of Tualatin's Urban Planning Area. As such, this agreement stipulates that urban services will generally be provided by the City upon annexation, except where the City holds intergovernmental agreements (IGAs) with other service providers.**

**The subject property is already within, and would remain within, the Clean Water Services District, Tualatin Valley Fire and Rescue, TriMet, and the Tigard-Tualatin School District. The annexation would prompt withdrawal from the Washington County Enhanced Sheriff Patrol District and the Washington County Urban Road Maintenance District. The annexation would not create any inconsistencies with any urban service agreements. This standard is met.**

- b. Any applicable annexation plan adopted pursuant to ORS 195.205;

**Finding: No applicable annexation plan exists for this area. This standard is not applicable.**

- c. Any applicable cooperative planning agreement adopted pursuant to ORS 195.020(2) between the affected entity and a necessary party;

**Finding: No applicable cooperative planning agreement exists for this area. This standard is not applicable.**

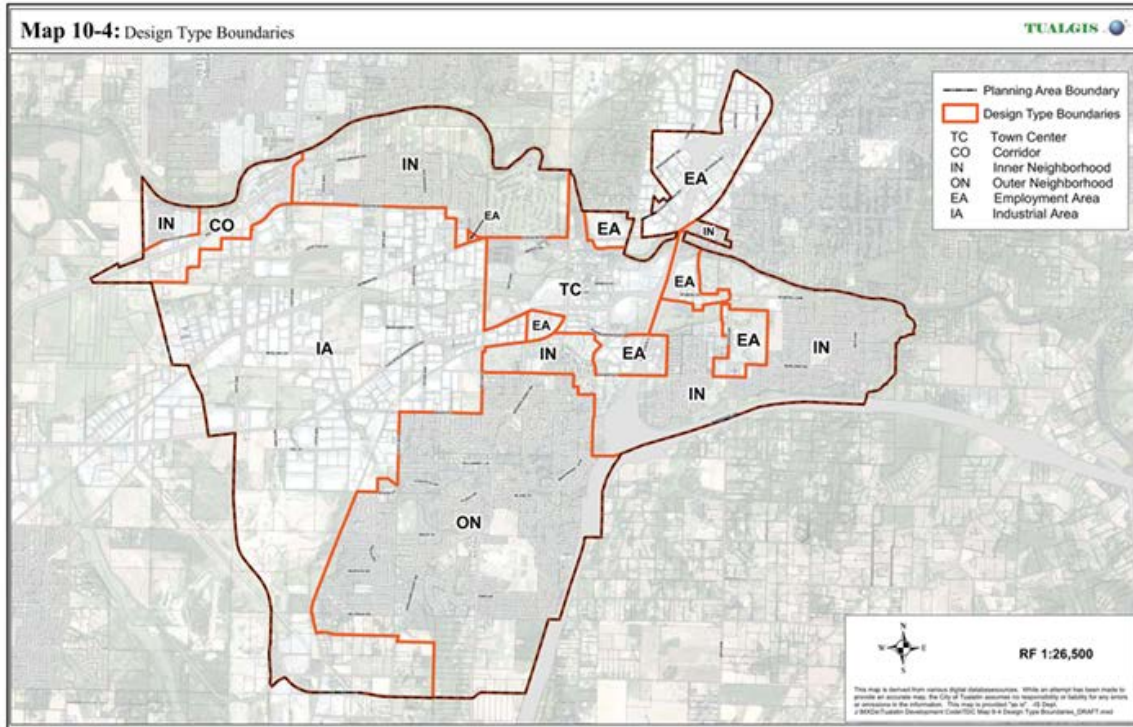
- d. Any applicable public facility plan adopted pursuant to a statewide planning goal on public facilities and services;

**Finding: The City's Transportation System Plan (2014) and public facilities plans contained within Tualatin's Comprehensive Plan reflect the Urban Planning Area that contains the extent of this territory and plans for eventual annexation. This standard is met.**

- e. Any applicable comprehensive plan;

**Finding: The City of Tualatin's Comprehensive Plan contains the Design Type Boundaries Map 10-4 showing this property as part of the Industrial Areas Lands.**





The provisions of the Comprehensive Plan that relate to annexations, found in TDC Chapter 4 are fully reflected in the criteria presented in the implementing sections of the TDC Chapter 33.010, Annexations, and Chapter 32.260, Annexation Procedures. This standard is met.

f. Any applicable concept plan; and

**Finding: This property is not located within a concept plan area. This standard is not applicable.**

2. Consider whether the boundary change would:

a. Promote the timely, orderly and economic provision of public facilities and services;

b. Affect the quality and quantity of urban services; and (Effective 07/11/2012) 3.09 - 6 of 9

c. Eliminate or avoid unnecessary duplication of facilities or services.

**Finding: Since the property is adjacent to existing urban services, including utilities and transportation access to Myslony, this annexation would not interfere with the timely, orderly, and economic provision of public facilities and services, nor would it necessitate the duplication of services. The progression toward additional transportation and utility improvements associated with any future development would be timely. Annexation is a necessary first step to future development and related public improvements. Standards a. through c. are met.**

E. A city may not annex territory that lies outside the UGB, except it may annex a lot or parcel that lies partially within and partially outside the UGB.

**Finding: The subject territory is wholly within the UGB. This standard is met.**

**ORS**

**CHAPTER 222**

**City Boundary Changes; Mergers; Consolidations; Withdrawals**

**222.111 Authority and procedure for annexation; specifying tax rate in annexed territory.**

(1) When a proposal containing the terms of annexation is approved in the manner provided by the charter of the annexing city or by ORS 222.111 to 222.180 or 222.840 to 222.915, the boundaries of any city may be extended by the annexation of territory that is not within a city and that is contiguous to the city or separated from it only by a public right of way or a stream, bay, lake or other body of water. Such territory may lie either wholly or partially within or without the same county in which the city lies.

**Finding: The subject property is not within a city and is contiguous to the City of Tualatin. This standard is met.**

**222.520 Annexation of less than entire district; assumption of obligations by city conditional.**

(1) Whenever a part less than the entire area of a district named in ORS 222.510 becomes incorporated as or annexed to a city in accordance with law and the city, after the incorporation or annexation, will provide for the service to the part of the district that the district provided before the incorporation or annexation, the city may cause the part to be withdrawn from the district in the manner set forth in ORS 222.120 or at any time after the incorporation or annexation in the manner set forth in ORS 222.524. Until withdrawn, the part of the district incorporated as or annexed to the city shall continue to be a part of the district.

**Finding: The subject property is in the Washington County Enhanced Sheriff Patrol District and the Washington County Urban Road Maintenance District. As part of this annexation, the subject properties will be withdrawn from the Enhanced Sheriff Patrol District and the Urban Road Maintenance District. Police services will be provided by the City of Tualatin. Because the proposed boundary change is consistent with state and local law, this standard is met.**

**Conclusion:**

**Based on the application and the above analysis and findings, the proposed annexation complies with applicable Oregon Revised Statutes, Metro Code, and TDC.**





1" = 200'

**ANNEXATION CERTIFIED**

BY VF

**DEC 09 2021**

**WASHINGTON COUNTY A & T  
CARTOGRAPHY**

# ANNEXATION

SITUATED IN THE SOUTHEAST 1/4 OF SECTION 22,  
TOWNSHIP 2 SOUTH, RANGE 1 WEST, W.M.,  
WASHINGTON COUNTY, OREGON

DECEMBER 8, 2021

W A L G R A E V E S

P.O.B.

N57°45'52"E

161.78'

S88°29'13"E

340.99'

N85°36'07"E

187.62'

N88°06'57"E

588.38'

N01°23'38"E

305.55'

S01°33'00"W

TRACT 2  
2006-090121

449.13'

ANNEXATION AREA  
462,318 S.F.  
(10.613 ACRES)

WASHINGTON COUNTY

N88°30'34"W

1248.54'

CITY OF TUALATIN

FOUND 5/8" REBAR  
WITH RED PLASTIC CAP  
"RYAN LS 58833" SET  
SN 30,526

FOUND 5/8" REBAR  
WITH RED PLASTIC CAP  
"RYAN LS 58833" SET  
SN 30,526

TRACT 1  
2006-090121

PARCEL 1  
PARTITION PLAT  
NO. 2003-082

MANHASSET DRIVE  
INDUSTRIAL CONDOMINIUM  
2005-058166  
52.03'

FOUND 5/8" REBAR WITH  
YELLOW PLASTIC CAP  
"TETSUKA ASSOC INC."  
SET PP 2003-082



SW MYSLONY STREET

PREPARED BY  
**KC DEVELOPMENT**  
360.834.2519

REGISTERED

PROFESSIONAL  
LAND SURVEYOR



OREGON  
JULY 11, 2000

**CINDY A. HALCUMB**  
58928 LS

EXPIRATION 06/30/23

PREPARED FOR  
**PHELAN  
DEVELOPMENT**

### PROPERTY OWNER INFORMATION

(This form is NOT the petition)

Metro Code 3.09.040 requires the names and address of all property owners and/or registered voters of the property, regardless of support shown on petition to annex. This is not for notification purposes. A signature on this form does not indicate support or opposition to the request.

**NAME OF OWNER/VOTER (V)**

**MAILING ADDRESS**

**PROPERTY DESIGNATION**

**PROPERTY ADDRESS (If different)**

(Indicate Section, Township, Range and Lot No.)

(1) Gary Walgraeve  
25122 D000550

(2) Ricky Walgraeves  
25122 D000550

(3) \_\_\_\_\_

(4) \_\_\_\_\_

(5) \_\_\_\_\_

(6) \_\_\_\_\_

(7) \_\_\_\_\_

(8) \_\_\_\_\_

(9) \_\_\_\_\_

(10) \_\_\_\_\_

## ANNEXATION PROPERTY INFORMATION SHEET

### EXISTING CONDITIONS IN AREA TO BE ANNEXED:

Land area, in acres: 20.43 acres

General description of territory (Include topographic features such as slopes, vegetation, drainage basins, and floodplain areas which are pertinent to this proposal): vacant, no significant vegetation, wetlands present (to be mitigated)

Describe land uses on surrounding parcels (Use tax lots as reference points)

North: This property will remain in the Walgraaves ownership and will remain residential in use, in Washington Co.

South: Ferguson Plumbing Supply (Industrial) & two multi-tenant Industrial buildings.

East: UPS Customer service building

West: Large Warehouse & Distribution centers.

### EXISTING LAND USE:

Number of existing units/structures:

Single-family: 0 Multi-family: 0 Commercial: 0 Industrial: 0

Describe existing units/structures: none

What is the current use(s) of the land proposed to be annexed: residential

Public facilities or other uses: current access to SW Herman Rd.  
Access after PLA/ANNEX from SW Myslongy St.

Total current year assessed valuation – Land \$: TBD. Structures \$: 0 (no structures on annex. land)

Total existing population: 2

Is the territory contiguous to the City limits: yes

Is the subject territory inside or outside of the Metro Regional Urban Growth Boundary: inside

**URBAN SERVICE PROVIDERS:**

If the territory described in the proposal is presently included within the boundaries of any of the following types of governmental units, please indicate so by stating the name or names of the governmental units involved.

County: Washington Co.

Highway Lighting District: \_\_\_\_\_

Fire District: TVER

Sanitary District: CWS

Water District: \_\_\_\_\_

Grade School District: Tigard-Tualatin

High School District: Tigard-Tualatin

Library District: \_\_\_\_\_

Drainage District: CWS

Parks & Recreation District: \_\_\_\_\_

Other: ESPD.

Is the territory served by any of the providers listed above (describe existing connections to public services): \_\_\_\_\_


The property to be annexed is vacant and will establish new connections to all City utilities and services.





### CERTIFICATION OF PROPERTY OWNERSHIP

I certify that the attached petition for annexation of the described territory to the City of Tualatin contains the names of the owners\* of a majority of the land area of the territory to be annexed, as shown on the last available complete assessment roll.

<u>TED FOSTER</u>	<u>GIS TECH</u>	_____
Printed Name	Title	
<u></u>	<u>12/9/21</u>	_____
Signature	Date	
<u>CARTOGRAPHY</u>	<u>WASHINGTON</u>	_____
Department	County of	

\*Owner means the owner of the title to real property or the contract purchaser of the real property.

**ANNEXATION CERTIFIED**

BY 

**DEC 09 2021**

**WASHINGTON COUNTY A & T  
CARTOGRAPHY**

### CERTIFICATION OF PROPERTY OWNERSHIP

I certify that the attached petition for annexation of the described territory to the City of Tualatin contains the names of the owners\* of a majority of the land area of the territory to be annexed, as shown on the last available complete assessment roll.

GARY A. WALGRAEVE  
Printed Name Title

Gary A. Walgraev Sept 1 - 2021  
Signature Date

Department County of

*\*Owner means the owner of the title to real property or the contract purchaser of the real property.*

### CERTIFICATION OF REGISTERED VOTERS

I certify that the attached petition for annexation of described territory to the City of Tualatin contains the names of at least a majority of the electors registered in the territory to be annexed.

GARY WALGRAEVE OWNER  
Printed Name Title

Gary Walgraev 8-16-21  
Signature Date

Department County of



25 NW 23rd Place Suite 1 / Commercial Dept  
Portland, OR 97210  
Phone (503) 219-9088 Fax (503) 477-6476

WFG National Title Insurance Company  
Attn: Trevor Cheyne  
25 NW 23rd Place Suite 1 / Commercial Dept  
Portland, OR 97210

Date Prepared: June 12, 2020

### PRELIMINARY TITLE REPORT

Order Number: **20-207334**  
Escrow Officer: Trevor Cheyne  
Phone: (503) 444-7047  
Fax: (503) 296-5869  
Email: [tcheyne@wfgnationaltitle.com](mailto:tcheyne@wfgnationaltitle.com)

**Seller(s): Gary Walgraeve and Ricky Walgraeve**  
**Buyer(s): Phelan Development Company, LLC**

**Property: 11345 SW Herman Road, Tualatin, OR 97062**

**WFG National Title Insurance Company**, is prepared to issue a title insurance policy, as of the effective date and in the form and amount shown on Schedule A, subject to the conditions, stipulations and exclusions from coverage appearing in the policy form and subject to the exceptions shown on Schedule B. This Report (and any Amendments) is preliminary to and issued solely for the purpose of facilitating the issuance of a policy of title insurance at the time the real estate transaction in question is closed and no liability is assumed in the Report. The Report shall become null and void unless a policy is issued and the full premium paid.

This report is for the exclusive use of the person to whom it is addressed. Title insurance is conditioned on recordation of satisfactory instruments that establish the interests of the parties to be insured; until such recordation, the Company may cancel or revise this report for any reason.

## SCHEDULE A

1. The effective date of this preliminary title report is **8:00 A.M. on 9th day of June, 2020**
2. The policies and endorsements to be insured and the related charges are:

<u>Policy/Endorsement Description</u>	<u>Liability</u>	<u>Charge</u>
<b>ALTA 2006 Owners Policy</b>	<b>\$9,016,920.00</b>	<b>\$14,126.00</b>
<b>Basic Owner's Rate</b>		<b>\$14,126.00</b>

**Proposed Insured: Phelan Development Company, LLC**

**Government Service Fee: \$25.00**

This is a preliminary billing only, a consolidated statement of charges, credits and advances, if any, in connection with this order will be provided at closing.

3. Title to the land described herein is vested in:

**Ricky Walgraeve and Gary Walgraeve, as tenants in common**

4. The estate or interest in land is:

**Fee Simple**

5. The land referred to in this report is described as follows:

**SEE ATTACHED EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF**

**EXHIBIT "A"**  
**LEGAL DESCRIPTION**

A tract of land being a portion of that certain tract of land described in Deed to Gary Walgraeve and Ricky Walgraeve recorded November 12, 1993, as Fee No. 930943118, Washington County Deed Records, in the Southeast 1/4 of Section 22, Township 2 South, Range 1 West of the Willamette Meridian, County of Washington and State of Oregon, being more particularly described as follows:

Commencing at a 3-1/4" aluminum disk marking the South 1/4 corner of said Section 22; thence along the South line of said Southeast 1/4 of Section 22, North 89°37'22" East 69.55 feet to the Southwest corner of said Walgraeve tract; thence along the West line thereof, North 00°27'50" West 970.99 feet to the True Point of Beginning of the herein described tract of land; thence continuing along said West line, North 00°27'50" West 1220.09 feet to the Southeasterly right of way line of the Southern Pacific Railroad (60.00 feet wide); thence along said right of way line North 67°04'40" East 1179.33 feet to the North line of said Southeast 1/4 of Section 22; thence leaving said right of way line and along said North line North 89°40'09" East 167.37 feet; thence South 00°20'09" East 444.41 feet to the North line of Tract B, Partition Plat No. 2003-082, a duly recorded plat in said County; thence along said North line North 88°39'51" West 5.00 feet to the Northwest corner of said Tract B, also being the Northwest corner of that certain tract of land described in Deed to Swanpor Corporation recorded September 24, 1986, as Fee No. 86043361, said Deed Records; thence along the West line of said Swanpor tract South 00°20'09" East 1227.71 feet; thence leaving said West line South 89°37'22" West 1248.52 feet to the True Point of Beginning.

ALSO a tract of land being a portion of that certain tract of land described in Deed to Gary Walgraeve and Ricky Walgraeve, as tenants in common, recorded July 28, 2006 as Instrument No. 2006-090121, Washington County Records, situated in the Southeast quarter of Section 22, Township 2 South, Range 1 West of the Willamette Meridian, County of Washington, State of Oregon, being more particularly described as follows:

Commencing at a 3-1/4" aluminum disk marking the South quarter corner of said Section 22; thence along the South line of said Southeast quarter of Section 22, North 89°37'22" East 69.55 feet to the Southwest corner of said Walgraeve tract; thence along the West line thereof North 00°27'50" West 507.64 feet to the True Point of Beginning of the herein described tract of land; thence continuing along said West line North 00°27'50" West 463.34 feet; thence leaving said West line North 89°37'22" East 1248.52 feet to the West line of Parcel 1, Partition Plat 2003-082, a duly recorded Plat in Washington County; thence along said West line South 00°20'09" East 430.00 feet to the North line of that certain tract of land conveyed to Pascuzzi Investment LLC by Quitclaim Deed recorded June 2, 1995 as Instrument No. 95-037906, said Deed Records; thence along said North line South 89°37'22" West 495.00 feet to the Northwest corner of said Pascuzzi tract of land; thence North 00°22'38" West 30.00 feet to the beginning of a 2553.81 foot radius non-tangent curve to the left, a radial line bears North 00°22'38" West to said point; thence along the arc of said curve 438.46 feet through a central angle of 9°50'14" (the long chord bears South 84°42'15" West 437.93 feet); thence along a radial line North 10°12'52" West 7.00 feet to the beginning of a 2560.81 foot radius curve to the left, said curve being concentric with the aforementioned curve; thence along the arc of said curve 37.74 feet through a central angle of 0°50'40" (the long chord bears South 79°21'49" West 37.74 feet) to the beginning of a 1497.92 foot radius reverse curve to the right; thence along the arc of said curve 272.61 feet through a central angle of 10°25'38" (the long chord bears South 84°09'18" West 272.23 feet); thence South 89°22'07" West 6.87 feet to the true point of beginning. The bearings contained in this description are based on Survey No. 30526, Washington County Survey Records.

EXCEPTING THEREFROM a tract of land located in the Southeast One-Quarter of Section 22, Township 2 South, Range 1 West, Willamette Meridian, City of Tualatin, Washington County, Oregon and being more particularly described as follows: Beginning at the southwest corner of Parcel 1 of Partition Plat Number 2003-082, being a 3 inch brass disk inscribed "DE HAAS AND ASSOC. INC.", thence along the west line of said Parcel 1 North 00°20'09" West 395.59 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "DE HAAS & ASSOC. INC."; thence South 89°37'22" West 5.00 feet to the True Point of Beginning, being a 5/8 inch iron rod with a yellow plastic cap inscribed "DE HAAS & ASSOC. INC."; thence South 89°37'22" West 495.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "RYAN LS 58833"; thence North 00°22'38" West 140.00 feet to a point; thence North 89°37'22" East 495.10 feet to a point on the west line of said Parcel I; thence along said west line South 00°20'09" East 140.00 feet to the True Point of Beginning. The Basis of Bearings is per Washington County Survey Number 30837.

## SCHEDULE B

### GENERAL EXCEPTIONS

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, or claims of easement, not shown by the public records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
4. Any encroachment (of existing improvements located on the subject land onto adjoining land or of existing improvements located on adjoining land onto the subject land), encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the subject land.
5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

### SPECIAL EXCEPTIONS

6. As disclosed by the tax roll the premises herein described have been zoned or classified for farm use. At any time that said land is disqualified for such use, the property may be subject to additional taxes or penalties and interest.
7. Unpaid Taxes for 2019 -2020:

Levied Amount	:	\$66.94
Balance Owing	:	\$66.94, plus interest
Property ID No.	:	<a href="#">R2159788</a>
Levy Code	:	<a href="#">023.76</a>
Map Tax Lot No.	:	2S122D000550
8. Unpaid Taxes for 2019 -2020:

Levied Amount	:	\$2,028.91
Balance Owing	:	\$2,028.91, plus interest
Property ID No.	:	<a href="#">R530624</a>
Levy Code	:	<a href="#">023.78</a>
Map Tax Lot No.	:	2S122D000550
9. City liens, if any, of the City of Tualatin. We find none as of June 12, 2020.
10. Rights of governmental bodies in and to any portion of the premises lying within an unnamed creek or tributary of [Hedges Creek](#), for flood control and protection of anadromous fish and for wetlands protection.
11. Ordinance No. 685-86 of the City of Tualatin, including the terms and provisions thereof:

Regarding	:	Local Improvement District for sewer system improvements
Recorded	:	January 27, 1986
Recording No.	:	<a href="#">86003933</a>
12. Ordinance No. 684-86 of the City of Tualatin, including the terms and provisions thereof:

Regarding	:	Local Improvement District for water system improvements
Recorded	:	January 27, 1986
Recording No.	:	<a href="#">86003934</a>



13. Easement, including the terms and provisions thereof:
  - For : Sanitary sewer line
  - Granted to : City of Tualatin
  - Recorded : May 12, 1987
  - Recording No. : [87024140](#)
  - Affects : see [Public Survey 31560](#) for location
  
14. Easement, including the terms and provisions thereof:
  - For : Storm water line to benefit property [south of Myslony Street](#)
  - Granted to : Pacific N.W. Properties Limited Partnership, and [assigns](#)
  - Recorded : December 24, 2007
  - Recording No. : [2007-130682](#)
  - Affects : Location to be determined
  
15. State Tax Warrant:
  - In favor of : State of Oregon Department of Revenue
  - Against : Rick A Walgraeve
  - Warrant No. : L0748665344
  - Recorded : August 19, 2016
  - Recording No. : [2016-066433](#)
  - Amount : \$7,907.84
  
16. State Tax Warrant:
  - In favor of : State of Oregon Department of Revenue
  - Against : Rick A Walgraeve
  - Warrant No. : L0115917568
  - Recorded : April 7, 2017
  - Recording No. : [2017-028179](#)
  - Amount : \$2,721.65
  - and
  - Notice of Renewal of Distraint Warrant:
    - Recorded : April 27, 2017
    - Recording No. : [2017-033784](#)
  
17. This Commitment is subject to approval by personnel of WFG National Title Insurance Company and any additional limitations, requirements or exceptions made by WFG National Title Insurance Company.
  
18. The legal description herein covers more property than is intended for the transaction. We require that a surveyor's legal description for the intended parcel be provided prior to closing.

**END OF EXCEPTIONS**

NOTE: Please be advised that we have searched the records and do not find any open Deeds of Trust or Mortgages. If you should have knowledge of an outstanding obligation, please contact the Title Department for further review.

NOTE: In no event shall WFG National Title Insurance Company have any liability for the tax assessor's imposition of any additional assessments for omitted taxes unless such taxes have been added to the tax roll and constitute liens on the property as of the date of closing. Otherwise, such omitted taxes shall be the sole, joint and several responsibility of seller(s) and buyer(s), as they may determine between themselves.

NOTE: LINKS FOR ADDITIONAL SUPPORTING DOCUMENTS:

- [Vesting Deed 93094118](#)
- [Vesting Deed 2006-090121 PLA](#)
- [Vesting Deed 2007-117930 PLA](#)
- [Vesting Deed 2010-102922 PLA](#)
- [PS 30526 - 2006 PLA survey](#)
- [PS 30837 - 2007 PLA survey](#)
- [PS 31560 - 2010 PLA survey](#)
- [PS 33560 - 2019 Myslony Street & 118th Ave survey](#)
- [Partition Plat 2012-002 south of Myslony St](#)
- [Partition Plat 2003-082 - adjacent east](#)
- [Plat Map 3-11 Tualatin Valley Acres - adjacent west](#)
- [86043361 deed to Swanpor](#)- legal description reference
- [2010-102923 deed to Pascuzzi](#) - legal description reference
- [map - WCO - Hedges Creek Greenway](#)
- [map - NWN gas lines](#)
- [map - WCO zoning](#)
- [Photos - GoogleEarth-rTM](#)

NOTE: Due to current conflicts or potential conflicts between state and federal law, which conflicts may extend to local law, regarding marijuana, if the transaction to be insured involves property which is currently used or is to be used in connection with a marijuana enterprise, including but not limited to the cultivation, storage, distribution, transport, manufacture, or sale of marijuana and/or products containing marijuana, the Company declines to close or insure the transaction, and this Preliminary Title Report shall automatically be considered null and void and of no force and effect.

NOTE: The following applicable recording fees will be charged by the county:

Washington County-First Page	\$81.00
Each Additional Page	\$ 5.00
Non-standard Document Fee	\$20.00
E-recording Fee	\$ 3.00

**Washington County Ordinance No. 193, recorded May 13, 1977 in Washington County, Oregon imposes a tax of \$1.00 per \$1,000.00 or fraction thereof on the transfer of real property located within Washington County.**

NOTE: IMPORTANT INFORMATION REGARDING PROPERTY TAX PAYMENTS

Fiscal Year:	July 1 <sup>st</sup> through June 30 <sup>th</sup>
Taxes become a lien on real property, but are not yet payable.	July 1 <sup>st</sup>
Taxes become certified and payable (approximately on this date)	October 15 <sup>th</sup>
First one third payment of taxes are due	November 15 <sup>th</sup>
Second one third payment of taxes are due	February 15 <sup>th</sup>
Final payment of taxes are due	May 15 <sup>th</sup>

Discounts: If two thirds are paid by November 15<sup>th</sup>, a 2% discount will apply.

If the full amount of the taxes are paid by November 15<sup>th</sup>, a 3% discount will apply.

Interest: Interest accrues as of the 15<sup>th</sup> of each month based on any amount that is unpaid by the due date. No interest is charged if the minimum amount is paid according to the above mentioned payment schedule.

**NOTE: THE FOLLOWING NOTICE IS REQUIRED BY STATE LAW: YOU WILL BE REVIEWING, APPROVING AND SIGNING IMPORTANT DOCUMENTS AT CLOSING. LEGAL CONSEQUENCES FOLLOW FROM THE SELECTION AND USE OF THESE DOCUMENTS. YOU MAY CONSULT AN ATTORNEY ABOUT THESE DOCUMENTS. YOU SHOULD CONSULT AN ATTORNEY IF YOU HAVE QUESTIONS OR CONCERNS ABOUT THE TRANSACTION OR ABOUT THESE DOCUMENTS. IF YOU WISH TO REVIEW TRANSACTION DOCUMENTS THAT YOU HAVE NOT SEEN, CONTACT THE ESCROW AGENT.**

## End of Report

### **Your Escrow Officer**

Trevor Cheyne  
WFG National Title Insurance Company  
25 NW 23rd Place Suite 1 / Commercial Dept  
Portland, OR 97210  
Phone: **(503) 444-7047**  
Fax: **(503) 296-5869**  
Email: **TeamTrevor@wfgnationaltitle.com**

### **Your Title Officer**

Rosa Stombaugh  
WFG National Title Insurance Company  
12909 SW 68th Pkwy., Suite 350  
Portland, OR 97223  
Phone: **(503) 431-8526**  
Fax: **(503) 684-2978**  
Email: **rstombaugh@wfgnationaltitle.com**



WFG National Title Insurance Company is prepared to issue, as of the date specified in the attached Preliminary Title Report (the Report), a policy or policies of title insurance as listed in the Report and describing the land and the estate or interest set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as a General or Specific Exception or not excluded from coverage pursuant to the printed Exclusions and Conditions of the policy form(s).

The printed General Exceptions and Exclusions from the coverage of the policy or policies are listed in Exhibit One to the Report. In addition, the forms of the policy or policies to be issued may contain certain contract clauses, including an arbitration clause, which could affect the party's rights. Copies of the policy forms should be read. They are available from the office which issued the Report.

The Report (and any amendments) is preliminary to and issued solely for the purpose of facilitating the issuance of a policy of title insurance at the time the real estate transaction in question is closed and no liability is assumed in the Report.

The policy(s) of title insurance to be issued will be policy(s) of WFG National Title Insurance Company.

**Please read the Specific Exceptions shown in the Report and the General Exceptions and Exclusions listed in Exhibit One carefully. The list of Specific and General Exceptions and Exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy to be issued and should be read and carefully considered.**

**It is important to note that the Report is not an abstract of title, a written representation as to the complete condition of the title of the property in question, and may not list all liens, defects and encumbrances affecting title to the land.**

The Report is for the exclusive use of the parties to this transaction, and the Company does not have any liability to any third parties or any liability under the terms of the policy(s) to be issued until the full premium is paid. Until all necessary documents are recorded in the public record, the Company reserves the right to amend the Report.

Countersigned

A handwritten signature in black ink, appearing to be 'J. B. G.', written in a cursive style.

**Exhibit One**  
**2006 American Land Title Association Loan Policy 6-17-06**  
**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
  - (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
  - (a) a fraudulent conveyance or fraudulent transfer, or
  - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

**THE ABOVE POLICY FORM MAY BE ISSUED TO AFFORD EITHER Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:**

**SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE**

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, or claims of easement, not shown by the public records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
4. Any encroachment (of existing improvements located on the subject land onto adjoining land or of existing improvements located on adjoining land onto the subject land), encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the subject land.
5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

**2006 AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY 6-17-06**  
**EXCLUSIONS FROM COVERAGE**

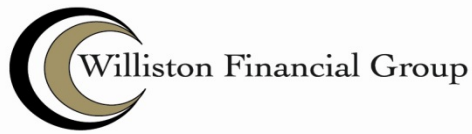
The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
  - (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
  - (a) a fraudulent conveyance or fraudulent transfer; or
  - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

**SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE**

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, or claims of easement, not shown by the public records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
4. Any encroachment (of existing improvements located on the subject land onto adjoining land or of existing improvements located on adjoining land onto the subject land), encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the subject land.

Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.



## Plain English Privacy Statement for Appraisal, Title & Escrow Customers

WFG believes it is important to protect your privacy and confidences. We recognize and respect the privacy expectations of our customers. We believe that making you aware of how we collect information about you, how we use that information, and who we share that information will form the basis for a relationship of trust between us. This Privacy Policy provides that explanation. We reserve the right to change this Privacy Policy from time to time.

Williston Financial Group, LLC, WFG National Title Insurance Co. and each of the affiliates listed below (collectively “WFG” or the “WFG Family”) are obligated to comply with Federal and state privacy laws. While there are some common requirements to those laws, the definitions and duties differ significantly from law-to-law and state-to-state. A privacy statement drafted to comply with all of the applicable privacy laws and their differing definitions would likely be confusing. Therefore, in an attempt to better communicate our privacy policies, WFG designed this “Plain English” explanation, followed by the Gramm-Leach-Bliley Act model form and State-Specific Privacy Notices in order to provide you with the complete, legal privacy notices and disclosures required under Federal and applicable State Laws.

WFG’s primary business is providing appraisal, title insurance and, escrow services for the sale or refinance of real property. This can be a complicated process, involving multiple parties, many of whom have been selected by our customers, each filling a specialized role. In part, you have hired WFG to coordinate and smooth the passage of the information necessary for an efficient settlement or closing.

In the course of this process, WFG collects a significant amount of personal and identifying information about the parties to a transaction, including sensitive items that include but are not limited to: your contact information including email addresses, Social Security numbers, driver’s license and, other identification numbers and information; financial, bank and insurance information; information about past and proposed mortgages and loans; about properties you currently or previously owned; your mortgage application package; and the cookie, IP address, and other information captured automatically by computer systems.

Much of this information is gathered from searches of public land records, tax, court and credit records to make certain that any liens, challenges, or title defects are addressed properly. Some of the information that is collected is provided by you, or the computer systems you use. We also may receive information from real estate brokers and agents, mortgage brokers and, others working to facilitate your transaction. We also may receive information from public, private or governmental databases including credit bureaus, ‘no-fly’ lists, and terrorist ‘watch lists’ , as well as from your lenders and credit bureaus.

### **What Information is Shared?**

**WFG DOES NOT SELL any of your information to non-affiliated companies for marketing or any other purpose.**

However, some of the same information does get shared with persons inside and outside the WFG Family in order to facilitate and complete your transaction.

For example:

- Information, draft documents, and closing costs will pass back and forth between WFG and your mortgage broker and lender to facilitate your transaction.
- Information, including purchase agreements and amendments, will pass back and forth between WFG and the real estate agents and brokers, the mortgage brokers and lenders, your lawyers and accountants, and others involved in facilitating the transaction.
- WFG may order property searches and examinations from title searchers, abstractors and title plants.
- WFG may use third parties to obtain tax information, lien information, payoff information, condominium and, homeowners’ association information and payoff information.
- Third parties may be engaged to prepare documents in connection with your transaction.
- Surveys, appraisals and, inspections may be ordered.
- Within the WFG Family of companies, we may divide up the work to handle each closing in the most efficient and compliant manner possible and to meet specific legal and licensing requirements. Certain parts of your closing (for example a search or disbursement) may be handled by another division or company within the WFG family.

- When it is time for signatures, your complete closing package may be sent to a notary, remote online notary, or notary service company who will arrange to meet with you to sign documents. The notary will, in turn, send signed copies back to us along with copies of your driver's license or other identity documents usually by mail, UPS, Federal Express or another courier service.
- Your deed, mortgage and other documents required to perfect title will be recorded with the local recorder of deeds.
- In some cases, we use an outside service to coordinate the recording or electronic-recording of those instruments, and they will receive copies of your deeds, mortgages and other recordable documents to process, scan and send on to the recording office.
- Various government agencies get involved. The law requires us to provide certain information to the IRS, the US Treasury, local and state tax authorities and other governmental agencies.

You have a choice in the selection of a mortgage broker, lender, real estate broker or agent and others that make up your 'transaction team.' Information flows to and from the members of the transaction team you have selected to facilitate an efficient transaction for you.

When WFG selects and engages a third-party provider, we limit the scope of the information shared with that third party to the information reasonably necessary for that service provider to provide the requested services. With most, we have entered into express agreements in which they expressly commit to maintain a WFG customer's information in strict confidence and use the information only for purposes of providing the requested services, clearing title, preventing fraud and addressing claims under our title insurance policies.

### **How does WFG use your Information?**

We may use your personal information in a variety of ways, including but not limited to:

- Provide the products, services and title insurance you have requested and to close and facilitate your transaction.
- Coordinate and manage the appraisal process.
- Handle a claim or provide other services relating to your title insurance policies.
- Create and manage your account.
- Operate and improve WFG's applications and websites, including WFG MyHome WFG's secure communication and transaction portal. Your information is used for access management, payment processing, site administration, internal operations, troubleshooting, data analysis, testing, research, and for statistical purposes.
- Respond to your requests, feedback, or inquiries.
- Comply with laws, regulations, and other legal requirements.
- Comply with relevant industry standards and our policies, including managing WFG's risk profile through reinsurance.
- Protect and enforce your rights and the rights of other users against unlawful activity, including identity theft and fraud.
- Protect and enforce our collective rights arising under any agreements entered into between WFG and you or any other third party;
- Protect the integrity and maintain security of our applications, websites, and products;
- Operate, evaluate, and improve our business; and
- Provide you with information about products, services, and promotions, from WFG or third parties that may interest you.

### **How Do We Store and Protect Your Personal Information?**

Although no system can guarantee the complete security of your personal information, we will use our best efforts to maintain commercially reasonable technical, organizational, and physical safeguards, consistent with applicable law, to protect your personal information and our systems and sites from malicious intrusions or hacking.

### **How Long Do We Keep Your Personal Information?**

We keep your personal information for as long as necessary to comply with the purpose for which it was collected, our business needs, and our legal and regulatory obligations. We may store some personal information indefinitely. If we dispose of your personal information, we will do so in a way that is secure and appropriate to the nature of the information subject to disposal.



## **Computer Information**

When you access a WFG website, or communicate with us by e-mail, we may automatically collect and store more information than you are expressly providing when you fill out a survey or send an email. This may include:

- Your IP Address.
- Your email address, your alias and, social media handles.
- (Internet Protocol Address) and domain name.
- The type of browser and operating system you use.
- The time of your visit.
- The pages of our site you visit.
- Cookies.

In order to provide you with customized service, we make use of Web browser cookies. Cookies are files that help us identify your computer and personalize your online experience. You may disable cookies on your computer, but you may not be able to download online documents or access certain sites unless cookies are enabled.

The technical information we collect is used for administrative and technical purposes and to prevent fraud and provide identity verification. For instance, we may use it to count the number of visitors to our site and determine the most popular pages. We may also use it to review types of technology you are using, determine which link brought you to our Web site, assess how our advertisements on other sites are working, help with maintenance, and improve our customers' experience.

We may compare information gathered on previous visits to verify that we are interacting with the same parties and not a potential imposter.

If we ask you to fill out any forms or surveys, we will use the information we receive only for the specific purposes indicated in those forms or surveys.

The information you and your transaction team send us in emails or attached to an email, or provide through any of our online tools, is used for purposes of providing title, escrow and appraisal management services and used for the purposes described above.

## **Links to Third Party Sites**

Our Applications and Websites may contain links to third-party websites and services. Please note that these links are provided for your convenience and information, and the websites and services may operate independently from us and have their own privacy policies or notices, which we strongly suggest you review. This Privacy Notice applies to WFG's applications and websites only.

## **Do Not Track**

Because there is not an industry-standard process or defined criteria to permit a user to opt-out of tracking their online activities (Do Not Track or DNT), our websites do not currently change the way they operate based upon detection of a "Do Not Track" or similar signal. Likewise, we cannot assure that third parties are not able to collect information about your online activities on WFG websites or applications.

## **Social Media Integration**

Our applications, websites, and products contain links to and from social media platforms. You may choose to connect to us through a social media platform, such as Facebook, Twitter, Google, etc. When you do, we may collect additional information from or about you, such as your screen names, profile picture, contact information, contact list, and the profile pictures of your contacts, through the social media platform. The social media platforms may also collect information from you.

When you click on a social plug-in, such as Facebook's "Like" button, Twitter's "tweet" button or the Google+, that particular social network's plugin will be activated and your browser will directly connect to that provider's servers. Your action in clicking on the social plug-in causes information to be passed to the social media platform.

We do not have control over the collection, use and sharing practices of social media platforms. We, therefore, encourage you to review their usage and disclosure policies and practices, including their data security practices, before using social media platforms.

### **How Can You “Opt-Out?”**

We do not sell your information; therefore there is no need to opt-out of such reselling. Under various laws, you can opt-out of the sharing of your information for more narrow purposes. For additional detail, consult the Links under the “Legal” Notices attached below.

### **The “Legal” Notices**

To comply with various federal and state laws, we are required to provide more complete legal notices and disclosures. In reviewing these, you will find that these notices incorporate the definitions and terminology used in the respective privacy laws which can often be somewhat convoluted and may even seem inconsistent with the descriptions above. The state-specific statutes may also give residents of those states additional rights and remedies.

### **How to Contact Us**

If you have any questions about WFG’s privacy policy or how we protect your information, please contact WFG:

- By email: [Consumerprivacy@willistonfinancial.com](mailto:Consumerprivacy@willistonfinancial.com)
- By telephone: 833-451-5718
- By fax: 503-974-9596
- By mail: 12909 SW 68th Pkwy, Suite 350, Portland, OR 97223
- In-person: 12909 SW 68th Pkwy, Suite 350, Portland, OR 97223

### **WFG FAMILY**

WILLISTON FINANCIAL GROUP LLC  
WFG NATIONAL TITLE INSURANCE COMPANY  
WFG LENDER SERVICES, LLC  
WFGLS TITLE AGENCY OF UTAH, LLC  
WFG NATIONAL TITLE COMPANY OF WASHINGTON, LLC  
WFG NATIONAL TITLE COMPANY OF CALIFORNIA  
WFG NATIONAL TITLE COMPANY OF TEXAS, LLC D/B/A WFG NATIONAL TITLE COMPANY  
UNIVERSAL TITLE PARTNERS, LLC  
VALUTRUST SOLUTIONS, LLC  
WILLISTON ENTERPRISE SOLUTIONS & TECHNOLOGY, LLC  
WFG NATIONAL TITLE COMPANY OF CLARK COUNTY, WA, LLC D/B/A WFG NATIONAL TITLE

FACTS	WHAT DOES WILLISTON FINANCIAL GROUP DO WITH YOUR PERSONAL INFORMATION?
Why?	Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.
What?	The types of personal information we collect and share depend on the product or service you have with us. This information can include: <ul style="list-style-type: none"> <li>• Social Security number and other government identification information</li> <li>• Your name, address, phone, and email</li> <li>• Information about the property, any liens and restrictions</li> <li>• Financial Information including credit history and other debt</li> <li>• Financial account information, including wire transfer instructions.</li> </ul>
How?	All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers' personal information; the reasons Williston Financial Group chooses to share; and whether you can limit this sharing.

Reasons we can share your personal information	Does Williston Financial Group share?	Can you limit this sharing?
For our everyday business purposes—such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus	Yes	No
For our marketing purposes—to offer our products and services to you	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes—information about your transactions and experiences	Yes	No
For our affiliates' everyday business purposes—information about your creditworthiness	No	We don't share
For our affiliates to market to you	No	We don't share
For nonaffiliates to market to you	No	We don't share

To limit our sharing	<ul style="list-style-type: none"> <li>• Call 833-451-5718—our menu will prompt you through your choice(s)</li> <li>• Visit us online: <a href="http://bit.ly/WFGsConsumerPrivacyInformationRequestPage">http://bit.ly/WFGsConsumerPrivacyInformationRequestPage</a> or e-mailing us at <a href="mailto:consumerprivacy@willistonfinancial.com">consumerprivacy@willistonfinancial.com</a></li> </ul> <p>Mail the form below</p> <p>Please note:</p> <p>If you are a new customer, we can begin sharing your information [30] days from the date we sent this notice. When you are no longer our customer, we continue to share your information as described in this notice.</p> <p>However, you can contact us at any time to limit our sharing.</p>
Questions?	Call 833-451-5718 or Email <a href="mailto:consumerprivacy@willistonfinancial.com">consumerprivacy@willistonfinancial.com</a>

Mail-In Form	
If you have a joint policy, your choices will apply to everyone on your account.	<p>Mark any/all you want to limit:</p> <p><input type="checkbox"/> Do not share information about my creditworthiness with your affiliates for their everyday business purposes.</p> <p><input type="checkbox"/> Do not allow your affiliates to use my personal information to market to me.</p> <p><input type="checkbox"/> Do not share my personal information with nonaffiliates to market their products and services to me.</p>
Name	
Address	
City, State, Zip	
File Number	
<p>Mail to:</p> <p>Williston Financial Group  PRIVACY DEPT  12909 SW 68<sup>th</sup> Pkwy, #350  Portland, OR 97223</p>	

<b>Who we are</b>	
Who is providing this notice	Williston Financial Group, LLC and its affiliates and subsidiaries as listed below:
<b>What we do</b>	
How does Williston Financial Group protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings. We limit access to your information to employees that need to use the information to process or protect transaction. We take industry standard (IPSEC) measures to protect against malicious intrusions or hacking
How does Williston Financial Group collect my personal information?	<p>We collect your personal information, for example, when you</p> <ul style="list-style-type: none"> <li>• Apply for insurance</li> <li>• Engage us to provide appraisal, title and escrow services</li> <li>• Give us your contact information</li> <li>• Provide your mortgage information</li> <li>• Show your driver's license</li> </ul> <p>We also collect your personal information from others, such as real estate agents and brokers, mortgage brokers, lenders, credit bureaus, affiliates, and others</p>
Why can't I limit all sharing?	<p>Federal law gives you the right to limit only</p> <ul style="list-style-type: none"> <li>• sharing for affiliates' everyday business purposes—information about your creditworthiness</li> <li>• affiliates from using your information to market to you</li> <li>• sharing for nonaffiliates to market to you</li> </ul> <p>State laws and individual companies may give you additional rights to limit sharing. See below for more on your rights under state law.</p>
What happens when I limit sharing for an account I hold jointly with someone else?	Your choices will apply to everyone on your policy.
<b>Definitions</b>	
Affiliates	<p>Companies related by common ownership or control. They can be financial and nonfinancial companies.</p> <p>Our affiliates include companies with a common corporate identity, including those listed below.</p>
Nonaffiliates	<p>Companies not related by common ownership or control. They can be financial and nonfinancial companies.</p> <p>Nonaffiliates we share with can include real estate agents and brokers, mortgage brokers, lenders, appraisers, abstractors and title searchers and others as appropriate to facilitate your transaction.</p>
Joint marketing	<p>A formal agreement between nonaffiliated financial companies that together market financial products or services to you.</p> <p>Williston Financial Group does not jointly market.</p>
<b>Other important information</b>	
As a resident or citizen of certain states, we may have to provide additional state-specific privacy notices and you may have rights other than as set forth above. The privacy notices below will provide state-specific information:	

## PRIVACY NOTICE FOR CALIFORNIA RESIDENTS

This PRIVACY NOTICE FOR CALIFORNIA RESIDENTS supplements the information contained in the Privacy Statement of WFG NATIONAL TITLE INSURANCE COMPANY and its parent, subsidiaries and affiliates (collectively, "WFG" "we," "us," or "our") and applies solely to customers, parties to real estate transactions, visitors, users, and others who reside in the State of California ("consumer" or "you"). We have adopted this notice to comply with the California Consumer Privacy Act of 2018 ("CCPA") and other California privacy laws. Any terms defined in the CCPA have the same meaning when used in this notice.

### **Your Rights as a California Consumer**

Under California Law, you have the right to request that WFG disclose what personal information we collect, use, disclose, and sell. You have the right to opt-out of a sale of your personal information, and you may request the deletion of your personal information. You will not receive discriminatory treatment by WFG if you exercise any of your privacy rights under CCPA.

You may also designate an authorized agent to make a request under the CCPA on your behalf.

These are not absolute rights, they are subject to exceptions and limitations which we are happy to discuss as they may apply to your particular circumstances and the services you have engaged WFG to supply.

If you would like to exercise any of these rights or to designate an authorized agent, you may start the process by:

- Emailing us at [consumerprivacy@willistonfinancial.com](mailto:consumerprivacy@willistonfinancial.com)
- Going to <http://bit.ly/WFGsConsumerPrivacyInformationRequestPage>
- Calling us at: 833-451-5718; or
- Going into any WFG office and making the request in person.

In exercising any of these rights, we must make absolutely certain we are dealing with you or your authorized agent. So depending on how you submit your request, we will be asking you to confirm your identity, which may include providing additional documentation or information to verify it is really you, and we may send a notary or other person to meet with you in person or require you to come into a WFG office to verify your identity. Some of the identification process may be handled through an online portal and may include knowledge-based identification questions.

### **Information We Collect**

WFG's primary business is providing appraisal, title and escrow services for the sale or refinance of real estate. This can be a complicated and legalistic process. In part, you have hired WFG to centralize and smooth the passage of all the information necessary for your real estate transaction and to have us coordinate a smooth and efficient closing. In the course of providing those services to you, we collect a significant amount of personal information.

We do not knowingly collect, maintain or use personal information from children under the age of 18 and no part of our Services are directed or targeted to children. If you become aware that a child under the age of 18 has provided WFG with personal information in violation of this Privacy Policy, please alert us at [Consumerprivacy@willistonfinancial.com](mailto:Consumerprivacy@willistonfinancial.com).

The CCPA requires us to list the statutory categories of consumers' personal information that we have collected about any consumers in the preceding 12 months. Much of this information is gathered from our searches of the land, tax, court and credit records to make certain that any liens, challenges, or title defects are addressed properly. Some of it is provided by you, or your computer systems. Some come from real estate agents and brokers, mortgage brokers and others working to facilitate your transaction, and some are provided by your lenders and credit bureaus. Here's how it breaks down:

Category and Examples	From where do we get this Information?	Purpose Collected	3 <sup>rd</sup> Parties with whom shared
Identifiers. Such as your name, spouse's name, maiden names, family member's names, aliases, postal address, unique personal identifier, online identifiers, Internet Protocol address, email address, account name, Social Security number, driver's license number, passport number, or other similar identifiers	You, your family and agents Your computer, tablet and cell phone Real estate agents and brokers involved in the transaction Mortgage brokers, lenders and credit bureaus Surveyors, appraisers, abstractors, title plants, title searchers Lien searchers and clearance companies	Each Category of information will be used in various combinations for the following purposes: <ul style="list-style-type: none"><li>To provide the services and products requested, including title and settlement services, evaluating the state of title of a property and identifying the liens and encumbrances affecting that property, to close loans, to record your deeds, mortgages and other instruments affecting title, make filings with government agencies, clearing title defects, to provide customer support to you and others involved in your transaction.</li><li>To prevent fraud in transactions, to find, prevent and respond to online and offline security issues, and for purposes of Identity verification</li></ul>	See Below "Disclosure of Personal Information for a Business Purpose"
Personal information categories listed in Cal. Civ. Code § 1798.80(e) such as your name, signature, Social Security number, physical characteristics or description, address, telephone number, passport number, driver's license or state identification card number, insurance policy number, education, employment, employment history, bank account number, credit card number, debit card number, or any other financial information..	You, your family and agents Your computer, tablet and cell phone Real estate agents and brokers involved in the transaction Mortgage brokers, lenders and credit bureaus Surveyors, appraisers, abstractors, title plants, title searchers Lien searchers and clearance companies	<ul style="list-style-type: none"><li>To prevent fraud in transactions, to find, prevent and respond to online and offline security issues, and for purposes of Identity verification</li><li>For Government and regulatory compliance and reporting, to comply with relevant industry standards and best practices and WFG policies.</li><li>To maintain and supplement title plants, databases of prior policies, subdivision master searches and other resources which may expedite future transactions affecting your property.</li><li>To use and optimize our computer systems, understand how you use our online an web resources and improve our websites and apps and present their contents to you; while maintaining the</li></ul>	See Below "Disclosure of Personal Information for a Business Purpose"
Protected classification characteristics under California or federal law including your age, race, color, marital status, sex, physical disability, and veteran or military status as such information appears in driver license and other identity documents and in loan application materials.	You, your family and agents Real estate agents and brokers involved in the transaction Mortgage brokers, lenders and credit bureaus	<ul style="list-style-type: none"><li>For Government and regulatory compliance and reporting, to comply with relevant industry standards and best practices and WFG policies.</li></ul>	See Below "Disclosure of Personal Information for a Business Purpose"
Commercial information mostly in the form of real property records, mortgage records and lien records.	You, your family and agents Your computer, tablet and cell phone Real estate agents and brokers involved in the transaction Mortgage brokers, lenders and credit bureaus Surveyors, appraisers, abstractors, title plants, title searchers Lien searchers and clearance companies	<ul style="list-style-type: none"><li>To maintain and supplement title plants, databases of prior policies, subdivision master searches and other resources which may expedite future transactions affecting your property.</li><li>To use and optimize our computer systems, understand how you use our online an web resources and improve our websites and apps and present their contents to you; while maintaining the</li></ul>	See Below "Disclosure of Personal Information for a Business Purpose"
Biometric information as contained in drivers licenses and identity documents; captured on security cameras in our offices; and as	You, your family and agents Notaries and others handling	<ul style="list-style-type: none"><li>To use and optimize our computer systems, understand how you use our online an web resources and improve our websites and apps and present their contents to you; while maintaining the</li></ul>	See Below "Disclosure of Personal Information for a Business Purpose"

required for notarization and e-notarization in some states.	closing and signing functions Your computer, tablet and cell phone	<p>integrity and security of our applications, websites and products.</p> <ul style="list-style-type: none"> <li>To provide you with email, text and video alerts, event registrations and other notices concerning our products or services, or events or news, that may be of interest to you.</li> <li>To carry out our obligations and enforce our rights arising from the contracts entered into between you and us, and with others, including for billing and collections and handling of claims under a title policy.</li> <li>For testing, research, analysis and product development.</li> <li>As necessary or appropriate to protect the rights, property or safety of us, insureds, our customers, and others.</li> <li>To respond to law enforcement, regulatory, and lender requests and as required by applicable law, court order, or governmental regulations.</li> <li>As described to you when collecting your personal information or as otherwise set forth in the CCPA and the Gramm-Leach-Bliley Act.</li> <li>To evaluate or conduct a merger, divestiture, restructuring, reorganization, dissolution, or other sale or transfer of some or all of our assets, whether as a going concern or as part of bankruptcy, liquidation, or similar proceeding, in which personal information held by us is among the assets transferred.</li> </ul>	Business Purpose”
Internet or other similar network activity such as information on how you interact with and use our websites, applications, emails, texts and other electronic resources	You, your family and agents Your computer, tablet and cell phone		See Below “Disclosure of Personal Information for a Business Purpose”
Geolocation data, primarily in the form of the location of your property and when and where someone may be meeting you for signatures, etc.	You, your family and agents Real estate agents and brokers involved in the transaction Mortgage brokers, lenders and credit bureaus Surveyors, appraisers, abstractors, title plants, title searchers Lien searchers and clearance companies Notaries and those handling closing and signing Your computer, tablet and cell phone		See Below “Disclosure of Personal Information for a Business Purpose”
Audio, electronic, visual, thermal, olfactory, or similar information.  Should you choose to interact with us by phone, video link or come into our offices your voice or images may be recorded	You, your family and agents Your computer, tablet and cell phone		See Below “Disclosure of Personal Information for a Business Purpose”
Professional or employment-related information.  Current or past job history is often a part of loan applications and statements of information.	You, your family and agents Mortgage brokers, lenders and credit bureaus		See Below “Disclosure of Personal Information for a Business Purpose”
Inferences drawn from other personal information.	You, your family and agents Your computer, tablet and cell phone Real estate agents and brokers involved in the transaction Mortgage brokers, lenders and credit bureaus Surveyors, appraisers, abstractors, title plants, title searchers Lien searchers and clearance companies		See Below “Disclosure of Personal Information for a Business Purpose”



## **Disclosure of Personal Information for a Business Purpose**

**WFG DOES NOT SELL your information for monetary or other valuable consideration for marketing or any other purpose.**

However, some of your information **does get shared**, and within the last 12 months has been shared with persons outside of the WFG family of companies in order to better facilitate and complete your transactions and for other business and commercial purposes.

For example:

- WFG may order property searches and examinations from title searchers, abstractors and title plants.
- WFG may use third parties to obtain tax information, lien information, mortgage payoff information, condominium, and homeowners' association information and payoff information.
- WFG may engage third parties to prepare documents in connection with your transaction.
- WFG may order surveys, appraisals, and inspections and/or communicate with those service providers.

Those services can't be ordered without providing basic information about the property involved, the parties, and/or the liens to those service providers.

- Within the WFG family of companies, we divide up the work to handle each closing most efficiently and to meet specific legal and licensing requirements. So certain parts of your closing (for example a search or disbursement) may be handled by another division or company within the WFG family.
- When it is time for signatures, your complete closing package may be sent to a mobile notary, remote online notary, or notary service company who will arrange to meet with you to sign documents. The notary will, in turn, send signed copies back to us along with copies of your driver's license or other identity documents usually by mail, UPS, Federal Express or other courier service and sometimes by email or another electronic transmission.
- Your deed, mortgage and other documents required to perfect or clarify title will be recorded with the local recorder of deeds.
- We may use an outside service to coordinate the recording or e-recording of those instruments, and they will receive copies of deeds, mortgages and other recordable documents to process, scan and send on to the recording office.
- Information and draft documents will pass back and forth between WFG and the lenders and mortgage brokers to facilitate your transaction.
- Information, including purchase agreements and amendments, will pass back and forth between WFG and the Real estate agents and brokers, lenders, the mortgage brokers and others facilitating the transaction; and
- Various government agencies get involved. The law requires us to provide certain information to the IRS, the US Treasury, local and state tax authorities, recorders of deeds and other governmental agencies.
- In resolving claims and mitigating losses, we may engage outside counsel and other service providers (such as surveyors and appraisers) to assist in resolving the claim.
- From time to time, we are required to respond to law enforcement, regulatory, and lender requests and as required by applicable law, court order, or governmental regulations.

## **Contact for More Information**

If you have any questions or comments about this notice, our Privacy Statement, the ways in which we collect and use your personal information, your choices and rights regarding such use, or wish to exercise your rights under California law, please do not hesitate to contact us at:

- Emailing us at [consumerprivacy@willistonfinancial.com](mailto:consumerprivacy@willistonfinancial.com)
- Going to <http://bit.ly/WFGsConsumerPrivacyInformationRequestPage>
- Calling us at: 833-451-5718; or
- Going into any WFG office and making the request in person.

The business is not subject to requirements set forth section 999.317(g) of the California Consumer Privacy Act Regulations

## **Changes to Our Privacy Notice**

We reserve the right to amend this privacy notice at our discretion and at any time. When we make changes to this privacy notice, we will notify you by email or through a notice on our website homepage.

## **Privacy Notice for Oregon Residents**

We may not disclose personal or privileged information about you unless we provide you with a disclosure authorization form that is executed by you or your representative and otherwise complies with certain statutory requirements. Any such authorization is not valid for more than 24 months and may be revoked by you at any time, subject to the rights of anyone who relied on the authorization prior to your notice of revocation.

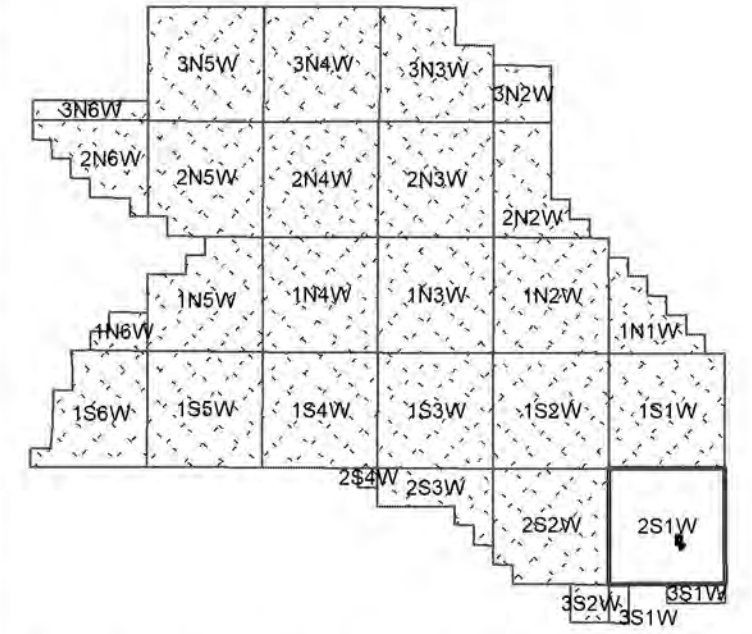
In addition, if your personal or privileged information was collected or received by us in connection with a title insurance transaction, we cannot disclose such information if the disclosure authorization form that you executed is more than one year old or if the requested disclosure is for a purpose other than a purpose expressly permitted by statute.

You have the right at any time to request in writing access to recorded personal information about you that is reasonably described by you and reasonably available to us. Within 30 days of the date of our receipt of any such written request from you, we will inform you of the nature and substance of any such information, permit you to see and copy that information or obtain a copy by mail, disclose the identity, if recorded, of the persons to whom we have disclosed such information during the previous two years, and provide you with a summary of the procedures by which you may request that such information be corrected, amended or deleted.

- Emailing us at [consumerprivacy@willistonfinancial.com](mailto:consumerprivacy@willistonfinancial.com)
- Calling us at: 833-451-5718; or
- Going into any WFG office and making the request in person.

Revised 12/31/19

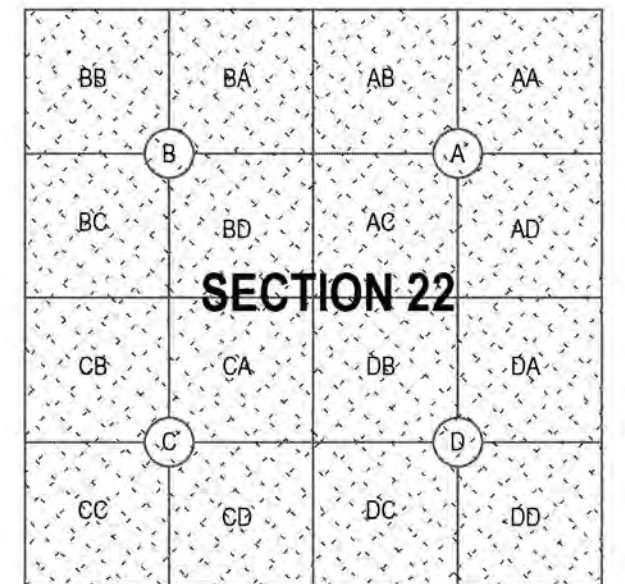




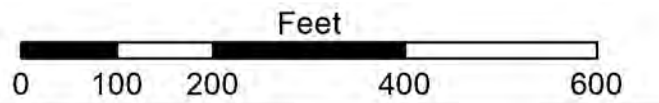
**WASHINGTON COUNTY OREGON**  
**SE 1/4 SECTION 22 T2S R1W W.M.**  
**SCALE 1" = 200'**

36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT  
[www.co.washington.or.us](http://www.co.washington.or.us)

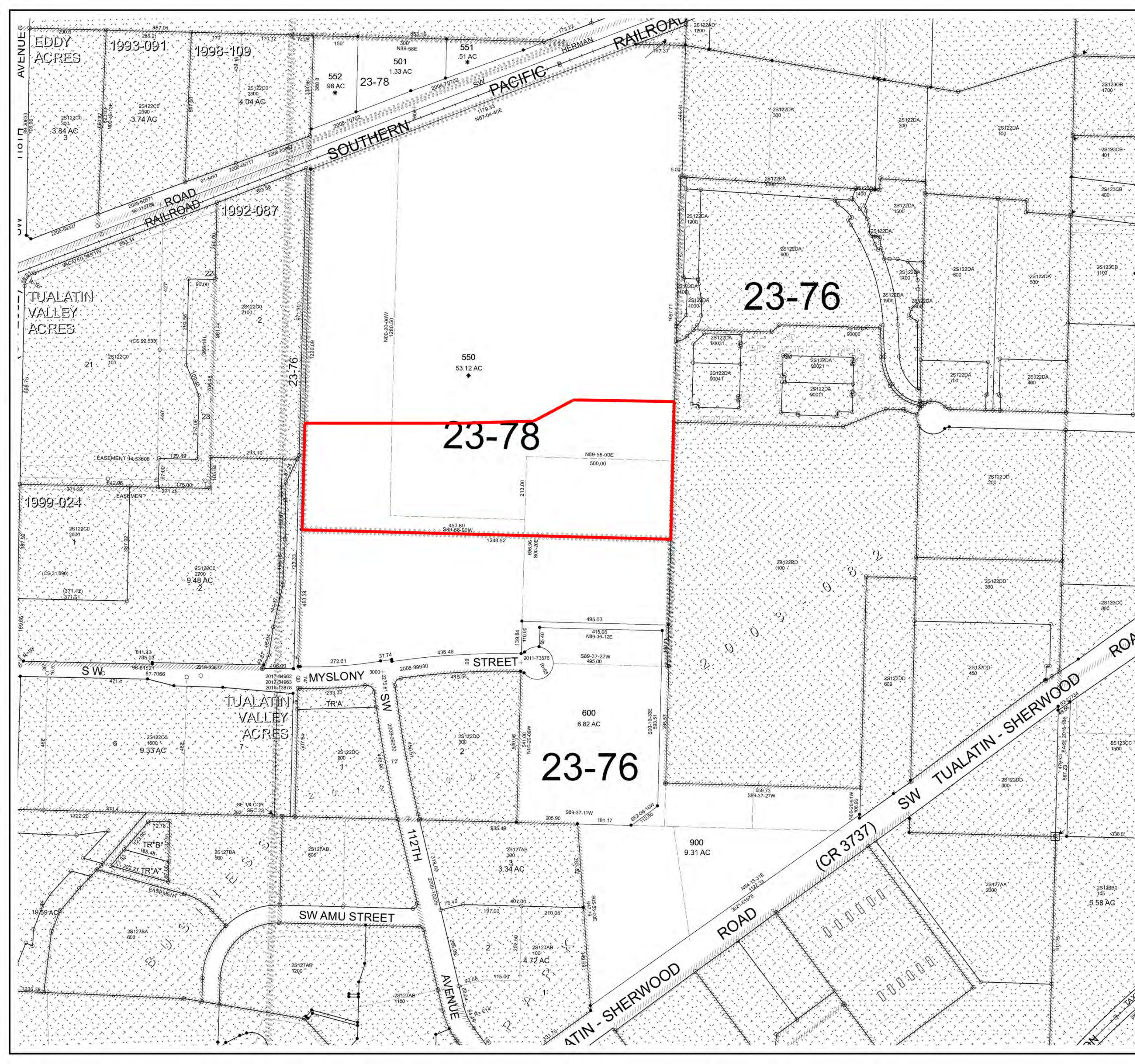


Cancelled Taxlots For: 2S122D  
 400,104,100,102,201,401,601,202,301,300,101,103,  
 200,700,800,500,502.



**PLOT DATE: 6/3/2021**  
 Rotation: 0  
**FOR ASSESSMENT PURPOSES**  
**ONLY - DO NOT RELY ON**  
**FOR OTHER USE**

Map areas delineated by either gray shading or a cross-hatched pattern are for reference only and may not indicate the most current property boundaries. Please consult the appropriate map for the most current information.





<b><u>NAME OF DOCUMENT FOR RECORDING:</u></b> <b>Waiver Of Rights And Remedies</b> Grantor: (Petitioner(s))  Grantee: City of Tualatin Consideration: None. Tax Statement to be mailed to: No change.  <u>After Recording, Return To:</u> City of Tualatin, Attn: City Recorder, 18880 SW Martinazzi, Tualatin, OR 97062	<i>(For County Recording Use Only)</i>
--	--

**MEASURE 37 & 49 WAIVER OF RIGHTS AND REMEDIES**

Whereas, Gary & Rick Walgraeves ("Petitioner", including collectively all petitioners) has petitioned to the City of Tualatin ("City") to commence certain proceedings, i.e., annexation, planning district change, and/or plan text amendment for the following described real property,

See attached legal description

Whereas, under Ballot Measure 37 (effective December 2, 2004), as amended by Ballot Measure 49 (effective December 6, 2007), a property owner may seek just compensation or waiver of certain land use regulations if a public entity enacts or enforces the land use regulations after the property owner acquired the property; and

Whereas, Oregon electors or the Oregon Legislature may, in the future, enact further statutory or constitutional amendments relating to compensation for the impact of local regulations upon real property, under certain circumstances; and

Whereas, City does not wish to approve the Petitioner's requested proceedings if such approval could result in the owner or the owner's successors or assigns filing a claim for compensation for the land use regulations in effect upon the effective date of the proceedings or a claim seeking to require the City to waive its land use regulations, which are being newly imposed upon the property as a result of the Petitioner's requested proceedings; and

Whereas, Petitioner wishes to obtain the City's approval of Petitioner's requested proceedings and therefore agrees to eliminate the potential of claim for compensation or the right to seek waiver from the City's land use regulations existing as of the effective date of the proceedings.

Now, therefore, Petitioner warrants that the Petitioner executing this Waiver Agreement holds the full and complete present ownership or any interest therein in the property, and agrees as follows:

1. As inducement to the City to proceed with the following proceeding(s) affecting the subject real property: Annexation, planning district change, and/or plan text amendment which may include designation of the property as subject to additional applicable land use regulations and overlay zones and districts, which may include, but are not limited to the Mixed Use Commercial Overlay District, Industrial Business Park Overlay District, Flood Plain District, Wetlands Protection District, Greenway Protection Overlay District and Natural Areas, and/or design districts ("proceedings"), the undersigned Petitioner, on behalf of Petitioner, Petitioner's heirs, devisees, executors, administrators, successors and assigns, agrees and covenants to the City of Tualatin, its officers, agents, employees and assigns that the Petitioner hereby waives, releases and

20120.30  
4.

Annexation Application  
Community Development Department - Planning Division

Petitioner (corporation, etc.) Name: \_\_\_\_\_  
By: \_\_\_\_\_  
Name of Signor: \_\_\_\_\_  
Office/Title of Signor: \_\_\_\_\_

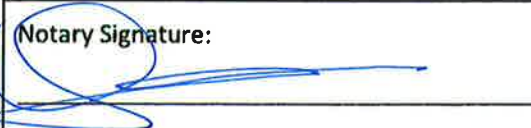
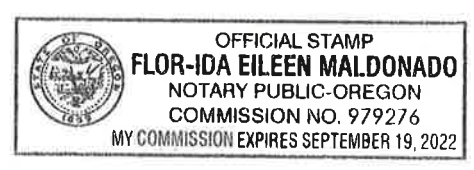
State of Oregon \_\_\_\_\_)

County of Washington)

On this 1 day of September, 2021 before me the undersigned Notary Public, personally appeared

Gary A. Walgraaves, Ricky A. Walgraves  
(Name of Petitioners signing; not Notary name)

- Personally known to me
- Proved to me on the basis of satisfactory evidence
- To be the person who executed the within instrument
- As \_\_\_\_\_ or on behalf of the entity therein named, pursuant to authority, and acknowledged to me the execution hereof.

WITNESS my hand and official seal (Do not write outside of the box)	Place Notary Seal Below
Notary Signature:  Notary name (legible): <u>Flor-Ida E. Maldonado, Notary Public</u>	

This document is accepted pursuant to authority and approved for recording.

City of Tualatin, Oregon

\_\_\_\_\_  
City Manager

forever discharges, and agrees that Petitioner shall be estopped from asserting any rights and remedies, actions, causes of action, suits, claims, liabilities, demands, and rights to waivers arising under or granted by any statutory or constitutional regulatory compensation or waiver provisions, including but not limited to Ballot Measure 37 (2004) and Ballot Measure 49 (2007) or otherwise enacted after the date of this proceeding which would create a right of claim for compensation or waiver from city land use regulations that exist upon the effective date of the proceeding and which, by the approval of the proceeding, are then applicable to the property.

2. This covenant, waiver, release, and discharge binds the undersigned's heirs, devisees, executors and administrators, successors in interests, and assigns. This covenant, waiver, release, and discharge will run with the land, and this instrument or a memorandum of it may be recorded in the official records of the County in which the subject real property is located. This instrument may be terminated upon the filing of a Notice of Termination of Waiver filed by the City of Tualatin.
3. If this instrument is given contemporaneous with a consent to future proceedings to be initiated by the City, Petitioner acknowledges that the proceedings may be initiated by the City of Tualatin at any time in the discretion of the City and that this waiver and release is applicable to any ordinances adopted prior to the effective date of the proceeding.
4. This document is executed of my own free will and without duress. I/we respectively acknowledge that I/we have been advised to obtain legal advice prior to the execution of this document, and that either I, or each of us respectively, have either obtained legal advice or have independently elected not to seek legal advice prior to the execution of this document, recognizing that this document may affect our legal rights and remedies.

DATED this 1 day of September, 2021

<u>Gary A. Walgraevae</u> (signature)	<u>Ricky A. Walgraevae</u> (signature)
Petitioner Name: <u>Gary A. Walgraevae</u>	Petitioner Name: <u>Ricky A. Walgraevae</u>
Date Signed: <u>Sept 1 2021</u>	Date Signed: <u>9/1/2021</u>

Project No.: \_\_\_\_\_ Project: Walgraaves  
Date: Sept. 16, 2021 Time: 6:00 Meeting  Field  Conversation   
Subject: Walgraaves Neighborhood Mtg.  
With: Public Contact Info: Zoom - meeting.

Cal Coatsworth cca  
Craig Harris AAI  
Beth Zouner AAI

-received emailed questions list:

1. Dave Kiersey (davek@kierseyandmcmillian.com)
2. Cozette Tran-caffee (TranCaffee@LanePowell.com)
3. Lisa McKillips (Lisa.Mckillips@nike.com)

No neighbors joined the Zoom meeting.  
Meeting was ended at 6:30 pm.



ZAMPELL TUALATIN LLC  
3 STANLEY TUCKER DR  
NEWBURYPORT, MA 01950

WETLANDS CONSERVANCY INC  
4640 SW MACADAM AVE #50  
PORTLAND, OR 97239

TUALATIN CITY OF  
18880 SW MARTINAZZI AVE  
TUALATIN, OR 97062

WASHINGTON CO. FACILITIES MGMT.  
169 N 1ST AVE #42  
HILLSBORO, OR 97124

WALGRAEVE GARY & WALGRAEVE  
RICKY  
11345 SW HERMAN RD  
TUALATIN, OR 97062

TUALATIN CITY OF  
PO BOX 723597  
ATLANTA, GA 31139

PHIGHT LLC  
ONE BOWERMAN DR  
BEAVERTON, OR 97005

TUALATIN YARDS LLC  
19100 SW 51ST AVE  
TUALATIN, OR 97062

TUALATIN INDUSTRIAL VENTURES LLC  
1101 SE TECH CENTER DR #160  
VANCOUVER, WA 98683

TAMARISK TUALATIN LLC  
1099 18TH STE 2900  
DENVER, CO 80202

SIDIEL LLC  
PO BOX 1696  
BEAVERTON, OR 97075

SEASONAL PRODUCTS LLC  
4112 NW SANDPIPER DR  
WOODLAND, WA 98674

S BENNER HEATHERBRAE LLC & M  
BENNER HEATHERBRAE LLC  
3329 WINTERCREEK CT  
EUGENE, OR 97405

PASCUZZI INVESTMENT LLC  
10250 SW NORTH DAKOTA  
TIGARD, OR 97223

PNWP LLC #5  
6600 SW 105TH AVE STE 175  
BEAVERTON, OR 97008

PACIFIC METAL COMPANY  
10700 SW MANHASSET DR  
TUALATIN, OR 97062

OFIFLEX OR LLC  
5348 VEGAS DR  
LAS VEGAS, NV 89108

NORSTAR BUSINESS CENTER WEST #2  
LLC  
PO BOX 1696  
BEAVERTON, OR 97075

NDH LLC & HOLMES THOMAS L  
PO BOX 111  
CANBY, OR 97013

MYSLONY LLC  
11555 SW MYSLONY ST  
TUALATIN, OR 97062

MORGAN WILLIAM RAY & JANICE ELLEN  
REV LIV TRUST  
4500 SW ADVANCE RD  
WILSONVILLE, OR 97070

MARSHALL ASSOCIATED LLC  
PO BOX 278  
TUALATIN, OR 97062

MARINE LUMBER COMPANY  
11800 SW MYSLONY ST  
TUALATIN, OR 97062

METRO  
600 NE GRAND AVE  
PORTLAND, OR 97232

MAJNARICH FAMILY LP  
8338 SW 11TH AVE  
PORTLAND, OR 97219

LUMBER FAMILY CO LLC  
PO BOX 1427  
TUALATIN, OR 97062

MANHASSET BUSINESS CENTER  
OWNERS ASSOC  
1498 SE TECH CENTER PL #150  
VANCOUVER, WA 98683

LIGHTSPEED TECHNOLOGIES INC  
11509 SW HERMAN RD  
TUALATIN, OR 97062

LIC LLC  
7650 SW VILLAGE GREEN CIR  
WILSONVILLE, OR 97070

HEDGES A AN LLC  
PO BOX 15523  
SEATTLE, WA 98115

HEDGES B AN LLC  
PO BOX 15523  
SEATTLE, WA 98115

HEDGES C AN LLC  
PO BOX 15523  
SEATTLE, WA 98115

HEDGES D AN LLC  
PO BOX 15523  
SEATTLE, WA 98115

HEDGES D AN LLC  
PO BOX 15523  
SEATTLE, WA 98115

GARSKE TRAVIS W  
PO BOX 729  
COLBERT, WA 99005

FUJIMI CORPORATION  
11200 SW LEVETON DR  
TUALATIN, OR 97062

CJO PROPERTIES LLC  
14859 SW 162ND TER  
TIGARD, OR 97224

CEDAR LANDSCAPE MAINTENANCE LLC  
6107 SW MURRAY BLVD #175  
BEAVERTON, OR 97008

BT PROPERTY LLC  
55 GLENLAKE PKWY NE  
ATLANTA, GA 30328

BENNETT LIV TRUST  
10550 S KELLAND CT  
OREGON CITY, OR 97045

BC CALKIN LLC  
PO BOX 3450  
TUALATIN, OR 97062

AXIOM INDUSTRIES INC  
PO BOX 1147  
TUALATIN, OR 97062

AW & JS ENTERPRISES LLC  
PO BOX 849  
TUALATIN, OR 97062

AMU PROPERTIES LLC  
20049 SW 112TH AVE  
TUALATIN, OR 97062

ABBOTT TUALATIN LLC  
3030 BRIDGEWAY, STE 100  
SAUSALITO, CA 94965

112TH & MYSLONY JPMJD/USICV LLC  
450 NEWPORT CENTER DR STE 405  
NEWPORT BEACH, CA 92660

D&B PROPERTY LEASING LLC  
8060 SW PFAFFLE ST STE 200  
TIGARD, OR 97223

EVE LAND INVESTMENTS LLC  
PO BOX 19856  
PORTLAND, OR 97280

**AFFIDAVIT OF MAILING NOTICE**

STATE OF OREGON            )  
  ) SS  
COUNTY OF WASHINGTON )

I, ALISON BAKER being first duly sworn, depose and say:

That on the 1 day of SEPTEMBER 21, I served upon the persons shown on Exhibit "A" (Mailing Area List), attached hereto and by this reference incorporated herein, a copy of the Notice of Neighborhood/Developer Meeting marked Exhibit "B," attached hereto and by this reference incorporated herein, by mailing to them a true and correct copy of the original hereof. I further certify that the addresses shown on said Exhibit "A" are their regular addresses as determined from the books and records of the Washington County and/or Clackamas County Departments of Assessment and Taxation Tax Rolls, and that said envelopes were placed in the United States Mail with postage fully prepared thereon.

  
Signature

SUBSCRIBED AND SWORN to before me this 13 day of September, 2021.



  
Notary Public for Oregon  
My commission expires: 01/20/2024

RE: WALKER'S NEIGHBORHOOD MEETING

## NOTICE OF NEIGHBOR/DEVELOPER MEETING

9/1/2021

AAI Engineering  
4875 SW Griffith Dr, #100  
Beaverton, Oregon 97005

RE: Walgraeves Industrial Park.

Dear Property Owner,

You are cordially invited to attend an online meeting on Sept. 16, 2021 at 6:00pm. This meeting shall be held to discuss an Annexation application and an Architecture Review application for the same property. It is important to note that the property under consideration is not the entire lot. Rather, the project site is a portion of the property to the south that will take access off of SW Myslony Street, NOT SW Herman Rd.

**This will be a FREE online meeting.**

Please join the meeting from a computer, tablet or smartphone.  
<https://zoom.us/join>

Meeting ID: 823 5620 3004  
Passcode: 611526

You can also dial in using your phone.  
United States: (253) 215-8782

This is an informational meeting to share the development proposal with interested neighbors. You will have the opportunity to review preliminary plans and identify topics of interest or consideration. Feel free to contact me with any questions or commentary.

Regards,

Beth Zauner  
AAI Engineering, Inc.  
503-620-3030; [bethz@aaieng.com](mailto:bethz@aaieng.com)

CERTIFICATION OF SIGN POSTING

<p><b>NOTICE</b></p> <p><b>NEIGHBORHOOD / DEVELOPER MEETING</b></p> <p>__/__/2010 __:__.m.</p> <p>SW _____</p> <p>503-__-__</p>
---

In addition to the requirements of TDC 32.150, the 18" x 24" sign must display the meeting date, time, and address as well as a contact phone number. The block around the word "NOTICE" must remain **orange** composed of the RGB color values Red 254, Green 127, and Blue 0. A PowerPoint template of this sign is available at: <https://www.tualatinoregon.gov/planning/land-use-application-sign-templates>.

As the applicant for the Walgraeves project, I hereby certify that on this day, 9/2/2021 sign(s) was/were posted on the subject property in accordance with the requirements of the Tualatin Development Code and the Community Development Division.

Applicant's Name: Beth Zauner  
(Please Print)

Applicant's Signature: 

Date: 9/2/2021



TLID	OWNER1	OWNER2
2S122DD00600	ZAMPELL TUALATIN LLC	
2S122DA00200	WETLANDS CONSERVANCY INC	
2S122DA00300	WETLANDS CONSERVANCY INC	
2S1220000500	WASHINGTON COUNTY FACILITIES MGMT	
2S122D000501	WALGRAEVE GARY & WALGRAEVE RICKY	
2S122D000550	WALGRAEVE GARY & WALGRAEVE RICKY	
2S122D000551	WALGRAEVE GARY & WALGRAEVE RICKY	
2S122D000552	WALGRAEVE GARY & WALGRAEVE RICKY	
2S1220000600	TUALATIN CITY OF	
2S1220000700	TUALATIN CITY OF	
2S1220000800	TUALATIN CITY OF	
2S122AD00200	TUALATIN CITY OF	
2S122C000105	TUALATIN CITY OF	
2S122C001500	TUALATIN YARDS LLC	
2S122DA90021	TUALATIN INDUSTRIAL VENTURES LLC	
2S122DA90041	TUALATIN INDUSTRIAL VENTURES LLC	
2S122DC00400	TUALATIN CITY OF	
2S127BA00200	TUALATIN CITY OF	
2S127AB00300	TAMARISK TUALATIN LLC	
2S122DD00400	SIDIEL LLC	
2S122DA00700	S BENNER HEATHERBRAE LLC & M BENNER HEATHERBRAE LLC	
2S122DC00200	PNWP LLC #5	
2S122DC00300	PNWP LLC #5	
2S127AB00100	PNWP LLC	
2S1220000300	PHIGHT LLC	ONE BOWERMAN DR
2S122AD01200	PASCUZZI INVESTMENT LLC	
2S122DA00900	PACIFIC METAL COMPANY	
2S127BA00500	OFIPLEX OR LLC	
2S122C002600	NORSTAR BUSINESS CENTER WEST #2 LLC	
2S122DD00300	NDH LLC & HOLMES THOMAS L	
2S122C002700	MYSLONY LLC	
2S122AD00600	MORGAN WILLIAM RAY & JANICE ELLEN REV LIV TRUST	
2S122AD00700	MORGAN WILLIAM RAY & JANICE ELLEN REV LIV TRUST	
2S122AD00800	MORGAN WILLIAM RAY & JANICE ELLEN REV LIV TRUST	
2S122DA00100	METRO	
2S122AD01000	MARSHALL ASSOCIATED LLC	
2S122C001502	MARINE LUMBER COMPANY	
2S122DA01000	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01100	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01200	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01300	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01400	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01500	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01600	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01700	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01800	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA01900	MANHASSET BUSINESS CENTER OWNERS ASSOC	
2S122DA90000	MANHASSET DRIVE INDUSTRIAL CONDO OWNERS OF ALL UNITS	
2S122DD00200	MANHASSET INDUSTRIAL LLC	
2S122C000300	MAJNARICH FAMILY LP	
2S122C002300	LUMBER FAMILY CO LLC	
2S122C002500	LIGHTSPEED TECHNOLOGIES INC	
2S122DA90011	LIC LLC	
2S127AB01100	HEDGES A AN LLC	
2S127AB01200	HEDGES B AN LLC	
2S127BA00600	HEDGES C AN LLC	
2S127BA00800	HEDGES D AN LLC	
2S127BA00900	HEDGES D AN LLC	
2S122AD01100	GARSKE TRAVIS W	
2S1220000400	FUJIMI CORPORATION	
2S127BA00300	FRANKLIN BUSINESS PARK OWNERS OF LOTS 1-4	



OWNERADDR	OWNERCITY	OWNERSTATE	OWNERZIP
3 STANLEY TUCKER DR	NEWBURYPORT	MA	01950
4640 SW MACADAM AVE #50	PORTLAND	OR	97239
4640 SW MACADAM AVE #50	PORTLAND	OR	97239
169 N 1ST AVE #42	HILLSBORO	OR	97124
11345 SW HERMAN RD	TUALATIN	OR	97062
11345 SW HERMAN RD	TUALATIN	OR	97062
11345 SW HERMAN RD	TUALATIN	OR	97062
11345 SW HERMAN RD	TUALATIN	OR	97062
18880 SW MARTINAZZI AVE	TUALATIN	OR	97062
18880 SW MARTINAZZI AVE	TUALATIN	OR	97062
18880 SW MARTINAZZI AVE	TUALATIN	OR	97062
PO BOX 723597	ATLANTA	GA	31139
18880 SW MARTINAZZI AVE	TUALATIN	OR	97062
19100 SW 51ST AVE	TUALATIN	OR	97062
1101 SE TECH CENTER DR #160	VANCOUVER	WA	98683
1101 SE TECH CENTER DR #160	VANCOUVER	WA	98683
18880 SW MARTINAZZI AVE	TUALATIN	OR	97062
18880 SW MARTINAZZI AVE	TUALATIN	OR	97062
1099 18TH STE 2900	DENVER	CO	80202
PO BOX 1696	BEAVERTON	OR	97075
3329 WINTERCREEK CT	EUGENE	OR	97405
6600 SW 105TH AVE STE 175	BEAVERTON	OR	97008
6600 SW 105TH AVE STE 175	BEAVERTON	OR	97008
6600 SW 105TH AVE, STE 175	BEAVERTON	OR	97008
	BEAVERTON	OR	97005
10250 SW NORTH DAKOTA	TIGARD	OR	97223
10700 SW MANHASSET DR	TUALATIN	OR	97062
5348 VEGAS DR	LAS VEGAS	NV	89108
PO BOX 1696	BEAVERTON	OR	97075
PO BOX 111	CANBY	OR	97013
11555 SW MYSLONY ST	TUALATIN	OR	97062
4500 SW ADVANCE RD	WILSONVILLE	OR	97070
4500 SW ADVANCE RD	WILSONVILLE	OR	97070
4500 SW ADVANCE RD	WILSONVILLE	OR	97070
600 NE GRAND AVE	PORTLAND	OR	97232
PO BOX 278	TUALATIN	OR	97062
11800 SW MYSLONY ST	TUALATIN	OR	97062
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
1498 SE TECH CENTER PL #150	VANCOUVER	WA	98683
		OR	00000
8625 EVERGREEN WAY STE 200	EVERETT	WA	98208
8338 SW 11TH AVE	PORTLAND	OR	97219
PO BOX 1427	TUALATIN	OR	97062
11509 SW HERMAN RD	TUALATIN	OR	97062
7650 SW VILLAGE GREEN CIR	WILSONVILLE	OR	97070
PO BOX 15523	SEATTLE	WA	98115
PO BOX 15523	SEATTLE	WA	98115
PO BOX 15523	SEATTLE	WA	98115
PO BOX 15523	SEATTLE	WA	98115
PO BOX 15523	SEATTLE	WA	98115
PO BOX 729	COLBERT	WA	99005
11200 SW LEVETON DR	TUALATIN	OR	97062
		OR	00000

2S122DA00600 EVE LAND INVESTMENTS LLC  
2S122C002100 D&B PROPERTY LEASING LLC  
2S122DA90031 CJO PROPERTIES LLC  
2S122AD00900 CEDAR LANDSCAPE MAINTENANCE LLC  
2S122DD00100 BT PROPERTY LLC  
2S122C000103 AW & JS ENTERPRISES LLC  
2S127AB00600 AMU PROPERTIES LLC  
2S122AD01300 ABBOTT TUALATIN LLC  
2S122D000600 112TH & MYSLONY JPMJD/USICV LLC  
2S122D000900 112TH & MYSLONY JPMJD/USICV LLC

STE 100

PO BOX 19856	PORTLAND	OR	97280
8060 SW PFAFFLE ST STE 200	TIGARD	OR	97223
14859 SW 162ND TER	TIGARD	OR	97224
6107 SW MURRAY BLVD #175	BEAVERTON	OR	97008
55 GLENLAKE PKWY NE	ATLANTA	GA	30328
PO BOX 849	TUALATIN	OR	97062
20049 SW 112TH AVE	TUALATIN	OR	97062
3030 BRIDGEWAY	SAUSALITO	CA	94965
450 NEWPORT CENTER DR STE 405	NEWPORT BEACH	CA	92660
450 NEWPORT CENTER DR STE 405	NEWPORT BEACH	CA	92660



### CIO Board of Directors List

**Updated 11/30/2021**

Always copy:  
 tualatincio@gmail.com,  
 mgeorge@tualatin.gov, and  
 brief@tualatin.gov

	Name	Term	Address	City	State	Zip	Phone	Email
<b>Riverpark</b>								
President	Janine Wilson	Elected 11/2021	18325 SW 135th Terrace	Tualatin	OR	97062	541-761-0705	<a href="mailto:riverparkcio@gmail.com">riverparkcio@gmail.com</a>
Vice President	Chris Tunstall	Elected 11/2021	17400 SW Cheyenne Way	Tualatin	OR	97062	503-789-9143	<a href="mailto:famtunstall1@frontier.com">famtunstall1@frontier.com</a>
Land Use Officer	Dan Hardy	Elected 11/2021	23070 SW Lodgepole Ave	Tualatin	OR	97062	503-332-8905	<a href="mailto:dan@danhardyproperties.com">dan@danhardyproperties.com</a>
Secretary	Kate Pinamonti	Elected 11/2021	10240 SW Fulton Drive	Tualatin	OR	97062	503-709-7466	<a href="mailto:katepinamonti@hotmail.com">katepinamonti@hotmail.com</a>
Treasurer	Jeanne Raikoglo	Elected 11/2021	17630 SW Shawnee Trail	Tualatin	OR	97062	503-803-7047	<a href="mailto:iraikoglo@aol.com">iraikoglo@aol.com</a>
At-Large	Daniel Bachhuber		10205 SW Casteel Ct	Tualatin	OR	97062	971-998-5407	<a href="mailto:daniel@bachhuber.co">daniel@bachhuber.co</a>
<b>East Tualatin</b>								
President	Doug Ulmer	Interim (08/2021)	7149 SW Sagert St., Unit 105	Tualatin	OR	97062	503-522-0504	<a href="mailto:cio.east.west@gmail.com">cio.east.west@gmail.com</a>
Vice President								
Land Use Officer	Dana Holland	Interim (11/2021)	7237 SW Delaware Ct.	Tualatin	OR	97062	503-243-1111	<a href="mailto:dana476@gmail.com">dana476@gmail.com</a>
Treasurer								
Secretary	Margarita Crowell	Interim (11/2021)	7237 SW Delaware Ct.	Tualatin	OR	97062	508-243-11143	<a href="mailto:mcrowell248@comcast.net">mcrowell248@comcast.net</a>
<b>Midwest Tualatin</b>								
President								<a href="mailto:tualatinmidwestcio@gmail.com">tualatinmidwestcio@gmail.com</a>
Vice President								
Land Use Officer								
Secretary	Tammy Palumbo	Elected 4/2021	9510 SW Siuslaw Ln	Tualatin	OR	97062	503-793-6179	<a href="mailto:tmppgarden@comcast.net">tmppgarden@comcast.net</a>
Treasurer								
<b>Martinazzi Woods</b>								
President	Sallie Olson	Reelected 11/2021	8960 SW Arapaho Rd	Tualatin	OR	97062	503-484-8056	<a href="mailto:solson.1827@gmail.com">solson.1827@gmail.com</a>
Vice President	Del Moore	Reelected 11/2020	8790 SW Nisqually Ct	Tualatin	OR	97062	503-807-2762	<a href="mailto:delmoore@frontier.com">delmoore@frontier.com</a>
Land Use Officer	Jamison Shields	Elected 11/2021	8182 SW Palute	Tualatin	OR	97062	804-385-2695	<a href="mailto:jamison.l.shields@gmail.com">jamison.l.shields@gmail.com</a>
Secretary	Claudia Sterling	Elected 11/2021	20600 SW Shoshone Dr	Tualatin	OR	97062	503-701-5793	<a href="mailto:claudia.sterling@comcast.net">claudia.sterling@comcast.net</a>
Treasurer	Janet Gilkey	Reelected 11/2020	21132 SW 86th Ct	Tualatin	OR	97062	503-307-6712	<a href="mailto:janet7531@gmail.com">janet7531@gmail.com</a>
At-Large	Roy Loop		20190 SW 86th Ct	Tualatin	OR	97062	503-969-2701	<a href="mailto:roydloop@gmail.com">roydloop@gmail.com</a>
<b>Ibach</b>								
President	Ed Casey		22255 SW 102nd Pl.	Tualatin	OR	97062	503-692-0513	<a href="mailto:edkcnw@comcast.net">edkcnw@comcast.net</a>
Vice President								
Land Use Officer								
Secretary	Julie Makarowsky		10775 SW Willow St.	Tualatin	OR	97062	503-351-8344	<a href="mailto:jmakarowsky@comcast.net">jmakarowsky@comcast.net</a>
Treasurer								
<b>Byrom</b>								
President	Alex Thurber		9875 SW Iowa Dr	Tualatin	OR	97062	503-880-2450	<a href="mailto:byromcio@gmail.com">byromcio@gmail.com</a>
Vice President								
Land Use Officer	Mary Lyn Westenhaver	Interim (08/2021)	9845 SW Iowa Dr	Tualatin	OR	97062	503-341-1936	<a href="mailto:mwestenhaver@hotmail.com">mwestenhaver@hotmail.com</a>
Secretary	Susan Humphrey	Interim (08/2021)	8801 SW Stono Dr.	Tualatin	OR	97063	503-830-2132	<a href="mailto:humphreysusan10@gmail.com">humphreysusan10@gmail.com</a>
Treasurer	Deb Fant		22680 SW Eno Pl.	Tualatin	OR	97062	408-391-8582	<a href="mailto:deb.fant@gmail.com">deb.fant@gmail.com</a>
<b>Commercial</b>								
President	Cathy Holland	2023	10740 SW Lucas Dr.	Tualatin	OR	97062	503-691-1813	<a href="mailto:tualatincommercialcio@gmail.com">tualatincommercialcio@gmail.com</a>
Vice President	Scott Miller	2023	12976 SW Hillside Terrace	Tualatin	OR	97223	971-275-0341	<a href="mailto:scottm@capacitycommercial.com">scottm@capacitycommercial.com</a>
Land Use Officer	Scott Miller	2023	12976 SW Hillside Terrace	Tualatin	OR	97223	971-275-0341	<a href="mailto:scottm@capacitycommercial.com">scottm@capacitycommercial.com</a>
Secretary								
Treasurer	Chris Tunstall	2023	17400 SW Cheyenne Way	Tualatin	OR	97062	503-789-9143	<a href="mailto:famtunstall1@frontier.com">famtunstall1@frontier.com</a>



# NOTICE OF PUBLIC HEARING AND OPPORTUNITY TO COMMENT

## CASE FILE: ANN 21-0002 — 11345 SW Herman Road

NOTICE IS HEREBY GIVEN that an application for Annexation (ANN 21-0002) will be heard by Tualatin City Council:

**Monday, February 14, 2022 at 7 pm**

Location: Juanita Pohl Center  
8513 SW Tualatin Road. Tualatin, OR 97062

To view the application materials visit:  
[www.tualatinoregon.gov/projects](http://www.tualatinoregon.gov/projects)

**TO COMMENT:**

**Email:** kleonard@tualatin.gov  
**Mail:** Planning Division. Attn: Keith Leonard  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062

To make verbal comment at the hearing, there are two options:

- **Zoom Teleconference.** Details at: [www.tualatinoregon.gov/citycouncil/council-meetings](http://www.tualatinoregon.gov/citycouncil/council-meetings)
- **Attend in person at the Juanita Pohl Center.** Physical distancing measures will be implemented for those attending in person, and City staff will be available to answer any questions.

- **Annexation ANN 21-0002:** Proposal to annex a 10.613-acre parcel located at 11345 SW Herman Road (Tax ID 2S122D000550) into the City of Tualatin from unincorporated Washington County. Any future development or construction will require a separate Architectural Review application to be submitted and approved.



- Criteria: Tualatin Development Code (TDC) 33.010, and Metro Code 3.09.045.
- **Application materials** are public record and are available for review. Copies can be viewed online or obtained at a reasonable cost, by contacting the Planning Division.
- **Staff report materials** will be available for inspection at no cost, at least seven days prior to the hearing. Copies can be obtained for a reasonable cost.
- **Individuals wishing to comment** may do so in writing to the Planning Division



# NOTICE OF PUBLIC HEARING AND OPPORTUNITY TO COMMENT

## CASE FILE: ANN 21-0002 — 11345 SW Herman Road

NOTICE IS HEREBY GIVEN that an application for Annexation (ANN 21-0002) will be heard by Tualatin City Council:

**Monday, February 14, 2022 at 7 pm**

Location: Juanita Pohl Center  
8513 SW Tualatin Road. Tualatin, OR 97062

To view the application materials visit:  
[www.tualatinoregon.gov/projects](http://www.tualatinoregon.gov/projects)

**TO COMMENT:**

**Email:** kleonard@tualatin.gov  
**Mail:** Planning Division. Attn: Keith Leonard  
18880 SW Martinazzi Ave.  
Tualatin, OR 97062

To make verbal comment at the hearing, there are two options:

- **Zoom Teleconference.** Details at: [www.tualatinoregon.gov/citycouncil/council-meetings](http://www.tualatinoregon.gov/citycouncil/council-meetings)
- **Attend in person at the Juanita Pohl Center.** Physical distancing measures will be implemented for those attending in person, and City staff will be available to answer any questions.

- **Annexation ANN 21-0002:** Proposal to annex a 10.613-acre parcel located at 11345 SW Herman Road (Tax ID 2S122D000550) into the City of Tualatin from unincorporated Washington County. Any future development or construction will require a separate Architectural Review application to be submitted and approved.



- Criteria: Tualatin Development Code (TDC) 33.010, and Metro Code 3.09.045.
- **Application materials** are public record and are available for review. Copies can be viewed online or obtained at a reasonable cost, by contacting the Planning Division.
- **Staff report materials** will be available for inspection at no cost, at least seven days prior to the hearing. Copies can be obtained for a reasonable cost.
- **Individuals wishing to comment** may do so in writing to the Planning Division

prior to the hearing and/or present written and/or verbal testimony to the City Council at the hearing.


- **The public hearing process** begins with a staff presentation, followed by testimony by proponents, testimony by opponents, and rebuttal. Individual testimony may be limited. At the conclusion of the hearing, the City Council will deliberate and make a decision based on the facts and arguments in the public record. Before the hearing is closed, a participant may request that the record remain open for at least seven days after the hearing.
- **Everyone is invited to attend the hearing and comment** on the application's approval criteria. Failure of an issue to be raised in the hearing, in person, or by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals (LUBA) based on that issue. The failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to the decision maker to respond to the issue precludes an action for damages in circuit court.
- A copy of the staff report, findings, and draft Ordinance on ANN 21-0002 will be available one week before the hearing at:  
<https://www.tualatinoregon.gov/citycouncil>.

**For additional information contact:**

Keith Leonard, Associate Planner: kleonard@tualatin.gov, 503-691-3029

*You received this mailing because you own property within 1,000 feet (ft) of the site or within a residential subdivision which is partly within 1,000 ft.*

 18880 SW Martinazzi Avenue, Tualatin, Oregon 97062

[TUALATINOREGON.GOV/PLANNING](https://www.tualatinoregon.gov/planning) 

prior to the hearing and/or present written and/or verbal testimony to the City Council at the hearing.

- **The public hearing process** begins with a staff presentation, followed by testimony by proponents, testimony by opponents, and rebuttal. Individual testimony may be limited. At the conclusion of the hearing, the City Council will deliberate and make a decision based on the facts and arguments in the public record. Before the hearing is closed, a participant may request that the record remain open for at least seven days after the hearing.
- **Everyone is invited to attend the hearing and comment** on the application's approval criteria. Failure of an issue to be raised in the hearing, in person, or by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals (LUBA) based on that issue. The failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to the decision maker to respond to the issue precludes an action for damages in circuit court.
- A copy of the staff report, findings, and draft Ordinance on ANN 21-0002 will be available one week before the hearing at:  
<https://www.tualatinoregon.gov/citycouncil>.

**For additional information contact:**

Keith Leonard, Associate Planner: kleonard@tualatin.gov, 503-691-3029

*You received this mailing because you own property within 1,000 feet (ft) of the site or within a residential subdivision which is partly within 1,000 ft.*

 18880 SW Martinazzi Avenue, Tualatin, Oregon 97062

[TUALATINOREGON.GOV/PLANNING](https://www.tualatinoregon.gov/planning) 

# 11345 SW Herman Road (Myslony)

## Pre-Application Meeting 10/14/20 Summary

Thank you for discussing the proposed industrial development at 11345 SW Herman Road. Below, please find a summary of some of the points we were able to discuss. If there is anything else you would like to document from our meeting, please respond with your notes as well. Thank you.

### Required Land Use Reviews

Submit electronically via eTrakit: <https://permits.ci.tualatin.or.us/eTrakit/>

A Neighborhood/Developer meeting must be held prior to submitting a land use application, including Annexation, Land Division, and Architectural Review.

- One Neighborhood/Developer meeting may cover multiple applications but should generally be held no more than six months prior to application. More detailed information about this meeting, including options for virtual meetings during the present pandemic response, is online here: <https://www.tualatinoregon.gov/planning/neighborhood-developer-meetings>
- Applicants are responsible for mailing and posting notice of your Neighborhood Developer meeting. The City can provide an address list for your notice letters for a \$32 fee. Please request this through our [eTrakit](#) platform, which enables online payment.

### Annexation:

- As we discussed, a portion of the proposed development area is within unincorporated Washington County. The property is presently within the Clean Water Services Sewer District, but not annexed into the City of Tualatin.
- Annexation application: [https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/5060/annexation\\_instructions\\_1.pdf](https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/5060/annexation_instructions_1.pdf)
- For a recent example of an annexation application being reviewed now, see <https://www.tualatinoregon.gov/planning/ann-20-0003-norwood-annexation>
- Annexation must be adopted by City Council prior to acceptance of future land use applications on the subject territory. Prior to Annexation, Washington County retains jurisdiction over the territory and the land is zoned FD-10.

### Land Division:

- A Partition is required for of up to three legal lots and Subdivision for four or more.
- Land division is typically preferred prior to an Architectural Review. Defined legal lots enables precise application of requirements for development.
- [https://www.tualatinoregon.gov/sites/default/files/fileattachments/engineering/page/5159/development\\_app\\_sub\\_par\\_pla\\_w\\_sign\\_and\\_mailing\\_labels.pdf](https://www.tualatinoregon.gov/sites/default/files/fileattachments/engineering/page/5159/development_app_sub_par_pla_w_sign_and_mailing_labels.pdf)

### Architectural Review:

- [https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/5081/ar\\_instructions\\_2019\\_withforms.pdf](https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/5081/ar_instructions_2019_withforms.pdf)
- Industrial developments over 150,000 square feet in building area are reviewed through Type III review including a hearing at the Architectural Review Board.
- Criteria to address in your narrative include:



**Tualatin Municipal Code:**

- [Chapter 03-02: Sewer Regulations; Rates;](#)
- [Chapter 03-03: Water Service;](#)
- [Chapter 03-05: Soil Erosion, Surface Water Management, Water Quality Facilities, and Building and Sewers;](#)

**Tualatin Development Code:**

- [TDC 61: General Manufacturing;](#)
- [TDC 70: Floodplain District;](#)
- [TDC 72: Natural Resource Protection Overlay;](#)
- [TDC 73A: Site Design,](#)
- [73B: Landscaping Design,](#)
- [73C: Parking Standards, and](#)
- [73D: Waste and Recyclables Management Standards;](#)
- [TDC 74: Public Improvements;](#)
- [TDC 75: Access.](#)

**Highlighted Site Design Standards**

- **Natural Resource Protection Overlay—Wetland Conservation Natural Area**



- The light purple shows the NRPO-WCNA. An additional screenshot of the overlay areas is included at the end of these notes. You may request these and additional land use layers for inclusion in your plan drawings from our GIS team as needed (contact Martin Loring at [mloring@tualatin.gov](mailto:mloring@tualatin.gov) or Tom Scott at [tscott@tualatin.gov](mailto:tscott@tualatin.gov)).

- Development is very restricted within the NRPO-WCNA. Uses other than trails, streets, parks, and driveway access are generally not permitted unless the overlay is removed. See [TDC 72.060](#). Partial grading may be permitted within the NRPO-WCNA per [TDC 72.040](#).
- This resource is listed as W-35 in the Tualatin Natural Resources Inventory and Local Wetlands Inventory (1995):  
[https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/4242/natural\\_resource\\_inventory\\_and\\_local\\_wetlands\\_inventory\\_-\\_dec\\_1995.pdf](https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/4242/natural_resource_inventory_and_local_wetlands_inventory_-_dec_1995.pdf)
- From our discussion, it sounds like you will seek to revise the location of the overlay following the process described in [TDC 72.065](#). Per this section, claims of a location error for this type of overlay may be processed as part of a subdivision, partition, lot line adjustment, architectural review, or variance.
- [TDC 72.065](#): *Claims of map errors shall be supported by adequate inventory information and analysis to justify the claim and meet the land use application approval criteria. Claims of map error for wetland boundaries shall be verified by the Oregon Division of State Lands.*
- Clean Water Services may present additional requirements for vegetated corridors and other site development requirements through their Service Provider Letter process.

**Additional notes on site design:**

- Demonstrate the minimum landscaping requirements in [TDC 73B](#) are met. Recall that the Architectural Review Board has expressed a particular interest in the quality of the public facing appearance of the development including landscaping.

**Public Utilities and Other Site Development**

- Geotech/soil/infiltration report:
  - An infiltration test report will need to be submitted to Engineering for a complete land use application if the private water quality facility includes infiltration in the design.
- An Erosion Control permit is required from Tualatin for projects disturbing over 500 square feet.
  - Additionally if between one and five acres are disturbed, a 1200CN is needed from CWS.
  - If over five acres are disturbed, a 1200C is needed from DEQ.
- A Water Quality Permit is needed for construction and modification of public and private impervious areas. The permit will include wetland mitigation/revegetation required by CWS SPL in addition to treatment/25-year Hedges Creek Subbasin detention per [TMC 3-5-3-220\(4\)](#)/hydromodification
  - <https://www.tualatinoregon.gov/engineering/water-quality-permit-application>
  - [TDC 14.020. - Drainage Plan](#) discusses the Hedges Creek detention requirements. *Map 14-1: Recommended Capital Improvements Hedges Creek Subbasin* is located here: [https://library.municode.com/or/tualatin/codes/development\\_code?nodeId=THDECOT\\_UOR\\_APXAMA](https://library.municode.com/or/tualatin/codes/development_code?nodeId=THDECOT_UOR_APXAMA)
- A Public Works Permit is needed for work within right-of-way or public easements.
  - Proposal to relocate the 21" sanitary sewer line crossing the lot will involve coordination and approval from Clean Water Services.
  - <https://www.tualatinoregon.gov/engineering/public-works-permit-application>
- Floodplain permit plans must confirm balanced cut & fill per [TMC 3-5-250](#)
- Hydraulic Modeling may be requested in advance of land use application to confirm availability/requirements. When submitting a modeling application include:

- Requirements/alternatives allowed by Tom Mooney, TVF&R (503-259-1419; [thomas.mooney@tvfr.com](mailto:thomas.mooney@tvfr.com))
- Hydrant flow test results. Request testing via <https://www.tualatinoregon.gov/publicworks/hydrant-flow-tests>. For questions contact Terrance Leahy, Water Division Manager, (503-691-3095; [tleahy@tualatin.gov](mailto:tleahy@tualatin.gov))

### Transportation and Site Access

- Traffic Impact Analysis – Contact Mike McCarthy, [mmcarthy@tualatin.gov](mailto:mmcarthy@tualatin.gov) to confirm TIA scope proposal
- Myslony requires dedication and Public Works and Water Quality Permits for construction. We strongly suggest providing exhibits showing both sides of Myslony for discussion with the City Engineer earlier rather than later.
  - TDC [Figure 11-1: Functional Classification and Traffic Signal Plan](#) shows Myslony as [Major Collector](#) to the west and [Minor Collector](#) to the east.
  - TDT credits are available per the Washington County TDT manual
- A 24-foot wide private easement must allow lots to the north to access Myslony. Utility easements must be provided. Please propose locations for vehicle, Public Utility, sanitary sewer, stormwater, and water that makes the most sense with your development for staff discussion.
  - Future development of the lot to the north will not be allowed access to Herman Road across Portland & Western Railroad tracks.
  - TDC 75.140 Existing Streets Access Standards (17)(b)(ii) [https://library.municode.com/or/tualatin/codes/development\\_code?nodeId=THDECOT\\_UOR\\_CH75ACMA\\_TDC\\_75.140EXSTACST](https://library.municode.com/or/tualatin/codes/development_code?nodeId=THDECOT_UOR_CH75ACMA_TDC_75.140EXSTACST)

### Trail

- Rich Muller, Parks and Planning Development Manager, for discussion of Ice Age Tonquin Trail (503) 691-3064

### Fire

- Tom Mooney, TVF&R (503-259-1419; [thomas.mooney@tvfr.com](mailto:thomas.mooney@tvfr.com))
- Flow testing: Terrance Leahy, Water Division Manager, (503-691-3095; [tleahy@tualatin.gov](mailto:tleahy@tualatin.gov))

### Fees

- Current fee schedule: <https://www.tualatinoregon.gov/finance/fee-schedule>
- For calculating SDC fees, please work with Lauren Gonzalez, [lgonzalez@tualatin.gov](mailto:lgonzalez@tualatin.gov)



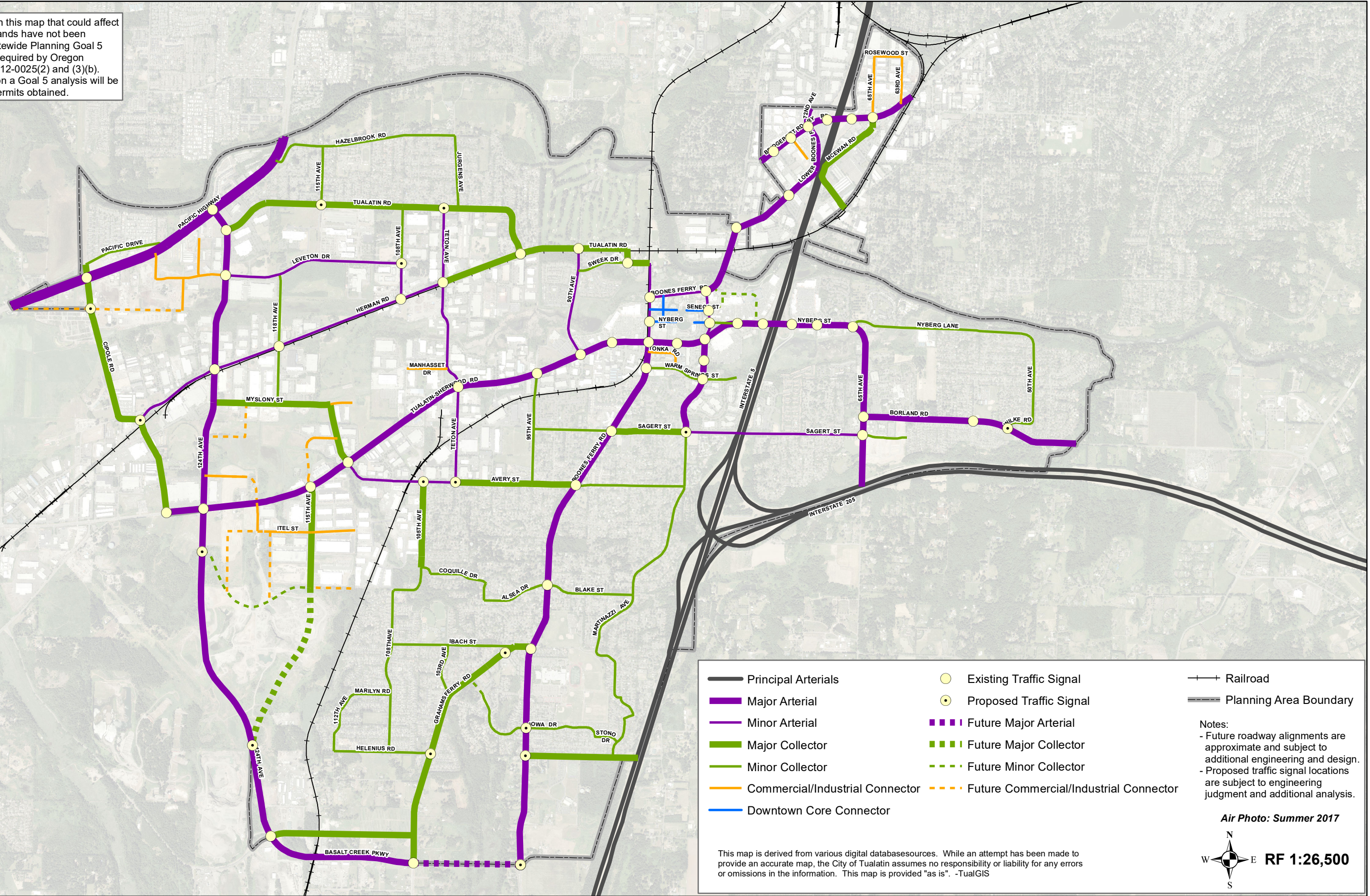
# Natural Resource Protection Overlays GIS Screenshot





# Map 8-1: Functional Classification and Traffic Signal Plan

The projects embodied in this map that could affect rivers, streams and wetlands have not been analyzed in terms of Statewide Planning Goal 5 (Natural Resources) as required by Oregon Administrative Rule 660-12-0025(2) and (3)(b). Thus, prior to construction a Goal 5 analysis will be completed and proper permits obtained.



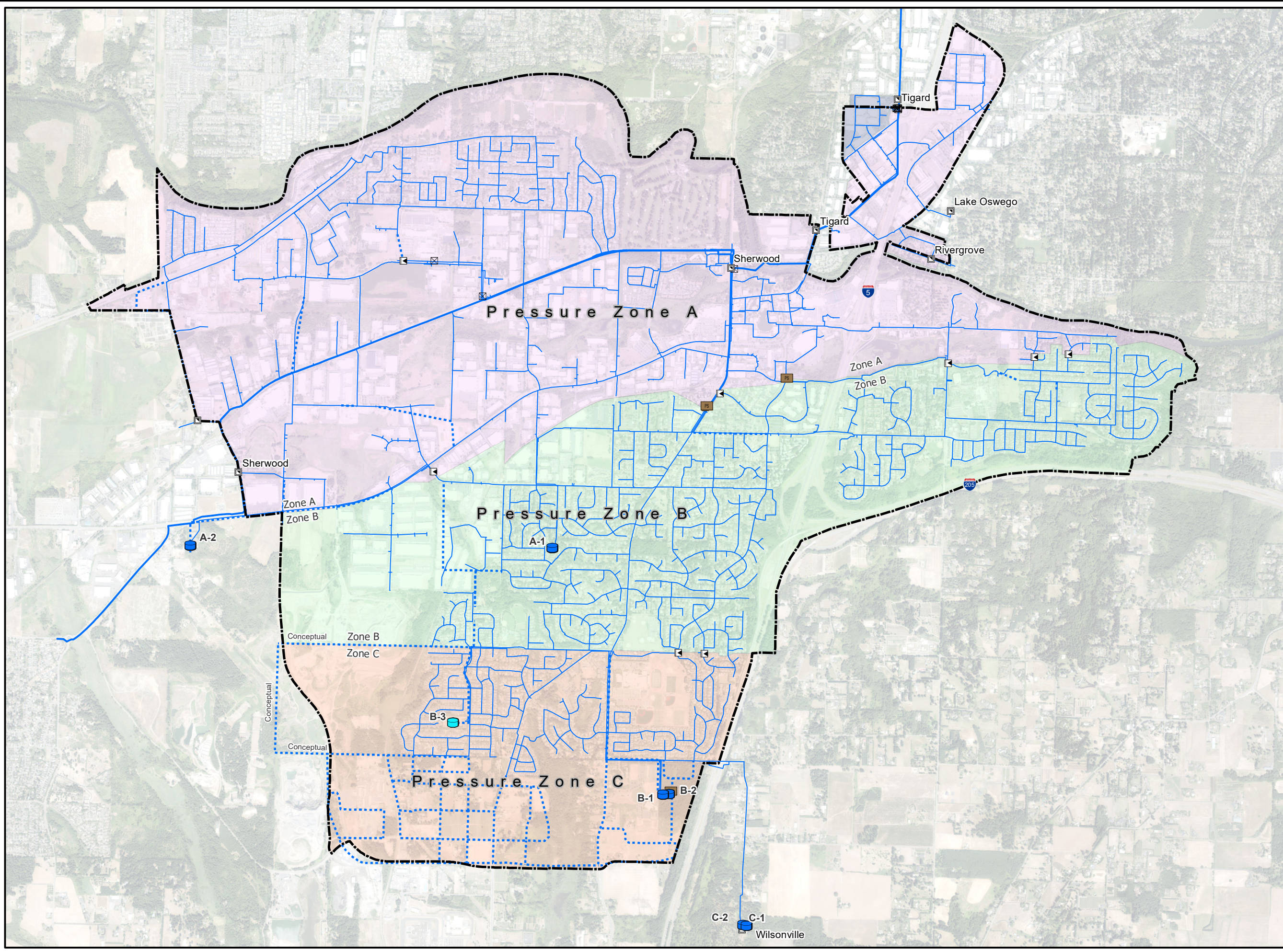
Principal Arterials	Existing Traffic Signal	Railroad
Major Arterial	Proposed Traffic Signal	Planning Area Boundary
Minor Arterial	Future Major Arterial	Notes: - Future roadway alignments are approximate and subject to additional engineering and design. - Proposed traffic signal locations are subject to engineering judgment and additional analysis.
Major Collector	Future Major Collector	
Minor Collector	Future Minor Collector	
Commercial/Industrial Connector	Future Commercial/Industrial Connector	
Downtown Core Connector		














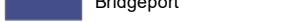
This map is derived from various digital databasesources. While an attempt has been made to provide an accurate map, the City of Tualatin assumes no responsibility or liability for any errors or omissions in the information. This map is provided "as is". -TualGIS

**Air Photo: Summer 2017**

**RF 1:26,500**





-  Pump Stations
-  Pressure Reducing Valve
-  Pressure Reducing-Sustaining Valve
-  Existing Reservoirs
-  Future Reservoirs
-  Water System Interties
-  Transmission Lines
-  Distribution System
-  Future System Improvements
-  A-Level
-  B-Level
-  C-Level
-  Bridgeport
-  Planning Area Boundary










RF 1:26,500

This map is derived from various digital database sources. While an attempt has been made to provide an accurate map, the City of Tualatin assumes no responsibility or liability for any errors or omissions in the information. This map is provided "as is". -TualGIS



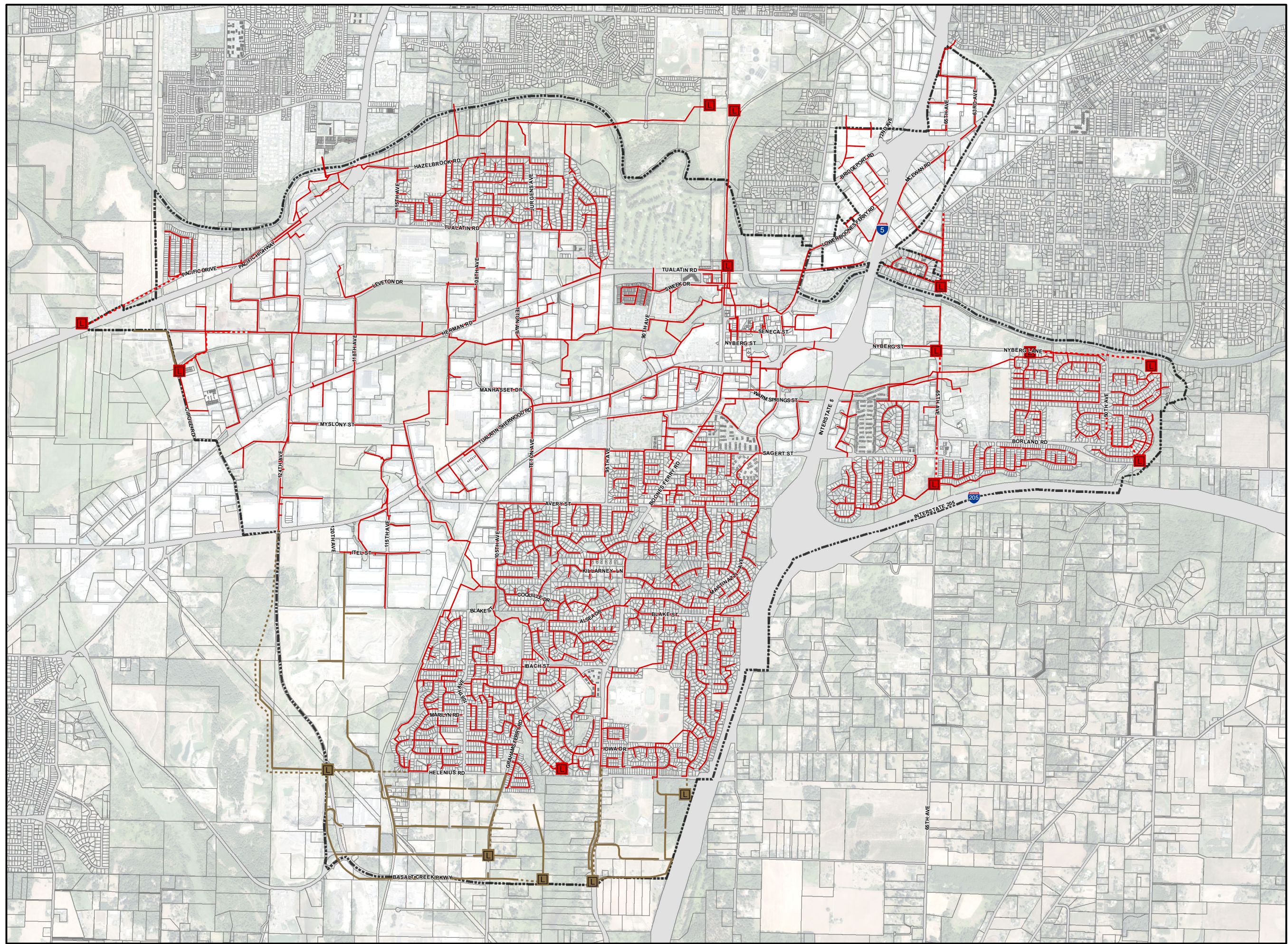
City of Tualatin  
Sewer System Master Plan  
Map 9-2

-  Conceptual Lift Station
-  Lift Station
-  Gravity Pipe
-  Force Main
-  Conceptual Gravity Pipe
-  Conceptual Force Main
-  Planning Area Boundary



RF 1:26,500

This map is derived from various digital database sources. While an attempt has been made to provide an accurate map, the City of Tualatin assumes no responsibility or liability for any errors or omissions in the information. This map is provided "as is". -TualGIS





# Map 10-1 Comprehensive Plan Map

- Notes:
1. All plan designation boundaries are intended to follow property lines, center lines of streets, or can be scaled pursuant to the scale of this map. If mapping errors occur, the City Council shall be the sole arbitration body to decide the location of boundaries.
  2. Specific requirements for each Planning District are found within the Tualatin Development Code.
  3. The Wetland Protection District and the Greenway and Riverbank Protection District locations are described in the Tualatin Development Code. Maps of the districts are available from the Planning Department.
  4. Properties within the Tualatin Urban Renewal Area boundary are subject to the Tualatin Urban Renewal Plan which may contain specifications and requirements that are more restrictive than those found within the Planning District standards.



**Residential**

- RL Low Density
- RML Medium-Low Density
- RMH Medium-High Density
- RH High Density
- RH/HR High Density/High Rise

**Commercial**

- CO Office
- CC Central
- CG General
- CN Neighborhood
- CR Recreational
- CO/MR Mid-Rise Office
- MUC Mixed Use
- MC Medical

**Manufacturing**

- ML Light
- MG General
- MP Park
- MBP Manufacturing Business Park

**Institutional**

- IN Institutional

Planning Area Boundary  
 City of Tualatin  
 Mobile Home Parks  
 Planning Districts  
 In Planning Area/Outside of City

Effective: April 21, 2021

