TUALATIN CITY COUNCIL

Monday, APRIL 9, 2018

JUANITA POHL CENTER
8513 SW Tualatin Road
Tualatin, OR 97062

WORK SESSION begins at 6:30 p.m.
BUSINESS MEETING begins at 7:00 p.m.

Mayor Lou Ogden

Council President Joelle Davis

Councilor Robert Kellogg **Councilor Frank Bubenik**
Councilor Paul Morrison **Councilor Nancy Grimes**
Councilor Jeff DeHaan

Welcome! By your presence in the City Council Chambers, you are participating in the process of representative government. To encourage that participation, the City Council has specified a time for your comments on its agenda, following Announcements, at which time citizens may address the Council concerning any item not on the agenda or to request to have an item removed from the consent agenda. If you wish to speak on a item already on the agenda, comment will be taken during that item. Please fill out a Speaker Request Form and submit it to the Recording Secretary. You will be called forward during the appropriate time; each speaker will be limited to three minutes, unless the time limit is extended by the Mayor with the consent of the Council.

Copies of staff reports or other written documentation relating to each item of business referred to on this agenda are available for review on the City website at www.tualatinoregon.gov/meetings, the Library located at 18878 SW Martinazzi Avenue, and on file in the Office of the City Manager for public inspection. Any person with a question concerning any agenda item may call Administration at 503.691.3011 to make an inquiry concerning the nature of the item described on the agenda.

In compliance with the Americans With Disabilities Act, if you need special assistance to participate in this meeting, you should contact Administration at 503.691.3011. Notification thirty-six (36) hours prior to the meeting will enable the City to make reasonable arrangements to assure accessibility to this meeting.

Council meetings are televised *live* the day of the meeting through Washington County Cable Access Channel 28. The replay schedule for Council meetings can be found at www.tvctv.org. Council meetings can also be viewed by live *streaming video* on the day of the meeting at www.tualatinoregon.gov/meetings.

Your City government welcomes your interest and hopes you will attend the City of Tualatin Council meetings often.

PROCESS FOR LEGISLATIVE PUBLIC HEARINGS

A ***legislative*** public hearing is typically held on matters which affect the general welfare of the entire City rather than a specific piece of property.

1. Mayor opens the public hearing and identifies the subject.
2. A staff member presents the staff report.
3. Public testimony is taken.
4. Council then asks questions of staff, the applicant, or any member of the public who testified.
5. When the Council has finished questions, the Mayor closes the public hearing.
6. When the public hearing is closed, Council will then deliberate to a decision and a motion will be made to either *approve*, *deny*, or *continue* the public hearing.

PROCESS FOR QUASI-JUDICIAL PUBLIC HEARINGS

A ***quasi-judicial*** public hearing is typically held for annexations, planning district changes, conditional use permits, comprehensive plan changes, and appeals from subdivisions, partititions and architectural review.

1. Mayor opens the public hearing and identifies the case to be considered.
2. A staff member presents the staff report.
3. Public testimony is taken:
    a) In support of the application
    b) In opposition or neutral
4. Council then asks questions of staff, the applicant, or any member of the public who testified.
5. When Council has finished its questions, the Mayor closes the public hearing.
6. When the public hearing is closed, Council will then deliberate to a decision and a motion will be made to either *approve*, *approve with conditions*, or *deny the application*, or *continue* the public hearing.

TIME LIMITS FOR PUBLIC HEARINGS

The purpose of time limits on public hearing testimony is to provide all provided all interested persons with an adequate opportunity to present and respond to testimony. All persons providing testimony **shall be limited to 3 minutes**, subject to the right of the Mayor to amend or waive the time limits.

EXECUTIVE SESSION INFORMATION

An Executive Session is a meeting of the City Council that is closed to the public to allow the City Council to discuss certain confidential matters. An Executive Session may be conducted as a separate meeting or as a portion of the regular Council meeting. No final decisions or actions may be made in Executive Session. In many, but not all, circumstances, members of the news media may attend an Executive Session.

The City Council may go into Executive Session for certain reasons specified by Oregon law. These reasons include, but are not limited to: ORS 192.660(2)(a) employment of personnel; ORS 192.660(2)(b) dismissal or discipline of personnel; ORS 192.660(2)(d) labor relations; ORS 192.660(2)(e) real property transactions; ORS 192.660(2)(f) information or records exempt by law from public inspection; ORS 192.660(2)(h) current litigation or litigation likely to be filed; and ORS 192.660(2)(i) employee performance of chief executive officer.

OFFICIAL AGENDA OF THE TUALATIN CITY COUNCIL MEETING FOR APRIL 9, 2018

A. CALL TO ORDER

1. Moment of Silence in Honor of Katherine Forrest, former Tualatin Councilor
2. Pledge of Allegiance

B. ANNOUNCEMENTS

1. Tualatin Youth Advisory Council Update for April, 2018

2. Proclamation Declaring April 8-14, 2018 as Public Safety Telecommunicators Week

C. CITIZEN COMMENTS

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.

D. 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. The matters removed from the Consent Agenda will be considered individually at the end of this Agenda under, Items Removed from the Consent Agenda. The entire Consent Agenda, with the exception of items removed from the Consent Agenda to be discussed, is then voted upon by roll call under one motion.

1. Consideration of Approval of the Minutes for the Regular Meeting of March 26, 2018

2. Consideration of **Resolution No. 5362-18** Approving Modifications to Employment Agreement with the City Manager

E. SPECIAL REPORTS

1. Tualatin Community Emergency Response Team (CERT) Program Update

2. Tualatin Heritage Center Annual Report

F. PUBLIC HEARINGS – *Quasi-Judicial*

1. Consideration of a Conditional Use Permit for a Fire Station (Station 39) Operated by Tualatin Valley Fire & Rescue in the Light Manufacturing (ML) Planning District on Land Adjacent to 7100 SW McEwan Road (Tax Map 2S1 13DD, Tax Lot 1601) (CUP-17-0002)

2. Request for Review (Appeal) of a Planning Commission Decision Approving a Variance (VAR17-0001) to the Separation Requirements of Wireless Communication Facilities

G. 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.

H. COMMUNICATIONS FROM COUNCILORS

I. ADJOURNMENT

City Council Meeting
Meeting Date: 04/09/2018
ANNOUNCEMENTS: Tualatin Youth Advisory Council Update, April 2018

ANNOUNCEMENTS

Tualatin Youth Advisory Council Update for April, 2018

A. YAC Update

April 8, 2018

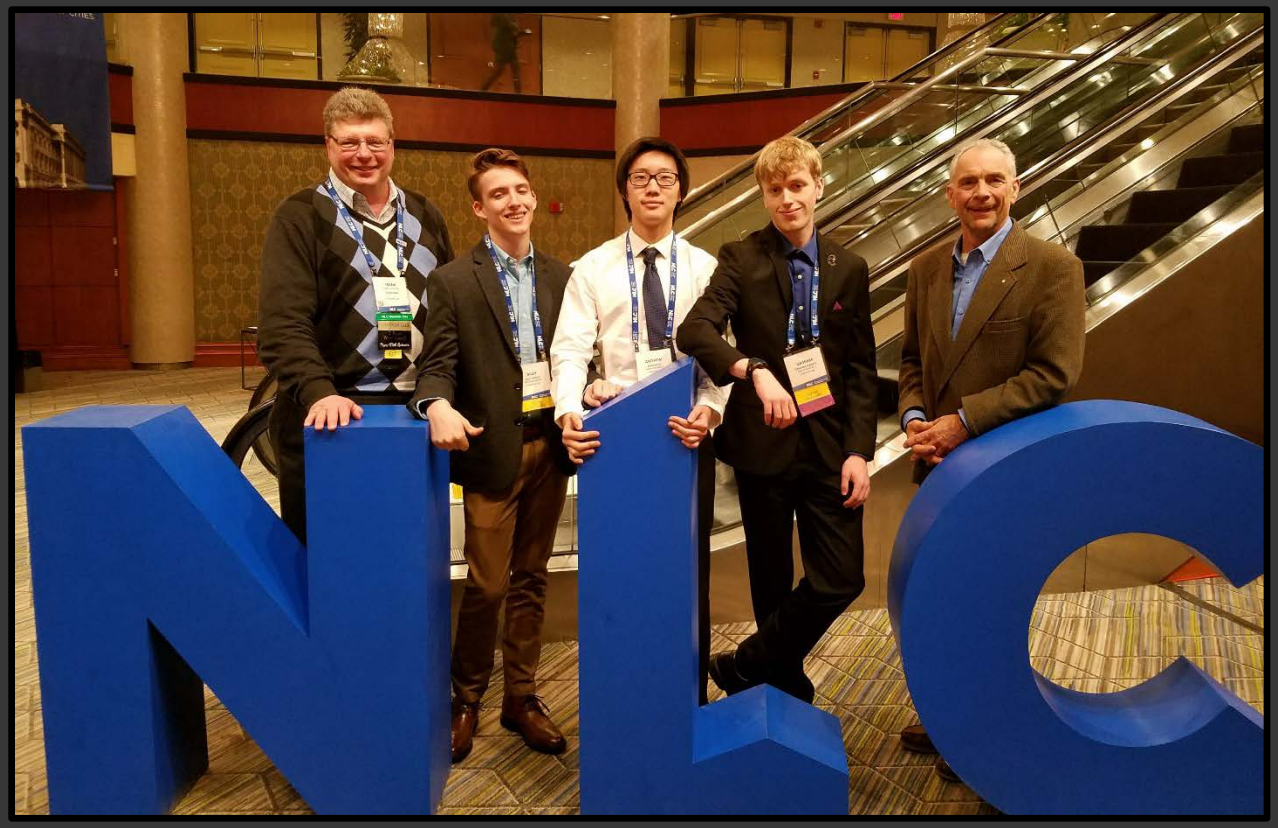
Tualatin Youth Advisory Council

Youth Participating in Governance

National League of Cities

Congressional City Conference

- March 10-14
- Civic engagement, leadership development, networking
- Thank you to Republic Services, PGE, and Comcast



National League of Cities

Congressional City Conference

- **Highlights**
  - Networked with other youth councils
  - Attended workshop sessions on increasing youth engagement in local and federal government, supporting economic development for youth
  - Learned about issues and projects other cities and youth councils are addressing
  - Toured US Capitol Building
  - Explored Washington, DC

National League of Cities

Congressional City Conference

- **Recommendations/Ideas**
  - Conduct youth survey
  - Increase focus on local/state/national policy issues and advocacy
  - Work to increase awareness of internships and apprenticeships for teens

National League of Cities

Congressional City Conference

City Council Meeting

Meeting Date: 04/09/2018

ANNOUNCEMENTS: Proclamation Declaring April 8-14, 2018 as Public Safety Telecommunicators Week

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ANNOUNCEMENTS

Proclamation Declaring April 8-14, 2018 as Public Safety Telecommunicators Week

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Proclamation

Proclamation

Declaring April 8-14, 2018 as Public Safety Telecommunicators Week in the City of Tualatin

WHEREAS Several hundred dedicated telecommunication professionals answer nearly 2 million emergency calls a year and serve the citizen of and visitors to Oregon 24 hours a day, 7 days a week, 365 days a year. These telecommunicators answer the 9-1-l emergency calls in need of assistance from law enforcement, fire, emergency medical services, and dispatch the appropriate assistance as quickly as possible; and

WHEREAS The professional public safety telecommunicator shows dedication and commitment every day and is a vital link between citizens and public safety providers who save lives, protect property, and apprehend criminals, and are the true first responders; and

WHEREAS The critical functions performed by professional telecommunicators also include those related to other operations performed by federal, state, and local government agencies to include emergency management, highway safety, and search and rescue; and

WHEREAS The Association of Public Safety Communications Officials (APCO), and other organizations from the United States and Canada, has set aside the second week in April to recognize telecommunicators and their crucial role in the protection of life and property.

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

April 8-14, 2018 as Public Safety Telecommunicators Week

INTRODUCED AND ADOPTED this 9th day of April, 2018.

CITY OF TUALATIN, OREGON

BY _____
Mayor

ATTEST:

BY _____
City Recorder

STAFF REPORT
CITY OF TUALATIN

TO: Honorable Mayor and Members of the City Council

THROUGH: Sherilyn Lombos, City Manager

FROM: Nicole Morris, Deputy City Recorder

DATE: 04/09/2018

SUBJECT: Consideration of Approval of the Minutes for the Regular Meeting of March 26, 2018

ISSUE BEFORE THE COUNCIL:

The issue before the Council is to approve the minutes for the Regular Meeting of March 26, 2018.

RECOMMENDATION:

Staff respectfully recommends that the Council adopt the attached minutes.

Attachments: City Council Regular Meeting Minutes of March 26, 2018

OFFICIAL MINUTES OF THE TUALATIN CITY COUNCIL MEETING FOR MARCH 26, 2018

Present: Mayor Lou Ogden; Councilor Frank Bubenik; Council President Joelle Davis; Councilor Nancy Grimes; Councilor Paul Morrison; Councilor Robert Kellogg

Absent: Councilor Jeff DeHaan

Staff Present: City Manager Sherilyn Lombos; City Attorney Sean Brady; Police Chief Bill Steele; Community Services Director Paul Hennon; Finance Director Don Hudson; Deputy City Recorder Nicole Morris; Maintenance Services Division Manager Clayton Reynolds; Library Manager Jerianne Thompson; Parks and Recreation Manager Rich Mueller; IS Director Bates Russell

A. CALL TO ORDER

Pledge of Allegiance

Mayor Ogden called the meeting to order at 7:03 p.m.

B. ANNOUNCEMENTS

1. Arbor Week Presentation, Awards and Proclamation Declaring April 1-7, 2018 as Arbor Week

Parks and Recreation Manager Rich Mueller presented materials for Arbor Week April 1-7, 2018. Tualatin Parks Advisory Committee Vice-Chair Valerie Pratt presented activities for Arbor Week including a poster contest, Arbor Week proclamation, and Tree City events.

Mayor Ogden presented the 5th Grade Poster Contest winners with their awards.

Council President Davis read the proclamation declaring April 1-7, 2018 as Arbor Week in the City of Tualatin.

2. Proclamation Declaring Mike Perez as Tualatin's Employee of the Year

City Manager Sherilyn Lombos announced Mike Perez as Tualatin's 2017 Employee of the Year. City Manager Lombos highlighted Mr. Perez's achievements. Mayor Ogden read the proclamation declaring Mr. Perez as Tualatin's 2017 Employee of the Year. Mr. Perez accepted the proclamation.

3. Proclamation Declaring April 2-6, 2018 as National Community Development Week in the City of Tualatin

Councilor Bubenik declared April 2-6, 2018 as National Community Development Week in the City of Tualatin.

4. Tualatin Library Foundation Vine2Wine 2018

Tualatin Library Foundation member Wayne Welch announced the Vine2Wine event to be held on April 21, at the Tualatin Library. Tickets are $45 per person and available on the foundations website or at the Library. Member Welch explained how the funds raised from the event are distributed throughout the community.

C. CITIZEN COMMENTS

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None.

D. 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. The matters removed from the Consent Agenda will be considered individually at the end of this Agenda under, Items Removed from the Consent Agenda. The entire Consent Agenda, with the exception of items removed from the Consent Agenda to be discussed, is then voted upon by roll call under one motion.

MOTION by Council President Joelle Davis, SECONDED by Councilor Nancy Grimes to adopt the consent agenda.

Aye: Mayor Lou Ogden, Councilor Frank Bubenik, Council President Joelle Davis, Councilor Nancy Grimes, Councilor Paul Morrison, Councilor Robert Kellogg

Other: Councilor Jeff DeHaan (Absent)

MOTION CARRIED

1. Consideration of Approval of the Minutes for the Work Session and Regular Meeting of February 26, 2018

2. Consideration of Approval of 2018 Liquor License Renewals-Late Submittals

3. Consideration of Approval of a New Liquor License Application for Union Wine Company

4. Consideration of **Resolution No. 5359-18** Authorizing the City of Tualatin to Apply for and Accept a Local Government Grant from the Oregon Parks and Recreation Department for the Ibach Park Playground Renovation

5. Consideration of **Resolution No. 5361-18** to Authorize the City Manager to Execute an Intergovernmental Agreement (IGA) with Washington County to Administer the City of Tualatin Transient Lodging Tax

6. Consideration of **Resolution No. 5360-18** Establishing a Youth Liaison to the Budget Committee

7. Annual Report for the Tualatin Planning Commission

E. SPECIAL REPORTS

1. Annual Report of the Tualatin Park Advisory Committee

Parks and Recreation Manager Rich Mueller and Tualatin Parks Advisory Committee (TPARK) Chair Dennis Wells presented the TPARK 2017 annual report. Chair Wells acknowledged committee members and staff for their hard work on the committee. The role of TPARK was reviewed. This year the committee made recommendations and suggestions on the Parks and Recreation Master Plan update, Parks and Recreation Month, the Tualatin Heritage Center Annual Report, Ice Age Tonquin Trail Easement Acquistions, and the Arbor Week Proclamation. TPARK's 2018 action plan includes fulfilling their prescribed duties, helping with the master plan update, supporting continued development of parks and recreation programs and facilities, and continuing to assist in development on greenway trails. Chair Wells provided a list of recommendations for the Council from the committee.

Mayor Ogden thanked the committee for their dedication and hard work.

F. GENERAL BUSINESS

If you wish to speak on a general business item please fill out a Speaker Request Form and you will be called forward during the appropriate item. 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.

1. Consideration of Recommendations from the Council Committee on Advisory Appointments

MOTION by Council President Joelle Davis, SECONDED by Councilor Frank Bubenik to approve the recommendations.

Aye: Mayor Lou Ogden, Councilor Frank Bubenik, Council President Joelle Davis, Councilor Nancy Grimes, Councilor Paul Morrison, Councilor Robert Kellogg

Other: Councilor Jeff DeHaan (Absent)

MOTION CARRIED

G. COMMUNICATIONS FROM COUNCILORS

Council Kellogg congratulated Mayor Ogden on receiving the Tualatin Chamber of Commerce Lifetime Achievement Award.

Mayor Ogden spoke to the upcoming ballot measure.

H. ADJOURNMENT

Mayor Ogden adjourned the meeting at 7:51 p.m.

Sherilyn Lombos, City Manager

_____ / Nicole Morris, Recording Secretary

_____ / Lou Ogden, Mayor

STAFF REPORT
CITY OF TUALATIN

TO: Honorable Mayor and Members of the City Council

THROUGH: Sherilyn Lombos, City Manager

FROM: Nicole Morris, Deputy City Recorder
Stacy Ruthrauff, Human Resources Director

DATE: 04/09/2018

SUBJECT: Consideration of **Resolution No. 5362-18** Approving Modifications to Employment Agreement with the City Manager

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ISSUE BEFORE THE COUNCIL:

Council will consider a resolution authorizing the modification of the City Manager's Employment Agreement.

RECOMMENDATION:

Staff recommends that the City Council adopt the resolution modifying the City Manager's Employment Agreement.

EXECUTIVE SUMMARY:

As per the City Council's adopted rules, the City Council conducted a formal review of the City Manager's job performance and compensation package in the first quarter of the even-numbered year and agreed that the City Manager's performance warrants an increase in compensation.

The attached resolution modifies Section 3 of the City Manager's Employment contract, setting the annual base salary and agreeing to pay into a deferred compensation plan on behalf of the City Manager. All other provisions of the Employment Agreement remain the same.

FINANCIAL IMPLICATIONS:

The costs associated with the increase in compensation will be budgeted within the Administration Department's personnel allocation.

Attachments: Resolution No. 5362-18

RESOLUTION NO. 5362-18

RESOLUTION APPROVING MODIFICATIONS TO EMPLOYMENT AGREEMENT WITH CITY MANAGER

WHEREAS through Resolution No. 4603-06 the City Council selected a City Manager and approved an employment agreement with the City Manager; and

WHEREAS the present City Manager commenced employment on December 18, 2006 and has served continuously since that time; and

WHEREAS the City Council has conducted a formal review of the City Manager's job performance and compensation package and agreed that the City Manager's performance warrants an increase in compensation.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that the Employment Agreement is modified in the following manner.

Section 3. Compensation

a. The City agrees to pay Employee an annual base salary of $134,700 for the performance of the above-mentioned services payable in installments at the same time that the other management employees of the City are paid.
b. The City Council will review Employee's job performance and compensation during the first quarter of every even-numbered year.
c. City agrees to pay on behalf of Employee an annual amount of $36,453 in a proportionate amount each pay period, to a pre-tax saving mechanism designed for Management Employees, subject to all applicable Internal Revenue Service (I.R.S.) codes and State of Oregon tax regulations.

All other provisions of the existing Employment Agreement shall remain in full force.

INTRODUCED AND ADOPTED this 9th day of April, 2018.

CITY OF TUALATIN, OREGON

BY _____
Mayor

ATTEST:

BY _____
City Recorder

City Council Meeting

Meeting Date: 04/09/2018

SPECIAL REPORTS: Tualatin Community Emergency Response Team (CERT) Program Update

Submitted For: Sherilyn Lombos, City Manager

SPECIAL REPORTS

Tualatin Community Emergency Response Team (CERT) Program Update

SUMMARY

Cathy Holland, CERT Team and CCIO president will be presenting to Council an update on the CERT Team Program. The CERT Team would like to say thanks for the continued support of the City of Tualatin, Tualatin CIO Program and the personal commitment of Tualatin Community Emergency Response Team (CERT) members, who have achieved their goals for 2017 and are in the process of implementing new programs to achieve their long-term goal of getting " **Tualatin Prepared**".

Accomplishments for 2017/18

- Received Oregon Emergency Management and FEMA approval of Tualatin CERT Team in March of 2017 (previous activities were under Tigard's certification)
- Held fall and spring, 7-week BASIC CERT training courses for Tualatin/Durham residents and employees while working in Tualatin, in coordination with other Washington County CERT Teams
- Assumed training responsibilities from Tigard when two Tualatin CERT volunteers received Teaching Certification for BASIC CERT course. Currently a third member will be trained in April 2018
- Following graduation of the spring 2018 class, Tualatin CERT reached 91 community volunteers and one company team (JAE) of 15 for a total of 106 volunteer members (last report to City Council in March 2017 - Tualatin CERT size was 44)
- Held monthly team training meetings on 3rd Wednesday of each month
- Held four HAM amateur radio license training courses. The Community Team now has 31 licensed HAM operators (34%), highest percentage of CERT volunteers in Washington County
- Supported creation of Tualatin Amateur Radio Emergency Services (TARES). The TARES Club is a local Amateur Radio Operators group for CERT and non-CERT licensed operators; they have 78 HAM operators on their email list
- Held weekly CERT Emergency Net HAM call-ins on two established frequencies
- Participated in field exercise training events as follows: Tualatin Team 2/25/17 and 5/20/17, multiple Washington County Teams 9/23/17 and joint Tualatin/Tigard Teams 1/27/18. Next Tualatin field exercise is scheduled for April 28, 2018.
- Adopted Bylaws as an unincorporated, volunteer association, January 2018
- Elected Board of Directors, February 2018
- CERT Team volunteered communication (HAM) and logistical support for Tualatin's Great Pumpkin Regatta with volunteers assisting with parking and providing additional information
- CERT Team will support the upcoming Blender Dash with similar communication (HAM

radio) along the fun run course

The preliminary goals for 2018/19 and 2019/20 - Two Year Planning Horizon

The Tualatin CERT Board continues to assess resources and challenges and at this time have the following objectives for the next two years for the CERT Team.

- Stand ready to respond to unexpected catastrophic event
- Expand CERT Community Team to 150 active members
- Add additional Company Teams within Tualatin
- Train, train, train and practice, practice, practice
- Evaluate equipment and resources as TEAM expands
- Compete in the local CERT Olympics

Neighborhood Ready - personal, business and neighborhood education

- Customize and adopt Washington County's proposed "Neighborhood Ready" materials; incorporate with free Map Your Neighborhood, Red Cross Prepare, and Living on Shaky Ground publications
- Roll out a systematic information and training platform with cooperation of the CIO's and the City to create prepared residential communities supported by prepared residents.
- Organize CERT and other volunteers through the CIO program
- Complete 50% of the residential areas by April 2020 (currently completed 200 households, out of approximately 5,600 or 4%)
- Support City of Tualatin emergency planning and actions as requested
- Complete downtown business area by April 2019 (currently 33% completed)

1-a CERT and CIO Update

TUALATIN CERT PROGRAM UPDATE PRESENTATION TO TUALATIN CITY COUNCIL

April 9, 2018

TUALATIN CERT PROGRAM RECAP 2017/2018

- FEMA and Oregon Emergency Management Approval Received – 3/10/17.
- Held Fall and Spring 7-week Basic CERT Class training in coordination with other Washington County CERT Teams.
- Will achieve active Team size of 100 volunteers by 4/30/18.
- Will have 3 volunteers completing "Train the Trainer" FEMA courses by 4/30/18, allowing us independences from Tigard CERT.

TUALATIN CERT PROGRAM RECAP CONTINUED

- Held multiple HAM license training classes, monthly Team training meetings, and participated/held 4 field training exercises.
- Held weekly CERT Emergency Net HAM call-ins on two established frequencies.
- Collaborated to create TARES (Tualatin Amateur Radio Emergency Services), a HAM club for CERT and non-CERT licensed HAM operators.
- Adopted Bylaws as an unincorporated, volunteer association and elected Board of Directors.

CERT RESPONDED TO REQUESTS FROM CITY OF TUALATIN FOR ASSISTANCE

TUALATIN CERT PROGRAM THANK YOU!

- Accomplishments couldn't have happened without support and advice from……
  - Members of the Tualatin City Council
  - Tualatin City Manager Sherilyn Lombos, IS Manager Bates Russell, Maintenance Service Manager Clay Reynolds, Program Coordinator Kathy Kaatz, Police Chief Bill Steele, and Assistant to City Manager Tanya Williams
  - Tigard Emergency Manager – Mike Lueck
  - Washington County Emergency Management Cooperative Director – Scott Porter
  - Every CIO President and Board Member

TUALATIN CERT PROGRAM
FIRE TRAINING AT TVFR CENTER

TUALATIN CERT PROGRAM CRIBBING AT TVFR CENTER

TUALATIN CERT PROGRAM
FALL 2017 CLASS

TUALATIN CERT PROGRAM SUMMARY OF SECOND YEAR EFFORTS

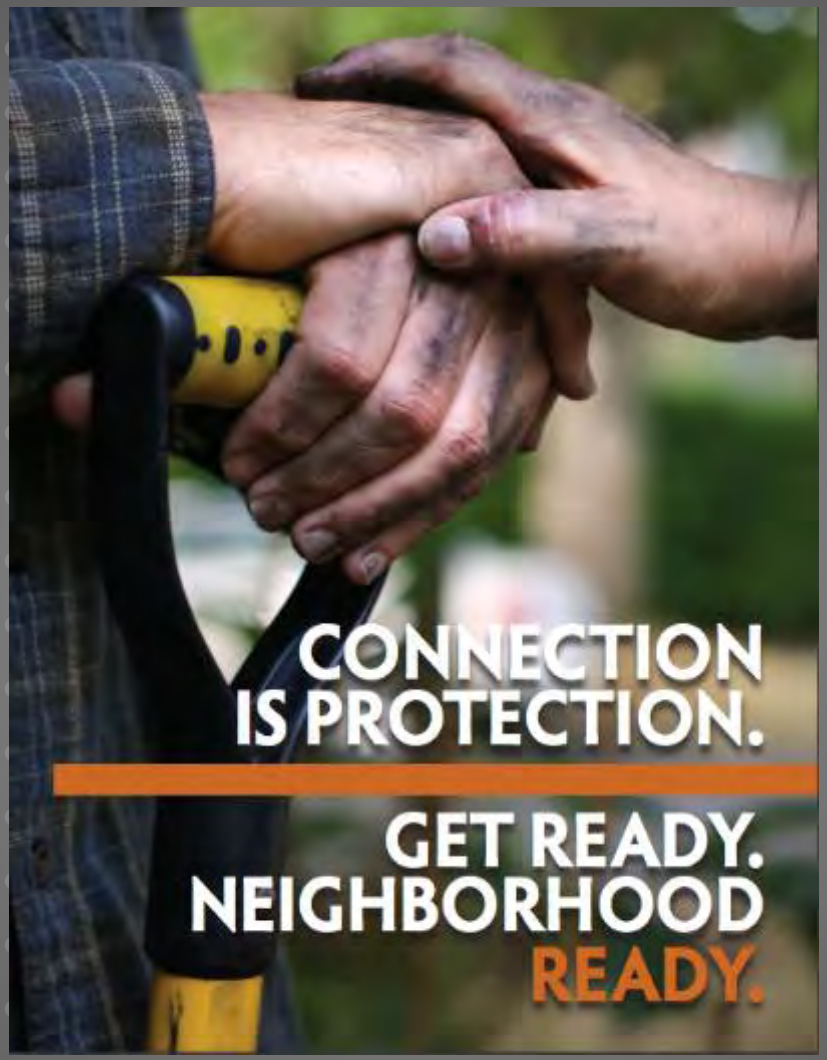
- Expanded CERT team – increased to 100+ volunteers.
- Held monthly team planning & training meetings.
- Helped CIOs integrated emergency preparation info into community outreach.
- With modest success at training neighborhoods, evaluated alternatives including program developed by volunteers in the City of Durham.

TUALATIN CERT PROGRAM UPDATE MULTI-YEAR OBJECTIVES

- Increase active Team size to 150+.
- Continue 2 7-week Basic CERT Classes/year and multiple HAM license training.
- Maintain 2017/18 funding for team training & equipment for 2018/19.
  - Fund additional needed Team equipment through CIO grant program & private donations.
- Create a competitive team for CERT Olympics.

TUALATIN CERT PROGRAM UPDATE MULTI-YEAR OBJECTIVES

- Participate in 4 field training exercises.
- Keep training and be ready to respond.
- Lead CIO's community outreach providing emergency preparation training.
- Expand CIO CERT Ham Radio Network.
- Adopt CIO/Neighborhood/Cluster program using Neighborhood Ready.


CONNECTION
IS PROTECTION.
GET READY.
NEIGHBORHOOD
READY.

RESOURCE MATERIAL 2018/19

Map Your Neighborhood

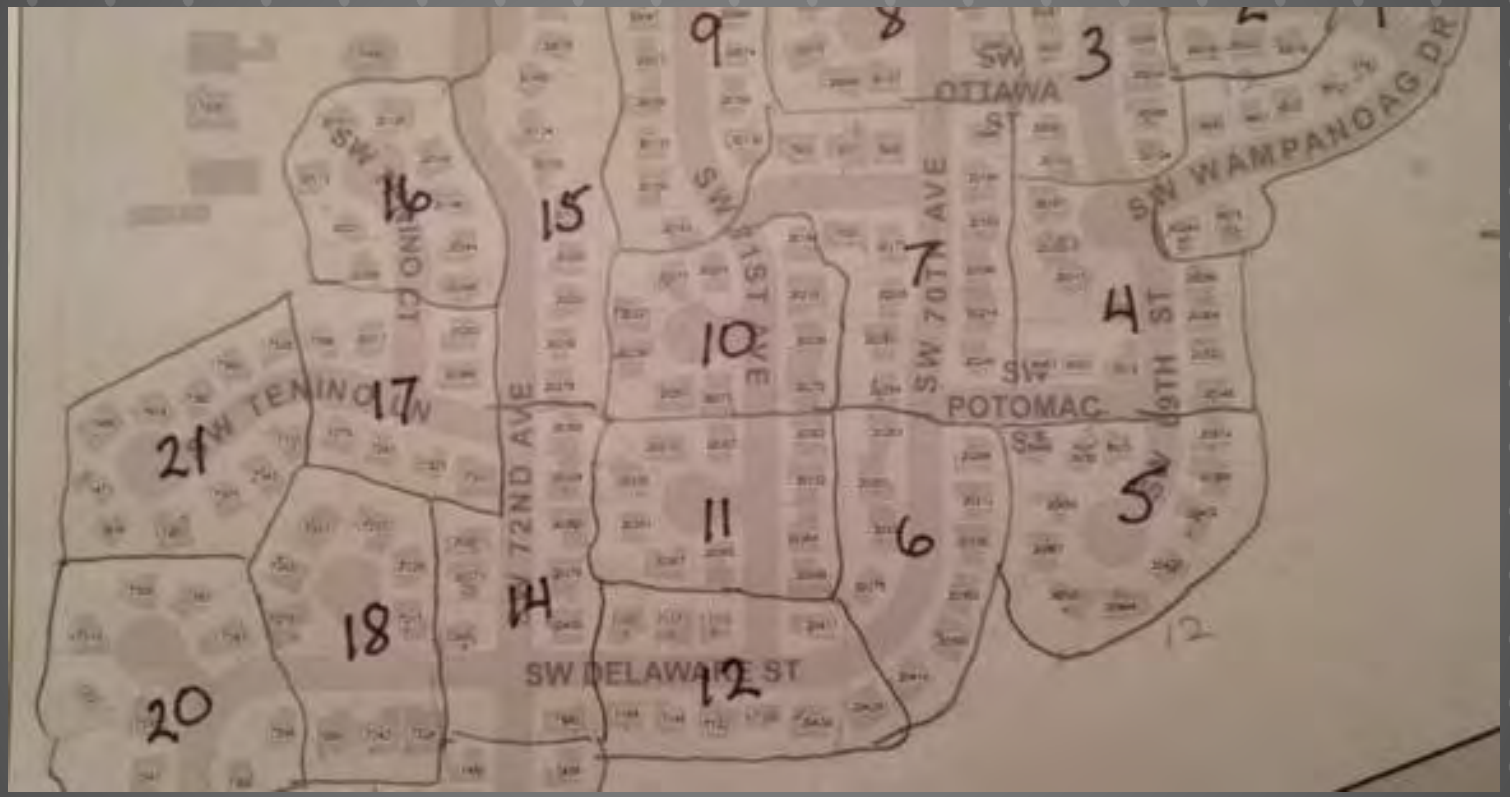
EXAMPLE: EAST CIO

EAST CIO: NEIGHBORHOODS

EAST CIO
SCHEDULED NEIGHBORHOOD MEETINGS

- April 19 at Library – Sequoia/Venetia Neighborhood
- May 31 at Library – Atfalati Neighborhood
- June 4 at Police Training Room – Fox Hills 3
- June 18 at Police Training Room – Fox Hills 4

EAST CIO: CLUSTERS



THANK YOU FOR YOUR SUPPORT!

City Council Meeting
Meeting Date: 04/09/2018
SPECIAL REPORTS: Tualatin Heritage Center Annual Report
Submitted For: Sherilyn Lombos, City Manager

SPECIAL REPORTS
Tualatin Heritage Center Annual Report

Heritage Center 2017 Annual Report
Heritage Center 2017 Presentation

2017 Annual Report: Tualatin Historical Society

In the next pages, you will read for yourself the incredible things we have done as an organization in 2017. Two things remain a priority for 2018: membership and the digital preservation of our archives in a way they can be accessed by the public.

We have an effective team in place to continue the work already begun to make Tualatin history available to all. Have a look at the big steps we have made using Facebook. Take time to visit our web page where you can connect to the many oral histories made available to you with the help of Pacific University. However, wait, there is more. On our web page, you will also find an interactive map showing History Around Tualatin. This includes not only the many displays available to the public across town, but also historic buildings and landmarks. We are proud to share these with you and we plan to do more next year as we work to share on-line the hundreds of items in our collection; thousands of digital photos; and additional surprises such as a digital library of the Tualatin High School's newspaper "The Wolf".

While the effort to share a digital version of your Tualatin history with you is making great progress, we must admit we need your help in that second area: membership. Those membership dollars are one of our largest sources of income. Please consider these ways you can help bring our membership to an even higher level:

- *Renew your membership*
- *Give the gift of history to friends and family*
- *Consider to up your membership to our new Founder's Club or Heritage Circle levels.*
- *Contact old friends and families of Tualatin who may not even live here anymore. Encourage them to join so they too can enjoy our quarterly newsletter and all the happenings back home. We still do our newsletter the old-fashioned way and mail it to each member*.

--Ross Baker
2017 President

HIGHLIGHTS OF 2017

November-December, 2016. At the 2016 annual meeting, we elected Ross Baker president and Jim Serrill as Secretary. Yvonne Addington moved into the past president position. However, Jim later needed to step down and the Board appointed City Councilor, Frank Bubenik. THS co-founder Loyce Martinazzi presented the Martinazzi-Lafky Award to Kurt Krause for his leadership in developing a printed guide to historic houses and buildings around town and the earlier signage for historic properties.

January. With the help of a recent Master's Degree graduate in museum studies, Brendan McCauley, we were able to launch a new Collections Management Policy in January. In addition, he did extensive research and benchmarking to decide which software would be best suited to moving our collections onto a digital platform. With those two items in hand, the newly formed team, nicknamed the Past Perfect Posse, was established to lead the charge.

February. After bylaws changes was approved in November to increase Board positions to 11, the Board appointed City Councilor, Frank Bubenik as our newest Board member. Jim Serrill also stepped down from the Board though remains involved. We saw progress on a project that

has been dormant for three years: final approval was given for an interpretive sign about homelands of the Confederated Tribes of Grand Ronde. Specifications were set for sign production and its steel frame. This partnership was aided greatly by the City of Tualatin. The sign is located a few steps from the picnic table and bike shelter at the Heritage Center.

March. The board officially decided on using Past Perfect's web version to record the digital archive. In the meantime, delays from the developer have caused the board to consider alternatives which Tualatin High School junior Graehm Alberty to develop this for us. During March, we also made extensive plans for a docent-led tour of the Ice Age elements on the Tualatin Greenway Trail during Tualatin's Arbor Week.

In April, several THS representatives attended the opening of a new restaurant at Nyberg Rivers Shopping Center, which keeps us visible in the community, which pays off with donations for our annual auction and other ways. At least one THS member is present every Friday morning at Tualatin Chamber of Commerce meetings when some 60-business members gather to network and we get to promote our projects and Heritage Center availability.

In **May,** we again greeted 300 fourth graders and their adult mentors for Pioneer Days, a hands-on experience with daily life skills used in Tualatin 150 years ago. Students particularly like to guess the purpose of artifacts displayed by THS member Rebecca Pratt. During each day, students from three elementary schools visit eight different learning stations.

In June, we awarded a $2,500 scholarship to Tualatin High School senior Sharona Shnayder who is now studying at both PCC and PSU. A highlight of the month was dedication of an interpretive sign developed in collaboration with the Confederated Tribes of Grand Ronde and the City of Tualatin. Installed next to the sidewalk near the heritage center, the sign features a map showing the original homelands of the Grand Ronde confederation that extended from the Columbia River to the California border, and bordered by the Cascades and Coastal Range. Our local Atfaliti Indians were part of the Kalapuya nation. Tribal Council members blessed the sign accompanied by drummers and singers. THS board member Sandra Carlson presented the tribe with a small stone atlatl discovered locally by the Lafky family. An atlatl is a device used when throwing a spear or dart. Tribal leader Jon George presented Yvonne Addington with a basket necklace for her role in facilitating THS and CTGR relationship, and a shell necklace to Sandra in appreciation for the artifact.

In **July**, our annual picnic at the first city park attracted a loyal crowd of potluck lovers. A team of actors provided entertainment from Mask and Mirror Community Theatre who performed sketches from their November play "Musical Comedy Murders of 1940." Our summer intern Graehm Alberty, a Tualatin High School student, designed and started implementing an on-line map locating historic buildings and places around town and also helped with our oral history project.

In **August**, we were underway with the transition of Tualatin Heritage Center managers. Sadly, we said farewell to Lindy Hughes after nine years of providing hospitality for hundreds of visitors each month. She now dons the hat of volunteer at the Center and is still helping with important jobs like the newsletter, auction, website and Pioneer Days. Gladly we welcomed local resident

Cindy Frost who is learning the ropes with enthusiasm. Cindy also has a part-time business of her own and is known for creating the TP Brigade, which encourages donations of paper and toiletry products for the Tualatin Schoolhouse Pantry.

In September last year, our 2017 silent auction and wine tasting on a pleasant summer evening netted over $9,000 for Society operations. The auction, raffle and popular Oregon and Washington wines and food selections have become a tradition as long-time families see each other again and newcomers feel welcome. This year's ninth annual auction saw 100 persons again enjoying a pleasant evening with music by Island Trio who returned with their easy-listening sounds. Our FY18 budget should see over $10,000 profit! In addition, our own THS member Gay Paschoal won the $500 cash raffle!

In **October**, our Galbreath (then Lafky/Lee) farm wagon restoration project neared completion in McMinnville wainwright's shop. Thanks to THS member Dawn Westphal, it will have a temporary home in her barn until we can arrange a public display. This is our largest artifact reflecting Tualatin's "modern day" era. It is not equipped to be pulled in a parade, however.

Public Programs Monthly

Hundreds attended monthly daytime and evening programs were held at the Heritage Center. The first Wednesday afternoons emphasize state and local history. The third Thursday nighttime presentations are planned in partnership with the Lower Columbia Chapter/Ice Age Floods Institute. Program ideas are always welcome.

November/December: *Tualatin's Unsolved Murder Case* by Ken Bilderback, Oregon author and *50 Years of Geologic Tumult in the Columbia Gorge* presented by Lloyd McKay.

January: *The Good Old Days in Tualatin,* a panel discussion featuring Lloyd and Helen Koch, Barbara and Bob Kern, and Frances Perry moderated by Lloyce Martinazzi. *New Technologies Meet Ancient Fossils* by Julian Gray from the Rice Museum of Rocks and Minerals

February: *Treasures in Our THS Attic* with stories behind various artifacts in our collection. *The Politics of Sand*, with videographer Tom Olsen sharing his documentary on Tom McCall's Beach Bill in the 1970s.

March: *Surprising Adventures of George Gibbs on the Oregon Frontier* by retired Lewis and Clark history professor Dr. Stephen Beckham. *The Golden Age of Radio* featuring Dick Karman playing segments of favorite radio programs of the past.

April: *History of Wilsonville* presented by city councilor Charlotte Lehan. *Engineering Geology: Implications of the Missoula Floods* presented by Bill Burgel.

May: *Marine One: Presidential Helicopters* with Tualatin retired Marine Corps pilot Norb Murray. *New Understandings of Mt. St .Helens* with Sheila Alfsen.

June: *Virtual Tour of Tualatin Historic Buildings* presented by Ross Baker followed by dedication of new sign by Confederated Tribes of Grand Ronde.

July: No regular program but picnic and fellowship at Community Park. *The Palouse Hills in Eastern Washington: Collateral Fallout from 2.5 Million Years of Ice Age Floods"* presented by Alan Busacca.

August: *Sons of the American Revolution Visit Tualatin*, three full-dress early militiamen who rose up against the British describe their story.

September: *Close Cousins of Tualatin: The Evolution of Sherwood,* the background of our common-border city presented by historian June Reynolds. *The Ice Age Oregon Trail*, an overview of the geology encountered by pioneer families as they headed west over strange terrain.

October: *When the Tualatin River Ran Backwards*, the sordid tale of local farmers fighting a big company that dammed the Tualatin River to float logs for making charcoal which also ruined farmlands upstream, presented by Loyce Martinazzi. *Talking Dirt: The Life and Times of a Soils Designer* by George Serrill whose firm formulates soils for a variety of purposes, often with diatomaceous earth (fossilized diatoms).

Membership Overview

Membership coordinators Norm Parker, Karin Olson, Cathy Stockwell and Ross Baker report we have 223 members. We welcomed 20 new members the last 12 months, a very nice increase! We were saddened by the death of Bill Galbreath, Eleanor Krause, Jon Hartman, and Joe Sequito. We now have 30 members who are 90-years old or more and automatically qualify for lifetime membership. They join 17 other Lifetime Members. We have now implemented a one-year complimentary honorary membership category for program presenters and 15 speakers received that certificate this year. Be sure to let Karin know if your address or other contact information changes.

Financial Picture of THS

We are lucky to have Barbara Stinger as our treasurer. She works diligently to track our income and spending and keeps reminding us in Board meetings about where we are either ahead or behind on budget. She makes sure we have a planned budget ready for the start of each new fiscal year starting July 1. We are presently half way through the 2018 fiscal year working with an anticipated budget of over $50,000. What follows is a general summary of what we typically take in and spend. Final figures for the year now underway will be compiled after books close June 30, 2018 and are available on request.

Income

Rental of THC in FY 2017 was up about $1,200 from the previous year to $15,893; individual donations grew from nearly $4,000 to $7,346; annual auction proceeds grew about $1,000 to $10,770. City of Tualatin subsidies for Center operations maintained at $8,100; memberships increased about $300 to $4,440; donations to the scholarship fund grew from $2,690 to $3,485; Product sales (books, jam) declined to $428. All income sources grew substantially from $41,747 to $52,347.

Expenses

We keep our Tualatin Heritage Center doors open to the public at least five days a week and many times in evenings and on weekends. Meantime, institutions bigger than ours are often unable to operate regular hours. Payroll expenses totaled $27,387. Operational expenses like postage, printing, supplies, telephone and internet services held steady at $3,570. Operational expenses like postage, printing, supplies, telephone and internet services held steady at $3,570. Contract for services like bookkeeping, a consultant on collection policy ,and speakers increased by $200 to $3,784; insurance, security system and equipment/landscape maintenance costs dipped slightly to $3,775; fundraising expenses increased by $350 from $1,634 to $1,982; we awarded the same-size scholarship of $2,500; other operational costs, such as business fees, credit card fees, membership in other organizations, awards, wagon restoration and monitors for certain rentals increased considerably to $4,369. Total spending through June 30, 2017 was $45,115.

Savings

In addition to temporary funds held in a money market account averaging $49,781, Barbara monitors a CD s with over $28,450 held in part for future exhibits and building modifications as the Board of Directors determines.

We Thank Our Supporters

Rentals of the heritage center provide a financial base for our operations. We are delighted to host a church on Sunday in keeping with the building's original purpose. Former Tualatin artist Linda Aman still travels back to Oregon from Idaho for occasional art classes. Our staff works hard to maintain this flow of support. THS is a popular venue for business networking functions, workshops, anniversary celebrations, and memorial gatherings. Avocation groups like watercolor artists and knitters like our space. These hundreds of visitors every month often pause to look at displays and exhibits.

Our major fundraiser for THS is the always-fun September auction that is headed by Barbara Stinger with the hard-working team of Lindy Hughes, Laura Baker, Diane Swientek, Karin Olson, Ellie and Larry McClure. The latest auction had another good turnout with many new friends being made and old-timers sharing memories. The popular Island Trio returned with their traditional good-listening background entertainment. The committee proposed three cash prizes for the most recent raffle, which resulted in two THS winners walking away with cash to cover their earlier purchases in the evening. Donors who gave gifts of wine, baskets, artworks, business services and gift cards are always greatly appreciated as well as the eager buyers who left with smiles on their faces.

Is Tualatin Historical Society a Beneficiary in Your Will?

One-time cash donations or even a monthly planned giving helps fill the gap between normal spending and new needs. Members are asked to consider a 1-5% earmark or a flat amount from your estate as a reasonable future gift to support THS. Please consider this option as a way to assure that the work of THS continues for future generations. Related to donations for

survival of the Society, remember that when you give to THS and also contribute an equal or larger amount to the Oregon Cultural Trust, there are tax advantages for each, but particularly for the donation to the Trust. In the latter case, you will get a valuable tax credit on your Oregon tax return. Details are available at the Oregon Cultural Trust website. THS has received grants from those funds in the past and received the one for new present collections system from the Cultural Coalition of Washington County, which gets its money from the Trust.

Visitors to THC Enjoy Exhibits and Displays

In the 12 months since our last annual meeting, the Heritage Center staff logged over 9,000 persons walking through our doors. Diane Swientek and Sandra Carlson coordinates our permanent and revolving displays, which these people see. The other permanent displays include: Robbins coverlet, family washboard, home picture and Pearl Casteel's bridal sickle for keeping the path to their mailbox clear; items from the original Methodist Church including the program used at the original dedication service in 1926; the original mastodon tusk and molars dug up near today's Fred Meyer parking lot; and a clock from the old Tualatin Elementary School. Outside the building are huge glacial erratic's and historic plants (Robbins roses, Lafky irises, Martinazzi daffodils, J.R.C. Thompson hydrangeas, and Nyberg snowdrops). Rotating exhibits these past few months included trophies, pictures, yearbooks and class books, cooking utensils, cookbooks, a kerosene lamp, fire department memorabilia, china, and picture albums. Clothing included a 1920s boy's sailor suit, vintage party dresses and shoes. Another small exhibit case is at the Juanita Pohl Center.

Because of its public hours, our most accessible artifacts are displayed at Tualatin Library featuring large and small Ice Age artifacts, castings and several replicas of mammals provided by our partners in the North American Research Group and Willamette Valley Pleistocene Project.

Tualatin History on View Other Places, Too!

Residents and visitors can view items and photographs reflecting Tualatin history at the Tualatin High School, Marquis Health Care Center at their new Café that features items from the former elementary school at that site and a mantle built from a walnut tree removed for construction. Vintage photos hang in elementary schools, Cabela's, New Seasons Market, Firehouse Subs, Sharky's, CenterCal offices and of course all city buildings thanks to the THS partnership with the City of Tualatin.

First Annual Survey Suggests Actions

All THS members were surveyed resulting in several suggestions we are now implementing. One of those was to once again hold an antique appraisal event as a fundraiser and look back in time to those "good old days" as experts share their knowledge of the items. That opportunity will be held a few days from now at the new Marquis Community Center, site of the 1939 elementary school. Appraisers are Charles and Vince Harbick, antique dealers from Sherwood.

Maintaining our Home

As we approach 12 years in the Heritage Center, signs of wear and tear become more apparent. Thanks again to assistance from the City of Tualatin and volunteers, we've been

working on a “to do” list of things that get overlooked such as reorganize equipment and materials, paint inside trim, replace an awkward office desk, clean the carpet and install efficient lighting. Our outside area landscaping takes continued care by several folks. Pressure washing the patio area and hardscapes eliminated mildew and moss. In the future, we will need to consider new and lighter chairs since the present ones are used and moved regularly and our window blinds are beginning to wear as well.

Looking Ahead

- We continue to need volunteers to preserve documents on digital formats, conduct oral history interviews, help maintain our patio garden, make school presentations, and monitor rentals which helps keep costs down. In addition, committees are at work year-round for special projects.
- We continue to look for a permanent location to display the restored Galbreath farm wagon. Ideas are welcome.
- Help us expand our membership base by inviting relatives, neighbors and friends to join you for a THS event next year.
- Remember the Society bookstore when you need that special gift! As the year ends, there is a special deal on our Tualatin berry preserves of three jars for the price of two!

We are pleased to have served on your Board of Directors this year and look forward to your participation in THS activities during the months ahead. Board meetings are normally the Monday before the first Wednesday program each month and are open to all members. Our third Thursday evening programs is open to all as well.

2017 Officers

Ross Baker, President
Kurt Krause, Vice President
Barbara Stinger, Treasurer
Vacant, Secretary
Sandra Carlson, Historian

2017 Directors

Loyce Martinazzi
Norm Parker
Larry McClure
Art Sasaki
Frank Bubenik
Yvonne Addington

TUALATIN HERITAGE CENTER
2017 ANNUAL REPORT

2017 HIGHLIGHTS

- Strong Monthly Program Attendance
- Lindy Hughes Retired & Cindy Frost Started
- Displays at Marquis Community Center
- Protect Artifacts, Photos & Documents
- Expanded Pioneer Days
- Community Theatre Returns
- Increased Social Media

OPERATIONS

Tualatin Historical Society operates Tualatin Heritage Center as a public resource for:

- Interpreting Local History
- Cultural & Environmental Education
- Civic Engagement Events
- Arts & Entertainment
- Diverse Community Use Includes:

  Quinceneras, Ramadan &

  Filipino Events

RESPONSIBILITY

Historical Society:

- Open to Public
- Welcoming & Safe Environment
- Arrange Programs & Events

City:

- Annual Support
- Support for Artistic Endeavors
- Building Maintenance & Repair
- Landscape Care

HISTORY & CULTURE

- Confederated Tribes of Grand Ronde Interpretive Sign
- Monthly Speakers
- New Heritage Center Look
- Antique Appraisal Event
- Tualatin Overture
- The Ice age Oregon Trail
- High School Scholarship
- Pioneer Days

ARTS, ENRICHMENT & SOCIAL

Arts & Enrichment

- Watercolor Classes, Music Practice, Knitting & Crocheting
- Mask & Mirror Plays

Social Gatherings

- Celebrations
- Weddings
- Showers

BUSINESS & COMMUNITY

- Churches
- Workshops & Seminars
- Chamber Networking
- HOA Meetings

Tualatin Together
A caring community working together for Tualatin youth.

2017 NUMBERS

- Open 10 am to 2 pm on Weekdays
- 10,450 Visitors
- 30 Volunteers
- Auction Made $10,770
- 230 Members (25 over 90 years)
- 300 Students at Pioneer Days
- Expenses $45,115
- Revenue Increased by $11,000 to $52,347

2018 GOALS

- Restored Historic Tualatin Farm Wagon Displayed
- Bench Installation
- Special Project Fundraising
- New Board Member Cathy Stockwell

THANK YOU!

Thanks Paul Hennon

- Helped Move & Create Heritage Center
- Incorporated History in Parks & Trails
- Preserved Historic Photographs
- Saved Artifacts
- Included History at Community Events
- Partnerships to Make it Happen

Best wishes for a well-deserved retirement!

We will miss you.

CITY OF TUALATIN
THANK YOU FOR YOUR SUPPORT!

STAFF REPORT
CITY OF TUALATIN

TO: Honorable Mayor and Members of the City Council

THROUGH: Sherilyn Lombos, City Manager

FROM: Matt Straite, Contract Planner
Aquilla Hurd-Ravich, Community Development Director

DATE: 04/09/2018

SUBJECT: Consideration of a Conditional Use Permit for a Fire Station (Station 39) Operated by Tualatin Valley Fire & Rescue in the Light Manufacturing (ML) Planning District on Land Adjacent to 7100 SW McEwan Road (Tax Map 2S1 13DD, Tax Lot 1601) (CUP-17-0002)

ISSUE BEFORE THE COUNCIL:

The issue before the City Council is the consideration of a conditional use permit for a new fire station, Station 39, operated by Tualatin Valley Fire & Rescue in the Light Manufacturing (ML) Planning District on a lot surrounded on three sides by the U-Haul facility on SW McEwan Road (Tax Map 2S1 13DD, Tax Lot 1601).

RECOMMENDATION:

Staff recommends that the City Council consider the staff report and supporting attachments and direct staff to prepare a resolution that conforms with Council direction. The proposed fire station use meets the criteria of Tualatin Development Code 32.030 with conditions of approval. This assessment is supported by the application materials and the Analysis and Findings (Attachment 101C).

EXECUTIVE SUMMARY:

This matter is a quasi-judicial public hearing for a requested Conditional Use Permit (CUP-17-0002) for the applicant, Tualatin Valley Fire & Rescue (TVF&R), to permit a new fire station (Station 39) in the Light Manufacturing (ML) Planning District, pursuant to Tualatin Development Code (TDC) 60.040(1)(f), on a 1.16-acre property that currently does not have an address but is located next to the existing U-Haul facility – 7100 SW McEwan Road. More specifically, Station 39 is proposed at Tax Map 2S1 13DD, Tax Lot 1601. According to the Tualatin Community Plan, the purpose of the Light Manufacturing (ML) planning district is to provide sites for manufacturing uses that are more compatible with adjacent commercial and residential uses; certain heavier manufacturing uses may be allowed as conditional uses. Conditional uses are those uses which may result in conflicts with surrounding uses, and thus an additional level of review is required to ensure that any potential conflicts are reduced or eliminated; in many instances, this may include specific conditions of approval.

TVF&R identified the need for a station in this location to ensure quick response times in the future as development continues in Tualatin, Lake Oswego, and Tigard. Public services are immediately available to the site.

The property was previously owned by Amerco Real Estate Company (U-HAUL), which continues to own the property surrounding the site to the north, west and south. The property was condemned by TVF&R and they took possession on May 4, 2017. See page 122 of the applicants narrative (Attachment B) for more detail.

Before granting the proposed CUP, the City Council must find that the use is allowed as a conditional use in the subject planning district and the application submittal meets the five criteria listed in Tualatin Development Code (TDC) 32.030. The applicant submitted a narrative that describes the proposed conditional use and addresses the CUP approval criteria (Attachment B). The Analysis and Findings (Attachment C) examines the application with respect to the criteria for granting a CUP. The five (5) criteria of TDC 32.030, including a summary of findings, and conditions of approval necessary to meet the criteria, are discussed below:

1.The use is listed as a conditional use in the underlying planning district.

- The subject property is located in the Light Manufacturing (ML) Planning District, where a "Fire Station" is a conditional use pursuant to TDC 60.040(1)(f).
- Staff finds that Criterion 1 is met.

2.The characteristics of the site are suitable for the proposed use, considering size, shape, location, topography, existence of improvements, and natural features.

The proposed fire station use will be located within an area that is mostly existing green space on the project site, surrounded on three sides by the existing U-Haul center; the other existing uses near the site, will remain unchanged. An Architectural Review (AR) will be required prior to develoment pursuant to TDC 73.040(1) and TDC 73.100(1) and (2).

- Staff finds that the following condition of approval is required to meet Criterion 2:
- Condition of Approval No. 1: The approval of Conditional Use Permit 17-0002 does not approve any site redevelopment or exterior building modifications, and the applicant shall obtain approval from the City for any site or exterior designs, pursuant to TDC 73.040(1) and TDC 73.100(1) and (2).

3.The proposed development is timely, considering the adequacy of transportation systems, public facilities, and services existing or planned for the area affected by the use.

- The applicant provided a traffic study explaining that the current existing conditions are adequate for the traffic that would be generated by the proposed fire use. The street fronting the site, SW McEwan Road is existing and in good condition. Parking shown on the conceptual site plan is adequate.
- The public sewer and water connections currently exist and are adequate to serve the property and the proposed use. Storm water lines do not exist however the site plan shows that on-site solutions will suffice. Additional drainage control measures will also be constructed as part of the proposed project.
- Staff finds that Criterion 3 is met.

4.The proposed use will not alter the character of the surrounding area in any manner, which substantially limits, impairs, or precludes the use of surrounding properties for the primary uses listed in the underlying Planning District.

- The proposed use would not alter the overall character of the immediate area defined by the properties abutting the site, which include a mix of storage and medical uses. Additionally, while eliminating some parking from the U-Haul facility, the fire station will not preclude the neighboring property's use as a storage facility.
- Staff finds that Criterion 4 is met.

5.The proposal will satisfy those objectives and policies of the Tualatin Community Plan which apply to the proposed use.

- The applicable Tualatin Community Plan policies and TDC regulations that apply to the proposed conditional use in the ML Planning District include:
  - Section 7.040 Manufacturing Planning District Objectives;
  - Section 32.030 Criteria for Review of Conditional Uses; and
  - Section 60.010 Purpose (Light Manufacturing Planning District [ML]).

The proposed use is consistent with the policies in TDC Section 7.040 and 60.010 which generally state that the Light Manufacturing (ML) planning district is suitable for warehousing, wholesaling and light manufacturing processes that are not hazardous and that do not create undue amounts of noise, dust, odor, vibration, or smoke. All proposed activities are non-hazardous and do not create undue amounts of noise, dust, odor, vibration, or smoke. In addition, the proposed use is consistent with adjacent uses in the ML planning district. TDC Section 32.030 includes the five criterion reviewed here and in Attachment C.

Staff finds that the following conditions of approval are required to meet Criterion 5:

- Condition of Approval No. 2: The applicant shall operate the use consistent with all application materials submitted to the City dated December 2017 (City stamp reads December 8, 2017).
- Condition of Approval No. 3: The applicant shall comply with the noise standards in TDC 60.085.
- Condition of Approval No. 4: The applicant shall—separately from the CUP—submit any sign permit applications pursuant to and in compliance with TDC Chapter 38.
- Condition of Approval No. 5: The approval period shall terminate, consistent with TDC 32.090 Automatic Termination of Conditional Use, as outlined below:

1. Unless otherwise provided by the Council in the resolution granting approval of the conditional use permit, a conditional use permit shall automatically become null and void two years after the effective date upon which it was granted unless one of the following events occur:
   1. The applicant or his successor in interest has secured a building permit within said two-year period, if a building permit is required, and has actually commenced construction of the building or structure authorized by the permit within said two-year period.
   2. The applicant or his successor in interest has commenced the activity or installation of the facility or structure authorized by the conditional use permit within said two-year period.
2. The applicant may submit a written request to the City Council for an extension of time on the conditional use permit to avoid the permit's becoming null and void. The request for extension must be submitted prior to the expiration of the times established by Subsection (1) above. The City Council may, in the resolution granting such conditional use permit, provide for an extension of time beyond 1 year.

- Condition of Approval No. 6: The applicant shall comply with all applicable TDC policies

and regulations.

Oregon Revised Statutes (ORS) 227.178(2) requires that the City Council take final action on a land use application, including resolution of all appeals under ORS 227.180, within 120 days after that application is deemed complete. The Council hearing date of April 9, 2018 is the 90th day following completeness, and the 120th day is May 8, 2018.

Based on the application materials and the Analysis and Findings (Attachment C), the TVF&R use for new fire station 39 (CUP-17-0002), meets the criteria of TDC 32.030 with recommended conditions of approval.

OUTCOMES OF DECISION:

Approval of the Conditional Use Permit (CUP) request will result in the following:

1. Allows the applicant a fire station use on the subject property.

2. At its next meeting on April 23, 2018, Council approves Resolution Number 5358-18.

Denial of the CUP request will result in the following:

1. Prohibits the applicant from using the subject property for a fire station use.

ALTERNATIVES TO RECOMMENDATION:

The alternatives to the staff recommendation for the Council are:

1. Approve the proposed Conditional Use Permit (CUP) with conditions that the Council deems necessary.

2. Deny the request for the proposed CUP with findings that state which criteria in Tualatin Development Code (TDC) 32.030 the applicant fails to meet.

3. Continue the discussion of the proposed CUP and return to the matter at a later date.

FINANCIAL IMPLICATIONS:

The Fiscal Year 2018/19 budget allocated revenue to process current planning applications, and the applicant has submitted payment per the City of Tualatin Fee Schedule to process the application.

Attachments: Attachment A- Vicinity Map
Attachment B- CUP Application Materials
Attachment C- Analysis and Findings
Attachment D- PowerPoint Presentation

TVF&R Station 39
Vicinity Map

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
Data Sources:

APG

City of Tualatin
www.tualatinoregon.gov

"NECESSARY PARTIES" MARKED BELOW

NOTICE OF APPLICATION SUBMITTAL

☐ ANNEXATION ☒ CONDITIONAL USE PERMIT ☐ PLAN TEXT AMENDMENT
☐ ARCHITECTURAL REVIEW ☐ PLAN MAP AMENDMENT ☐ OTHER:

CASE/FILE: CUP17-0002 (Community Development Dept.: Planning Division)

PROPOSAL	
	To approve the conditional use of a fire station—pursuant to Tualatin Development Code (TDC) 60.040(1)(f) for Tualatin Valley Fire & Rescue Station 39 on land adjacent to 7100 SW McEwan Road.

PROPERTY						
☐ n/a	**Name of Application**	TUALATIN VALLEY FIRE & RESCUE STATION 39				
	Street Address	Adjacent to 7100 SW McEwan Road				
	Tax Map and Lot No(s).	2S1 13DD 01601				
	Planning District	ML	**Overlays** ☐	**NRPO** ☐	**Flood Plain** ☐	
	Previous Applications	AR96-33, 93-31, 74-02; VAR93-04, 94-03, 96-03; CUP13-05	**Additional Applications:**		**CIO** MANUFACTURING	

DATES				CONTACT	
Receipt of application	12/08/2017	**Deemed Complete**	01/08/2018		**Name:** Erin Engman
Notice of application submittal			01/10/2018		**Title:** Associate Planner
Project Status / Development Review meeting					**E-mail:** EENGMAN@tualatin.gov
Comments due for staff report			01/24/2018		**Phone:** 503-691-3024
Public meeting: ☐ **ARB** ☐ **TPC** ☒ **n/a**					**Notes:** You may view the application materials through this City web page: www.tualatinoregon.gov/projects
City Council (CC) ☐ **n/a**			04/09/2018		

City Staff
☒ City Manager
☒ Building Official
☒ Chief of Police
☒ City Attorney
☒ City Engineer
☒ Community Development Director
☒ Community Services Director
☒ Economic Development liaison
☒ Engineering Associate*
☒ Finance Director
☒ GIS technician(s)
☒ IS Manager
☒ Operations Director*
☒ Parks and Recreation Coordinator
☒ Planning Manager
☒ Street/Sewer Supervisor
☒ Water Supervisor

Neighboring Cities
☐ Durham
☐ King City Planning Commission
☐ Lake Oswego
☐ Rivergrove PC
☐ Sherwood Planning Dept.
☐ Tigard Community Dev. Dept.
☐ Wilsonville Planning Division

Counties
☐ Clackamas County Dept. of Transportation and Development
☒ Washington County Dept. of Land Use and Transportation (ARs)
☐ Washington County Long Range Planning (LRP) (Annexations)

Regional Government
☒ Metro

School Districts
☐ Lake Oswego School Dist. 7J
☐ Sherwood SD 88J
☐ Tigard-Tualatin SD 23J (TTSD)
☐ West Linn-Wilsonville SD 3J

State Agencies
☐ Oregon Dept. of Aviation
☐ Oregon Dept. of Environmental Quality (DEQ)
☐ Oregon Dept. of Land Conservation and Development (DLCD)
☒ Oregon Dept. of State Lands: Wetlands Program
☒ Oregon Dept. of Transportation (ODOT) Region 1
☐ ODOT Maintenance Dist. 2A
☐ ODOT Rail Division
☐ OR Dept. of Revenue

Utilities
☒ Republic Services
☒ Clean Water Services (CWS)
☒ Comcast [cable]*
☒ Frontier Communications [phone]
☒ Northwest Natural [gas]
☒ Portland General Electric (PGE)
☒ TriMet
☒ Tualatin Valley Fire & Rescue
☒ USPS (Washington)
☐ USPS (Clackamas)
☒ Wash. Co. Consolidated Communications Agency (WCCCA)

Additional Parties
☒ Tualatin Citizen Involvement Organization (CIO)

***Paper Copies**

☐ *1.032: Burden of Proof*

☐ *31.071 Architectural Review Procedure*

☐ *31.074 Architectural Review Application Review Process*

☐ *31.077 Quasi-Judicial Evidentiary Hearing Procedures*

☐ *Metro Code 3.09.045 Annexation Review Criteria*

☒ *32.030 Criteria for Review of Conditional Uses*

☐ *33.020 Conditions for Granting a Variance that is not a Sign or a Wireless Communication Facility*

☐ *33.022 Criteria for Granting a Sign Variance*

☐ *33.024 Criteria for Granting a Minor Variance*

☐ *33.025 Criteria for Granting a Variance*

☐ *34.200 Tree Cutting on Private Property without Architectural Review, Subdivision or Partition Approval, or Tree Removal Permit Prohibited*

☐ *34.210 Application for Architectural Review, Subdivision or Partition Review, or Permit*

☐ *34.230 Criteria (tree removal)*

☐ *35.060 Conditions for Granting Reinstatement of Nonconforming Use*

☐ *36.160 Subdivision Plan Approval*

☐ *36.230 Review Process (partitioning)*

☐ *36.330 Review Process (property line adjustment)*

☐ *37.030 Criteria for Review (IMP)*

☐ *40.030 Conditional Uses Permitted (RL)*

☐ *40.060 Lot Size for Conditional Uses (RL)*

☐ *40.080 Setback Requirements for Conditional Uses (RL)*

☐ *41.030 Conditional Uses Permitted (RML)*

☐ *41.050 Lot Size for Conditional Uses (RML)*

☐ *41.070 Setback Requirements for Conditional Uses (RML)*

☐ *42.030 Conditional Uses Permitted (RMH)*

☐ *42.050 Lot Size for Conditional Uses (RMH)*

☐ *42.070 Setback Requirements for Conditional Uses (RMH)*

☐ *43.030 Conditional Uses Permitted (RH)*

☐ *43.060 Lot Size for Conditional Uses (RH)*

☐ *43.090 Setback Requirements for Conditional Uses (RH)*

☐ *44.030 Conditional Uses Permitted (RH-HR)*

☐ *44.050 Lot Size for Conditional Uses (RH-HR)*

☐ *44.070 Setback Requirements for Conditional Uses (RH-HR)*

☐ *49.030 Conditional Uses (IN)*

☐ *49.040 Lot Size for Permitted and Conditional Uses (IN)*

☐ *49.060 Setback Requirements for Conditional Uses (IN)*

☐ *50.020 Permitted Uses (CO)*

☐ *50.030 Central Urban Renewal Plan – Additional Permitted Uses and Conditional Uses (CO)*

☐ *50.040 Conditional Uses (CO)*

☐ *52.030 Conditional Uses (CR)*

☐ *53.050 Conditional Uses (CC)*

☐ *53.055 Central Urban Renewal Area – Conditional Uses (CC)*

☐ *54.030 Conditional Uses (CG)*

☐ *56.030 Conditional Uses (MC)*

☐ *56.045 Lot Size for Conditional Uses (MC)*

☐ *57.030 Conditional Uses (MUCOD)*

☒ *60.040 Conditional Uses (ML)*

☐ *60.041 Restrictions on Conditional Uses (ML)*

☐ *61.030 Conditional Uses (MG)*

☐ *61.031 Restrictions on Conditional Uses (MG)*

☐ *62.030 Conditional Uses (MP)*

☐ *62.031 Restrictions on Conditional Uses (MP)*

☐ *64.030 Conditional Uses (MBP)*

☐ *64.050 Lot Size for Permitted and Conditional Uses (MBP)*

☐ *64.065 Setback Requirements for Conditional Uses (MBP)*

☐ *68.030 Criteria for Designation of a Landmark*

☐ *68.060 Demolition Criteria*

☐ *68.070 Relocation Criteria*

☐ *68.100 Alteration and New Construction Criteria*

☐ *68.110 Alteration and New Construction Approval Process*

☐ *73.130 Standards*

☐ *73.160 Standards*

☐ *73.190 Standards – Single-Family and Multi-Family Uses*

☐ *73.220 Standards*

☐ *73.227 Standards*

☐ *73.230 Landscaping Standards*

☐ *73.300 Landscape Standards – Multi-Family Uses*

☐ *73.310 Landscape Standards – Commercial, Industrial, Public and Semi-Public Uses*

☐ *73.320 Off-Street Parking Lot Landscaping Standards*

☐ *73.320 Off-Street Parking and Loading*

☐ *73.470 Standards*

☐ *73.500 Standards*

City of Tualatin

www.tualatinoregon.gov

CONDITIONAL USE PERMIT
CERTIFICATION OF SIGN POSTING

The applicant shall provide and post a sign pursuant to Tualatin Development Code (TDC) 31.064(2). Additionally, the 18" x 24" sign must contain the application number, and the block around the word "NOTICE" must remain **lime green** composed of the **RGB color values Red 146, Green 208, and Blue 80**. Additionally, the potential applicant must provide a flier (or flyer) box on or near the sign and fill the box with brochures reiterating the meeting info and summarizing info about the potential project, including mention of anticipated land use application(s). Staff has a Microsoft PowerPoint 2007 template of this sign design available through the Planning Division homepage at < www.tualatinoregon.gov/planning/land-use-application-sign-templates>.

As the applicant for the TVF&R Station 39 (CUP 17-0002) project, I hereby certify that on this day, January 4, 2018 sign(s) was/were posted on the subject property in accordance with the requirements of the Tualatin Development Code and the Community Development Department - Planning Division.

Applicant's Name: Clinton Doxsee, Angelo Planning Group
(PLEASE PRINT)

Applicant's Signature: C J. Doxsee

Date: 1/4/18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Tualatin Valley Fire & Rescue Station #39
Rivergrove

Transportation Impact Study

Tualatin, Oregon

Date:
December 7, 2017

Prepared for:
Tualatin Valley Fire & Rescue

Prepared by:
Daniel Stumpf, EI
Todd Mobley, PE

RENEWS: 12/31/18

LANCASTER
ENGINEERING

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Executive Summary

1. The Tualatin Valley Fire & Rescue Station #39 – Rivergrove, has been proposed for development on a property located near 7100 SW McEwan Road in Tualatin, Oregon.
2. The trip generation calculations show that the proposed development is projected to generate twelve site trips during the morning peak hour and four site trips during the evening peak hour.
3. No significant trends or crash patterns were identified at any of the study intersections. Accordingly, no specific safety mitigation is recommended.
4. Adequate sight distance is available at both site accesses to ensure safe operation of each proposed intersection along SW McEwan Road. No sight distance mitigation is necessary or recommended.
5. Left-turn lane warrants are not projected to be met at either site access intersection under any of the analysis scenarios through the 2019 build-out year. No new turn lanes are necessary or recommended.
6. Due to insufficient main and side-street traffic volumes, traffic signal warrants are not projected to be met at the intersection of SW 65th Avenue at SW McEwan Road under any of the analysis scenarios.
7. Based on a turning-movement analysis, a driveway width of 24 feet is sufficient to accommodate entering emergency response vehicles at the north site access intersection.
8. All study intersections are currently operating acceptably per their respective jurisdictional standards and are projected to continue operating acceptably upon build-out of the proposed development through year 2019. No operational mitigation is necessary or recommended at these intersections.

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Project Description and Location

Introduction

The Tualatin Valley Fire & Rescue (TVF&R) Station #39 – Rivergrove, has been proposed for development on a property located near 7100 SW McEwan Road in Tualatin, Oregon. This report addresses the impacts of the proposed development on the nearby street system. The study includes safety and capacity/level-of-service analyses at the following intersections:

- SW 65th Avenue at SW Lower Boones Ferry Road;
- Proposed north site access at SW McEwan Road;
- Proposed south site access at SW McEwan Road; and
- SW 65th Avenue at SW McEwan Road.

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the existing and proposed uses and to determine any mitigation that may be necessary to do so. Detailed information on traffic counts, trip generation calculations, safety analyses, and level of service calculations is included in the appendix to this report.

Project and Location Description

The project site is located southwest of SW McEwan Road and east of Interstate 5 (I-5) in Tualatin, Oregon. The subject site is surrounded by a mix of land-uses, with a medical clinic to the north, a U-Haul facility to the south, and self-storage facilities to the east. Two notable developments within a half-mile walking/biking distance of the site include the Meridian Square Shopping Mall to the north and River Grove Elementary School to the east.

Access to the site will be provided via two driveways along SW McEwan Road: a two-way access to the north and an emergency response vehicle egress access to the south.

Vicinity Streets

The proposed development is expected to predominantly impact three nearby vicinity roadways: SW Lower Boones Ferry Road, SW McEwan Road, and SW 65th Avenue. Table 1 provides a description of each of the vicinity roadways.

Table 1 – Vicinity Roadway Descriptions

Roadway	Jurisdication	Functional Classification	Cross-Section	Speed	On-street Parking	Bicycle Lanes	Curbs	Sidewalks
SW Lower Boones Ferry Road	Clackamas County	Arterial	5 to 8 Lanes	35 mph Posted	Not Permitted	Both Sides	Both Sides	Both Sides
SW McEwan Road	City of Tualatin	Major Collector/Local Street	2 to 3 Lanes	25/30 mph Posted	Partially Permitted	Partial Both Sides	Partial Both Sides	Partial Both Sides
SW 65th Avenue	City of Tualatin	Neighborhood Collector/Major Collector	2 to 4 Lanes	25/30 mph Posted	Permitted	None	Partial Both Sides	Partial Both Sides

Study Intersections

The intersection of SW 65th Avenue at SW Lower Boones Ferry Road is a four-legged intersection that is controlled by a traffic signal. The northbound approach has one left-turn lane and one shared lane for all turning-movements. The southbound approach has one shared left-turn/through lane and one right-turn lane served with permitted/overlap phasing. The northbound and southbound approaches operate under split phasing. The eastbound approach has one left-turn lane served with protected phasing, two through lanes, one right-turn lane served with permitted/overlap phasing, and a bicycle lane situated in between the outermost through and right-turn lanes. The westbound approach has one left-turn lane served with protected phasing, two through lanes, one shared through/right-turn lane, and a bicycle lane to the right of the outermost standard travel lane. Crosswalks are marked across all four intersection legs.

The intersection of SW 65th Avenue at SW McEwan Road is a four-legged intersection that is all-way stop-controlled. All four intersection approaches each have one shared lane for all turning-movements. Crosswalks are unmarked across all four intersection legs.

A vicinity map displaying the project site, vicinity streets, and the study intersections with their associated lane configurations is shown in Figure 1 on page 5.

Transit

The project site is located near two transit lines that have stops within a half-mile walking/biking distance north of the site, just east of the intersection of SW 65th Avenue at SW Lower Boones Ferry Road. Complete sidewalks and adequate crossing measures at intersections are available between the project site and each of the transit stop locations allowing for safe and comfortable travel for transit users.

TriMet bus line *#36 – South Shore*, provides service between Tualatin Park & Ride and Portland City Center, with notable stops near Lake Oswego Transit Center, Lake Oswego Library, and Johns Landing. Weekday service is scheduled from approximately 7:00 AM to 7:15 PM and has headways of approximately 30 to 100 minutes.

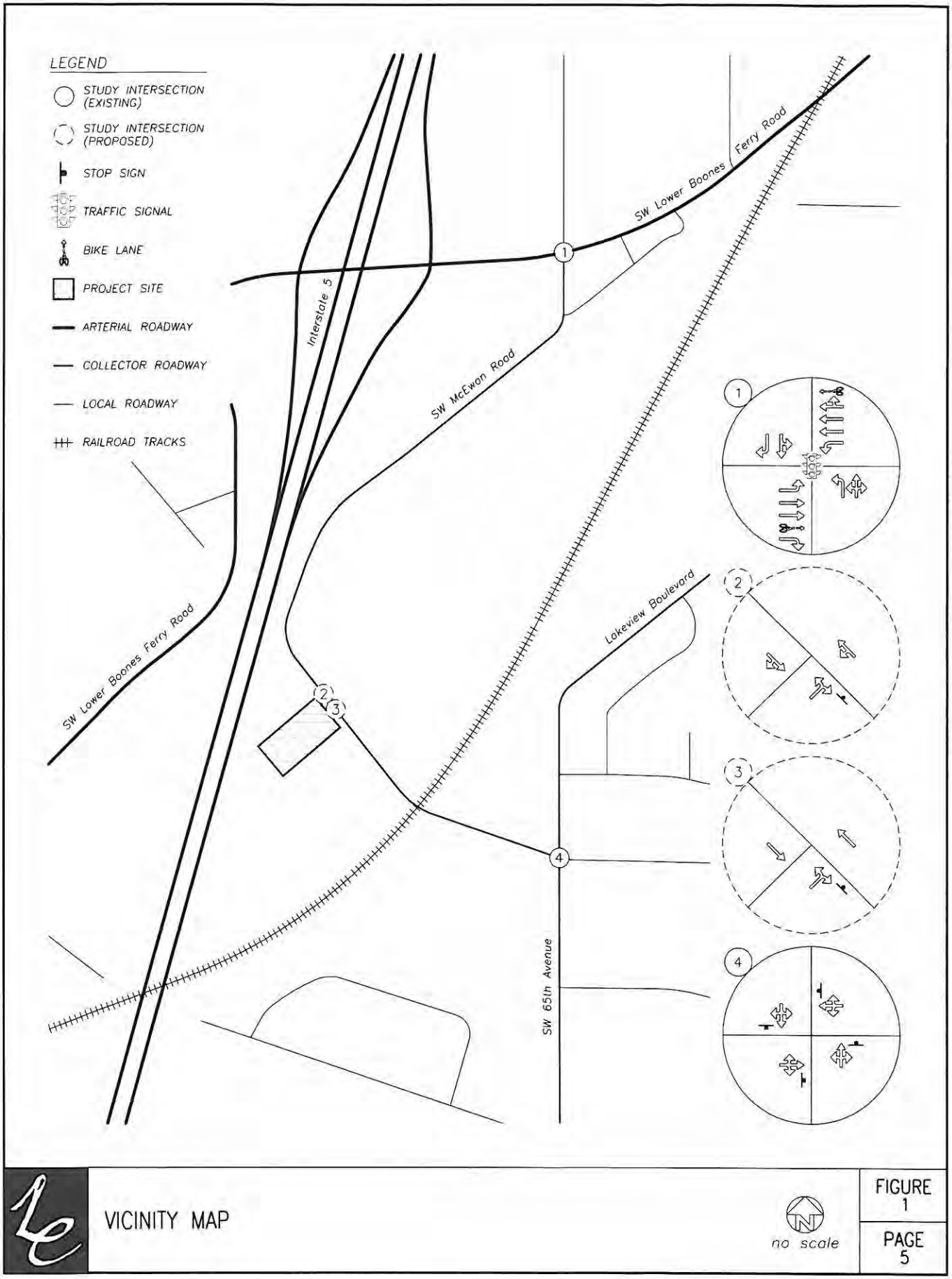
TriMet bus line *#37 – Lake Grove*, provides service between Tualatin Park & Ride and Lake Oswego Transit Center, with notable stops near Lake Oswego High School and Lake Oswego Library. Weekday service is scheduled from approximately 7:00 AM to 5:30 PM and has headways of approximately 50 to 100 minutes.

Traffic Counts

Traffic counts were conducted at the intersection of SW 65th Avenue at SW Lower Boones Ferry Road on Wednesday, November 15th, 2017 and at the intersection of SW 65th Avenue at SW McEwan Road on Tuesday, November 28th, 2017, from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. Data was used from each intersection's respective morning and evening peak hours.

To determine through volumes along SW McEwan Road at the site access locations, traffic volumes were balanced with the intersections of SW 65th Avenue at SW Lower Boones Ferry Road and at SW 65th Avenue at SW McEwan Road. The highest directional volumes to/from each intersection were utilized, which subsequently provides a conservative assessment of operation at the site access intersections.

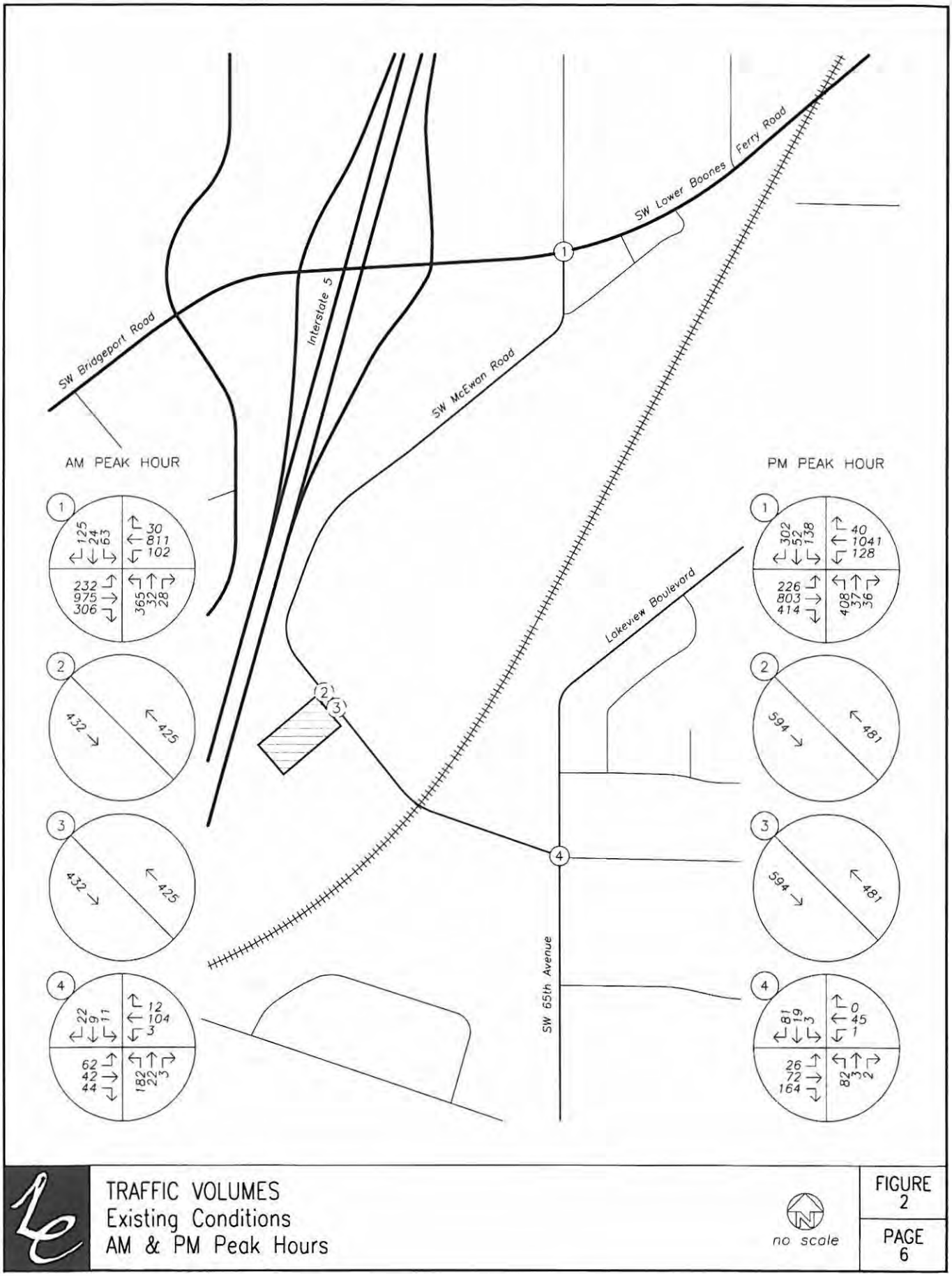
Figure 2 on page 6 shows the existing morning and evening peak hour traffic volumes at the study intersections.



VICINITY MAP

no scale

FIGURE 1



TRAFFIC VOLUMES
Existing Conditions
AM & PM Peak Hours

no scale

FIGURE 2

PAGE 6

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Site Trips

Trip Generation

No comparable land-use category exists in the *TRIP GENERATION MANUAL*[1] for fire stations; therefore, the size and operation of the facility was examined in order to best estimate the trip generation of the station. The trip generation calculations shown below are supported by trip data collected at other similar TVF&R stations. The proposed Station #39 is designed for a crew size of six full-time employees. Shifts for full-time employees are 24 hours in duration and shift changes will occur at 7:00 AM. The majority of site trips during the morning peak hour are typically generated from employees. Additional trips corresponding to visitors, deliveries, and emergency response services are also accounted for.

It is estimated that the proposed station will generate a total of twelve morning peak hour site trips, with six employees entering and exiting the site. During the evening peak hour, the site is expected to generate a nominal number individual employee trips to the site; however, two trips entering and exiting the site were included to account for visitors, deliveries, and other miscellaneous traffic. Usage of the TVF&R's Community Room will typically occur after the evening peak hour; therefore, trips generated by the Community Room will increase site's total daily trip generation while not increasing morning or evening peak hour trip generation.

The trip generation estimates of the proposed TVF&R facility are summarized in Table 2 below.

Table 2 – Trip Generation Summary

	Size	Morning Peak Hour			Evening Peak Hour			Weekday Total
		Enter	Exit	Total	Enter	Exit	Total	
Proposed TVF&R #39								
Employee Shift Change	6 Employees	6	6	12	0	0	0	12
Community Room	15 People	0	0	0	0	0	0	20
Emergency Calls	4 Events	0	0	0	0	0	0	8
Non-Emergency Calls	2 Events	0	0	0	0	0	0	4
Visitors, Deliveries, etc	5 People	0	0	0	2	2	4	10
Total		**6**	**6**	**12**	**2**	**2**	**4**	**54**

[1] Institute of Transportation Engineers (ITE), *TRIP GENERATION MANUAL*, 9th Edition, 2012.

1e

Trip Distribution

TVF&R Station #39 – Rivergrove will predominately serve residents in the surrounding areas of Tualatin, Lake Oswego, and unincorporated Washington and Clackamas Counties. Areas within the site vicinity, particularly the neighborhoods to the east and northeast of the site, generate a significant number of emergency response calls. Non-emergency trips, such as employee commuting, visitors, deliveries, etc, are more likely to travel to/from SW Lower Boones Ferry Road and I-5.

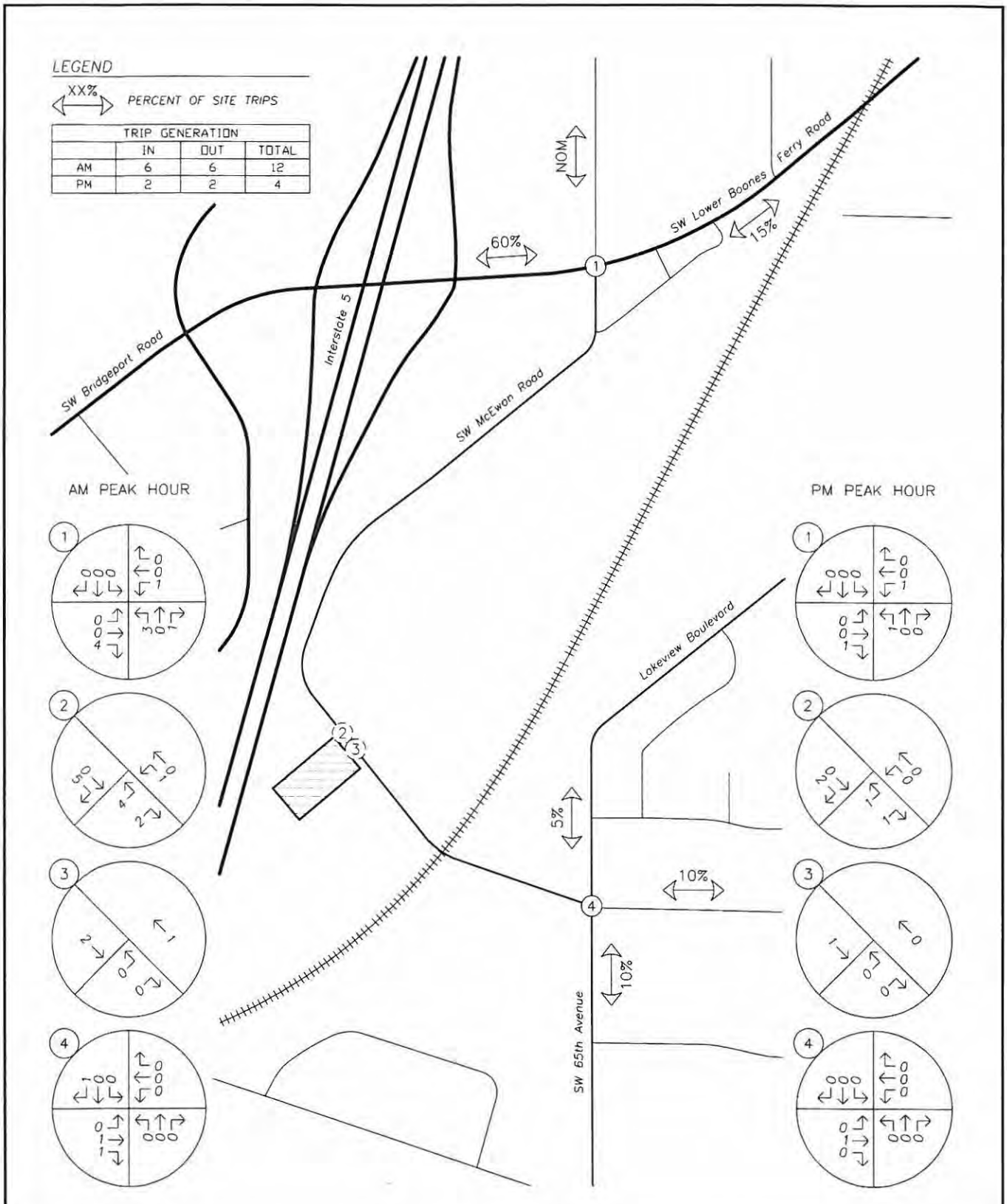
The directional distribution of peak hour site trips to/from the proposed development was estimated based on locations of likely trip destinations, locations of major transportation facilities within the site vicinity, and existing travel patterns at study intersections.

The following trip distribution was estimated and used for analysis:

- Approximately 60 percent of site trips will travel to/from the west along SW Lower Boones Ferry Road;
- Approximately 15 percent of site trips will travel to/from the east along SW Lower Boones Ferry Road;
- Approximately 10 percent of site trips will travel to/from the east along SW McEwan Road;
- Approximately 10 percent of site trips will travel to/from the south along SW 65th Avenue; and
- Approximately 5 percent of site trips will travel to/from the north along SW 65th Avenue.

The proposed development will be served by two accesses along SW McEwan Road. The north site access will serve inbound emergency response vehicles and as a two-way access for passenger vehicles while the south site access will serve outbound emergency response vehicles only. Based on the projected trips generated, approximately 20 percent of site trips will result from emergency/non-emergency calls to the station; accordingly, the south access may serve approximately 20 percent of exiting trips throughout a typical day. However, since calls to the station are expected to be uncommon, will occur irregularly, and cannot be anticipated, no response calls were projected during either peak hour. Therefore, all site trips generated during the morning and evening peak hours will utilize the northern access.

The trip assignment for the site trips generated by the proposed development during the morning and evening peak hours are shown in Figure 3 on page 9.



SITE TRIP DISTRIBUTION & ASSIGNMENT
Proposed Development Plan – Site Trips
AM & PM Peak Hours

no scale

FIGURE 3

Future Traffic Volumes

Background Volumes

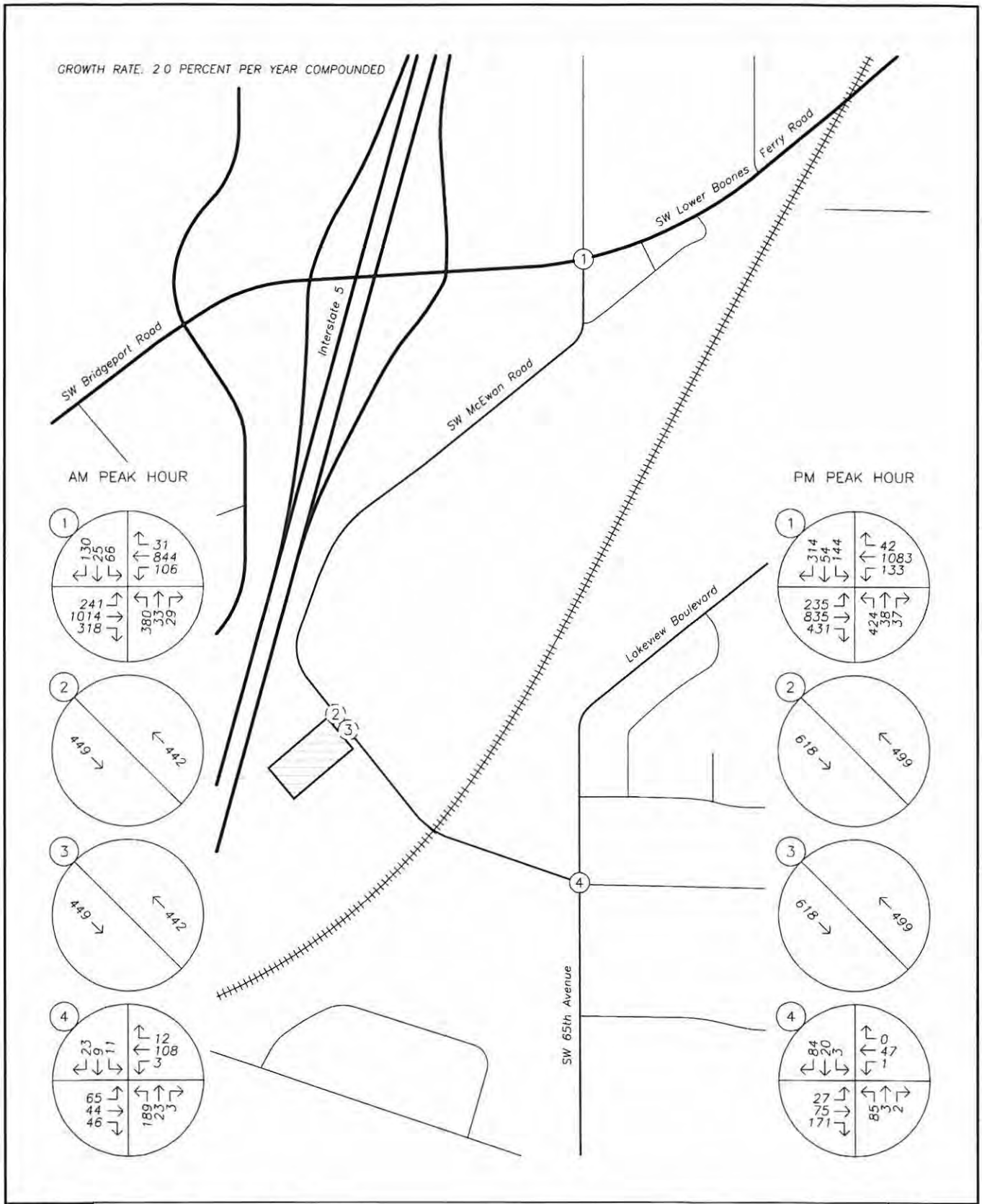
To provide analysis of the impact of the proposed development on the nearby transportation facilities, an estimate of future traffic volumes is required. In order to calculate the future traffic volumes at the study intersections, a compounded growth rate of two percent per year for an assumed build-out condition of two years was applied to the measured existing traffic volumes to approximate year 2019 background conditions.

Figure 4 on page 11 shows the projected year 2019 background traffic volumes at the study intersections during the morning and evening peak hours.

Background Volumes plus Site Trips

Peak hour trips calculated to be generated by the proposed development, as described earlier within the *Site Trips* section, were added to the projected year 2019 background traffic volumes to obtain the expected 2019 background volumes plus site trips.

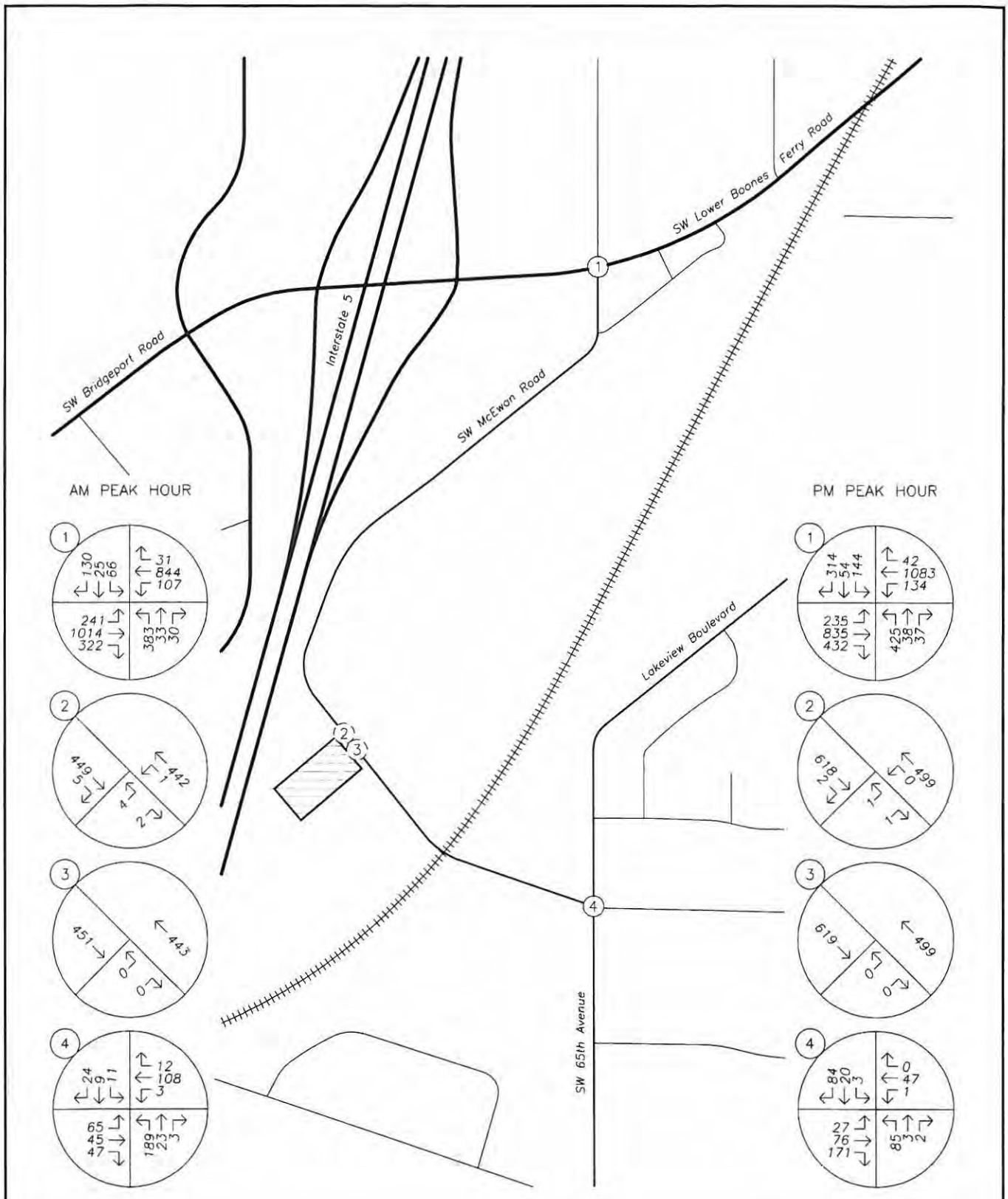
Figure 5 on page 12 shows the projected year 2019 peak hour background traffic volumes plus proposed development site trips at the study intersections during the morning and evening peak hours.



TRAFFIC VOLUMES
Year 2019 Background Conditions
AM & PM Peak Hours

no scale

FIGURE 4



TRAFFIC VOLUMES
Year 2019 Background Conditions plus Site Trips
AM & PM Peak Hours

no scale

FIGURE 5

Safety Analysis

Crash Data Analysis

Using data obtained from the Oregon Department of Transportation's (ODOT) Crash Analysis and Reporting Unit, a review of the most recent available five years of crash history (from January 2011 to December 2015) at the study intersections was performed. The crash data was evaluated based on the number of crashes, the type of collisions, the severity of the collisions, and the resulting crash rate for the intersection. Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated using the common assumption that traffic counted during the evening peak period represents 10 percent of average daily traffic (ADT) at the intersection. Crash rates in excess of one to two crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

The intersection of SW 65th Avenue at SW Lower Boones Ferry Road had ten reported crashes during the analysis period. The crashes consisted of seven rear-end collisions, one angle-type collision, one fixed-object collision, and one turning-movement collision. Of the reported crashes, five were classified as "Property Damage Only" (*PDO*), four were classified as "Possible Injury – Complaint of Pain" (*Injury C*), and one was classified as "Non-Incapacitating Injury" (*Injury B*). The crash rate at the intersection was calculated to be 0.15 CMEV.

The intersection of SW 65th Avenue at SW McEwan Road had one reported crash during the analysis period. The crash was a turning-movement collision that was classified as *PDO*. The crash rate at the intersection was calculated to be 0.11 CMEV.

Based on the most recent five years of available crash data, no significant trends or crash patterns were identified at any of the study intersections. Accordingly, no specific safety mitigation is recommended.

Sight Distance Analysis

Sight distance was examined for the site access intersections located along SW McEwan Road. Intersection sight distance was measured and evaluated in accordance with the standards established in *A Policy on Geometric Design of Highways and Streets*[2]. According to AASHTO, the driver's eye is assumed to be 15 feet from the near edge of the nearest travel lane of the intersecting street and at a height of 3.5 feet above the minor-street approach pavement. The vehicle driver's eye-height along the major-street approach is assumed to be 3.5 feet above the cross-street pavement.

---

[2] American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 6th Edition, 2011.

North Site Access

The northernmost site access will serve two-way traffic, where vehicles exiting the site will consist of predominately passenger cars. Therefore, the minimum recommended intersection sight distance was calculated assuming a time gap of 7.5 seconds for a minor-street approaching passenger car. Based on a posted speed of 30 mph, the minimum recommended intersection sight distance for a passenger car turning onto a three-lane roadway was calculated to be 335 feet.

Intersection sight distance at the north site access was measured to be 450 feet to the north, limited by a building located north of the site along the eastern side of SW McEwan Road. Sight distance to the south was measured to be in excess of 550 feet. Based on the measurements conducted at the north site access, adequate sight distance is available to ensure safe operation at the proposed intersection while maintaining unimpeded flow of traffic along SW McEwan Road.

South Site Access

The southernmost site access will serve as a one-way egress access for emergency response vehicles only. Typically, it is expected that when an emergency vehicle exits the site, lights and possibly sirens will be active. In these instances, interrupting the flow of traffic on the major-street is the intent of the emergency vehicle and accordingly maintaining adequate intersection sight distance would generally not be applicable at this access. However, in the event that a non-emergency occurs but requires an emergency response vehicle, adequate intersection sight distance would be necessary at the access.

Since the access will serve vehicles larger than a passenger car, the minimum recommended intersection sight distance was calculated assuming a time gap of 9.5 for a minor-street approaching single-unit truck. Based on a posted speed of 30 mph, the minimum recommended intersection sight distance for a single-unit truck was calculated to be 420 feet.

The south egress access will serve emergency response vehicles, which will likely have drivers seated at a higher position than in regular passenger vehicles. Therefore, in addition to utilizing the standard 3.5-foot high driver's eye height on the minor-street approach, a 7.6-foot truck eye height was also used to measure intersection sight distance at the access.

Intersection sight distance at the south site access was measured to be 492 feet to the north, limited by a building located north of the site along the eastern side of SW McEwan Road. Sight distance to the south was measured to be in excess of 550 feet. Based on the measurements conducted at the south site access, adequate sight distance is available to ensure safe operation at the proposed intersection while maintaining unimpeded flow of traffic along SW McEwan Road.

Based on the analysis, adequate sight distance is available at both site accesses to ensure safe operation of each proposed intersection along SW' McEwan Road. No sight distance mitigation is necessary or recommended.

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Warrant Analysis

Left-turn and traffic signal warrants were examined for the study intersections where such treatments would be applicable.

A left-turn refuge lane is primarily a safety consideration for the major-street, removing left-turning vehicles from the through traffic stream. The left-turn lane warrants used were developed from the National Cooperative Highway Research Project's (NCHRP) Report 457. Turn lane warrants were evaluated based on the number of advancing and opposing vehicles as well as the number of turning vehicles, the travel speed, and the number of through lanes.

Left-turn lane warrants are not projected to be met at the north site access intersection under any of the analysis scenarios through the 2019 build-out year. Since the south site access will be egress only, left-turn lanes are not applicable at the proposed intersection Accordingly, no new turn lanes are necessary or recommended.

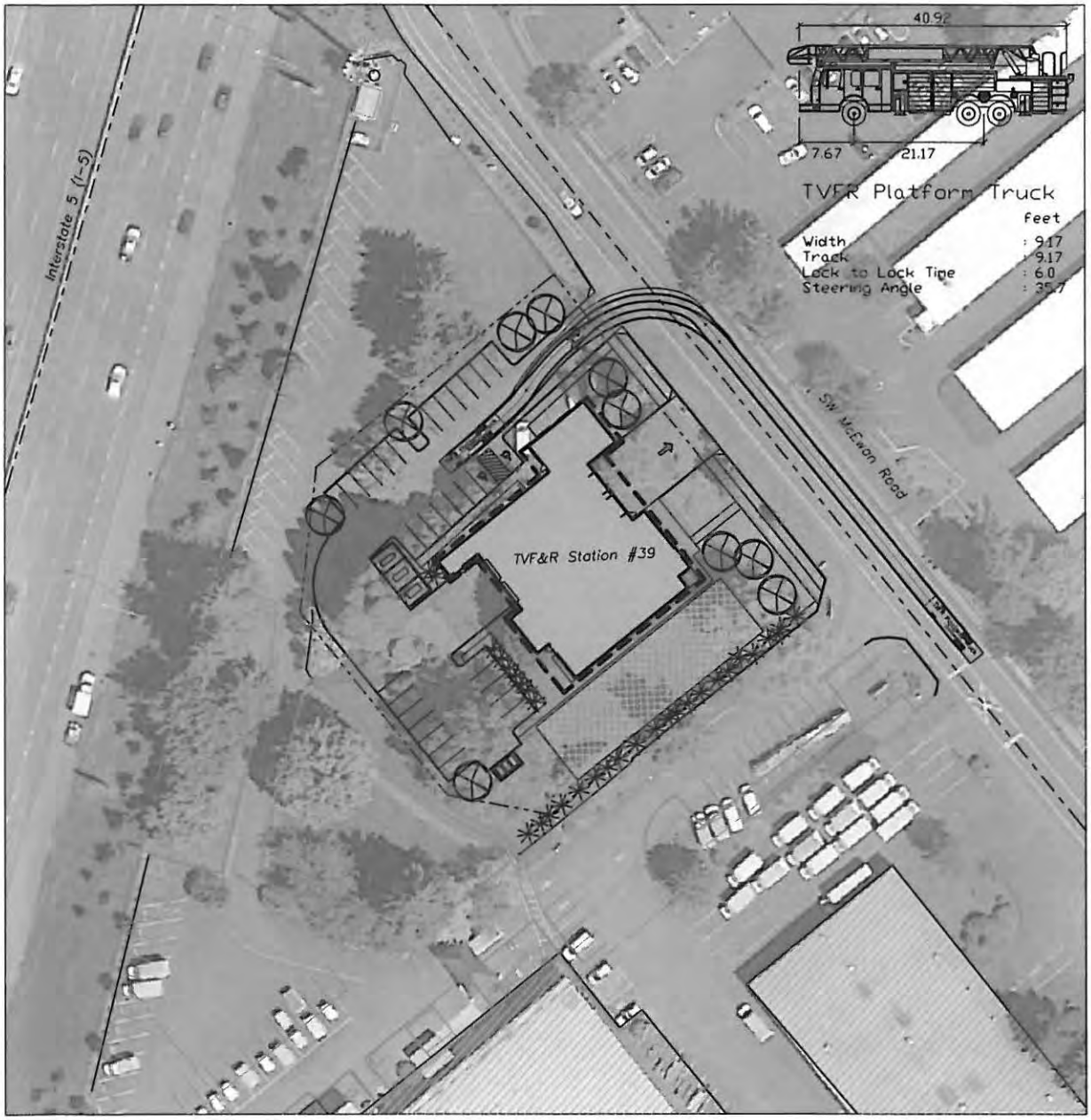
Traffic signal warrants were examined for the unsignalized study intersections to determine whether the installation of any new traffic signal will be warranted at the intersections upon completion of the proposed development. Due to insufficient main and side-street traffic volumes, traffic signal warrants are not projected to be met at the intersection of SW 65th Avenue at SW McEwan Road under any of the analysis scenarios.

Driveway Width

To demonstrate an access width of 24 feet is sufficient to serve emergency response vehicles entering the site at the north access, a turning-movement analysis was conducted using AutoTurn software. A custom design vehicle, modeled after a standard TVF&R emergency response vehicle, was created and used. Analysis scenarios examined include the following:

- A northbound left-turning vehicle entering the north access; and
- A southbound right-turning vehicle entering the north access.

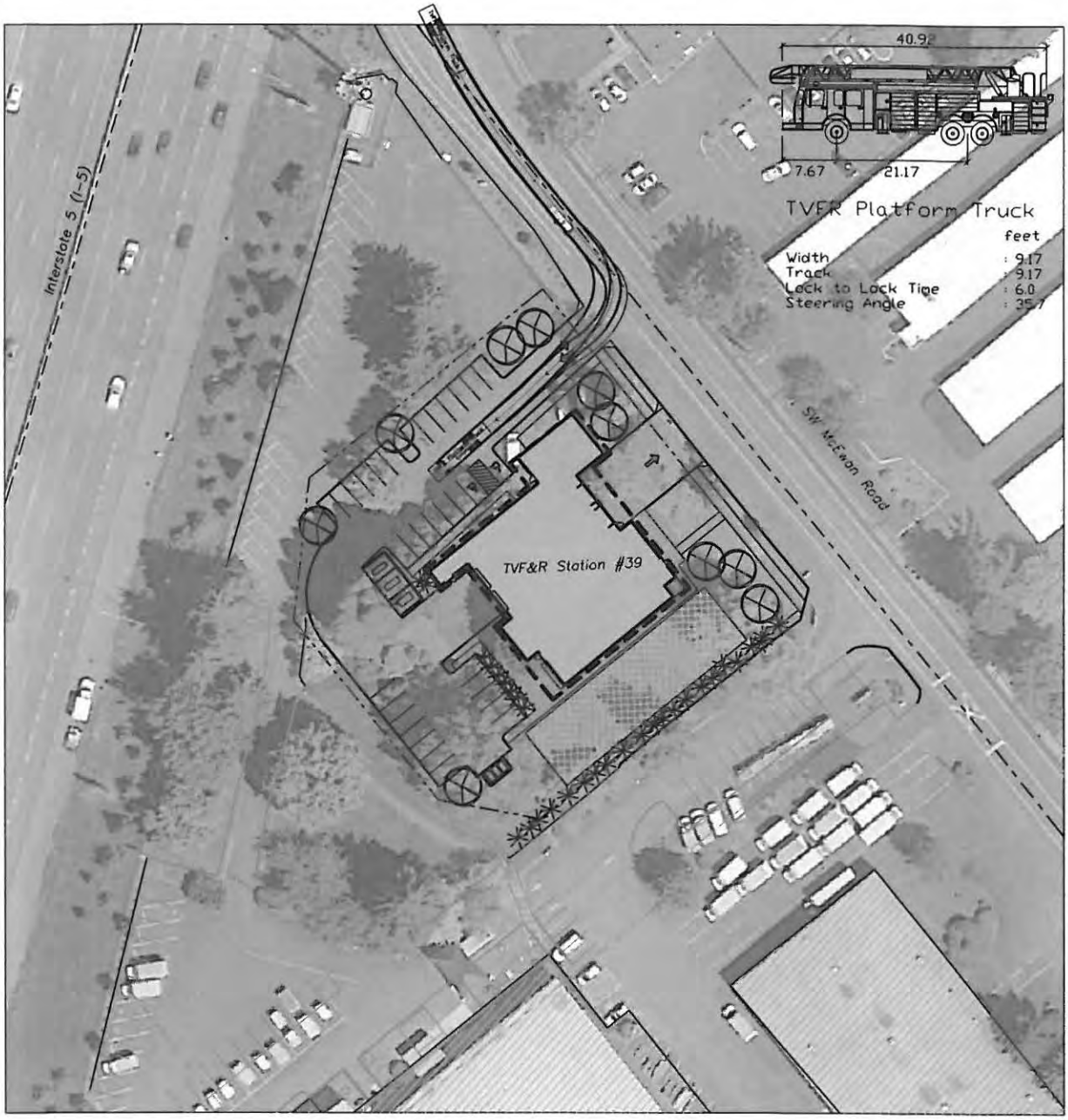
Based on the turning-movement analysis, a driveway width of 24 feet is sufficient to accommodate entering emergency response vehicles at the north site access intersection. Diagrams showing the turning-movements for each analysis scenario are shown in Figure 6 on page 16 and Figure 7 on page 17 for northbound and southbound entering vehicles, respectively.



TURNING MOVEMENT ANALYSIS
North Access – Northbound Entering Vehicle
Custom TVF&R Design Vehicle

no scale

FIGURE 6



TURNING MOVEMENT ANALYSIS
North Access – Southbound Entering Vehicle
Custom TVF&R Design Vehicle

no scale

FIGURE 7

Operational Analysis

Capacity Analysis

A capacity and delay analysis was conducted for each of the study intersections per the signalized and unsignalized intersection analysis methodologies in the *HIGHWAY CAPACITY MANUAL*[3] (HCM). The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume to capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

The study area includes intersections located within multiple jurisdictions, including the City of Tualatin, and Clackamas County. The following is a description of each jurisdictional standard

- The City of Tualatin standards require intersections operate at LOS E or better.
- Per Table 5-2a and Map 4-8 of Clackamas County's Comprehensive Plan, Clackamas County standards require intersections operate with a v/c ratio of 0.99 or less.

For both LOS and delay related to the analysis of unsignalized intersections, the reported results apply to the worst movement.

The intersection of SW 65th Avenue at SW Lower Boones Ferry Road operates at LOS C with v/c ratios of 0.81 or less during the morning peak hour and at LOS D with v/c ratios of 0.81 or less during the evening peak hour or all analysis scenarios.

Upon build-out of the proposed development, the north site access intersection at SW McEwan Road is projected to operate at LOS C with v/c ratios of 0.02 or less during the morning and evening peak hours.

Upon build-out of the proposed development, the south site access intersection at SW McEwan Road is projected to operate at LOS B with a v/c ratio of 0.01 during the morning peak hour and at LOS C with a v/c ratio of 0.01 during the evening peak hour.

The intersection of SW 65th Avenue at SW McEwan Road currently operates at LOS A during the morning and evening peak hours. Under year 2019 background conditions, the intersection is projected to operate at LOS B during the morning peak hour and at LOS A during the evening peak hour.

The v/c, delay, and LOS results of the capacity analysis are shown in Table 3 for the morning and evening peak hours. The reported results are generally based on the analysis methodologies provided in the 2010 HCM; however, for intersections where the 2010 methodology is unable to determine intersection capacity/delay, such as SW 65th Avenue at SW Lower Boones Ferry Road due to the northbound shared lane

[3] Transportation Research Board, *HIGHWAY CAPACITY MANUAL 2000* and *HIGHWAY CAPACITY MANUAL 2010*.

configuration, operation was evaluated using the HCM 2000 methodologies. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

Table 3 – Capacity Analysis Summary

	Morning Peak Hour			Evening Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
SW 65th Ave at SW Lower Boones Ferry Rd						
2017 Existing Conditions	C	31	0.78	D	35	0.78
2019 Background Conditions	C	33	0.81	D	42	0.81
2019 Background plus Site Conditions	C	33	0.81	D	42	0.81
North Site Access at SW McEwan Rd						
2019 Background plus Site Conditions	C	16	0.02	C	18	0.01
South Site Access at SW McEwan Rd						
2019 Background plus Site Conditions	B	15	0.01	C	18	0.01
SW 65th Ave at SW McEwan Rd						
2017 Existing Conditions	A	10	-	A	9	-
2019 Background Conditions	B	10	-	A	9	-
2019 Background plus Site Conditions	B	10	-	A	9	-

Based on the results of the operational analysis, all study intersections are currently operating acceptably per their respective jurisdictional standards and are projected to continue operating acceptably upon build-out of the proposed development through year 2019. No operational mitigation is necessary or recommended at these intersections.

Conclusions

No significant trends or crash patterns were identified at any of the study intersections. Accordingly, no specific safety mitigation is recommended.

Adequate sight distance is available at both site accesses to ensure safe operation of each proposed intersection along SW McEwan Road. No sight distance mitigation is necessary or recommended.

Left-turn lane warrants are not projected to be met at either site access intersection under any of the analysis scenarios through the 2019 build-out year. No new turn lanes are necessary or recommended.

Due to insufficient main and side-street traffic volumes, traffic signal warrants are not projected to be met at the intersection of SW 65th Avenue at SW McEwan Road under any of the analysis scenarios.

Based on a turning-movement analysis, a driveway width of 24 feet is sufficient to accommodate entering emergency response vehicles at the north site access intersection.

All study intersections are currently operating acceptably per their respective jurisdictional standards and are projected to continue operating acceptably upon build-out of the proposed development through year 2019. No operational mitigation is necessary or recommended at these intersections.

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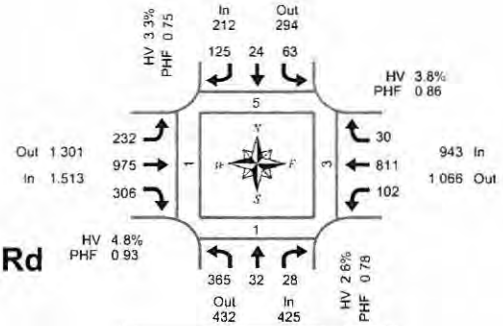
Appendix

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SW 65th Ave & SW Lower Boones Ferry Rd

Wednesday, November 15, 2017
7:00 AM to 9:00 AM

Peak Hour Summary
7:55 AM to 8:55 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval	Pedestrians Crosswalk			
Time	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
7:00 AM	13	4	2	0	1	1	4	0	16	81	15	0	7	51	1	0	196	0	0	0	0
7:05 AM	23	3	1	0	1	1	10	0	11	55	23	0	2	57	2	0	189	0	0	0	1
7:10 AM	34	4	1	0	0	3	17	0	23	47	16	0	5	54	0	0	204	2	0	0	0
7:15 AM	28	6	4	0	1	1	15	0	6	76	14	0	5	66	0	0	222	0	0	0	0
7:20 AM	32	7	2	0	3	3	4	0	17	58	24	0	7	33	1	0	191	0	0	0	0
7:25 AM	21	0	1	0	4	2	6	0	15	74	13	0	1	56	0	0	193	0	0	0	0
7:30 AM	22	4	2	0	4	0	10	0	12	73	25	0	8	49	0	0	209	0	0	0	0
7:35 AM	33	2	2	0	6	1	6	0	10	64	20	0	3	55	0	0	202	0	0	0	0
7:40 AM	14	3	0	0	3	0	5	0	10	75	13	1	2	34	4	0	163	0	1	0	1
7:45 AM	12	4	4	0	3	0	8	0	10	87	23	1	8	38	0	0	197	1	0	0	0
7:50 AM	33	2	2	0	7	4	12	0	13	74	21	1	5	59	0	0	232	0	0	0	0
7:55 AM	23	3	3	0	4	3	7	0	15	107	27	0	7	57	1	0	257	0	0	0	0
8:00 AM	28	1	1	0	3	1	8	0	26	83	24	0	12	57	2	0	246	0	0	0	0
8:05 AM	40	7	3	0	2	0	9	0	21	86	14	0	4	59	2	0	247	0	0	0	0
8:10 AM	24	3	1	0	4	1	8	0	14	77	25	1	8	64	0	0	229	1	0	0	0
8:15 AM	15	0	3	0	4	4	10	0	30	78	25	0	9	79	4	0	261	0	0	0	0
8:20 AM	37	5	5	0	5	3	10	0	21	75	34	0	11	58	3	0	267	0	0	0	0
8:25 AM	29	3	2	0	3	3	8	0	15	93	33	0	7	88	4	0	288	1	0	0	0
8:30 AM	50	1	5	0	6	2	15	0	24	80	30	0	9	61	4	1	287	1	0	0	0
8:35 AM	41	4	2	0	11	3	9	0	16	52	21	0	8	50	2	0	219	1	0	2	0
8:40 AM	28	0	1	0	6	1	13	0	17	92	22	0	8	82	2	0	272	0	0	0	0
8:45 AM	18	1	1	0	8	1	19	0	20	86	15	0	6	85	5	0	265	0	1	1	0
8:50 AM	32	4	1	0	7	2	9	0	13	66	36	0	13	71	1	0	255	1	0	0	1
8:55 AM	37	2	8	0	8	2	9	1	21	61	40	0	13	48	3	0	252	0	2	0	0
Total Survey	667	73	57	0	104	42	231	1	396	1,800	553	4	168	1,411	41	1	5,543	8	4	3	3

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval	Pedestrians Crosswalk			
Time	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
7:00 AM	70	11	4	0	2	5	31	0	50	183	54	0	14	162	3	0	589	2	0	0	1
7:15 AM	81	13	7	0	8	6	25	0	38	208	51	0	13	155	1	0	606	0	0	0	0
7:30 AM	69	9	4	0	13	1	21	0	32	212	58	1	13	138	4	0	574	0	1	0	1
7:45 AM	68	9	9	0	14	7	27	0	38	268	71	2	20	154	1	0	686	1	0	0	0
8:00 AM	92	11	5	0	9	2	25	0	61	246	63	1	24	180	4	0	722	1	0	0	0
8:15 AM	81	8	10	0	12	10	28	0	66	246	92	0	27	225	11	0	816	1	0	0	0
8:30 AM	119	5	8	0	23	6	37	0	57	224	73	0	25	193	8	1	778	2	0	2	0
8:45 AM	87	7	10	0	23	5	37	1	54	213	91	0	32	204	9	0	772	1	3	1	1
Total Survey	667	73	57	0	104	42	231	1	396	1,800	553	4	168	1,411	41	1	5,543	8	4	3	3

Peak Hour Summary
7:55 AM to 8:55 AM

By Approach	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Total
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	
Volume	425	432	857	0	212	294	506	0	1,513	1,301	2,814	1	943	1,066	2,009	1	3,093
%HV		2.6%				3.3%				4.8%				3.8%			4.1%
PHF		0.78				0.75				0.93				0.86			0.92

Pedestrians Crosswalk			
North	South	East	West
5	1	3	1

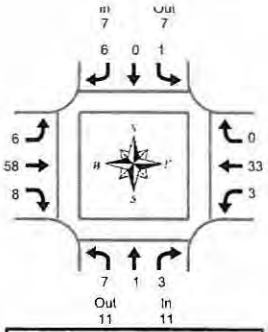
By Movement	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	365	32	28	425	63	24	125	212	232	975	306	1,513	102	811	30	943	3,093
%HV	1.9%	3.1%	10.7%	2.6%	1.6%	0.0%	4.8%	3.3%	2.6%	5.9%	2.6%	4.8%	2.9%	4.1%	0.0%	3.8%	4.1%
PHF	0.76	0.73	0.58	0.78	0.63	0.60	0.76	0.75	0.88	0.88	0.79	0.93	0.91	0.85	0.68	0.86	0.92

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval	Pedestrians Crosswalk			
Time	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
7:00 AM	288	42	24	0	37	19	104	0	158	871	234	3	60	609	9	0	2,455	3	1	0	2
7:15 AM	310	42	25	0	44	16	98	0	169	934	243	4	70	627	10	0	2,588	2	1	0	1
7:30 AM	310	37	28	0	48	20	101	0	197	972	284	4	84	697	20	0	2,798	3	1	0	1
7:45 AM	360	33	32	0	58	25	117	0	222	984	299	3	96	752	24	1	3,002	5	0	2	0
8:00 AM	379	31	33	0	67	23	127	1	238	929	319	1	108	802	32	1	3,088	5	3	3	1

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Out 46
In 72

SW 65th Ave & SW Lower Boones Ferry Rd

Wednesday, November 15, 2017
7:00 AM to 9:00 AM

Peak Hour Summary
7:55 AM to 8:55 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	2	0	2	5
7:05 AM	0	0	0	0	1	0	0	1	0	2	0	2	0	3	0	3	6
7:10 AM	2	1	0	3	0	0	0	0	0	3	1	4	0	2	0	2	9
7:15 AM	3	0	0	3	0	0	1	1	0	2	0	2	0	3	0	3	9
7:20 AM	1	0	0	1	0	0	0	0	1	3	1	5	0	2	0	2	8
7:25 AM	0	0	0	0	1	0	0	1	0	2	1	3	0	3	0	3	7
7:30 AM	1	0	0	1	0	0	0	0	1	2	0	3	2	3	0	5	9
7:35 AM	1	0	1	2	0	0	1	1	0	4	0	4	0	1	0	1	8
7:40 AM	1	0	0	1	1	0	1	2	0	4	0	4	0	2	0	2	9
7:45 AM	0	0	0	0	0	0	1	1	0	4	0	4	1	1	0	2	7
7:50 AM	2	0	0	2	0	0	0	0	0	1	0	1	1	0	0	1	4
7:55 AM	1	0	0	1	0	0	0	0	0	3	0	3	1	3	0	4	8
8:00 AM	1	0	0	1	0	0	0	0	0	4	1	5	0	2	0	2	8
8:05 AM	2	1	0	3	0	0	1	1	1	4	0	5	0	4	0	4	13
8:10 AM	0	0	0	0	0	0	0	0	0	4	1	5	0	3	0	3	8
8:15 AM	0	0	0	0	0	0	0	0	0	5	1	6	0	3	0	3	9
8:20 AM	1	0	1	2	0	0	0	0	1	3	1	5	0	3	0	3	10
8:25 AM	0	0	0	0	0	0	2	2	1	7	1	9	1	5	0	6	17
8:30 AM	0	0	1	1	0	0	0	0	1	5	0	6	0	0	0	0	7
8:35 AM	0	0	1	1	1	0	0	1	0	8	0	8	0	1	0	1	11
8:40 AM	0	0	0	0	0	0	1	1	2	5	1	8	0	4	0	4	13
8:45 AM	1	0	0	1	0	0	2	2	0	5	0	5	1	2	0	3	11
8:50 AM	1	0	0	1	0	0	0	0	0	5	2	7	0	3	0	3	11
8:55 AM	2	0	0	2	0	0	2	2	0	2	3	5	0	2	0	2	11
Total Survey	20	3	4	27	4	0	12	16	8	89	14	111	7	57	0	64	218

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	2	2	0	4	1	0	0	1	0	7	1	8	0	7	0	7	20
7:15 AM	4	0	0	4	1	0	1	2	1	7	2	10	0	8	0	8	24
7:30 AM	3	0	1	4	1	0	2	3	1	10	0	11	2	6	0	8	26
7:45 AM	3	0	0	3	0	0	1	1	0	8	0	8	3	4	0	7	19
8:00 AM	3	1	0	4	0	0	1	1	1	12	2	15	0	9	0	9	29
8:15 AM	1	0	1	2	0	0	2	2	2	15	3	20	1	11	0	12	36
8:30 AM	0	0	2	2	1	0	1	2	3	18	1	22	0	5	0	5	31
8:45 AM	4	0	0	4	0	0	4	4	0	12	5	17	1	7	0	8	33
Total Survey	20	3	4	27	4	0	12	16	8	89	14	111	7	57	0	64	218

Heavy Vehicle Peak Hour Summary
7:55 AM to 8:55 AM

By Approach	Northbound SW 65th Ave			Southbound SW 65th Ave			Eastbound SW Lower Boones Ferry Rd			Westbound SW Lower Boones Ferry Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	11	11	22	7	7	14	72	46	118	36	62	98	126
PHF	0.55			0.44			0.78			0.75			0.88

By Movement	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	7	1	3	11	1	0	6	7	6	58	8	72	3	33	0	36	126
PHF	0.44	0.25	0.38	0.55	0.25	0.00	0.50	0.44	0.50	0.73	0.67	0.78	0.75	0.75	0.00	0.75	0.88

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

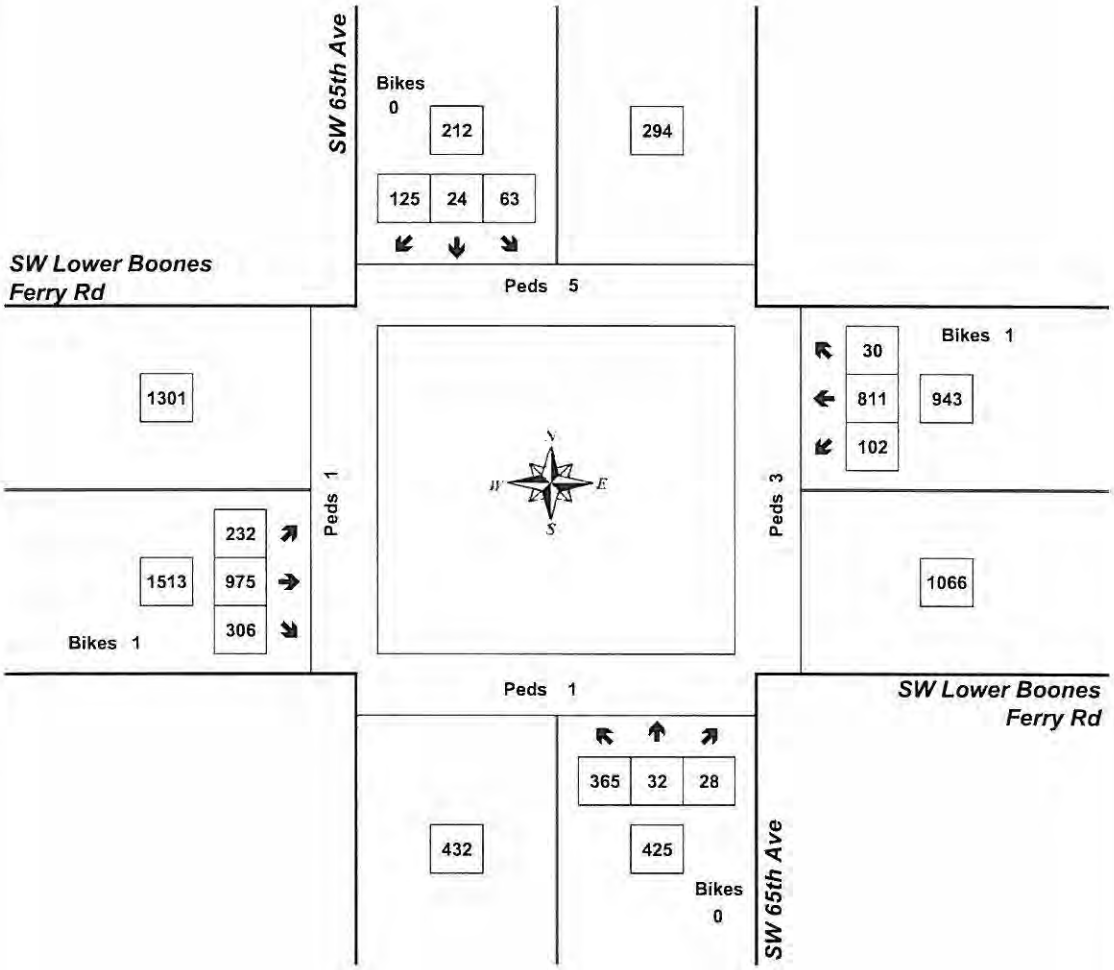
Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	12	2	1	15	3	0	4	7	2	32	3	37	5	25	0	30	89
7:15 AM	13	1	1	15	2	0	5	7	3	37	4	44	5	27	0	32	98
7:30 AM	10	1	2	13	1	0	6	7	4	45	5	54	6	30	0	36	110
7:45 AM	7	1	3	11	1	0	5	6	6	53	6	65	4	29	0	33	115
8:00 AM	8	1	3	12	1	0	8	9	6	57	11	74	2	32	0	34	129

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SW 65th Ave & SW Lower Boones Ferry Rd

7:55 AM to 8:55 AM
Wednesday, November 15, 2017

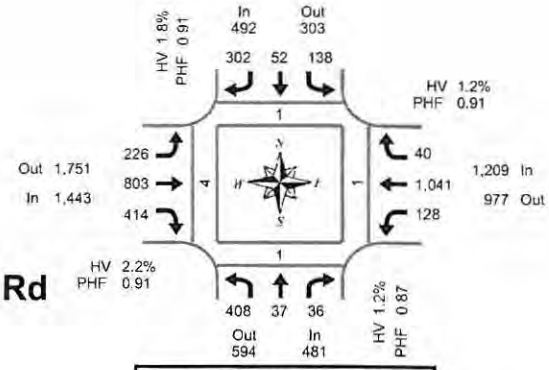


Approach	PHF	HV%	Volume
EB	0.93	4.8%	1,513
WB	0.86	3.8%	943
NB	0.78	2.6%	425
SB	0.75	3.3%	212
Intersection	0.92	4.1%	3,093

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SW 65th Ave & SW Lower Boones Ferry Rd

Wednesday, November 15, 2017
4:00 PM to 6:00 PM

Peak Hour Summary
4:20 PM to 5:20 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval Total
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	
4:00 PM	72	5	9	0	39	13	103	0	62	206	82	0	22	269	9	0	891
4:15 PM	84	9	8	0	47	15	83	0	66	183	97	0	37	249	14	0	892
4:30 PM	118	10	9	0	36	11	88	0	40	176	98	0	28	251	9	0	874
4:45 PM	92	6	7	0	31	15	75	0	59	232	98	0	33	290	9	0	947
5:00 PM	117	11	11	0	27	13	80	0	68	181	99	0	29	236	10	0	882
5:15 PM	105	13	6	0	37	17	68	0	50	226	135	0	23	204	11	0	895
5:30 PM	114	18	7	0	30	21	60	0	49	178	100	1	13	209	3	0	802
5:45 PM	71	12	11	0	22	21	43	0	60	206	99	0	27	256	13	0	841
Total Survey	773	84	68	0	269	126	600	0	454	1,588	808	1	212	1,964	78	0	7,024

Pedestrians Crosswalk			
North	South	East	West
0	1	0	0
1	1	0	0
0	1	0	1
0	0	0	1
0	0	1	2
0	1	0	1
0	1	2	0
0	1	0	0
1	6	3	5

Peak Hour Summary
4:20 PM to 5:20 PM

By Approach	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Total
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	
Volume	481	594	1,075	0	492	303	795	0	1,443	1,751	3,194	0	1,209	977	2,186	0	3,625
%HV	1.2%				1.8%				2.2%				1.2%				1.7%
PHF	0.87				0.91				0 91				0 91				0.96

Pedestrians Crosswalk			
North	South	East	West
1	1	1	4

By Movement	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	408	37	36	481	138	52	302	492	226	803	414	1,443	128	1,041	40	1,209	3,625
%HV	1.0%	2.7%	2.8%	1.2%	1.4%	0.0%	2.3%	1.8%	7.5%	1.2%	1.2%	2.2%	0 8%	1.2%	0 0%	1.2%	1.7%
PHF	0.86	0 77	0 75	0.87	0 78	0.87	0.86	0.91	0.83	0.87	0.90	0.91	0 76	0 88	0.59	0.91	0 96

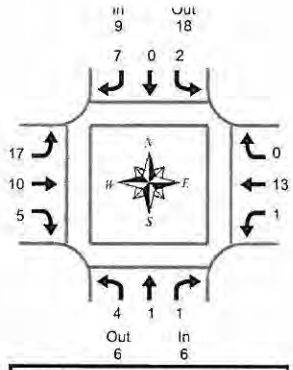
Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval Total
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	
4:00 PM	366	30	33	0	153	54	349	0	227	797	375	0	120	1,059	41	0	3,604
4:15 PM	411	36	35	0	141	54	326	0	233	772	392	0	127	1,026	42	0	3,595
4:30 PM	432	40	33	0	131	56	311	0	217	815	430	0	113	981	39	0	3,598
4:45 PM	428	48	31	0	125	66	283	0	226	817	432	1	98	939	33	0	3,526
5:00 PM	407	54	35	0	116	72	251	0	227	791	433	1	92	905	37	0	3,420

Pedestrians Crosswalk			
North	South	East	West
1	3	0	2
1	2	1	4
0	2	1	5
0	2	3	4
0	3	3	3

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SW 65th Ave & SW Lower Boones Ferry Rd

Wednesday, November 15, 2017
4:00 PM to 6:00 PM

Peak Hour Summary
4:20 PM to 5:20 PM

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	2	2	13	7	3	23	0	5	0	5	30
4:15 PM	3	0	1	4	2	0	1	3	5	1	3	9	1	2	0	3	19
4:30 PM	1	0	0	1	0	0	3	3	6	2	0	8	0	1	0	1	13
4:45 PM	1	0	0	1	0	0	2	2	1	4	0	5	0	5	0	5	13
5:00 PM	0	1	0	1	0	0	1	1	4	3	2	9	0	4	0	4	15
5:15 PM	3	0	0	3	1	0	0	1	2	1	1	4	0	2	0	2	10
5:30 PM	1	0	0	1	0	0	2	2	3	5	2	10	0	5	0	5	18
5:45 PM	1	0	0	1	0	1	0	1	0	4	0	4	0	5	0	5	11
Total Survey	10	1	1	12	3	1	11	15	34	27	11	72	1	29	0	30	129

Heavy Vehicle Peak Hour Summary
4:20 PM to 5:20 PM

By Approach	Northbound SW 65th Ave			Southbound SW 65th Ave			Eastbound SW Lower Boones Ferry Rd			Westbound SW Lower Boones Ferry Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	6	6	12	9	18	27	32	24	56	14	13	27	61
PHF	0.50			0.56			0.73			0.58			0.73

By Movement	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	4	1	1	6	2	0	7	9	17	10	5	32	1	13	0	14	61
PHF	0.50	0.25	0.25	0.50	0.25	0.00	0.58	0.56	0.53	0.42	0.63	0.73	0.25	0.54	0.00	0.58	0.73

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

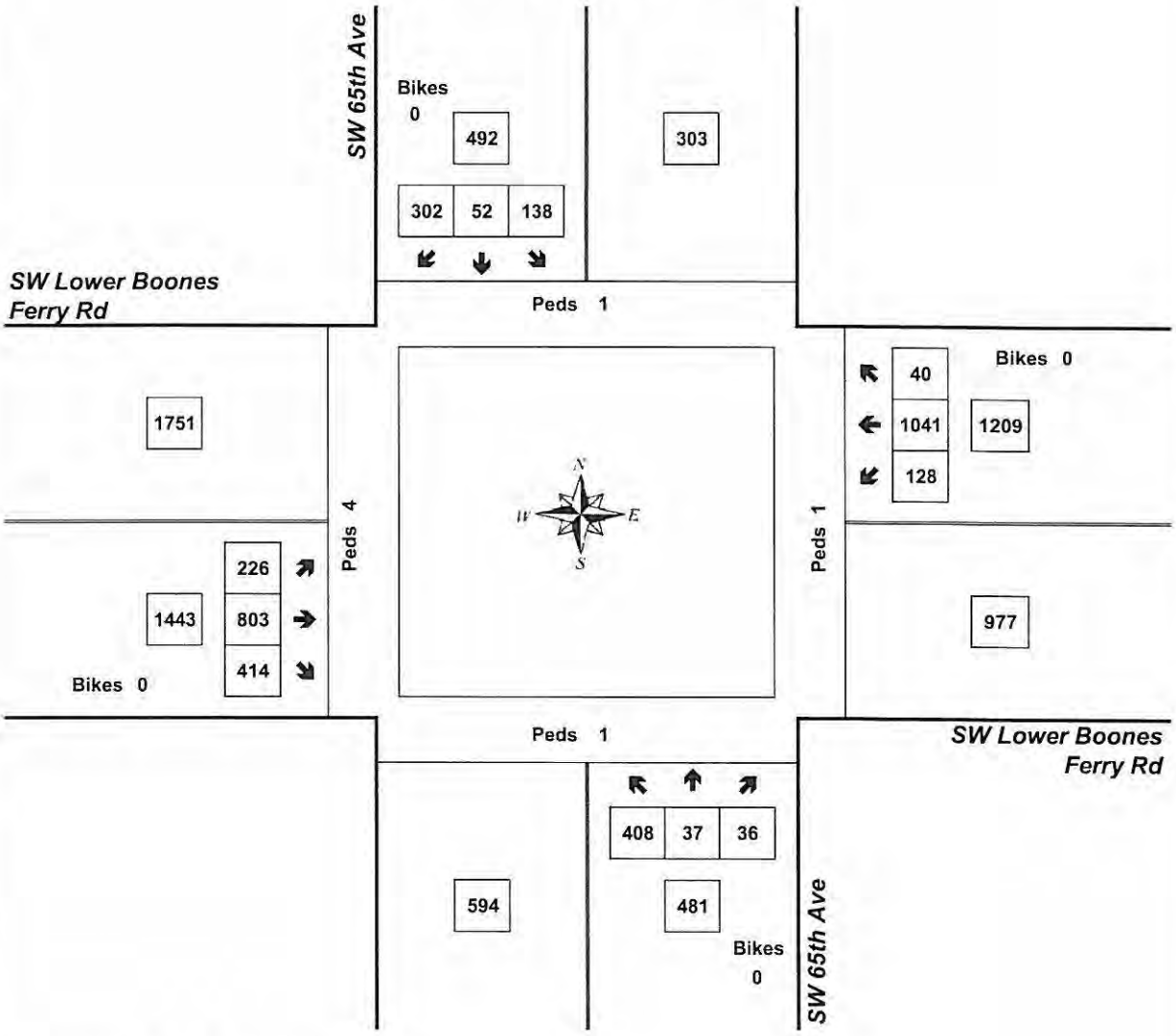
Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Lower Boones Ferry Rd				Westbound SW Lower Boones Ferry Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	5	0	1	6	2	0	8	10	25	14	6	45	1	13	0	14	75
4:15 PM	5	1	1	7	2	0	7	9	16	10	5	31	1	12	0	13	60
4:30 PM	5	1	0	6	1	0	6	7	13	10	3	26	0	12	0	12	51
4:45 PM	5	1	0	6	1	0	5	6	10	13	5	28	0	16	0	16	56
5:00 PM	5	1	0	6	1	1	3	5	9	13	5	27	0	16	0	16	54

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SW 65th Ave & SW Lower Boones Ferry Rd

4:20 PM to 5:20 PM
Wednesday, November 15, 2017

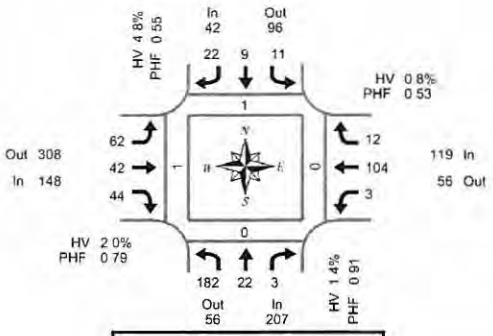


Approach	PHF	HV%	Volume
EB	0.91	2.2%	1,443
WB	0.91	1.2%	1,209
NB	0.87	1.2%	481
SB	0.91	1.8%	492
Intersection	0.96	1.7%	3,625

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc
Clay Carney
(503) 833-2740



Peak Hour Summary
7:50 AM to 8:50 AM

SW 65th Ave & SW Mcewan Rd

Tuesday, November 28, 2017
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7 00 AM	12	0	0	0	0	0	0	0	4	0	1	0	0	3	0	0	20	0	0	0	0
7 05 AM	12	2	0	0	0	0	2	0	1	2	0	0	0	1	0	0	20	0	0	0	0
7 10 AM	13	0	0	0	0	0	1	0	5	3	3	0	0	7	0	0	32	0	0	0	0
7 15 AM	15	1	0	0	0	0	3	0	2	2	0	0	0	5	0	0	28	0	0	0	0
7 20 AM	11	0	0	0	0	0	4	0	2	4	0	1	0	3	0	0	24	0	0	0	0
7 25 AM	19	1	0	0	0	0	4	0	2	2	1	0	0	9	0	0	38	0	0	0	0
7 30 AM	16	1	0	0	0	0	2	0	2	0	3	0	0	2	1	0	27	0	0	0	0
7 35 AM	14	1	0	0	2	0	1	0	4	4	1	0	0	3	0	0	30	0	0	0	0
7 40 AM	11	0	0	0	0	2	4	0	6	2	6	0	0	6	0	0	37	0	0	0	0
7 45 AM	18	0	0	0	0	0	0	0	4	2	0	0	0	7	0	0	31	0	0	1	0
7 50 AM	22	4	0	0	0	0	5	0	4	5	2	0	0	5	0	0	47	0	0	0	0
7 55 AM	15	0	0	0	0	0	1	0	9	2	6	0	0	8	0	0	41	0	0	0	0
8 00 AM	14	2	0	0	0	0	2	0	10	0	4	0	0	9	0	0	41	0	0	0	0
8 05 AM	19	1	0	0	0	0	2	0	6	3	3	0	0	5	0	0	39	0	0	0	1
8 10 AM	17	0	1	0	3	0	2	0	4	5	4	0	0	7	0	0	43	0	0	0	0
8 15 AM	14	3	0	0	3	1	2	0	3	8	5	0	2	4	4	0	49	0	0	0	0
8 20 AM	9	3	1	0	5	1	2	0	8	7	3	0	0	18	0	0	57	0	0	0	0
8 25 AM	20	2	1	0	0	1	1	0	2	2	3	0	1	23	3	0	59	1	0	0	0
8 30 AM	10	2	0	0	0	2	2	0	2	6	2	0	0	10	1	0	37	0	0	0	0
8 35 AM	8	2	0	0	0	0	3	0	3	2	3	0	0	6	1	0	28	0	0	0	0
8 40 AM	21	0	0	0	0	3	0	0	6	0	3	0	0	8	1	0	42	0	0	0	0
8 45 AM	13	3	0	0	0	1	0	0	5	2	6	0	0	1	2	0	33	0	0	0	0
8 50 AM	9	4	0	0	0	0	2	0	1	2	4	0	0	1	0	0	23	0	0	0	0
8 55 AM	10	1	0	0	0	0	3	0	3	1	4	0	0	9	2	0	33	0	0	0	0
Total Survey	342	33	3	0	13	11	48	0	98	66	67	1	3	160	15	0	859	1	0	1	1

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7 00 AM	37	2	0	0	0	0	3	0	10	5	4	0	0	11	0	0	72	0	0	0	0
7 15 AM	45	2	0	0	0	0	11	0	6	8	1	1	0	17	0	0	90	0	0	0	0
7 30 AM	41	2	0	0	2	2	7	0	12	6	10	0	0	11	1	0	94	0	0	0	0
7 45 AM	55	4	0	0	0	0	6	0	17	9	8	0	0	20	0	0	119	0	0	1	0
8 00 AM	50	3	1	0	3	0	6	0	20	8	11	0	0	21	0	0	123	0	0	0	1
8 15 AM	43	8	2	0	8	3	5	0	13	17	11	0	3	45	7	0	185	1	0	0	0
8 30 AM	39	4	0	0	0	5	5	0	11	8	8	0	0	24	3	0	107	0	0	0	0
8 45 AM	32	8	0	0	0	1	5	0	9	5	14	0	0	11	4	0	89	0	0	0	0
Total Survey	342	33	3	0	13	11	48	0	98	66	67	1	3	160	15	0	859	1	0	1	1

Peak Hour Summary
7:50 AM to 8:50 AM

By Approach	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Total
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	
Volume	207	56	263	0	42	96	138	0	148	308	456	0	119	56	175	0	516
%HV		1 4%				4 8%				2.0%				0.8%			1.7%
PHF		0 91				0.55				0.79				0.53			0 78

Pedestrians Crosswalk			
North	South	East	West
1	0	0	1

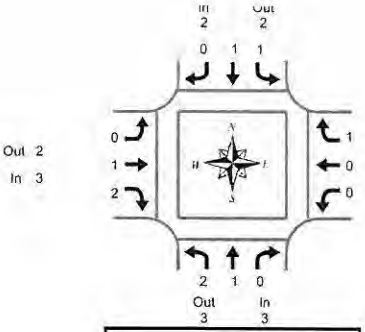
By Movement	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	182	22	3	207	11	9	22	42	62	42	44	148	3	104	12	119	516
%HV	1 1%	4 5%	0 0%	1 4%	9 1%	11 1%	0 0%	4 8%	0.0%	2.4%	4.5%	2.0%	0.0%	0 0%	8.3%	0.8%	1.7%
PHF	0 89	0.69	0 38	0 91	0.25	0 45	0 69	0 55	0 62	0 53	0 85	0 79	0 25	0 51	0 43	0 53	0 78

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7 00 AM	178	10	0	0	2	2	27	0	45	28	23	1	0	59	1	0	375	0	0	1	0
7 15 AM	191	11	1	0	5	2	30	0	55	31	30	1	0	69	1	0	426	0	0	1	1
7 30 AM	189	17	3	0	13	5	24	0	62	40	40	0	3	97	8	0	501	1	0	1	1
7 45 AM	187	19	3	0	11	8	22	0	61	42	38	0	3	110	10	0	514	1	0	1	1
8 00 AM	164	23	3	0	11	9	21	0	53	38	44	0	3	101	14	0	484	1	0	0	1

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SW 65th Ave & SW Mcewan Rd

Tuesday, November 28, 2017
7:00 AM to 9:00 AM

Peak Hour Summary
7:50 AM to 8:50 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
7:25 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 AM	0	0	0	0	1	0	0	1	0	1	1	2	0	0	0	0	3
7:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
8:25 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
8:30 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:55 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Survey	2	1	0	3	2	1	2	5	0	2	5	7	0	0	1	1	16

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	1	0	0	1	0	1	1	2	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
8:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
8:30 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Survey	2	1	0	3	2	1	2	5	0	2	5	7	0	0	1	1	16

Heavy Vehicle Peak Hour Summary
7:50 AM to 8:50 AM

By Approach	Northbound SW 65th Ave			Southbound SW 65th Ave			Eastbound SW Mcewan Rd			Westbound SW Mcewan Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	3	3	6	2	2	4	3	2	5	1	2	3	9
PHF	0.38			0.25			0.38			0.25			0.45

By Movement	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	1	0	3	1	1	0	2	0	1	2	3	0	0	1	1	9
PHF	0.25	0.25	0.00	0.38	0.25	0.25	0.00	0.25	0.00	0.25	0.25	0.38	0.00	0.00	0.25	0.25	0.45

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

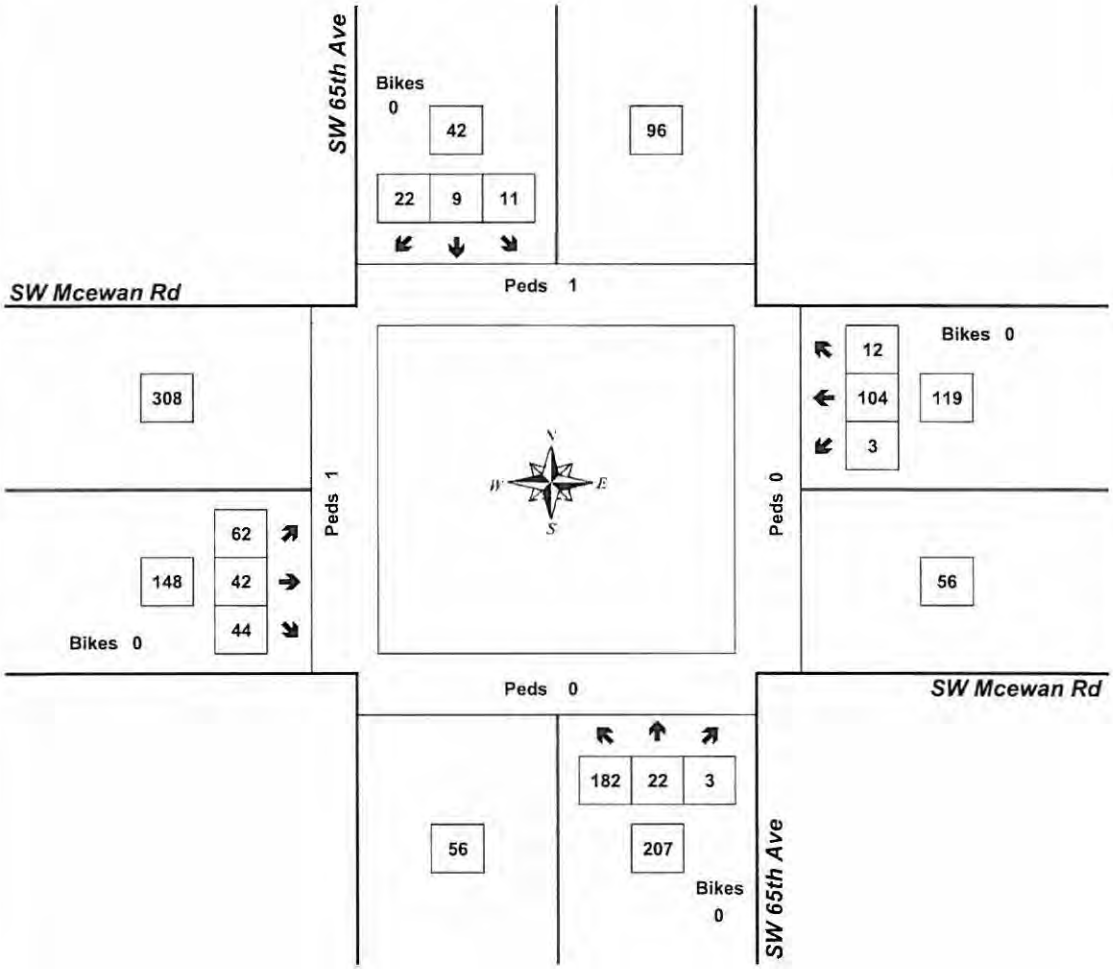
Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	1	0	2	3	0	2	2	4	0	0	0	0	7
7:15 AM	2	0	0	2	1	0	2	3	0	2	1	3	0	0	0	0	8
7:30 AM	2	1	0	3	2	0	0	2	0	2	2	4	0	0	0	0	9
7:45 AM	2	1	0	3	1	1	0	2	0	1	2	3	0	0	1	1	9
8:00 AM	2	1	0	3	1	1	0	2	0	0	3	3	0	0	1	1	9

Peak Hour Summary

All Traffic Data Services Inc
Clay Carney
(503) 833-2740

SW 65th Ave & SW Mcewan Rd

7:50 AM to 8:50 AM
Tuesday, November 28, 2017

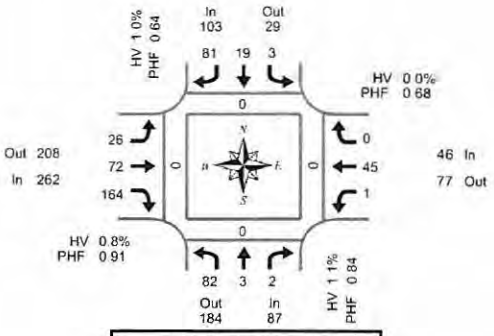


Approach	PHF	HV%	Volume
EB	0.79	2.0%	148
WB	0.53	0.8%	119
NB	0.91	1.4%	207
SB	0.55	4.8%	42
Intersection	0.78	1.7%	516

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SW 65th Ave & SW Mcewan Rd

Tuesday, November 28, 2017
4:00 PM to 6:00 PM

Peak Hour Summary
5:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval	Pedestrians Crosswalk			
Time	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
4:00 PM	4	0	0	0	1	0	4	0	0	6	10	0	0	4	1	0	30	0	0	0	1
4:05 PM	10	0	0	0	0	1	7	0	4	4	18	0	0	2	0	0	46	0	0	0	0
4:10 PM	5	1	0	0	0	3	6	0	2	5	12	0	0	3	0	0	37	0	0	0	0
4:15 PM	6	1	0	0	0	2	2	0	4	0	15	0	0	8	0	0	38	0	0	0	0
4:20 PM	10	0	0	0	1	1	2	0	3	5	16	0	0	4	0	0	42	0	0	0	0
4:25 PM	6	0	0	0	0	1	4	0	3	8	10	0	0	2	1	0	35	0	0	0	0
4:30 PM	3	0	0	0	0	2	6	0	1	4	13	0	0	4	0	0	33	0	0	0	0
4:35 PM	8	0	0	0	0	2	8	0	1	4	15	0	0	7	0	0	45	0	0	0	0
4:40 PM	9	0	0	0	0	2	1	0	3	4	11	0	0	4	0	0	34	0	0	0	0
4:45 PM	10	1	1	0	0	2	3	0	5	4	18	0	0	2	0	0	46	0	0	0	0
4:50 PM	4	1	0	0	0	0	4	0	0	10	9	0	0	0	1	0	29	1	0	0	0
4:55 PM	2	1	0	0	0	2	6	0	1	5	14	0	0	4	0	0	35	0	0	0	0
5:00 PM	2	0	0	0	1	1	9	0	2	5	20	0	0	7	0	0	47	0	0	0	0
5:05 PM	7	0	0	0	0	5	13	0	1	8	9	0	1	3	0	0	47	0	0	0	0
5:10 PM	9	0	0	0	0	0	11	0	1	6	13	0	0	0	0	0	40	0	0	0	0
5:15 PM	3	2	1	0	0	3	8	0	1	4	17	0	0	5	0	0	44	0	0	0	0
5:20 PM	10	0	0	0	0	2	6	0	4	3	16	0	0	1	0	0	42	0	0	0	0
5:25 PM	4	0	0	0	1	2	4	0	3	5	9	0	0	6	0	0	34	0	0	0	0
5:30 PM	9	0	0	0	0	1	3	0	3	8	16	0	0	0	0	0	40	0	0	0	0
5:35 PM	7	1	0	0	0	2	5	0	1	2	12	0	0	9	0	0	39	0	0	0	0
5:40 PM	5	0	1	0	1	0	5	0	1	9	11	0	0	5	0	0	38	0	0	0	0
5:45 PM	7	0	0	0	0	0	7	0	3	11	12	0	0	3	0	0	43	0	0	0	0
5:50 PM	13	0	0	0	0	1	5	0	3	5	11	0	0	2	0	0	40	0	0	0	0
5:55 PM	6	0	0	0	0	2	5	0	3	6	18	0	0	4	0	0	44	0	0	0	0
Total Survey	159	8	3	0	5	37	134	0	53	131	325	0	1	89	3	0	948	1	0	0	1

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval	Pedestrians Crosswalk			
Time	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
4:00 PM	19	1	0	0	1	4	17	0	6	15	40	0	0	9	1	0	113	0	0	0	1
4:15 PM	22	1	0	0	1	4	8	0	10	13	41	0	0	14	1	0	115	0	0	0	0
4:30 PM	20	0	0	0	0	6	15	0	5	12	39	0	0	15	0	0	112	0	0	0	0
4:45 PM	16	3	1	0	0	4	13	0	6	19	41	0	0	6	1	0	110	1	0	0	0
5:00 PM	18	0	0	0	1	6	33	0	4	19	42	0	1	10	0	0	134	0	0	0	0
5:15 PM	17	2	1	0	1	7	18	0	8	12	42	0	0	12	0	0	120	0	0	0	0
5:30 PM	21	1	1	0	1	3	13	0	5	19	39	0	0	14	0	0	117	0	0	0	0
5:45 PM	26	0	0	0	0	3	17	0	9	22	41	0	0	9	0	0	127	0	0	0	0
Total Survey	159	8	3	0	5	37	134	0	53	131	325	0	1	89	3	0	948	1	0	0	1

Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	87	184	271	0	103	29	132	0	262	208	470	0	46	77	123	0	498	0	0	0	0
%HV		1 1%				1 0%				0 8%				0.0%			0 8%				
PHF		0 84				0 64				0.91				0 68			0.93				

By Movement	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	82	3	2	87	3	19	81	103	26	72	164	262	1	45	0	46	498
%HV	0 0%	0 0%	50 0%	1 1%	0 0%	0.0%	1 2%	1 0%	3 8%	0 0%	0 6%	0 8%	0 0%	0 0%	0.0%	0 0%	0.8%
PHF	0 79	0 38	0 50	0 84	0 75	0 59	0 61	0 64	0 65	0 72	0 89	0 91	0 25	0 66	0 00	0 68	0 93

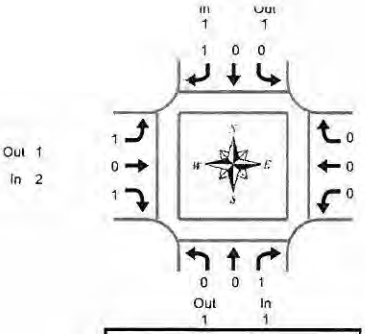
Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval	Pedestrians Crosswalk			
Time	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
4:00 PM	77	5	1	0	2	18	53	0	27	59	161	0	0	44	3	0	450	1	0	0	1
4:15 PM	76	4	1	0	2	20	69	0	25	63	163	0	1	45	2	0	471	1	0	0	0
4:30 PM	71	5	2	0	2	23	79	0	23	62	164	0	1	43	1	0	476	1	0	0	0
4:45 PM	72	6	3	0	3	20	77	0	23	69	164	0	1	42	1	0	481	1	0	0	0
5:00 PM	82	3	2	0	3	19	81	0	26	72	164	0	1	45	0	0	498	0	0	0	0

Heavy Vehicle Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740



SW 65th Ave & SW Mcewan Rd

Tuesday, November 28, 2017
4:00 PM to 6:00 PM

Peak Hour Summary
5:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:20 PM	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	2
4:25 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
5:40 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	0	1	2	0	1	3	4	3	0	2	5	0	1	1	2	13

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	0	1	0	1	2	0	1	3	0	0	1	1	5
4:30 PM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:30 PM	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	0	1	2	0	1	3	4	3	0	2	5	0	1	1	2	13

Heavy Vehicle Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound SW 65th Ave			Southbound SW 65th Ave			Eastbound SW Mcewan Rd			Westbound SW Mcewan Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	1	1	2	1	1	2	2	1	3	0	1	1	4
PHF	0.25			0.25			0.25			0.00			0.50

By Movement	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	0	1	1	0	0	1	1	1	0	1	2	0	0	0	0	4
PHF	0.00	0.00	0.25	0.25	0.00	0.00	0.25	0.25	0.25	0.00	0.25	0.25	0.00	0.00	0.00	0.00	0.50

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

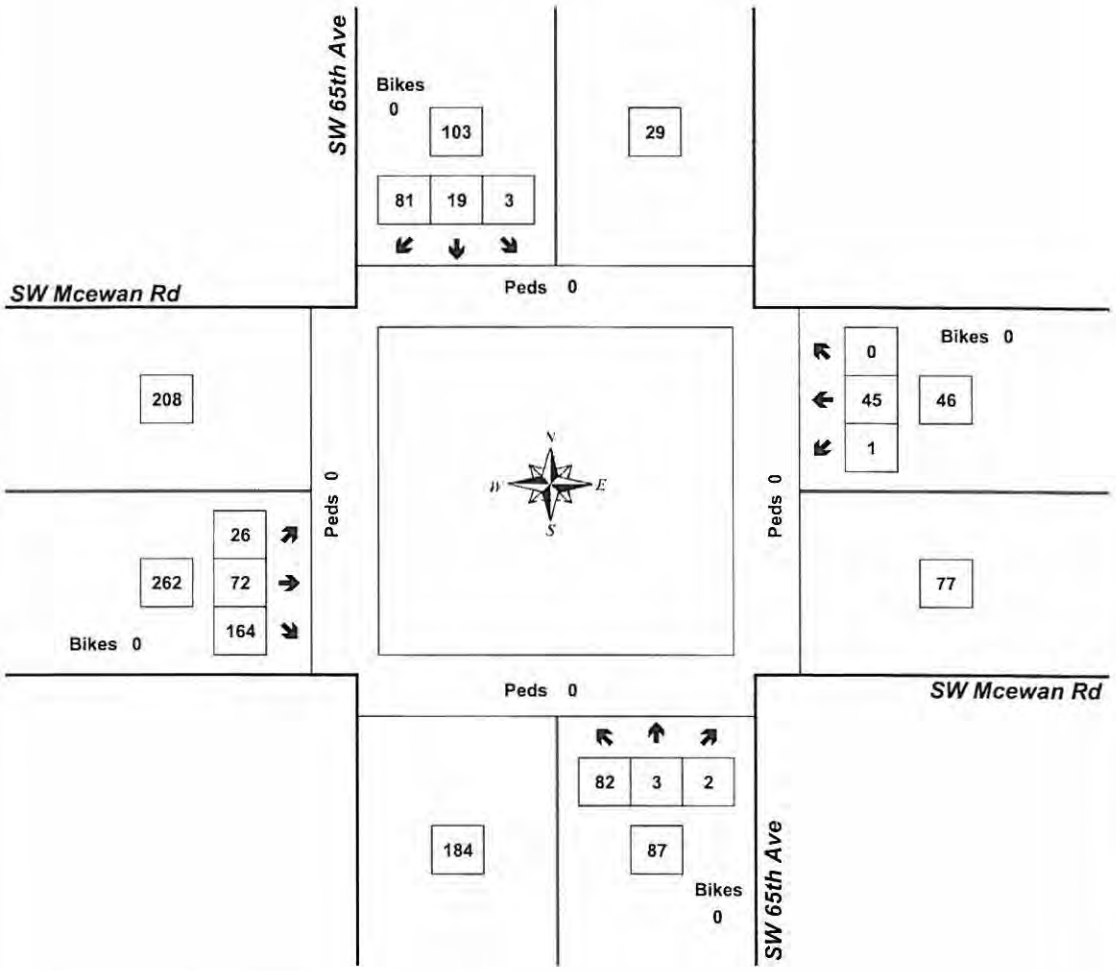
Interval Start Time	Northbound SW 65th Ave				Southbound SW 65th Ave				Eastbound SW Mcewan Rd				Westbound SW Mcewan Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	0	0	1	0	1	2	3	2	0	1	3	0	1	1	2	9
4:15 PM	1	0	0	1	0	1	3	4	2	0	1	3	0	0	1	1	9
4:30 PM	1	0	0	1	0	0	3	3	1	0	0	1	0	0	0	0	5
4:45 PM	1	0	1	2	0	0	1	1	1	0	1	2	0	0	0	0	5
5:00 PM	0	0	1	1	0	0	1	1	1	0	1	2	0	0	0	0	4

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SW 65th Ave & SW Mcewan Rd

5:00 PM to 6:00 PM
Tuesday, November 28, 2017



Approach	PHF	HV%	Volume
EB	0.91	0.8%	262
WB	0.68	0.0%	46
NB	0.84	1.1%	87
SB	0.64	1.0%	103
Intersection	0.93	0.8%	498

Count Period: 4:00 PM to 6:00 PM

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

65TH AVE at BOONES FERRY RD, City of Tualatin, Clackamas County, 01/01/2011 to 12/31/2015

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: 2012														
ANGLE	0	1	0	1	0	4	0	0	1	0	1	1	0	0
REAR-END	0	2	1	3	0	3	0	1	2	2	1	3	0	0
YEAR 2012 TOTAL	**0**	**3**	**1**	**4**	**0**	**7**	**0**	**1**	**3**	**2**	**2**	**4**	**0**	**0**
YEAR: 2011														
REAR-END	0	1	1	2	0	1	0	0	1	1	1	2	0	0
YEAR 2011 TOTAL	**0**	**1**	**1**	**2**	**0**	**1**	**0**	**0**	**1**	**1**	**1**	**2**	**0**	**0**
FINAL TOTAL	**0**	**4**	**2**	**6**	**0**	**8**	**0**	**1**	**4**	**3**	**3**	**6**	**0**	**0**

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

65TH AVE at BOONES FERRY RD, City of Tualatin, Clackamas County, 01/01/2011 to 12/31/2015

Total crash records: 6

SER# / INVEST	P R S W / E A U I O / E L G N R / D C S L K	DATE / DAY / TIME	CLASS / DIST / FROM	CITY STREET / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P# TYPE	INJ SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACT EVENT	CAUSE
05216	N N N N N	11/15/2012	14	BOONES FERRY RD	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT									07
CITY		TU	0	SW 65TH AVE	NE		TRF SIGNAL	N	WET	REAR		PRVTE	NE-SW								000	07
		2P			06	3		N	DAY	INJ		PSNGR CAR		01 DRVR	NONE	16	F	OR-Y OR<25		026	000	07
											02	NONE 0	STOP									
												PRVTE	NE-SW								011	00
												PSNGR CAR		01 DRVR	INJC	42	M	OR-Y OR<25		000	000	00
01248	N N N	10/14/2013	14	BOONES FERRY RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT									07
NONE		MO	0	SW 65TH AVE	NE		TRF SIGNAL	N	DRY	REAR		PRVTE	NE-SW								000	07
		12P			06	1		N	DAY	PDO		UNKNOWN		01 DRVR	NONE	00	M	OR-Y OR<25		026	000	07
											02	NONE 0	STOP									
												PRVTE	NE-SW								011	00
												PSNGR CAR		01 DRVR	NONE	32	F	OR-Y OR<25		000	000	00
04436	N N N	11/19/2012	14	BOONES FERRY RD	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT									07
NONE		MO	0	SW 65TH AVE	NE		TRF SIGNAL	N	WET	REAR		PRVTE	NE-SW								000	07
		7P			06	1		N	DLIT	INJ		PSNGR CAR		01 DRVR	NONE	47	M	OR-Y OR<25		043	000	07
											02	NONE 0	STOP									
												PRVTE	NE-SW								011	00
												PSNGR CAR		01 DRVR	INJC	11	F	OR-Y OR<25		000	000	00
											03	NONE 0	STOP									
												PRVTE	NE-SW								012	00
												PSNGR CAR		02 PSNG	INJC	17	F			000	000	00
04631	N N N	12/12/2011	16	BOONES FERRY RD	INTER	CROSS	N	N	UNK	S-1STOP	01	NONE 0	STRGHT									07
NONE		MO	0	SW 65TH AVE	S		TRF SIGNAL	N	UNK	REAR		PRVTE	S -N								000	07
		6P			06	0		N	DLIT	PDO		PSNGR CAR		01 DRVR	NONE	55	F	OR-Y OR<25		026	000	07
											02	NONE 0	STOP									
												PRVTE	S -N								011	00
												PSNGR CAR		01 DRVR	NONE	30	M	OR-Y OR<25		000	000	00
04649	N N N	12/23/2011	16	BOONES FERRY RD	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT									07
NONE		WE	0	SW 65TH AVE	S		TRF SIGNAL	N	WET	REAR		PRVTE	S -N								000	07
		11A			06	1		N	DAY	INJ		PSNGR CAR		01 DRVR	NONE	24	F	OR-Y OR<25		026	088	07
											02	NONE 0	STOP									
												PRVTE	S -N								011	00
												PSNGR CAR		01 DRVR	INJC	52	F	OR-Y OR<25		000	000	00
05214	N N N N N	11/23/2012	14	BOONES FERRY RD	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 0	STRGHT									04
CITY		FR		SW 65TH AVE	CN		TRF SIGNAL	N	WET	ANGL		PRVTE	E -W								000	00
		3P			02	1		N	DLIT	INJ		PSNGR CAR		01 DRVR	NONE	75	M	OTH-Y N-RES		121	000	04
											01	NONE 0	STRGHT									
												PRVTE	E -W								000	00
												PSNGR CAR		02 PSNG	INJC	59	F			000	000	00

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

OREGON: DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

65TH AVE at BOONES FERRY RD, City of Tualatin, Clackamas County, 01/01/2011 to 12/31/2015

TOTAL CRASH RECORDS: 5

SER# INVEST	S D / P R S W / E A U I C O DATE / E L G N H R DAY / D C S L K TIME	CLASS DIST FROM	CITY STREET / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A / G / E	S / E / X	LICNS / RES	PED / LOC	ERROR	ACT EVENT	CAUSE
										01	NONE 0	STRGHT										
											PRVTE	S -N									[illegible]	[illegible]
											PSNGR CAR		01	DRVR	INJC	20	F	OR-Y OR<25		000	000	[illegible]
										01	NONE 0	STRGHT										
											PRVTE	S -N									[illegible]	[illegible]
											PSNGR CAR		02	PSNG	INJB	21	F			000	[illegible]	[illegible]
										02	NONE 0	STRGHT										
											PRVTE	S -N									000	[illegible]
											PSNGR CAR		01	PSNG	INJB	31	M			000	000	[illegible]

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

65TH AVE at LOWER BOONES FERRY, City of Tualatin, Washington County, 01/01/2011 to 12/31/2015

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: 2014														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	0	1	0	1	1	0	1
YEAR 2014 TOTAL	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**1**
YEAR: 2012														
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR 2012 TOTAL	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**
YEAR: 2011														
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	0	1	0	1	1	0	0
YEAR 2011 TOTAL	**0**	**1**	**1**	**2**	**0**	**1**	**0**	**1**	**1**	**1**	**1**	**2**	**0**	**0**
FINAL TOTAL	**0**	**1**	**3**	**4**	**0**	**1**	**0**	**2**	**2**	**2**	**2**	**4**	**0**	**1**

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

65TH AVE at LOWER BOONES FERRY, City of Tualatin, Washington County, 01/01/2011 to 12/31/2015

Total crash records: 4

SER# / INVEST	E A U I C O / P R S W / D C S L K	DATE / DAY / TIME	CLASS / DIST FROM	CITY STREET / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS / PED RES	LOC	ERROR	ACT	EVENT	CAUSE
01117	N N N	08/30/2012	19	SW LOWER BOONES FERRY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE		TH	0	SW 65TH AVE	N		TRF SIGNAL	N	DRY	REAR		UNKN	N -S									000		07
		11A			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	M	OR-Y UNK		026	000		07
											02	NONE 0	STOP											
												PRVTE	N -S									011		00
												PSNGR CAR		01	DRVR	NONE	39	F	OR-Y OR<25		000	000		00
00944	Y Y Y N N	02/15/2014	14	SW LOWER BOONES FERRY	INTER	CROSS	N	Y	RAIN	FIX OR	01	NONE 0	STRGHT										055	01,08
CITY		SA		SW 65TH AVE	E		TRF SIGNAL	N	WET	FIX		PRVTE	W -E									000	055	[illegible]
		3P			05	3		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	22	M	OR-Y OR<25		047,023	000		01,08
00323	N N N N N	05/18/2011	14	SW LOWER BOONES FERRY	INTER	CROSS	N	N	CLR	S-1STOP	01	UNKN 0	STRGHT										013	07
CITY		WE		SW 65TH AVE	W		TRF SIGNAL	N	DRY	REAR		UNKN	W -E									000		07
		1P			06	3		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		026	000		07
											02	NONE 0	STOP											
												PRVTE	W -E									011	014	[illegible]
												PSNGR CAR		01	DRVR	NONE	11	F	OR-Y OR<25		000	000		[illegible]
											03	NONE 0	STOP											
												PRVTE	W -E									022		[illegible]
												PSNGR CAR		01	DRVR	INJC	56	F	OR-Y OR<25		000	000		00
01508	N N N	04/11/2013	14	SW LOWER BOONES FERRY	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01	NONE 0	STRGHT											02
NONE		SU		SW 65TH AVE	CN		TRF SIGNAL	N	WET	TURN		PRVTE	N -S									000		00
		7P			0[illegible]	3		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	27	F	OR-Y OR<25		000	000		00
											02	UNKN 0	TURN-L											
												UNKN	S -W									000		00
												PSNGR CAR		01	DRVR	NONE	00	M	UNK UNK		004,028	000		02

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

65TH AVE at MCEWAN RD, City of Tualatin, Clackamas County, 01/01/2011 to 12/31/2015

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
FINAL TOTAL														

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirements, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

65TH AVE at MCEWAN RD, City of Tualatin, Washington County, 01/01/2011 to 12/31/2015

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: 2013														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	0	1	1	0	0
YEAR 2013 TOTAL	0	0	1	1	0	0	0	1	0	0	1	1	0	0
FINAL TOTAL	0	0	1	1	0	0	0	1	0	0	1	1	0	0

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF TUALATIN, WASHINGTON COUNTY

65TH AVE at MCEWAN RD, City of Tualatin, Washington County, 01/01/2011 to 12/31/2015

Total crash records: 1

SER# / INVEST	E A U I C O / R L G N H R / D C S L K (flags)	DATE / DAY / TIME	CLASS / DIST / FROM	CITY STREET / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / V# TYPE	MOVE / FROM / TO	P#	TYPE	INJ SVRTY	A G E	S E X	LICNS / RES	PED / LOC	ERROR	ACT EVENT	CAUSE
[illegible]	N N N N N	10/[illegible] 2013	[illegible]	SW MCEWAN RD	INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE 0	STRGHT										[illegible]
CITY		WE	0	SW 65TH AVE	CN		STOP SIGN	N	DRY	TURN		PRVTE	S -N									000	[illegible]
		[illegible]			03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	[illegible]	[illegible]	OR-Y OR<25		000	000	[illegible]
											02	NONE 0	TURN-L										
												PRVTE	E -S									01[illegible]	[illegible]
												PSNGR CAR		01	DRVR	NONE	25	F	OTH-Y N-RES		028	000	[illegible]

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

65TH AVE at MCEWAN RD, City of Tualatin, Washington County, 01/01/2011 to 12/31/2015

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: 2013														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	0	1	1	0	0
YEAR 2013 TOTAL	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
FINAL TOTAL	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**

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OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF TUALATIN, WASHINGTON COUNTY

65TH AVE at MCEWAN RD, City of Tualatin, Washington County, 01/01/2011 to 12/31/2015

Total crash records: 1

SER# / INVEST	S W E A U I C O D C S L K	DATE / DAY / TIME	CLASS / DIST / FROM	CITY STREET / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / V# TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	AGE	SEX	LICNS / RES	PED / LOC	ERROR	ACT EVENT	CAUSE
[illegible]	N N N N N	[illegible]/10/20[illegible]	[illegible]	SW MCEWAN RD	INTER	[illegible]-LEG	N	N	CLD	ANGL-OTH	01	NONE [illegible]	STRGHT										[illegible]
CITY		WE	[illegible]	SW 65TH AVE	[illegible]N		STOP SIGN	N	DRY	TURN		PRVTE	S -N									000	[illegible]
		[illegible]			03	[illegible]		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	[illegible]	F	OR-Y OR<25		[illegible]	000	[illegible]
											02	NONE [illegible]	TURN-L										
												PRVTE	E -[illegible]									[illegible]	[illegible]
												PSNGR CAR		01	DRVR	NONE	[illegible]	M	OTH-Y N-RES		028	000	[illegible]

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Left-Turn Lane Warrant Analysis

1e

Project: TVF&R Station 39
Intersection: North Site Access at SW McEwan Road
Date: 11/28/2017
Scenario: 2019 Background plus Site Conditions - AM Peak Hour

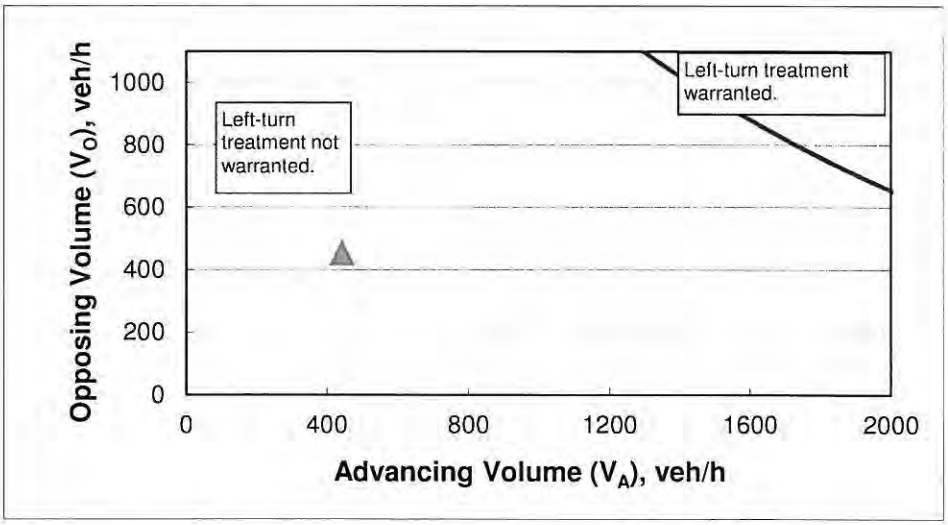
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	30
Percent of left-turns in advancing volume (V_A), %:	0%
Advancing volume (V_A), veh/h:	443
Opposing volume (V_O), veh/h:	454

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	2456
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: TVF&R Station 39
Intersection: North Site Access at SW McEwan Road
Date: 11/28/2017
Scenario: 2019 Background plus Site Conditions - PM Peak Hour

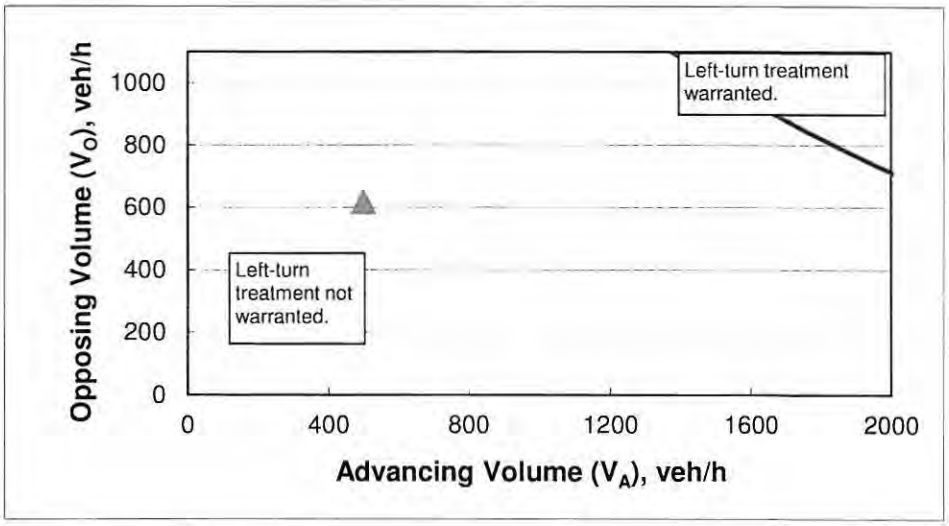
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	30
Percent of left-turns in advancing volume (V_A), %:	0%
Advancing volume (V_A), veh/h:	499
Opposing volume (V_O), veh/h:	620

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	2199
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Traffic Signal Warrant Analysis

1e

Project: TVF&R Station 39
Date: 11/30/2017
Scenario: Year 2019 Background plus Site Conditions

Major Street:	SW McEwan Road	Minor Street:	SW 65th Avenue
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	322	PM Peak Hour Volumes:	90

Warrant Used:

X 100 percent of standard warrants used

_____ 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
WARRANT 1, CONDITION A		100%	70%	100%	70%
Major St.	Minor St.	Warrants	Warrants	Warrants	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CONDITION B					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	3,220	8,850	
Minor Street*	900	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	3,220	13,300	
Minor Street*	900	1,350	**No**
Combination Warrant			
Major Street	3,220	10,640	
Minor Street*	900	2,120	**No**

* Minor street right-turning traffic volumes reduced by 25%

1e

LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

Level of service A: Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

Level of service B: Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

Level of service C: Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Level of service E: Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

Level of service F: Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.

1e

LEVEL OF SERVICE CRITERIA
FOR SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80

LEVEL OF SERVICE CRITERIA
FOR UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50

HCM Signalized Intersection Capacity Analysis
1: SW 65th Avenue & SW Lower Boones Ferry Road

11/30/2017

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	232	975	306	102	811	30	365	32	28	63	24	125
Future Volume (vph)	232	975	306	102	811	30	365	32	28	63	24	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.95	0.95			1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.97	1.00
Satd. Flow (prot)	1719	3438	1515	1736	4955		1665	1655			1777	1559
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.64	1.00
Satd. Flow (perm)	1719	3438	1515	1736	4955		1665	1655			1178	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	252	1060	333	111	882	33	397	35	30	68	26	136
RTOR Reduction (vph)	0	0	151	0	4	0	0	6	0	0	0	48
Lane Group Flow (vph)	252	1060	182	111	911	0	230	226	0	0	94	88
Confl. Peds. (#/hr)	5		1	1		5	1		3	3		1
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	pm+ov
Protected Phases	7	4	2	3	8		2	2			6	7
Permitted Phases			4							6		6
Actuated Green, G (s)	15.7	28.4	44.2	6.9	19.6		15.8	15.8			11.6	27.3
Effective Green, g (s)	15.7	28.4	44.2	6.9	19.6		15.8	15.8			11.6	27.3
Actuated g/C Ratio	0.19	0.35	0.55	0.09	0.24		0.20	0.20			0.14	0.34
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	334	1209	914	148	1203		325	324			169	614
v/s Ratio Prot	c0.15	c0.31	0.04	0.06	0.18		c0.14	0.14				0.03
v/s Ratio Perm			0.08								c0.08	0.03
v/c Ratio	0.75	0.88	0.20	0.75	0.76		0.71	0.70			0.56	0.14
Uniform Delay, d1	30.7	24.5	9.3	36.1	28.3		30.3	30.2			32.2	18.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	9.3	7.4	0.1	19.0	2.8		6.9	6.4			3.9	0.1
Delay (s)	40.0	31.9	9.4	55.1	31.1		37.2	36.7			36.1	18.7
Level of Service	D	C	A	E	C		D	D			D	B
Approach Delay (s)		28.6			33.7			36.9			25.8	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.7	Sum of lost time (s)	18.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	62	42	44	3	104	12	182	22	3	11	9	22
Future Vol, veh/h	62	42	44	3	104	12	182	22	3	11	9	22
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	1	1	1	1	1	1	5	5	5
Mvmt Flow	79	54	56	4	133	15	233	28	4	14	12	28
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.6	9.3	10.9	8.4
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	88%	42%	3%	26%
Vol Thru, %	11%	28%	87%	21%
Vol Right, %	1%	30%	10%	52%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	207	148	119	42
LT Vol	182	62	3	11
Through Vol	22	42	104	9
RT Vol	3	44	12	22
Lane Flow Rate	265	190	153	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.367	0.255	0.208	0.073
Departure Headway (Hd)	4.973	4.839	4.907	4.907
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	719	738	726	722
Service Time	3.036	2.901	2.973	2.99
HCM Lane V/C Ratio	0.369	0.257	0.211	0.075
HCM Control Delay	10.9	9.6	9.3	8.4
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.7	1	0.8	0.2

HCM Signalized Intersection Capacity Analysis
1: SW 65th Avenue & SW Lower Boones Ferry Road

11/30/2017

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	803	414	128	1041	40	408	37	36	138	52	302
Future Volume (vph)	226	803	414	128	1041	40	408	37	36	138	52	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.95	0.95			1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.96	1.00
Satd. Flow (prot)	1770	3539	1562	1787	5103		1698	1685			1797	1570
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.96	1.00
Satd. Flow (perm)	1770	3539	1562	1787	5103		1698	1685			1797	1570
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	235	836	431	133	1084	42	425	39	38	144	54	315
RTOR Reduction (vph)	0	0	216	0	5	0	0	7	0	0	0	47
Lane Group Flow (vph)	235	836	215	133	1121	0	251	244	0	0	198	268
Confl. Peds. (#/hr)	1		1	1		1	4		1	1		4
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Split	NA	pm+ov
Protected Phases	7	4	2	3	8		2	2		6	6	7
Permitted Phases			4									6
Actuated Green, G (s)	15.0	24.6	41.0	9.3	18.9		16.4	16.4			13.9	28.9
Effective Green, g (s)	15.0	24.6	41.0	9.3	18.9		16.4	16.4			13.9	28.9
Actuated g/C Ratio	0.18	0.30	0.50	0.11	0.23		0.20	0.20			0.17	0.35
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	322	1059	864	202	1173		338	336			303	637
v/s Ratio Prot	c0.13	0.24	0.05	0.07	c0.22		c0.15	0.14			c0.11	0.08
v/s Ratio Perm			0.09									0.09
v/c Ratio	0.73	0.79	0.25	0.66	0.96		0.74	0.73			0.65	0.42
Uniform Delay, d1	31.7	26.4	11.8	34.9	31.2		30.9	30.8			31.9	20.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	8.0	4.0	0.2	7.5	16.7		8.5	7.6			5.0	0.4
Delay (s)	39.7	30.4	11.9	42.5	47.9		39.4	38.4			36.9	20.7
Level of Service	D	C	B	D	D		D	D			D	C
Approach Delay (s)		26.6			47.3			38.9			27.0	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	82.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	72	164	1	45	1	82	3	2	3	19	81
Future Vol, veh/h	26	72	164	1	45	1	82	3	2	3	19	81
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	28	77	176	1	48	1	88	3	2	3	20	87
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	8	8.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	94%	10%	2%	3%
Vol Thru, %	3%	27%	96%	18%
Vol Right, %	2%	63%	2%	79%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	87	262	47	103
LT Vol	82	26	1	3
Through Vol	3	72	45	19
RT Vol	2	164	1	81
Lane Flow Rate	94	282	51	111
Geometry Grp	1	1	1	1
Degree of Util (X)	0.128	0.321	0.066	0.132
Departure Headway (Hd)	4.937	4.099	4.666	4.289
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	725	879	767	835
Service Time	2.972	2.121	2.698	2.322
HCM Lane V/C Ratio	0.13	0.321	0.066	0.133
HCM Control Delay	8.7	9.1	8	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	1.4	0.2	0.5

HCM Signalized Intersection Capacity Analysis
1: SW 65th Avenue & SW Lower Boones Ferry Road

11/30/2017

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	1014	318	106	844	31	380	33	29	66	25	130
Future Volume (vph)	241	1014	318	106	844	31	380	33	29	66	25	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.95	0.95			1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.96	1.00
Satd. Flow (prot)	1719	3438	1515	1736	4955		1665	1654			1776	1559
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.63	1.00
Satd. Flow (perm)	1719	3438	1515	1736	4955		1665	1654			1166	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	262	1102	346	115	917	34	413	36	32	72	27	141
RTOR Reduction (vph)	0	0	154	0	4	0	0	6	0	0	0	48
Lane Group Flow (vph)	262	1102	192	115	947	0	240	235	0	0	99	93
Confl. Peds. (#/hr)	5		1	1		5	1		3	3		1
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	pm+ov
Protected Phases	7	4	2	3	8		2	2			6	7
Permitted Phases			4							6		6
Actuated Green, G (s)	16.1	29.5	45.6	6.7	20.1		16.1	16.1			12.0	28.1
Effective Green, g (s)	16.1	29.5	45.6	6.7	20.1		16.1	16.1			12.0	28.1
Actuated g/C Ratio	0.20	0.36	0.55	0.08	0.24		0.20	0.20			0.15	0.34
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	336	1232	922	141	1210		325	323			170	617
v/s Ratio Prot	c0.15	c0.32	0.04	0.07	0.19		c0.14	0.14				0.03
v/s Ratio Perm			0.09								c0.08	0.03
v/c Ratio	0.78	0.89	0.21	0.82	0.78		0.74	0.73			0.58	0.15
Uniform Delay, d1	31.4	24.9	9.2	37.2	29.1		31.1	31.0			32.8	18.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	10.9	8.6	0.1	29.1	3.4		8.5	7.9			5.0	0.1
Delay (s)	42.3	33.6	9.4	66.3	32.4		39.6	38.9			37.8	18.9
Level of Service	D	C	A	E	C		D	D			D	B
Approach Delay (s)		30.0			36.1			39.3			26.7	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	82.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	65	44	46	3	108	12	189	23	3	11	9	23
Future Vol, veh/h	65	44	46	3	108	12	189	23	3	11	9	23
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	1	1	1	1	1	1	5	5	5
Mvmt Flow	83	56	59	4	138	15	242	29	4	14	12	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.8	9.4	11.2	8.5
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	88%	42%	2%	26%
Vol Thru, %	11%	28%	88%	21%
Vol Right, %	1%	30%	10%	53%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	155	123	43
LT Vol	189	65	3	11
Through Vol	23	44	108	9
RT Vol	3	46	12	23
Lane Flow Rate	276	199	158	55
Geometry Grp	1	1	1	1
Degree of Util (X)	0.384	0.269	0.217	0.076
Departure Headway (Hd)	5.014	4.882	4.957	4.958
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	711	729	718	714
Service Time	3.082	2.951	3.03	3.048
HCM Lane V/C Ratio	0.388	0.273	0.22	0.077
HCM Control Delay	11.2	9.8	9.4	8.5
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.8	1.1	0.8	0.2

HCM Signalized Intersection Capacity Analysis
1: SW 65th Avenue & SW Lower Boones Ferry Road

11/30/2017

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	835	431	133	1083	42	424	38	37	144	54	314
Future Volume (vph)	235	835	431	133	1083	42	424	38	37	144	54	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.95	0.95			1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.96	1.00
Satd. Flow (prot)	1770	3539	1562	1787	5102		1698	1685			1797	1570
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.96	1.00
Satd. Flow (perm)	1770	3539	1562	1787	5102		1698	1685			1797	1570
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	245	870	449	139	1128	44	442	40	39	150	56	327
RTOR Reduction (vph)	0	0	219	0	5	0	0	7	0	0	0	47
Lane Group Flow (vph)	245	870	230	139	1167	0	261	253	0	0	206	280
Confl. Peds. (#/hr)	1		1	1		1	4		1	1		4
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Split	NA	pm+ov
Protected Phases	7	4	2	3	8		2	2		6	6	7
Permitted Phases			4									6
Actuated Green, G (s)	15.4	25.7	42.5	8.1	18.4		16.8	16.8			14.2	29.6
Effective Green, g (s)	15.4	25.7	42.5	8.1	18.4		16.8	16.8			14.2	29.6
Actuated g/C Ratio	0.19	0.31	0.51	0.10	0.22		0.20	0.20			0.17	0.36
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	329	1098	886	174	1133		344	341			308	646
v/s Ratio Prot	c0.14	0.25	0.05	0.08	c0.23		c0.15	0.15			c0.11	0.08
v/s Ratio Perm			0.09									0.10
v/c Ratio	0.74	0.79	0.26	0.80	1.03		0.76	0.74			0.67	0.43
Uniform Delay, d1	31.8	26.1	11.3	36.6	32.2		31.1	31.0			32.1	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	8.8	4.0	0.2	22.0	34.8		9.2	8.4			5.4	0.5
Delay (s)	40.7	30.1	11.5	58.6	67.0		40.3	39.4			37.5	20.7
Level of Service	D	C	B	E	E		D	D			D	C
Approach Delay (s)		26.4			66.1			39.9			27.2	
Approach LOS		C			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	41.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	82.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	27	75	171	1	47	1	85	3	2	3	20	84
Future Vol, veh/h	27	75	171	1	47	1	85	3	2	3	20	84
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	29	81	184	1	51	1	91	3	2	3	22	90
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.2	8.1	8.8	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	94%	10%	2%	3%
Vol Thru, %	3%	27%	96%	19%
Vol Right, %	2%	63%	2%	79%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	273	49	107
LT Vol	85	27	1	3
Through Vol	3	75	47	20
RT Vol	2	171	1	84
Lane Flow Rate	97	294	53	115
Geometry Grp	1	1	1	1
Degree of Util (X)	0.134	0.336	0.069	0.138
Departure Headway (Hd)	4.977	4.123	4.703	4.328
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	719	872	761	826
Service Time	3.014	2.146	2.738	2.364
HCM Lane V/C Ratio	0.135	0.337	0.07	0.139
HCM Control Delay	8.8	9.2	8.1	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	1.5	0.2	0.5

HCM Signalized Intersection Capacity Analysis
1: SW 65th Avenue & SW Lower Boones Ferry Road

11/30/2017

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	1014	322	107	844	31	383	33	30	66	25	130
Future Volume (vph)	241	1014	322	107	844	31	383	33	30	66	25	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.95	0.95			1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.96	1.00
Satd. Flow (prot)	1719	3438	1515	1736	4955		1665	1654			1776	1559
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.63	1.00
Satd. Flow (perm)	1719	3438	1515	1736	4955		1665	1654			1168	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	262	1102	350	116	917	34	416	36	33	72	27	141
RTOR Reduction (vph)	0	0	156	0	4	0	0	6	0	0	0	48
Lane Group Flow (vph)	262	1102	194	116	947	0	245	234	0	0	99	93
Confl. Peds. (#/hr)	5		1	1		5	1		3	3		1
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	pm+ov
Protected Phases	7	4	2	3	8		2	2			6	7
Permitted Phases			4							6		6
Actuated Green, G (s)	16.1	29.5	45.7	6.7	20.1		16.2	16.2			12.0	28.1
Effective Green, g (s)	16.1	29.5	45.7	6.7	20.1		16.2	16.2			12.0	28.1
Actuated g/C Ratio	0.20	0.36	0.55	0.08	0.24		0.20	0.20			0.15	0.34
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	335	1230	922	141	1208		327	325			170	616
v/s Ratio Prot	c0.15	c0.32	0.04	0.07	0.19		c0.15	0.14				0.03
v/s Ratio Perm			0.09								c0.08	0.03
v/c Ratio	0.78	0.90	0.21	0.82	0.78		0.75	0.72			0.58	0.15
Uniform Delay, d1	31.5	25.0	9.3	37.3	29.1		31.2	31.0			32.9	18.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	11.3	8.7	0.1	30.5	3.4		9.1	7.4			5.0	0.1
Delay (s)	42.8	33.7	9.4	67.8	32.5		40.3	38.4			37.9	19.0
Level of Service	D	C	A	E	C		D	D			D	B
Approach Delay (s)		30.1			36.4			39.3			26.8	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	82.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.1

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	449	5	1	442	4	2
Future Vol, veh/h	449	5	1	442	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	488	5	1	480	4	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	493	0	974	491
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	483	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1071	-	279	578
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	620	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1071	-	279	578
Mov Cap-2 Maneuver	-	-	-	-	279	-
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	619	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0	15.9
HCM LOS			C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	337	1071	-	-	-
HCM Lane V/C Ratio	0.019	0.001	-	-	-
HCM Control Delay (s)	15.9	8.4	0	-	-
HCM Lane LOS	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑			↑	↱	
Traffic Vol, veh/h	451	0	0	443	1	1
Future Vol, veh/h	451	0	0	443	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	490	0	0	482	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	972	490
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	482	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	280	578
Stage 1	-	0	0	-	616	-
Stage 2	-	0	0	-	621	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	280	578
Mov Cap-2 Maneuver	-	-	-	-	280	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	621	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWT	SET
Capacity (veh/h)	377	-	-
HCM Lane V/C Ratio	0.006	-	-
HCM Control Delay (s)	14.6	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	65	45	47	3	108	12	189	23	3	11	9	24
Future Vol, veh/h	65	45	47	3	108	12	189	23	3	11	9	24
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	1	1	1	1	1	1	5	5	5
Mvmt Flow	83	58	60	4	138	15	242	29	4	14	12	31
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.8	9.4	11.2	8.5
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	88%	41%	2%	25%
Vol Thru, %	11%	29%	88%	20%
Vol Right, %	1%	30%	10%	55%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	157	123	44
LT Vol	189	65	3	11
Through Vol	23	45	108	9
RT Vol	3	47	12	24
Lane Flow Rate	276	201	158	56
Geometry Grp	1	1	1	1
Degree of Util (X)	0.384	0.273	0.217	0.078
Departure Headway (Hd)	5.021	4.881	4.962	4.956
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	711	731	718	714
Service Time	3.092	2.952	3.038	3.048
HCM Lane V/C Ratio	0.388	0.275	0.22	0.078
HCM Control Delay	11.2	9.8	9.4	8.5
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.8	1.1	0.8	0.3

HCM Signalized Intersection Capacity Analysis
1: SW 65th Avenue & SW Lower Boones Ferry Road

11/30/2017

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	835	432	134	1083	42	425	38	37	144	54	314
Future Volume (vph)	235	835	432	134	1083	42	425	38	37	144	54	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.95	0.95			1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.96	1.00
Satd. Flow (prot)	1770	3539	1562	1787	5102		1698	1685			1797	1570
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.97			0.96	1.00
Satd. Flow (perm)	1770	3539	1562	1787	5102		1698	1685			1797	1570
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	245	870	450	140	1128	44	443	40	39	150	56	327
RTOR Reduction (vph)	0	0	220	0	5	0	0	7	0	0	0	47
Lane Group Flow (vph)	245	870	230	140	1167	0	261	254	0	0	206	280
Confl. Peds. (#/hr)	1		1	1		1	4		1	1		4
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Split	NA	pm+ov
Protected Phases	7	4	2	3	8		2	2		6	6	7
Permitted Phases			4									6
Actuated Green, G (s)	15.4	25.6	42.4	8.2	18.4		16.8	16.8			14.2	29.6
Effective Green, g (s)	15.4	25.6	42.4	8.2	18.4		16.8	16.8			14.2	29.6
Actuated g/C Ratio	0.19	0.31	0.51	0.10	0.22		0.20	0.20			0.17	0.36
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	329	1094	884	176	1133		344	341			308	646
v/s Ratio Prot	c0.14	0.25	0.05	0.08	c0.23		c0.15	0.15			c0.11	0.08
v/s Ratio Perm			0.09									0.10
v/c Ratio	0.74	0.80	0.26	0.80	1.03		0.76	0.74			0.67	0.43
Uniform Delay, d1	31.8	26.2	11.4	36.5	32.2		31.1	31.0			32.1	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	8.8	4.1	0.2	21.5	34.8		9.2	8.5			5.4	0.5
Delay (s)	40.7	30.3	11.5	58.0	67.0		40.3	39.5			37.5	20.7
Level of Service	D	C	B	E	E		D	D			D	C
Approach Delay (s)		26.5			66.0			39.9			27.2	
Approach LOS		C			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	82.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	618	2	1	499	1	1
Future Vol, veh/h	618	2	1	499	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	672	2	1	542	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	674	0	1218	673
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	545	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	917	-	199	455
Stage 1	-	-	-	-	507	-
Stage 2	-	-	-	-	581	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	917	-	199	455
Mov Cap-2 Maneuver	-	-	-	-	199	-
Stage 1	-	-	-	-	507	-
Stage 2	-	-	-	-	580	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0	18.1
HCM LOS			C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	277	917	-	-	-
HCM Lane V/C Ratio	0.008	0.001	-	-	-
HCM Control Delay (s)	18.1	8.9	0	-	-
HCM Lane LOS	C	A	A	-	-
HCM 95th %tile Q(veh)	0	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑			↑	↾	
Traffic Vol, veh/h	619	0	0	499	1	1
Future Vol, veh/h	619	0	0	499	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	673	0	0	542	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	1215	673
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	542	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	200	455
Stage 1	-	0	0	-	507	-
Stage 2	-	0	0	-	583	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	200	455
Mov Cap-2 Maneuver	-	-	-	-	200	-
Stage 1	-	-	-	-	507	-
Stage 2	-	-	-	-	583	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0	18.1
HCM LOS			C

Minor Lane/Major Mvmt	NELn1	NWT	SET
Capacity (veh/h)	278	-	-
HCM Lane V/C Ratio	0.008	-	-
HCM Control Delay (s)	18.1	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	27	76	171	1	47	1	85	3	2	3	20	84
Future Vol, veh/h	27	76	171	1	47	1	85	3	2	3	20	84
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	29	82	184	1	51	1	91	3	2	3	22	90
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	8.1	8.8	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	94%	10%	2%	3%
Vol Thru, %	3%	28%	96%	19%
Vol Right, %	2%	62%	2%	79%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	274	49	107
LT Vol	85	27	1	3
Through Vol	3	76	47	20
RT Vol	2	171	1	84
Lane Flow Rate	97	295	53	115
Geometry Grp	1	1	1	1
Degree of Util (X)	0.134	0.338	0.069	0.138
Departure Headway (Hd)	4.981	4.124	4.704	4.332
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	719	872	760	826
Service Time	3.018	2.148	2.74	2.368
HCM Lane V/C Ratio	0.135	0.338	0.07	0.139
HCM Control Delay	8.8	9.3	8.1	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	1.5	0.2	0.5

Technical Memorandum

LANCASTER ENGINEERING

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Portland, OR 97204
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lancasterengineering.com

To: Tony Doran, City of Tualatin

Copy: Frank Angelo, Angelo Planning

From: Todd E. Mobley, PE

Date: January 5, 2018

Subject: TVF&R Station 39 – Transportation Impact Study Addendum #1

Introduction

At your request, this memorandum is written to provide a comparison of the proposed Tualatin Valley Fire and Rescue Station #39 with a reasonable worst-case development that could be constructed on the site under the existing industrial zone. The fire station is allowed as a conditional use in the existing zone and an examination of how the fire station affects conditions at the planning horizon is also included.

Trip Generation Comparison

As shown in the Transportation Impact Study[1], the fire station is expected to generate a total of 12 trips during the morning peak hour, 4 trips during the evening peak hour, and a weekday total of 54 trips.

To estimate potential trip generation of the building if it were to be re-occupied by an industrial user that is allowed in the current zone, trip rates from the *Trip Generation Manual* [2] were used. The trip rates are from land-use category 110, General Light Industrial and are based on the building square footage. The results of the trip generation calculations show that an industrial use of the fire station building would generate 9 trips during the morning peak hour, 9 trips during the evening peak hour, and a total of 66 weekday trips. The table below shows a summary of the trip generation comparison.

Table 1: Trip Generation Comparison

Land Use	Size	AM Peak Hour	PM Peak Hour	Weekday
Proposed Fire Station	9,500 sf	12	4	54
General Light Industrial	9,500 sf	9	9	66
Net Increase in Trips		3	-5	-12

[1] Tualatin Valley Fire & Rescue Station #39 Rivergrove, Transportation Impact Study, Table 2 on page 7
[2] Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition, 2012.

Planning Horizon Conditions

As shown in Table 1, the proposed fire station represents a reduction in trip generation during the evening peak hour and over a typical weekday and only a minor increase during the morning peak hour. The two uses are very similar in trip generation and the proposed conditional use for the fire station does not increase the trip generation of the site above what would be allowed outright in the zone.

As such, development of this intensity is already considered in the City of Tualatin's Comprehensive Plan, including the Transportation System Plan (TSP) and its planning-horizon analyses. There will be no long-term traffic impacts to surrounding streets and intersections above what is already considered in the TSP as a result of the proposed fire station.

TRIP GENERATION CALCULATIONS

Land Use: General Light Industrial
Land Use Code: 110
Variable: 1,000 Square Feet
Variable Quantity: 9.5

AM PEAK HOUR

Trip Rate: 0.92

	Enter	Exit	Total
Directional Distribution	88%	12%	
Trip Ends	**8**	**1**	**9**

PM PEAK HOUR

Trip Rate: 0.97

	Enter	Exit	Total
Directional Distribution	12%	88%	
Trip Ends	**1**	**8**	**9**

WEEKDAY

Trip Rate: 6.97

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**33**	**33**	**66**

SATURDAY

Trip Rate: 1.32

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**6**	**6**	**12**

Source: TRIP GENERATION, Ninth Edition

Tualatin Valley Fire & Rescue
Station 39

Conditional Use Application

Submitted by: Tualatin Valley Fire & Rescue (TVF&R)
11945 SW 70th Avenue
Tigard, OR 97223
503-649-8577

Prepared by: Angelo Planning Group (APG)
921 SW Washington Street, Suite 468
Portland, OR 97205
503-224-6974

December 2017

City of Tualatin
www.tualatinoregon.gov

APPLICATION FOR CONDITIONAL USE PERMIT

Code Information:		
Code Section: Section 60.040(1)(f)	Condition Use to Allow: Fire Station	
Assessor's Map Number: 2S I 13DD	Tax Lot #: 1601	Lot area in acres: 1.16
Address of Property: Adjacent to 7100 SW McEawan		
City: Tualatin	State: OR	ZIP Code: 97062
Existing Buildings (# and type): 0	Current use: Vacant	

Applicant		
Name: Frank Angelo	Company Name: Angelo Planning Group	
Address: 921 SW Washington Street, Suite 468		
City: Portland	State: OR	ZIP Code: 97205
Phone: 503-227-3664	Fax:	Email: fangelo@angeloplanning.com
Applicant's Signature:		Date: 12/5/17

Property Owner		
Name: Tualatin Valley Fire & Rescue, Siobhan Kirk		
Address: 11945 SW 70th Avenue		
City: Tigard	State: OR	ZIP Code: 97223
Phone: 503-649-8577	Fax:	Email: Siobhan.Kirk@tvfr.com
Property Owner's Signature:		Date 12-06-2017
(Note: Letter of authorization is required if not signed by owner)		

Contact		
Name:		
Address:		
City:	State:	ZIP Code:
Phone:	Fax:	Email:

As the person responsible for this application, I, the undersigned, hereby acknowledge that I have read the above application and its attachments, understand the requirements described herein, and state that the information supplied is as complete and detailed as is currently possible, to the best of my knowledge.

Applicant's Signature:	Date: 12/1/17

Office Use		
Case No:	Date Received:	Received by:
Fee: Complete Review:	Receipt No:	

Revised: 5/15/15

Project Team

Applicant:

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Architect:

Michael Bonn, AIA
Ankrom Mosian Architects
38 NW Davis Street #300
Portland, OR 97209
Phone: 503-245-7100
Email: MichaelB@ankrommoisan.com

Civil Engineering

Bruce Baldwin
AKS Engineering
12965 SW Herman Road #100
Tualatin, OR 97062
Phone: 503-563-6151
Email: bruce@aks-eng.com

Transportation Engineering

Todd Mobley
Lancaster Engineering
321 SW 4th Avenue
Portland, OR 97204
Phone: 503-248-0313
Email: todd@lancasterengineering.com

Development Application Summary Information

Site Address	Adjacent to 7100 SW McEwan Rd, Tualatin, OR 97062
Tax Lot ID	2S1 13DD TL 1601
Current Zoning	Light Manufacturing (ML)
Applications Submitted	Conditional Use Permit
Site Size	1.16 acres

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Development Application for TVF&R Station 39

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Section 1: Project Information

General Description

Tualatin Valley Fire & Rescue (TVF&R) is seeking Conditional Use approval from the City of Tualatin to construct a new fire station (Station 39) on tax lot 1601, located on SW McEwan Road, south of SW Boones Ferry Road (see Figure 2).

Site and Context

The site is a new tax lot approximately 1.16 acres in size (see Exhibit 5).[1] The site for Station 39 is zoned Light Industrial (ML), as shown in Figure 2. The site has frontage on SW McEwan and is surrounded on three sides by U-Haul, a storage facility permitted in the ML zone. Additional storage facilities are located across SW McEwan from the subject site. Other prominent features around the site include Interstate 5 to the west with commercial shopping area beyond that; and the P&W rail line to the south and east with additional light manufacturing and residential areas zoned for medium-high density dwellings.

Technical Details

The proposed building will be a single-story, hip roofed fire station approximately 9,500 square feet and will include a 600-square foot community room (see Exhibit 2 for preliminary site plan drawings and building elevations). The building will house the station's firefighters and have an interior two-space parking bay for fire trucks and necessary emergency apparatus. There are 12 staff and 21 public (33 total) parking spaces proposed on-site to serve the fire station and community room. Station 39 will include 24-hour staffing starting with four persons per shift and ultimately grow to six-person shifts.[2]

The building will look similar to TVF&R Station 55 which is currently under construction in the City of West Linn. The primary exterior building materials will consist of brick masonry veneer, metal wall panels, and precast concrete. Other materials include metal clad wood windows, steel apparatus bay doors, standing seam metal roofing, and hollow metal and aluminum entrance doors.

Neighborhood and Community Outreach

A formal Neighborhood/Developer Meeting was held on November 7, 2017. The meeting was held at Juanita Pohl Center at 8513 SW Tualatin Road. TVF&R representatives reviewed the proposed project, the need for the new station, and described the architectural features. The audience asked a number of questions. Additional information on the Neighborhood/Developer Meeting, including the list of recipients for the mailed notice, and presentation materials, can be found in Exhibit 6.

Project Schedule

Following approval of the Conditional Use for Station 39, TVF&R will submit an Architectural Review 2 application for the building to the City of Tualatin. Assuming Architectural Review approval in early summer, construction of Station 39 could begin in the fall of 2018 with occupancy and operation by the end of 2019.

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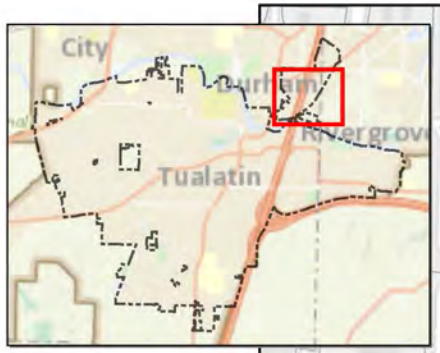
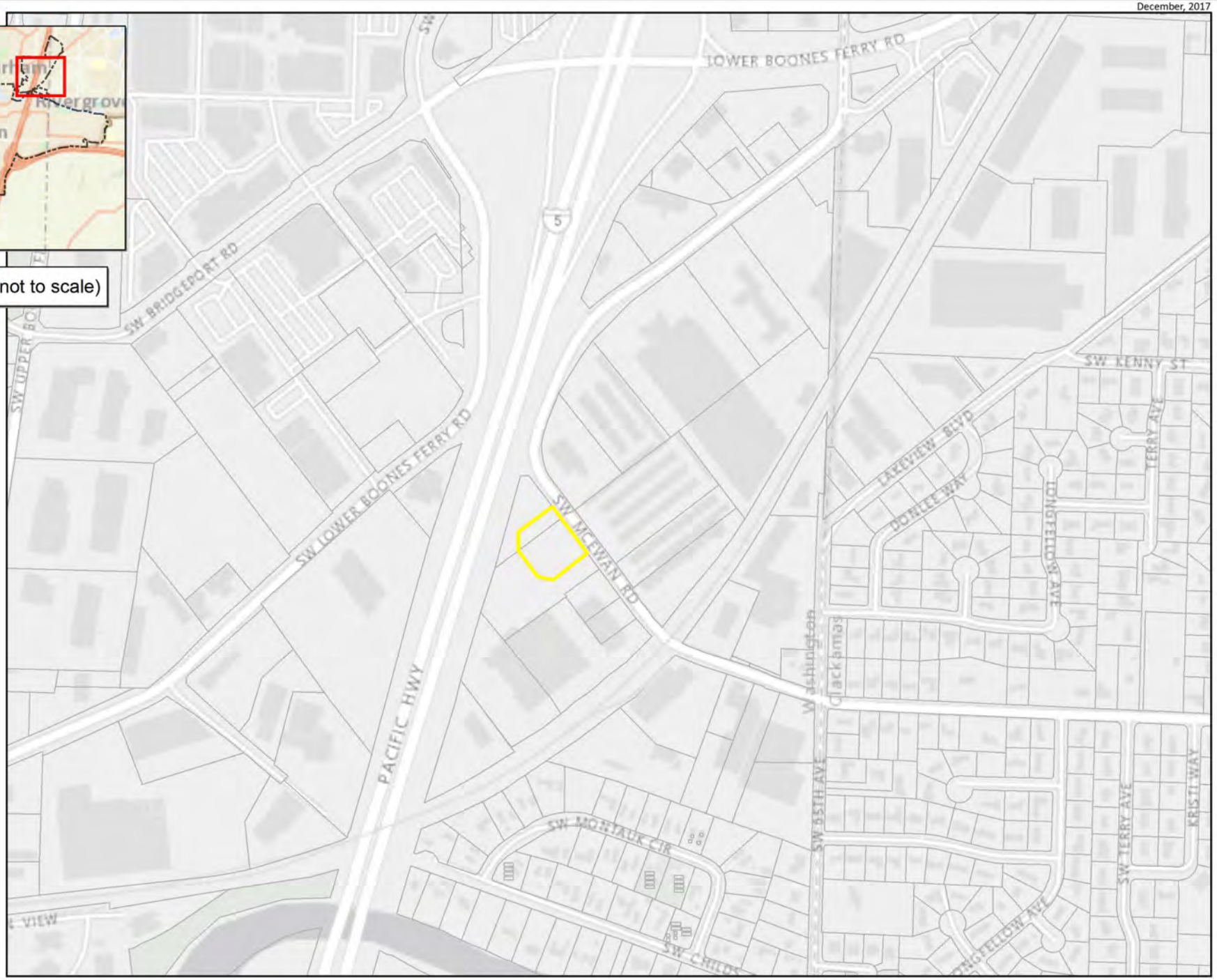
[1] See Exhibits 7 and 8. On May 4, 2017, the Washington County Circuit Court granted plaintiffs (TVF&R) Motion for Entry of an Order of Immediate Possession. Accordingly, as of May 5, 2014, TVFR has immediate legal possession of the property, and as such may proceed with moving forward with its project.

[2] The maximum occupancy (six staff) is used in the transportation impact study as evaluated in Exhibit 3

December, 2017



Station 39 (not to scale)



N

0 200 400 Feet

TVF&R Station 39
Vicinity Map

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
Data Sources:

APG

Figure
1

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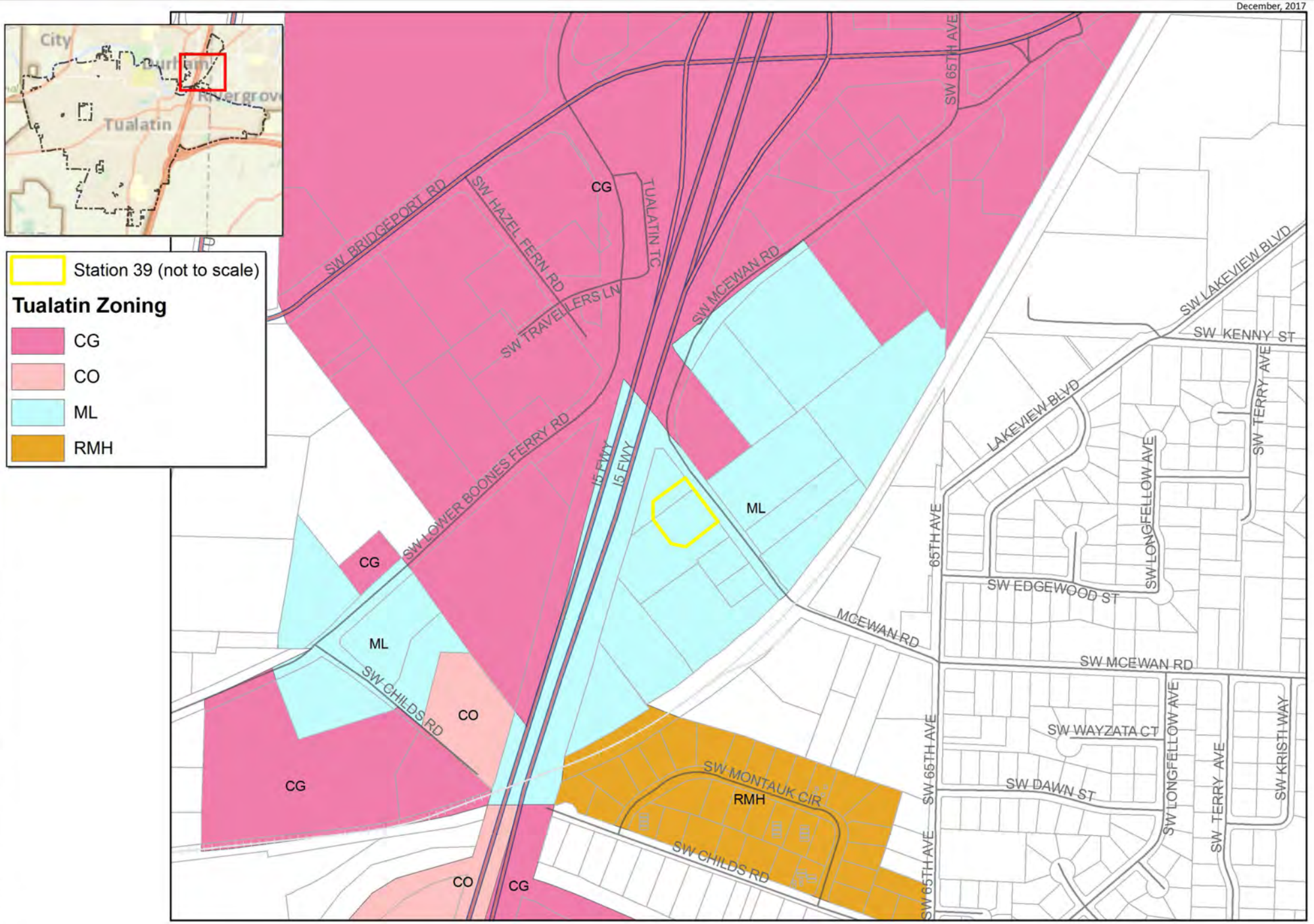
December, 2017



N

0 200 400 Feet

Tualatin Zoning
TVF&R Station 39

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
Data Sources:

APG

Figure **2**

N:\Projects\006034 TVFR Station 39 (Tualatin)\2017 Project\Application\Figures\zoning.mxd - cdoxsee - 11/28/2017

Section 2: Tualatin Development Code

Light Manufacturing Planning District (ML) (TDC Chapter 60)

Station 39 is located in the ML zoning district. As noted in TDC Section 60.040(1)(f), a Fire Station is permitted in the ML zone as a Conditional Use.

Conditional Use Approval Criteria (TDC 32.030)

Pursuant to Section 32.030, Tualatin City Council may allow a conditional use, after conducting a public hearing, provided that the applicant, TVF&R demonstrates a fire station satisfies the following criteria.

(1) The use is listed as a conditional use in the underlying planning district.

Response: Station 39 is located in the ML zoning district. As noted in TDC Section 60.040(1)(f), a Fire Station is permitted in the ML zone as a Conditional Use.

(2) The characteristics of the site are suitable for the proposed use, considering size, shape, location, topography, existence of improvements and natural features.

Response: The site characteristics are compatible with other TVF&R stations throughout the District. The site size (1.16 acres) is consistent with comparable TVF&R stations and can accommodate the building program for Station 39. There are no topographic or natural features on the site that will impact construction of Station 39. TVF&R has identified the location as an appropriate location to meet required service response standards and needs of the District. It's location near Interstate 5 will provide quick response to incidents on the freeway as well as quick emergency response to the surrounding community. TVF&R's Station 34 is located in the City of Tualatin but is on the westside of Interstate 5 just off Tualatin Sherwood Road (19365 SW 90th Court). Station 39's location on the eastside of Interstate 5 will significantly enhance response times for emergency services, making this location very suitable for the proposed use.

(3) The proposed development is timely, considering the adequacy of transportation systems, public facilities, and services existing or planned for the area affected by the use.

Response: The construction of the proposed Station 39 is funded through General Fund and a Local Option Levy approved by District voters in 2014 to upgrade and improve the safety and operations of TVF&R's fire stations. TVF&R identified the need for a station in this location to ensure quick response times in the future as development continues in Tualatin, Lake Oswego, and Tigard. Public services are immediately available to the site. As noted in the Traffic Impact Analysis submitted with this application (Exhibit 3), Station 39 traffic will not adversely impact the existing transportation system. The analysis notes that Station 39 will generate a small number of daily trips that can easily be accommodated on the transportation system.

(4) The proposed use will not alter the character of the surrounding area in any manner that substantially limits, impairs, or precludes the use of surrounding properties for the primary uses listed in the underlying planning district.

Response: The location of Station 39 will allow uses on the property immediately adjacent to Station 39 to continue operating and will not limit or preclude the use of surrounding property. As can be seen on the attached Station 39 site plan (Exhibit 2), TVF&R will take direct access to SW McEwan Road and will not impede or conflict with access to surrounding properties. The Traffic Impact Analysis submitted with this application indicates that Station 39 traffic will not adversely impact the existing transportation system. The analysis notes that Station 39 will generate a small number of daily trips that can easily be accommodated on the transportation system.

The site plan also notes how stormwater will be accommodated on-site and in a manner that will not impact adjacent properties. As well landscaping provided with the project will create a visual buffer between Station 39 and adjacent properties.

The emergency services use is not out of character with surrounding land uses in the ML zone. Medical offices are located across SW McEwan from Station 39. As can be seen from the building elevations submitted with this application Station 39 will be an appropriate design and will not be out of character with existing industrial and office buildings on surrounding properties.

(5) The proposal satisfies those objectives and policies of the Tualatin Community Plan that are applicable to the proposed use.

Response: The Tualatin Community Plan, which is the City comprehensive plan, is integrated within the Tualatin Development Code (TDC) as Chapters 1-30. Based on discussions with City of Tualatin staff, the following two sections of the TDC are applicable to the proposed use:

A. Section 7.040 Manufacturing Planning District Objectives.

This section describes the purpose of each manufacturing planning district.

(2) Light Manufacturing Planning District (ML)

(a) Suitable for warehousing, wholesaling and light manufacturing processes that are not hazardous and that do not create undue amounts of noise, dust, odor, vibration, or smoke. Also suitable, with appropriate restrictions, are the retail sale of products not allowed for sale in General Commercial areas, subject to the Special Commercial Setback from arterial streets and Commercial Services Overlay as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035, and office commercial uses where any portion of a legally created lot is within 60 feet of a CO Planning District boundary. Also suitable is the retail sale of products manufactured, assembled, packaged or wholesaled on the site provided the retail sale area, including the showroom area, is no more than 5% of the gross floor area of the building not to exceed 1,500 square feet. Also suitable for the retail sale of home improvement materials and supplies provided it is not greater than 60,000 square feet of gross floor area per building or business and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035. Rail access and screened open storage allowed in these areas will conform to defined architectural, landscape and environmental design standards.

B. Chapter 60: Light Manufacturing Planning District (ML)

Section 60.010 Purpose.

The purpose of this district is to provide areas of the City that are suitable for industrial uses and compatible with adjacent commercial and residential uses. The district serves to buffer heavy manufacturing uses from commercial and residential areas. The district is suitable for warehousing, wholesaling, and light manufacturing processes that are not hazardous and do not create undue amounts of noise, dust, odor, vibration, or smoke. The district is also suitable for retail sale of products manufactured, assembled, packaged or wholesaled on the site provided the retail sale area, including the showroom area, is no more than 5% of the gross floor area of the building not to exceed 1,500 square feet and, with appropriate restrictions, for retail sale of products not allowed for sale in General Commercial Planning Districts, and office commercial uses where any portion of a legally created lot is within 60 feet of a CO Planning District boundary. Railroad access and screened outdoor storage will be allowed in this district, conforming to defined architectural, landscape, and environmental design standards. In accordance with the Industrial Business Park Overlay District, TDC Chapter 69, and TDC 60.037-60.038 selected small-scale mixed uses that are supportive of and secondary to industrial uses are allowed to provide services to businesses and employees. The purpose is also to allow certain commercial service uses in the Commercial Services Overlay shown in the specific areas illustrated on Map 9-5 and selected commercial uses subject to distance restrictions from residential areas and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035.

Locating TVF&R Station 39 in the ML district is appropriate. As noted in TDC Section 60.040(1)(f), a Fire Station is permitted in the ML zone as a Conditional Use. The use is not hazardous and will not create undue amounts of noise, dust, odor, vibration, or smoke. Any noise generated will be limited. Station 39 will not require sirens to sound at or near the site. Fire personnel are not required to sound sirens when leaving the station, the lights on the apparatus normally are sufficient to stop traffic. The only time the fire apparatus operators would be required to use their sirens would be when they pass through a traffic signal. Regardless, there are no noise sensitive uses near the site.

The City's comprehensive plan is designed to promote public health, safety, and welfare. Providing opportunities for emergency services to operate within the City is a critical aspect of community health, safety, and welfare. As noted earlier, locating Station 39 at this site will allow TVF&R to achieve their emergency services response times. As well, the Traffic Impact Analysis submitted with this application indicates that Station 39 traffic will not adversely impact the existing transportation system. The analysis notes that Station 39 will generate a small number of daily trips that can easily be accommodated on the transportation system.

Summary

This proposal for Conditional Use approval for Station 39 satisfies the objectives and policies of the Tualatin Community Plan that are applicable to the proposed use. Therefore, the Conditional Use should be approved.

Exhibits

Exhibit 1 – Pre-Application Form

Exhibit 2 – Station 39 Site Plan and Building Elevations

Exhibit 3 – Transportation Impact Study

Exhibit 4 – Clean Water Services (CWS) Service Provider Letter

Exhibit 5 – Washington County Assessor Map

Exhibit 6 – Neighborhood/Developer Meeting Notice and Materials

Exhibit 7 – Order Granting Plaintiff's Motion of Immediate Possession (Case No. 17CV14497)

Exhibit 8 - Letter from Cynthia Fraser (on behalf of TVF&R) to Sean Brady (City Attorney)

LAND USE PLANNING
TRANSPORTATION PLANNING
PROJECT MANAGEMENT

MEMORANDUM

TVF&R Station 39

Pre-Application Conference Request

DATE	September 11, 2017
TO	City of Tualatin
FROM	Frank Angelo, APG
CC	Siobhan Kirk, TVF&R Jennifer Jenkins, Ankrom Mosian Architects Michael Bonn, Ankrom Moisan Architects Bruce Baldwin, AKS Todd Mobley, Lancaster Engineering Jamin Kimmel, APG

Tualatin Valley Fire & Rescue is proposing to develop a new fire station (Station 39) on SW McEwan Road south of SW Boones Ferry Road. The new station will be approximately 9,500 square feet and will include a 600-square foot community room. The building will house the station's firefighters and have an interior two-space parking bay for fire trucks and necessary emergency apparatus. There are 36 parking spaces proposed on-site to serve the fire station and community room. Station 39 will include 24-hour staffing starting with 4 persons per shift and ultimately growing to 6 person shifts. The building will look similar to TVF&R Station 55 which is currently under construction in the City of West Linn.

<u>Questions for the Pre-Application Conference</u>

1. Describe the Conditional Use and Architectural review standards, review procedures and schedule.
2. Discuss Neighborhood Meeting requirements.
3. Identify Transportation Assessments that will be required (if any).
4. Describe CWS review requirements.

Attachments: Pre-Application Conference Form
Station 39 Preliminary Site Plan
Station 39 Preliminary Building Elevations
Pre-Application Fee (provided separately)

City of Tualatin

COMMUNITY DEVELOPMENT PLANNING DIVISION

Pre-Application Meeting Request

The purpose of the Scoping and Pre-Application meetings is to offer early assistance in the land use and permitting process. This includes thoughtful feedback on preliminary design direction and visioning, outlining expectations, and to assist the applicant in attaining a complete application at first submittal.

PROJECT DESCRIPTION

Project name/title: TVF&R Station 39

What is the primary purpose of this pre-application meeting (What would you like to accomplish)? (Attach additional sheets if needed.)

- Review Station 39 site plan
- Discuss site issues
- Determine review processes & standards

PROPERTY INFORMATION

Property address/location(s): Adjacent to 7100 SW McEwan, Tualatin, OR 97062

Tax map and tax lot no.(s): 2S 113DD TL 1600/1700

Zoning: ML

PROPERTY OWNER/HOLDER INFORMATION

Name(s): Tualatin Valley Fire & Rescue c/o Siobhan Kirk

Address: 11945 SW 70th Ave Phone: 503.649.8577

City/state: Tigard, OR Zip: 97223

APPLICANT INFORMATION

Name: Angelo Planning Group

Address: 921 SW Washington St Phone: 503.649.8577

City/state: Portland, OR Zip: 97205

Contact person: Frank Angelo

Phone: 503.227.3664 Email: fangelo@angeloplanning.com

Pre-application Conference Information

All of the information identified on this form is required and must be submitted to the Planning Division with this application. Conferences are scheduled subject to availability and a minimum of two weeks after receiving this application and all materials. Pre-application conferences are one (1) hour long and are typically held on Mondays between the hours of 3-4 p.m. or Wednesdays between 2-4 p.m.

REQUIRED SUBMITTAL ELEMENTS

(Note: Requests will not be accepted without the required submittal elements)

☐ A complete application form and accompanying fee.

1 hard copy and an electronic set of the following:

☐ Preliminary site and building plans, drawn to scale, showing existing and proposed features. (Plans do not need to be professionaly prepared; just accurate and reliable.)

☐ A detailed narrative description of the proposal that clearly identifies the location, existing and proposed uses, and any proposed construction.

☐ A list of all questions or issues the applicant would like the City to address.

FOR STAFF USE ONLY

Case No.: _____

Related Case No.(s): _____

Application fee: _____

Application accepted:

By: _____ Date: _____

Date of pre-app: _____

Time of pre-app: _____

Planner assigned to pre-app: _____

If more than four (4) people are expected to attend the pre-application conference in your group, please inform the City in advance so that alternate room arrangements can be made to accommodate the group.

What type of development are you proposing? (Check all that apply)

[ ] Industrial [ ] Commercial [ ] Residential [X] Institutional [ ] Mixed-use

Please provide a brief description of your project: (Attach additional sheets if needed.) Please include description of existing uses and structures in addition to what is proposed.

Construct a new TVF&R fire station (Station 39). Will include a community room.

Are you familiar with the development process in Washington or Clackamas County or Tualatin?

[X] Yes [ ] No

If yes, please identify an example project:

TVF&R Station 34 in Tualatin

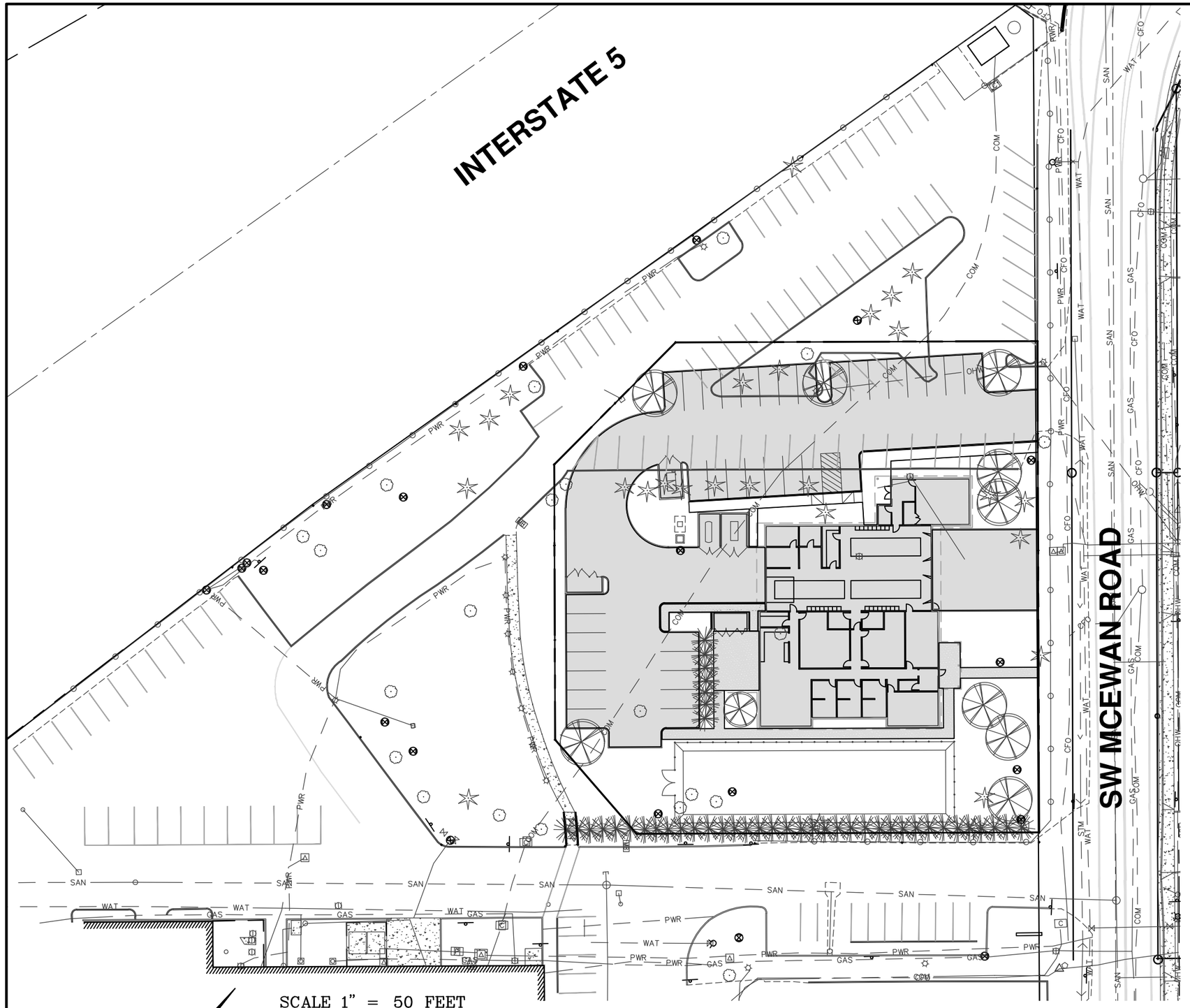
Are you familiar with the sections of the Tualatin Development Code (TDC) that pertain to your proposed development?

[X] Yes [ ] No

Is the property under enforcement action? If yes, please attached a notice of the violation.

Please provide the names of City, TVF&R, CWS, and County staff with whom you have already discussed this proposal:

Scoping meeting held with City staff on March 6, 2016



SCALE 1" = 50 FEET

50 0 20 30 40 50

NOTE: SCALE BAR ACCURATE
WHEN PLOTTED ON 11"x17" SHEET

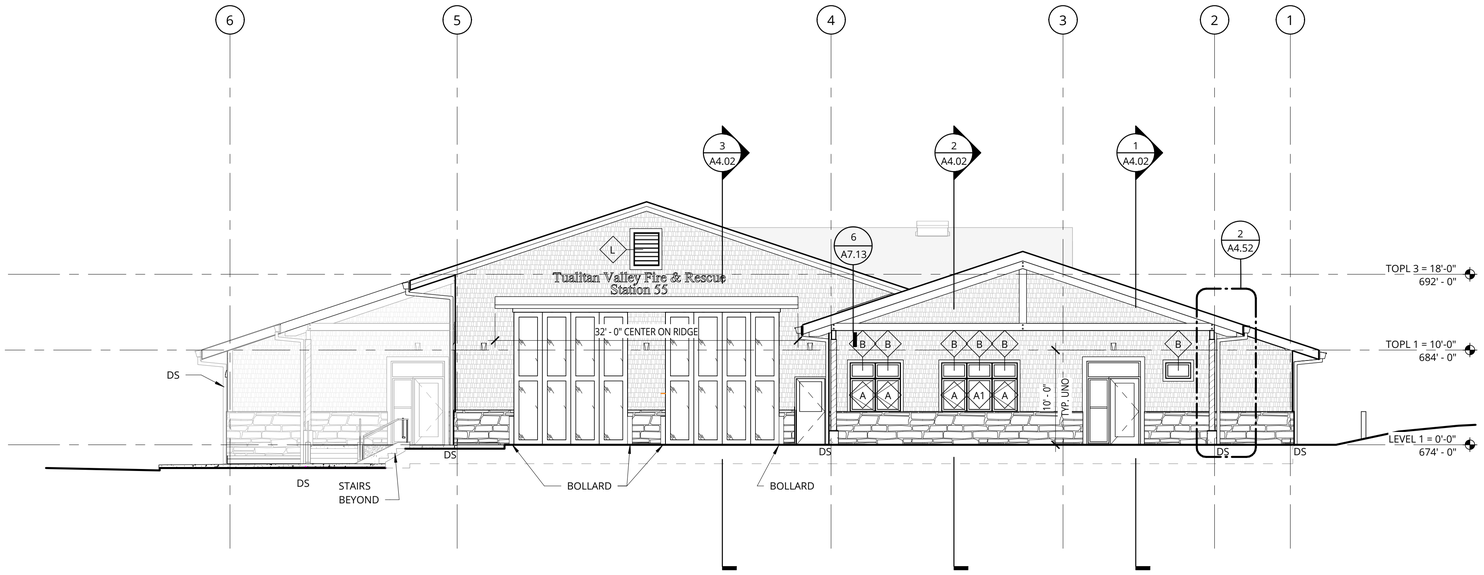
DATE: 09/07/2017

SITE FIT PLAN	EXHIBIT **A**
TVFR STATION 39	

AKS ENGINEERING & FORESTRY, LLC
12965 SW HERMAN RD, STE 100
TUALATIN, OR 97062
P: 503.563.6151 F: 503.563.6152 aks-eng.com

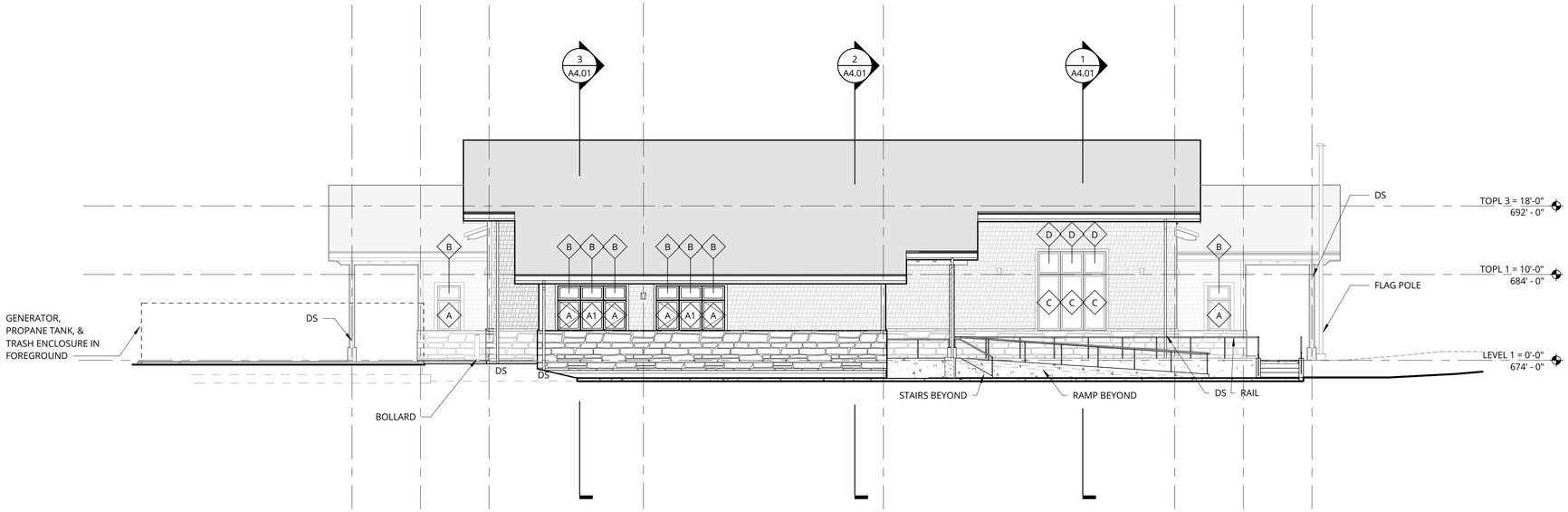
DRWN:	LTP
CHKD:	BRB
AKS JOB:	4756

DWG: 4756 STATION 39 FIT PLAN | LAYOUT1



1 NORTH ELEVATION

1/8" = 1'-0"



2 EAST ELEVATION

1/8" = 1'-0"

GENERAL NOTES - EXTERIOR ELEVATIONS

EXTERIOR ELEVATIONS

1. REFER TO SHEET A0.01 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK
2. ELEVATIONS NOTED ARE RELATIVE TO SEA LEVEL (OR PROJECT DATUM)
3. SEE SHEET A12.21 FOR WINDOW SCHEDULE
4. SEE DOOR SCHEDULE SHEET A12.01 FOR DOOR LOCATIONS AND TYPES.
5. SEE ENLARGED ELEVATIONS AND WALL SECTIONS FOR ADDITIONAL EXTERIOR ENVELOPE DETAILS.

MATERIALS - LEGEND

- FIBER CEMENT SHINGLE SIDING
- SIMULATED STONE
- EXPOSED TIMBER FRAMING
- ASPHALT ROOF SHINGLES
- EXTERIOR LIGHTING
- DS DOWNSPOUT

Ankrom Moisan

38 NW DAVIS ST, SUITE 300
PORTLAND, OR 97209
T 503.245.7100

1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
T 206.576.1600

REGISTERED ARCHITECT
5011
Jennifer Rebecca Jenkins
PORTLAND, OR
STATE OF OREGON

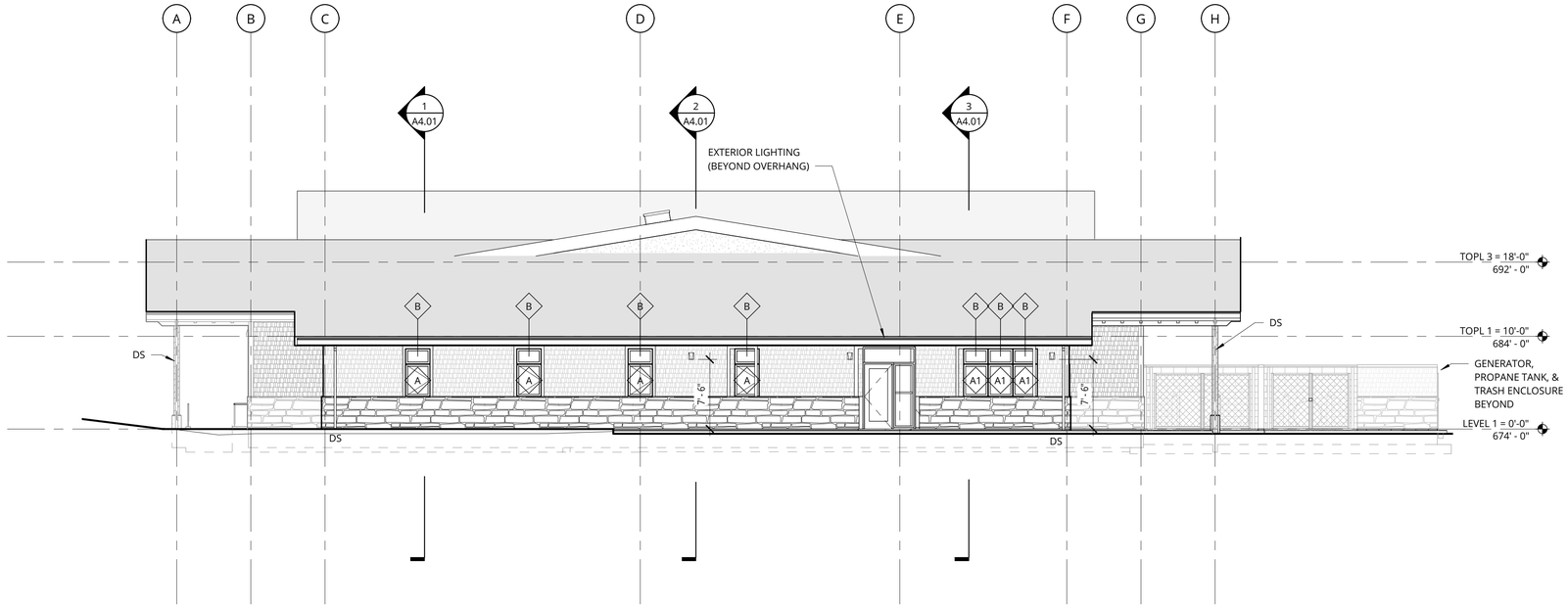
TVF&R Station 55 - Rosemont
20790 Hidden Springs Rd
West Linn, OR 97068
Tualatin Valley Fire & Rescue

REVISION	DATE	REASON FOR ISSUE

N & E EXTERIOR ELEVATIONS

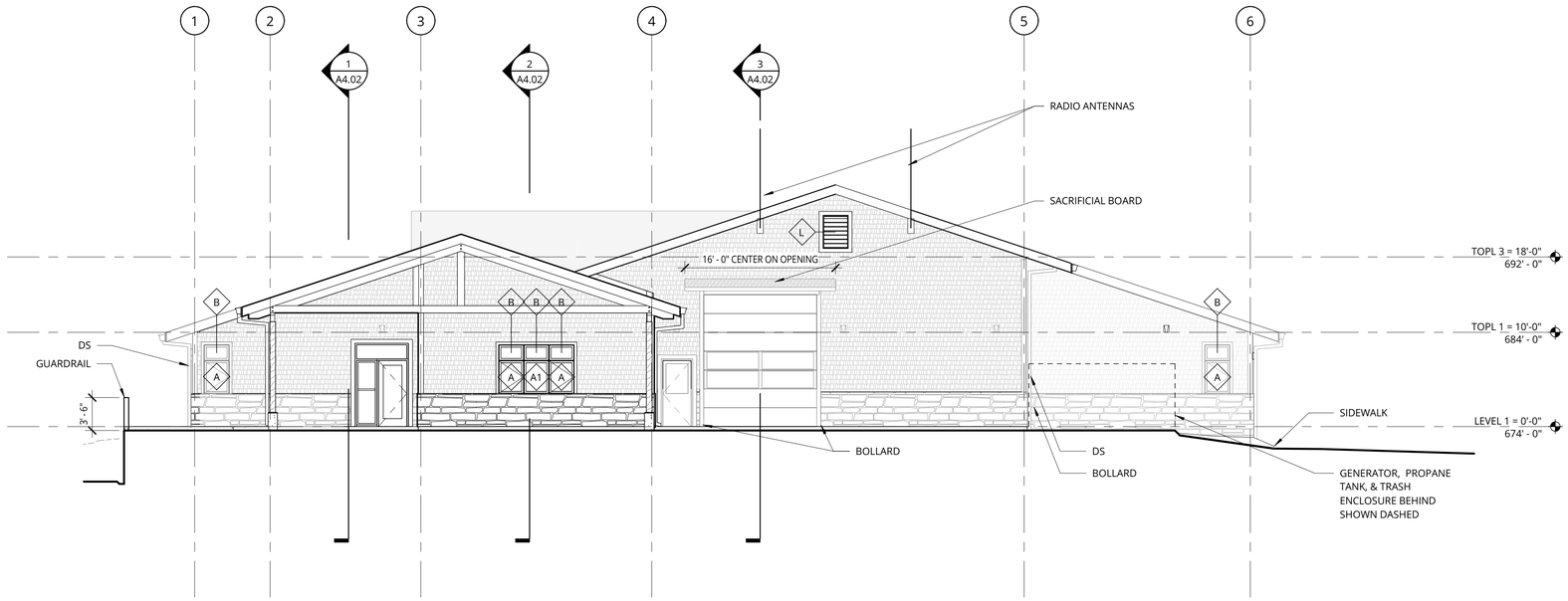
CONSTRUCTION SET

DATE 06/16/17	REVISION
PROJECT NUMBER 160420	SHEET NUMBER A3.11
SCALE As indicated	



2 WEST ELEVATION

1/8" = 1'-0"



1 SOUTH ELEVATION

1/8" = 1'-0"

GENERAL NOTES - EXTERIOR ELEVATIONS

EXTERIOR ELEVATIONS

1. REFER TO SHEET A0.01 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK
2. ELEVATIONS NOTED ARE RELATIVE TO SEA LEVEL (OR PROJECT DATUM)
3. SEE SHEET A12.21 FOR WINDOW SCHEDULE
4. SEE DOOR SCHEDULE SHEET A12.01 FOR DOOR LOCATIONS AND TYPES.
5. SEE ENLARGED ELEVATIONS AND WALL SECTIONS FOR ADDITIONAL EXTERIOR ENVELOPE DETAILS.

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- SIMULATED STONE
- EXPOSED TIMBER FRAMING
- ASPHALT ROOF SHINGLES
- EXTERIOR LIGHTING
- DS DOWNSPOUT

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REGISTERED ARCHITECT
5011
Jennifer Rebecca Jenkins
PORTLAND, OR
STATE OF OREGON

TVF&R Station 55 - Rosemont
20790 Hidden Springs Rd
West Linn, OR 97068

Tualatin Valley Fire & Rescue

REVISION	DATE	REASON FOR ISSUE

S & W EXTERIOR ELEVATIONS

CONSTRUCTION SET

DATE 06/16/17	REVISION
PROJECT NUMBER 160420	SHEET NUMBER A3.12
SCALE As indicated	

TUALATIN VALLEY FIRE & RESCUE - STATION 39

SHEET NUMBER	SHEET NAME	CONDITIONAL USE - 11/22/17
GENERAL		
CS	COVER SHEET	■
ARCHITECTURAL		
A1.01	SITE PLAN	■
A2.01	FLOOR PLAN	■
A2.03	ROOF PLAN	■
A3.11	BUILDING ELEVATIONS	■
A3.12	BUILDING ELEVATIONS	■

CLIENT TEAM

OWNER
TUALATIN VALLEY FIRE AND RESCUE
11945 SW 70th AVE
TIGARD, OR 97223
CONTACT: SIOBHAN KIRK
CONSTRUCTION PROJECT MANAGER
PH:(503) 259-1219
siobhan.kirk@tvfr.com

CIVIL
AKS ENGINEERING
12965 SW HERMAN RD, SUITE 100
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CONTACT: BRUCE BALDWIN
PH: (503)563-6151
bruce@aks-eng.com

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ANKROM MOISAN ARCHITECTS
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(503) 245-7100
michaelb@ankrommoisan.com

STRUCTURAL
KPFF
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PORTLAND, OREGON 97204
CONTACT: STUART FINNEY
PH: (503)227-3251
stuart.finney@kpff.com

MECHANICAL, ELECTRICAL, & PLUMBING
INTERFACE ENGINEERING
100 SW MAIN ST
SUITE 1600
PORTLAND, OR 97204
CONTACT: JEFFREY GLANVILLE
PH: (503)382-2266
JeffreyG@InterfaceEng.Com

LANDSCAPE
OTTEN LANDSCAPE ARCHITECTS
3933 SW KELLY AVE. PORTLAND, OR 97239
BEAVERTON, OREGON 97005
CONTACT: JANET OTTEN
PH: (503) 972-0312
Janet@Ottenla.com

CONSTRUCTION TEAM

GENERAL CONTRACTOR
Emerick Construction Co.
7855 SW MOHAWK ST
TUALATIN, OR 97062

CONTACT: JORDAN FELL	jfell@emerick.com (503)332-5620
BILL JUDGE	billj@emerick.com (503)539-1471
LINDLEY BYNUM	lindleyb@emerick.com (503) 777 5531

NOT FOR CONSTRUCTION

TV F&R STATION 39 - TUALATIN
7100 SW MCEWAN
TUALATIN, OR 97062

TUALATIN VALLEY FIRE & RESCUE

REVISION	DATE	REASON FOR ISSUE

COVER SHEET

CONDITIONAL USE APPLICATION

DATE 11/22/2017
PROJECT NUMBER 173470

SHEET NUMBER
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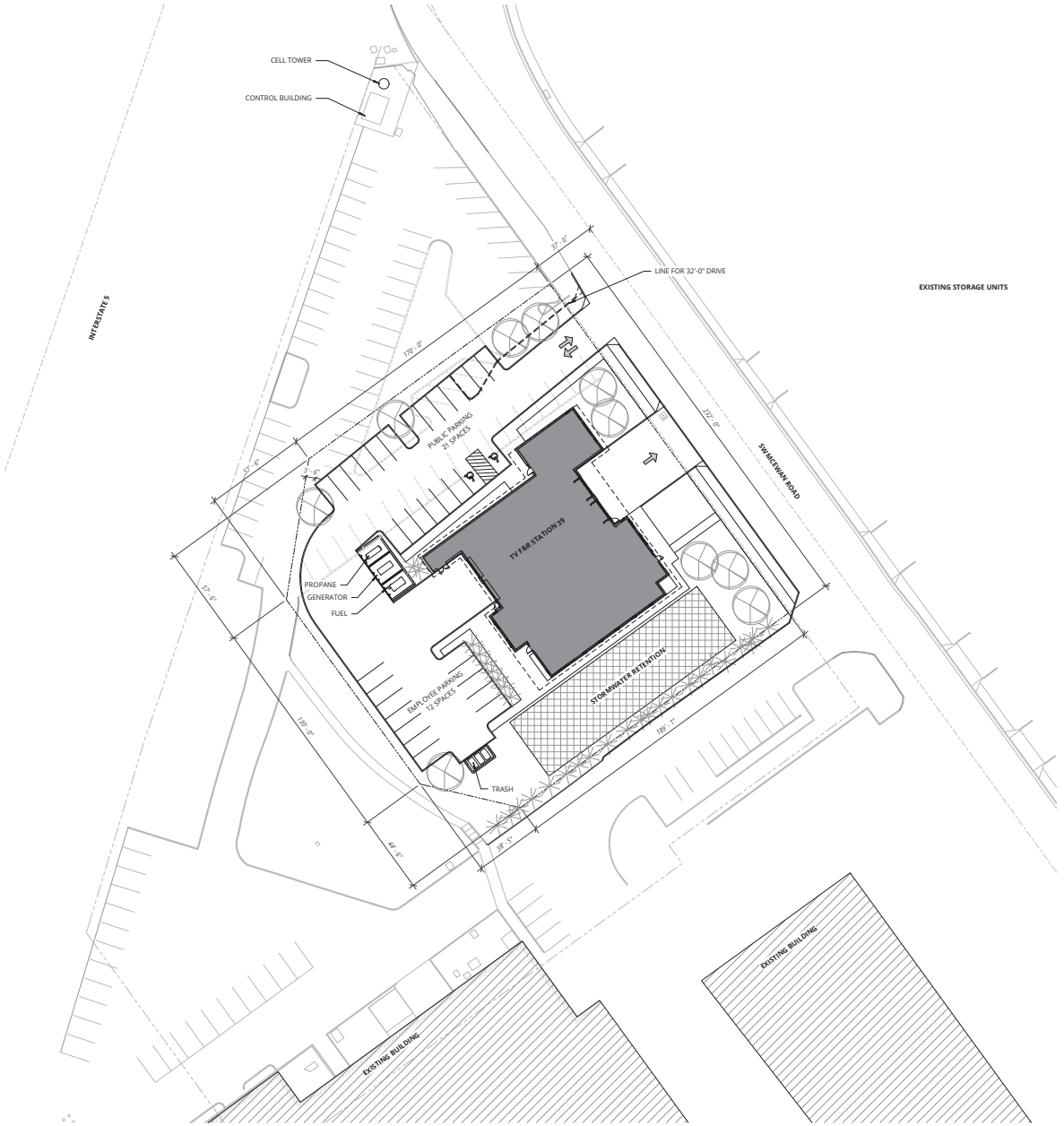

1 ARCHITECTURAL SITE PLAN

1" = 30'-0"

0 15 30 60 120

TRUE

NOT FOR CONSTRUCTION

Ankrom Moisan

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T 503.245.7100

1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
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1014 HOWARD STREET
SAN FRANCISCO, CA 94103
T 415.252.7063

TV F&R STATION 39 - TUALATIN

7100 SW MCEWAN
TUALATIN, OR 97062

TUALATIN VALLEY FIRE & RESCUE

REVISION	DATE	REASON FOR ISSUE

SITE PLAN

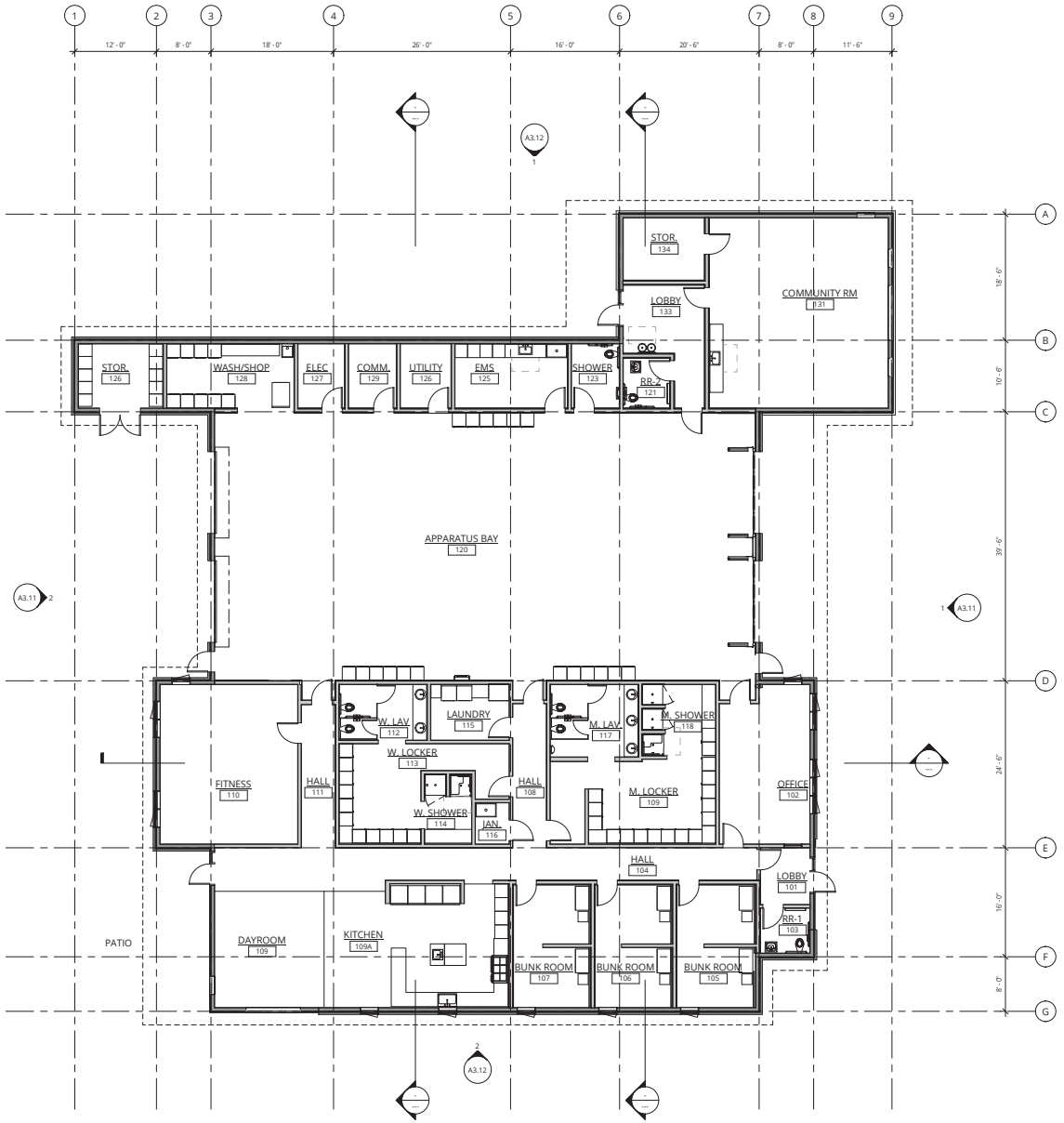
CONDITIONAL USE APPLICATION

DATE 11/22/2017

PROJECT NUMBER 173470

SHEET NUMBER

A1.01



1 FLOOR LEVEL

1/8" = 1'-0"

0 4 8 16 32

PROJECT TRUE

NOT FOR CONSTRUCTION

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300
PORTLAND, OR 97209
T 503.245.7100

1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
T 206.576.1600

1014 HOWARD STREET
SAN FRANCISCO, CA 94103
T 415.252.7063

TV F&R STATION 39 - TUALATIN

7100 SW MCEWAN
TUALATIN, OR 97062

TUALATIN VALLEY FIRE & RESCUE

REVISION	DATE	REASON FOR ISSUE

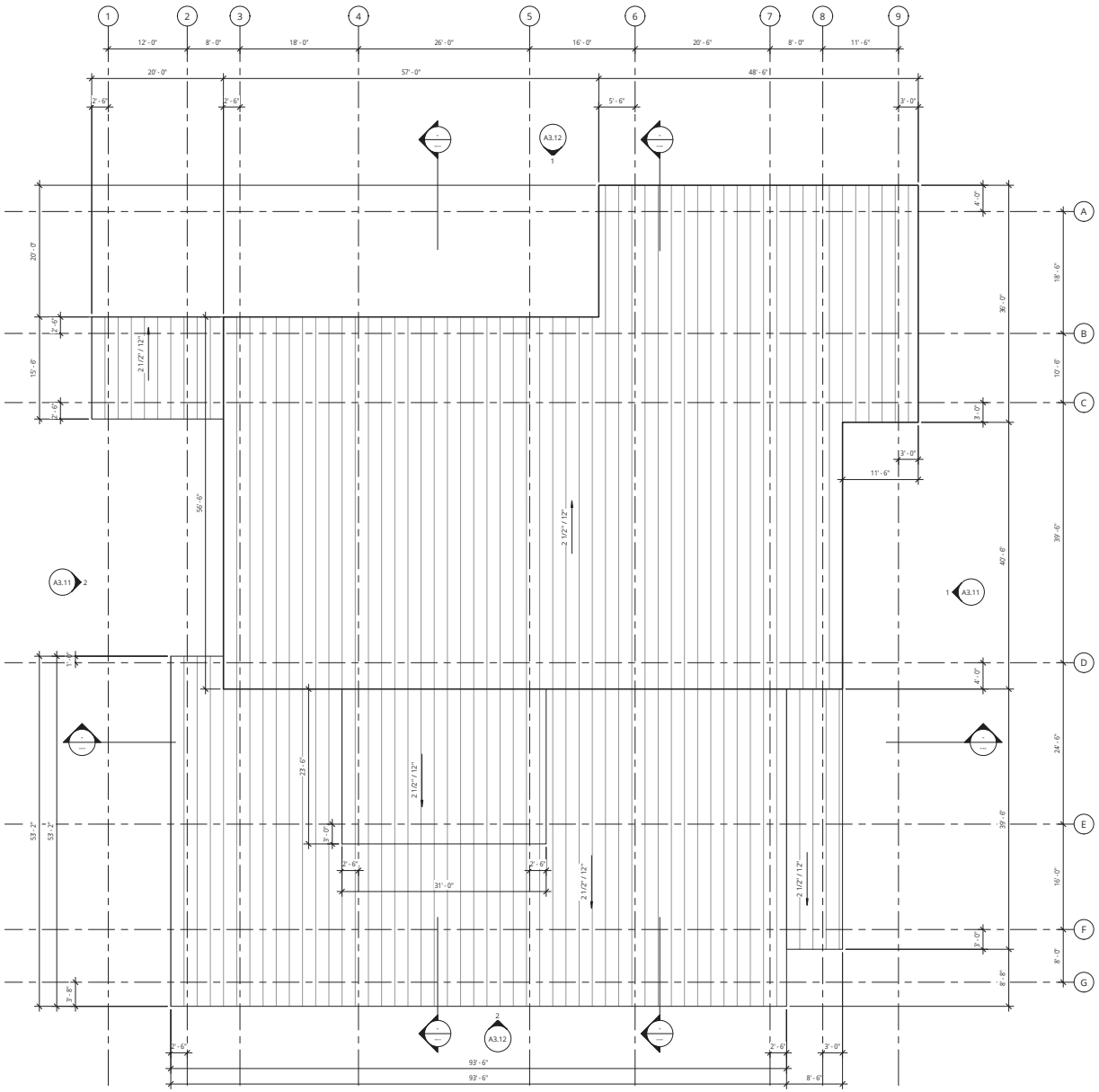
FLOOR PLAN

CONDITIONAL USE APPLICATION

DATE 11/22/2017

PROJECT NUMBER 173470

SHEET NUMBER **A2.01**



1 ROOF LEVEL

1/8" = 1'-0"

0 4 8 16 32

PROJECT TRUE

NOT FOR CONSTRUCTION

Ankrom Moisan

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PORTLAND, OR 97209
T 503.245.7100

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T 415.252.7063

TV F&R STATION 39 - TUALATIN

7100 SW MCEWAN
TUALATIN, OR 97062

TUALATIN VALLEY FIRE & RESCUE

REVISION	DATE	REASON FOR ISSUE

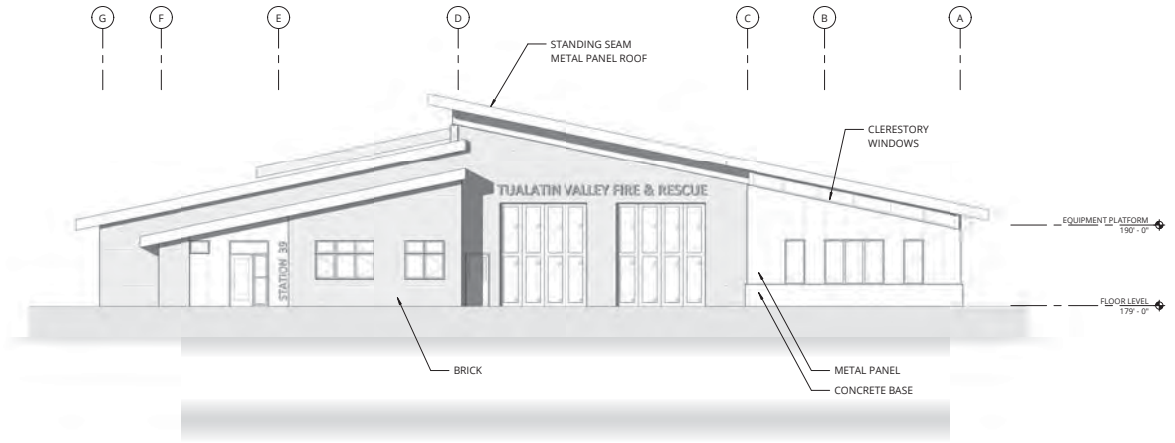
ROOF PLAN

CONDITIONAL USE APPLICATION

DATE	PROJECT NUMBER
11/22/2017	173470

SHEET NUMBER

A2.03



1 NORTH EAST ELEVATION

1/8" = 1'-0"

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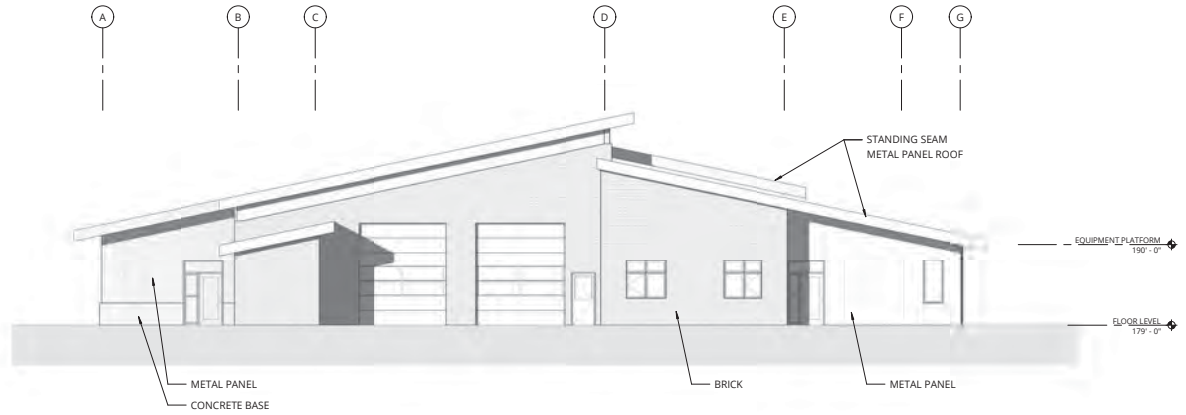


2 SOUTH WEST ELEVATION

1/8" = 1'-0"

0 4 8 16 32

NOT FOR CONSTRUCTION

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300
PORTLAND, OR 97209
T 503.245.7100

1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
T 206.576.1600

1014 HOWARD STREET
SAN FRANCISCO, CA 94103
T 415.252.7063

TV F&R STATION 39 - TUALATIN

7100 SW MCEWAN
TUALATIN, OR 97062

TUALATIN VALLEY FIRE & RESCUE

REVISION	DATE	REASON FOR ISSUE

BUILDING ELEVATIONS

CONDITIONAL USE APPLICATION

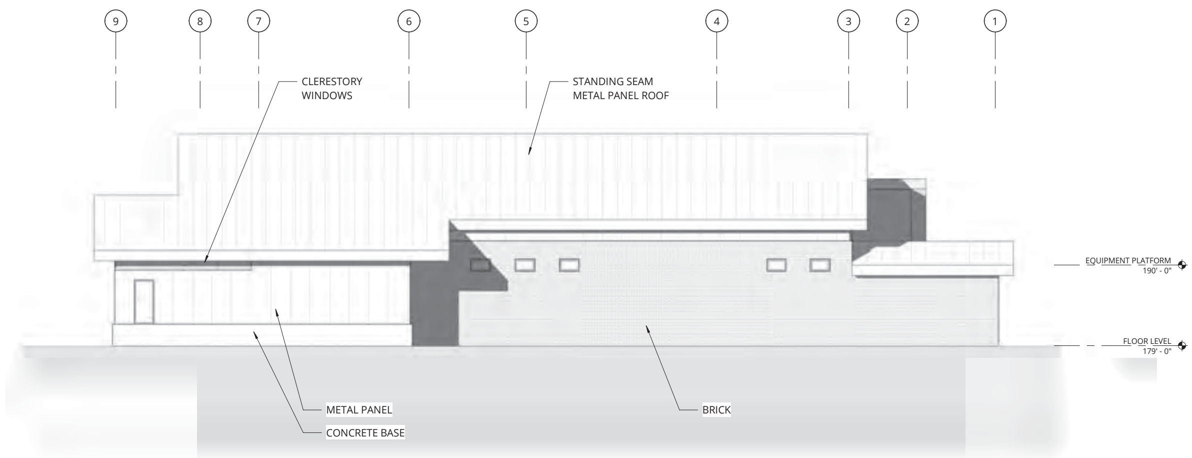
DATE 11/22/2017

PROJECT NUMBER 173470

SHEET NUMBER

A3.11

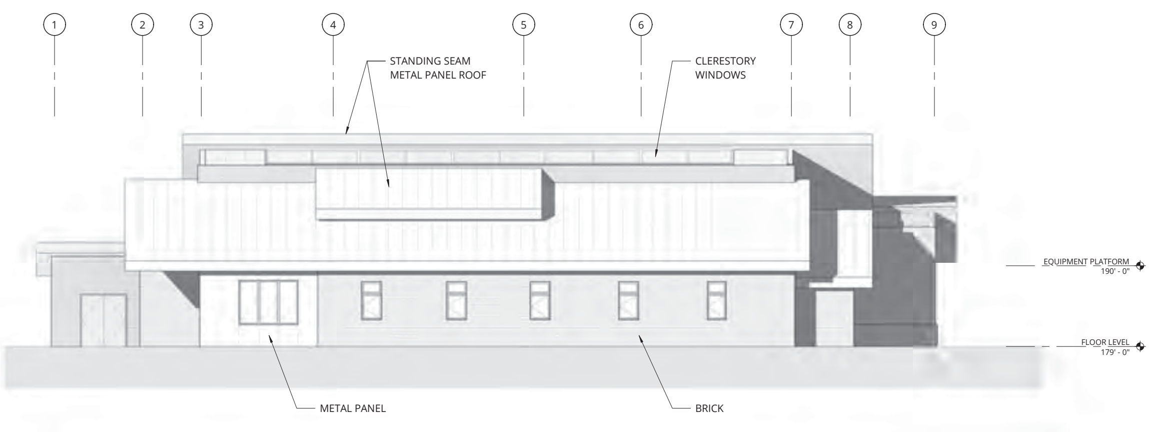
11/22/2017 1:00:41 PM



1 NORTH WEST ELEVATION

1/8" = 1'-0"

0 4 8 16 32



2 SOUTH EAST ELEVATION

1/8" = 1'-0"

0 4 8 16 32

C:_Revit Projects\173470_17-TVFR 39\173470_17-TVFR 39_matthewp.rvt

NOT FOR CONSTRUCTION

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300
PORTLAND, OR 97209
T 503.245.7100

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TV F&R STATION 39 - TUALATIN

7100 SW MCEWAN
TUALATIN, OR 97062

TUALATIN VALLEY FIRE & RESCUE

REVISION	DATE	REASON FOR ISSUE

BUILDING ELEVATIONS

CONDITIONAL USE APPLICATION

DATE 11/22/2017

PROJECT NUMBER 173470

SHEET NUMBER

A3.12

Clean Water Services File Number: 17-003489

Clean Water Services

Sensitive Area Pre-Screening Site Assessment

1. **Jurisdiction:** Tualatin

2. **Property Information** *(example 1S234AB01400)*
Tax lot ID(s): 2S 113DD TL 1601

OR **Site Address:** Adjacent to 7100 SW McEwan
City, State, Zip: Tualatin, OR 97062
Nearest Cross Street: SW McEwan & Lower Boones Ferry Rd.

3. **Owner Information**
Name: Siobhan Kirk
Company: Tualatin Valley Fire & Rescue
Address: 11945 SW 70th Avenue
City, State, Zip: Tigard, OR 97223
Phone/Fax: 503-649-8577
E-Mail:

4. **Development Activity** *(check **all** that apply)*
- ☐ Addition to Single Family Residence (rooms, deck, garage)
- ☐ Lot Line Adjustment
- ☐ Minor Land Partition
- ☐ Residential Condominium
- ☐ Commercial Condominium
- ☐ Residential Subdivision
- ☐ Commercial Subdivision
- ☐ Single Lot Commercial
- ☐ Multi Lot Commercial

Other: New fire station

5. **Applicant Information**
Name: Frank Angelo
Company: Angelo Planning Group
Address: 921 SW Washington Ave. Suite 468
City, State, Zip: Portland, OR 97205
Phone/Fax: 503-649-8577
E-Mail: fangelo@angeloplanning.com

6. **Will the project involve any off-site work?** ☐ Yes ☑ No ☐ Unknown
Location and description of off-site work

7. **Additional comments or information that may be needed to understand your project** Site plan and tax map are attached.

This application does NOT replace Grading and Erosion Control Permits, Connection Permits, Building Permits, Site Development Permits, DEQ 1200-C Permit or other permits as issued by the Department of Environmental Quality, Department of State Lands and/or Department of the Army COE. All required permits and approvals must be obtained and completed under applicable local, state, and federal law.

By signing this form, the Owner or Owner's authorized agent or representative, acknowledges and agrees that employees of Clean Water Services have authority to enter the project site at all reasonable times for the purpose of inspecting project site conditions and gathering information related to the project site. I certify that I am familiar with the information contained in this document, and to the best of my knowledge and belief, this information is true, complete, and accurate.

Print/Type Name Frank Angelo **Print/Type Title** Principal

Signature _____ **Date** Oct. 18, 2017

FOR DISTRICT USE ONLY

☐ Sensitive areas potentially exist on site or within 200' of the site. **THE APPLICANT MUST PERFORM A SITE ASSESSMENT PRIOR TO ISSUANCE OF A SERVICE PROVIDER LETTER.** If Sensitive Areas exist on the site or within 200 feet on adjacent properties, a Natural Resources Assessment Report may also be required.

☒ Based on review of the submitted materials and best available information Sensitive areas do not appear to exist on site or within 200' of the site. This Sensitive Area Pre-Screening Site Assessment does NOT eliminate the need to evaluate and protect water quality sensitive areas if they are subsequently discovered. This document will serve as your Service Provider letter as required by Resolution and Order 17-05, Section 3.02.1. All required permits and approvals must be obtained and completed under applicable local, State, and federal law.

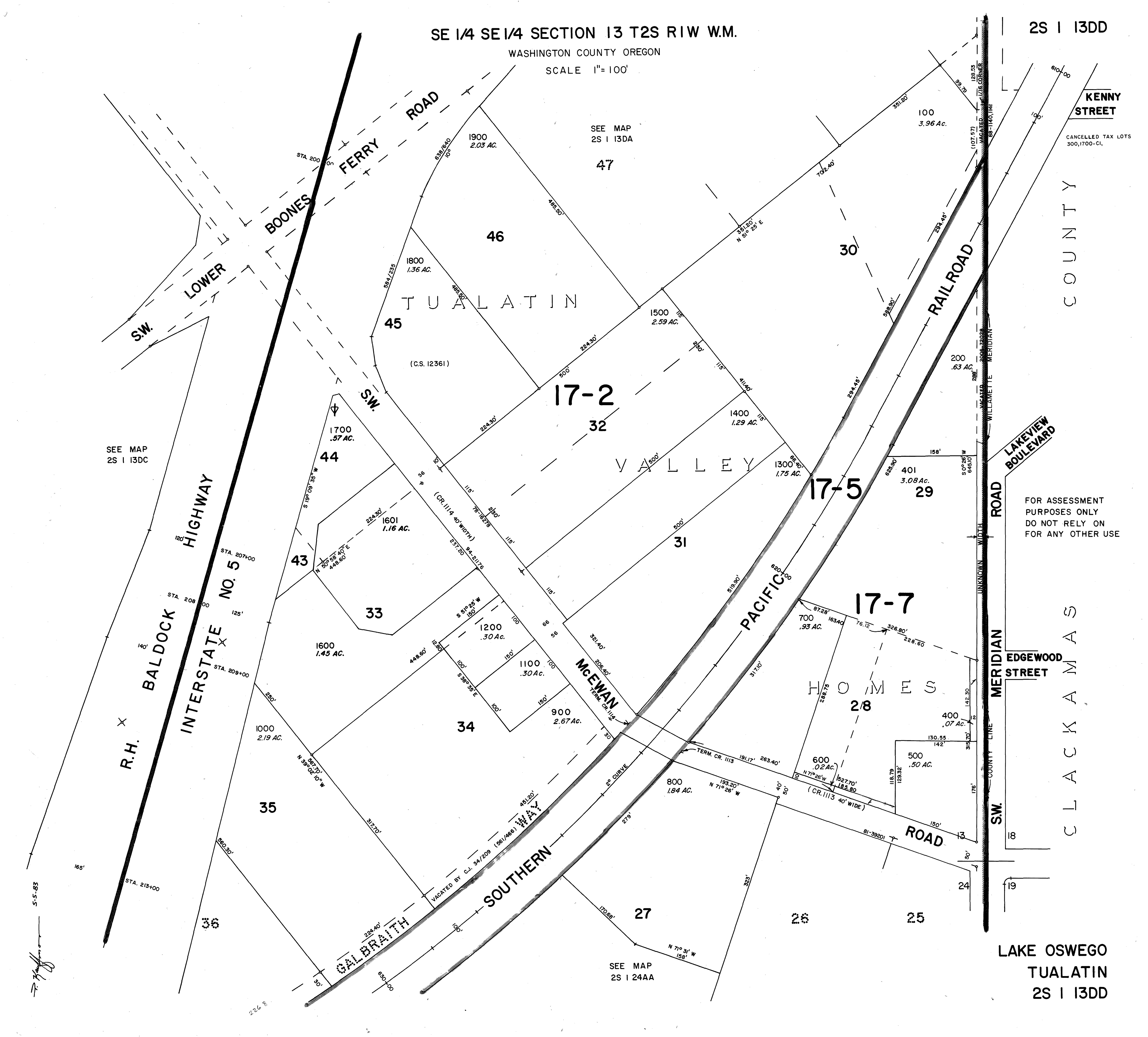
☐ Based on review of the submitted materials and best available information the above referenced project will not significantly impact the existing or potentially sensitive area(s) found near the site. This Sensitive Area Pre-Screening Site Assessment does NOT eliminate the need to evaluate and protect additional water quality sensitive areas if they are subsequently discovered. This document will serve as your Service Provider letter as required by Resolution and Order 17-05, Section 3.02.1. All required permits and approvals must be obtained and completed under applicable local, state and federal law.

☐ **This Service Provider Letter is not valid unless _____ CWS approved site plan(s) are attached.**

☐ The proposed activity does not meet the definition of development or the lot was platted after 9/9/95 ORS 92.040(2). NO SITE ASSESSMENT OR SERVICE PROVIDER LETTER IS REQUIRED.

Reviewed by _____ Date 10/31/17

Once complete, email to: **SPLReview@cleanwaterservices.org** • Fax: **(503) 681-4439**
OR mail to: SPL Review, Clean Water Services, 2550 SW Hillsboro Highway, Hillsboro, Oregon 97123


SE 1/4 SE1/4 SECTION 13 T2S R1W W.M.
WASHINGTON COUNTY OREGON
SCALE 1"= 100'
2S 1 13DD
KENNY STREET
CANCELLED TAX LOTS 300,1700-C1,
SEE MAP 2S 1 13DA
SEE MAP 2S 1 13DC
SEE MAP 2S 1 24AA
BOONES FERRY ROAD
S.W. LOWER
R.H. BALDOCK HIGHWAY
INTERSTATE NO. 5
TUALATIN
VALLEY
HOMES
S.W. McEWAN
RAILROAD
PACIFIC
SOUTHERN
GALBRAITH WAY
ROAD
LAKEVIEW BOULEVARD
EDGEWOOD STREET
S.W. MERIDIAN ROAD
COUNTY
CLACKAMAS
VACATED WILLAMETTE MERIDIAN
UNKNOWN WIDTH
COUNTY LINE
FOR ASSESSMENT PURPOSES ONLY DO NOT RELY ON FOR ANY OTHER USE
17-2
17-5
17-7
1900 2.03 AC.
1800 1.36 AC.
100 3.96 AC.
1500 2.59 AC.
1400 1.29 AC.
1300 1.75 AC.
1700 .57 AC.
1601 1.16 AC.
1600 1.45 AC.
1200 .30 AC.
1100 .30 AC.
1000 2.19 AC.
900 2.67 AC.
800 1.84 AC.
700 .93 AC.
600 .02 AC.
500 .50 AC.
400 .07 AC.
401 3.08 AC.
200 .63 AC.
(C.S. 12361)
(CR. 1114 40' WIDTH)
(CR. 1113 40' WIDE)
TERM. CR. 1113
TERM. CR. 1114
2° CURVE
VACATED BY C.J. 34/209 (561/466)
STA. 200
STA. 207+00
STA. 208+00
STA. 209+00
STA. 213+00
47
46
45
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LAKE OSWEGO
TUALATIN
2S 1 13DD
5-5-83

NEIGHBORHOOD/DEVELOPER MEETING
AFFIDAVIT OF MAILING

STATE OF OREGON)
) SS
COUNTY OF WASHINGTON)

I, Clinton Boxsee, being first duly sworn, depose and say:

That on the 24 day of October, 2017, I served upon the persons shown on Exhibit "A," 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 29th day of November, 2017.

OFFICIAL STAMP
SUSAN M MILLER
NOTARY PUBLIC-OREGON
COMMISSION NO. 931300
MY COMMISSION EXPIRES AUGUST 14, 2018

Notary Public for Oregon
My commission expires:

RE: TVF+R Station 39

Dear Resident/Property Owner,

Tualatin Valley Fire & Rescue (TVF&R) is proposing to develop a new fire station (Station 39) on SW McEwan Road south of SW Boones Ferry Road. The new station will be approximately 7,500 square feet and include a 600-square foot community room. The building will house the station's firefighters and have an interior two-space parking bay for fire trucks and necessary emergency apparatus. Station 39 will include 24-hour staffing starting with 4 persons per shift and ultimately growing to 6-person shifts.

The 1.16-acre site is within the City of Tualatin's Light Manufacturing Planning District (ML). New fire stations are permitted in the ML Planning District through a Conditional Use Permit and Architectural Review. The Conditional Use will require submittal of an application to the City for review and approval by the City Council. A pre-application conference was held for the project on September 20, 2017. Following Conditional Use review an Architectural Review application will be submitted for construction of the new station. This application will be reviewed by staff.

As specific engineering and site plans are being prepared and before submitting the application for the necessary reviews and approvals, we would like to discuss the proposal with the surrounding property owners and residents. In accordance with City requirements, we are conducting a Neighborhood Meeting on the following date and at the following location:

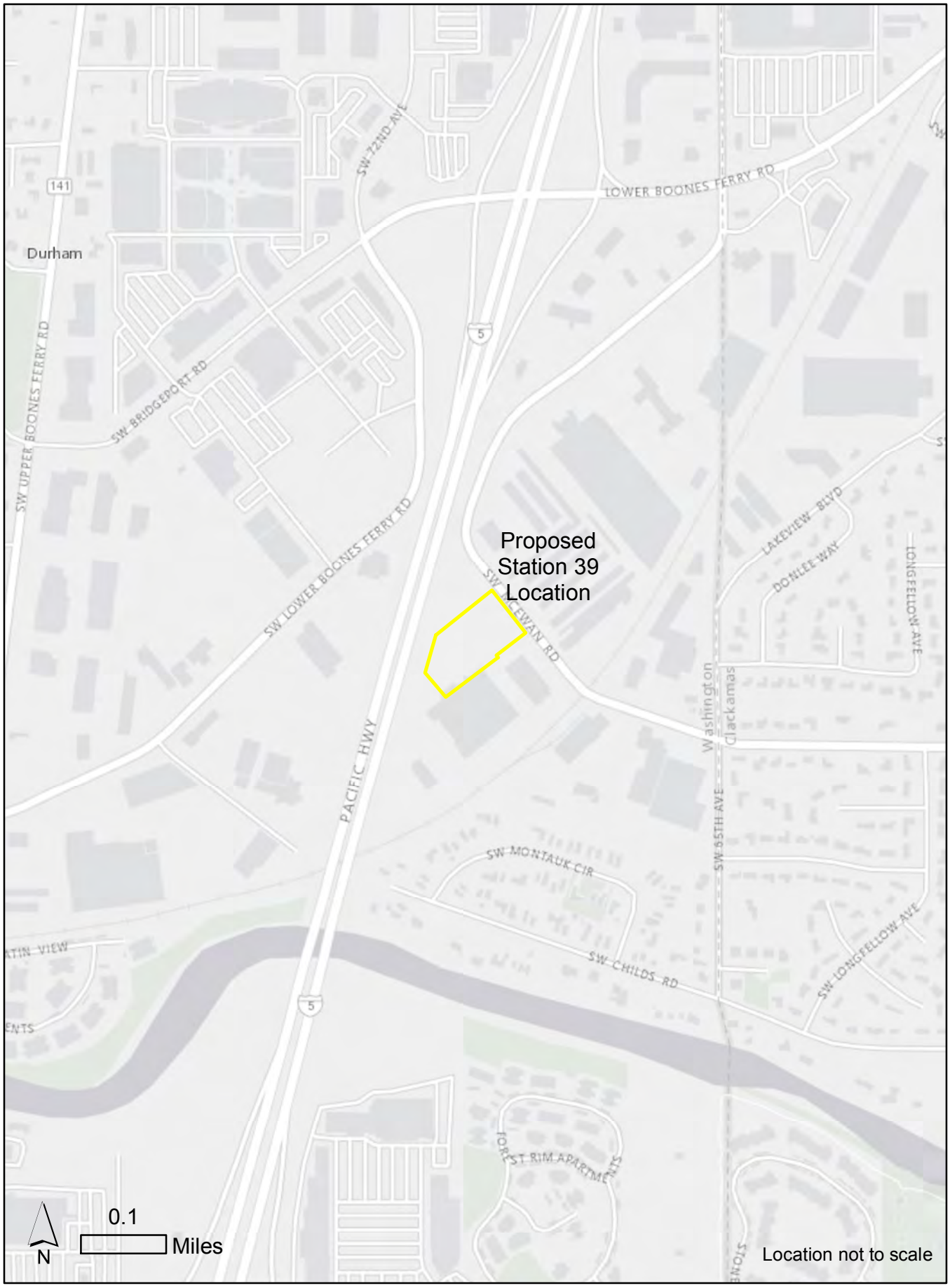
Tuesday, November 7th, 2017
6:00 – 7:00 pm
Juanita Pohl Center
8513 SW Tualatin Road
Tualatin, Oregon 97062

We look forward to discussing the proposal with you. Please feel free to contact the project's development application representative, at 503-227-3664 or fangelo@angeloplanning.com if you have any questions.

Sincerely,

Frank Angelo, Principal

Attachment: Vicinity/Location Map


Proposed
Station 39
Location
Durham
141
5
LOWER BOONES FERRY RD
SW 72ND AVE
SW BRIDGEPORT RD
SW UPPER BOONES FERRY RD
SW LOWER BOONES FERRY RD
PACIFIC HWY
SW MCEWAN RD
LAKEVIEW BLVD
DOHLEE WAY
LONGFELLOW AVE
Washington
Clackamas
SW 65TH AVE
SW MONTAUK CIR
SW CHILDS RD
SW LONGFELLOW AVE
FOREST RIM APARTMENTS
N
0.1
Miles
Location not to scale

NEIGHBORHOOD / DEVELOPER MEETING
CERTIFICATION OF SIGN POSTING

In addition to the requirements of TDC 31.064(2) quoted earlier in the packet, the 18" x 24" sign that the applicant provides must display the meeting date, time, and address and 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**. Additionally, the potential applicant must provide a flier (or flyer) box on or near the sign and fill the box with brochures reiterating the meeting info and summarizing info about the potential project, including mention of anticipated land use application(s). Staff has a Microsoft PowerPoint 2007 template of this sign design available through the Planning Division homepage at < www.tualatinoregon.gov/planning/land-use-application-sign-templates >.

As the applicant for the

TVF&R Station 39 project, I

hereby certify that on this day, October 24, 2017 sign(s) was/were posted on the subject property in accordance with the requirements of the Tualatin Development Code and the Community Development Department - Planning Division.

Applicant's Name: Clinton Doxsee, Angelo Planning Group
(PLEASE PRINT)

Applicant's Signature: C. Doxsee

Date: 11/29/17

NOTICE

NEIGHBORHOOD / DEVELOPER MEETING

11/7/2017 6:00 p.m.
8513 SW Tualatin Road
503-227-3664.

TVF&R Station 39 Neighborhood/Developer Meeting Notice Sign posted on site.

MEMORANDUM

TVF&R Station 39

Neighborhood Meeting Notes

DATE November 9, 2017
TO Project Team
FROM Frank Angelo, APG
CC

The Station 39 Neighborhood Meeting for the land use application was held on Tuesday, November 7, 2017 at the Juanita Pohl Center, 8513 SW Tualatin Road, Tualatin, Oregon 97062. The meeting Agenda, Sign-in Sheet and Illustrations presented at the meeting are attached to this meeting summary.

Project team attendance:

- TVF&R: Assistant Chief Havener, Siobhan Kirk
- APG: Frank Angelo
- Ankrom Moisan Architects: Michael Bonn
- AKS: Bruce Baldwin
- Lancaster Engineering: Todd Mobley

City of Tualatin Staff in attendance:

- Charles Benson, Planner

Frank Angelo introduced the Neighborhood Meeting and turned it over to Assistant Chief Havener to introduce the project and discuss the site selection, project funding and station operations.

Frank Angelo reviewed the land use application process and schedule for application submittal, noting the following.

- Tonight's meeting is a part of the city's land use application process. We are preparing a Conditional Use first, then an Architectural Review 2 land use application to demonstrate how the project complies with the City's CU Review Criteria.
- The Conditional Use application will address the use of the property and be presented at a City Council public hearing.

- The second application will follow Conditional Use approval and will be the Architectural Review application.
- The AR application will demonstrate how the project meets the City's design requirements and standards.
- The AR application will be reviewed and approved by staff. The application does not require review/approval by the Planning Commission.
- We expect to file the Conditional Use application in November.
- You received direct notice of tonight's meeting because you are within 1000' of the project site. Following submittal of the CU application you will receive notice of the Planning Commission hearing date/time.

Michael Bonn, Ankrom Moisan Architects, reviewed the site plan and building design elements.

- Michael provided an overview of site design considerations and key features.
- Stepped through the site plan, access to the site, on-site circulation, stormwater treatment, and landscaping.
- Station 39 will be similar in design to Station 55 currently under construction in West Linn.
- Staffing will be 4 full-time staff (24-hour shifts) with room to expand to 6 full-time staff.
- Michael noted the 600 sf Community Room and its availability to the residents for meetings.

Questions from the audience:

1. Discuss the landscaping that will be provided.
2. Question regarding the location of the driveway to SW McEwen and its proximity to the existing cell tower.
3. Where is the station in relation to the Legacy Medical office?
4. Has the design considered flooding and debris flows from Scoggins Dam?
5. Where is this site in relation to the Lake Oswego Fire District boundary?
6. Is there an agreement (Mutual Aid Agreement) between TVF&R and LOFD?
7. Is the building being constructed to address emergency preparedness? Design will include seismic enhancements.
8. Will TVF&R assist with HazMat calls?

The meeting adjourned at 7:00pm.

Attachments: Meeting Agenda; Sign-In Sheet; Project Illustrations

Tualatin Valley Fire & Rescue Station 39
Neighborhood / Developer Meeting
Tuesday, November 7th, 2017
6:00 – 7:00 pm
Juanita Pohl Center
8513 SW Tualatin Road
Tualatin, Oregon 97062

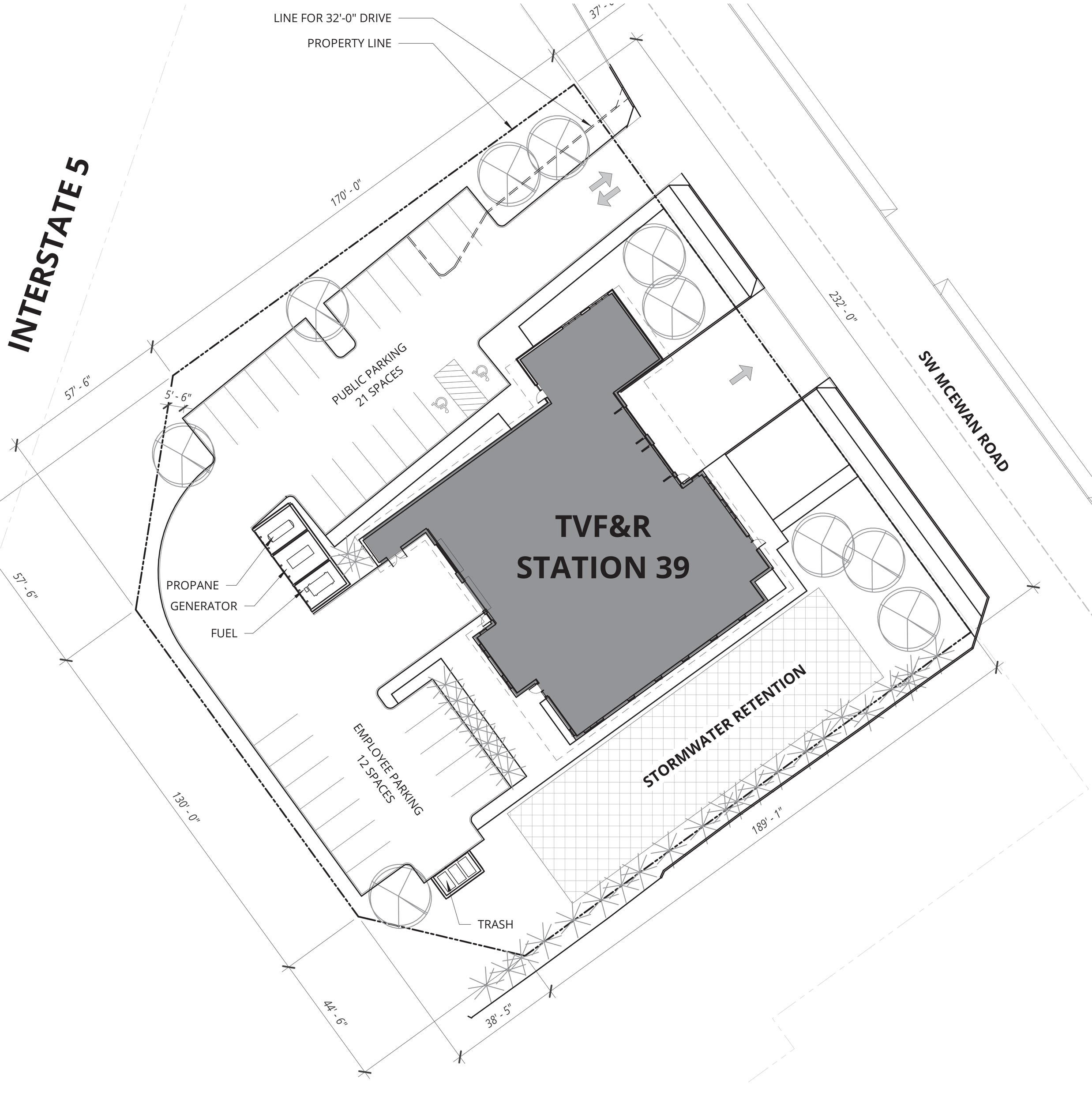
Agenda

1. Welcome / Meeting Overview – Frank Angelo, Angelo Planning Group
2. Introduction from TVF&R – Assistant Chief Mark Havener
3. Land Use Application – Frank Angelo
4. Site Plan– Michael Bonn, Ankrom Moisan Architects
5. Audience Questions / Comments – All

TVF&R Station 39 Neighborhood Meeting

November 7, 2017
6:00 pm – 7:00 pm
Juanita Pohl Center
8513 SW Tualatin Road
Tualatin, OR 97062

Name	Address	Email Address
Frank Angelo	[redacted]	
Bruce Baldwin		
Todd Morley		
Shannon Marvin		
Kim Meron		
Michael Bonn		
Charles Benson		
Larry Silver – Buildings		
"		
Wade Havener		
Siobhan Kirk		
Sherry Patterson		
Allen Patterson		

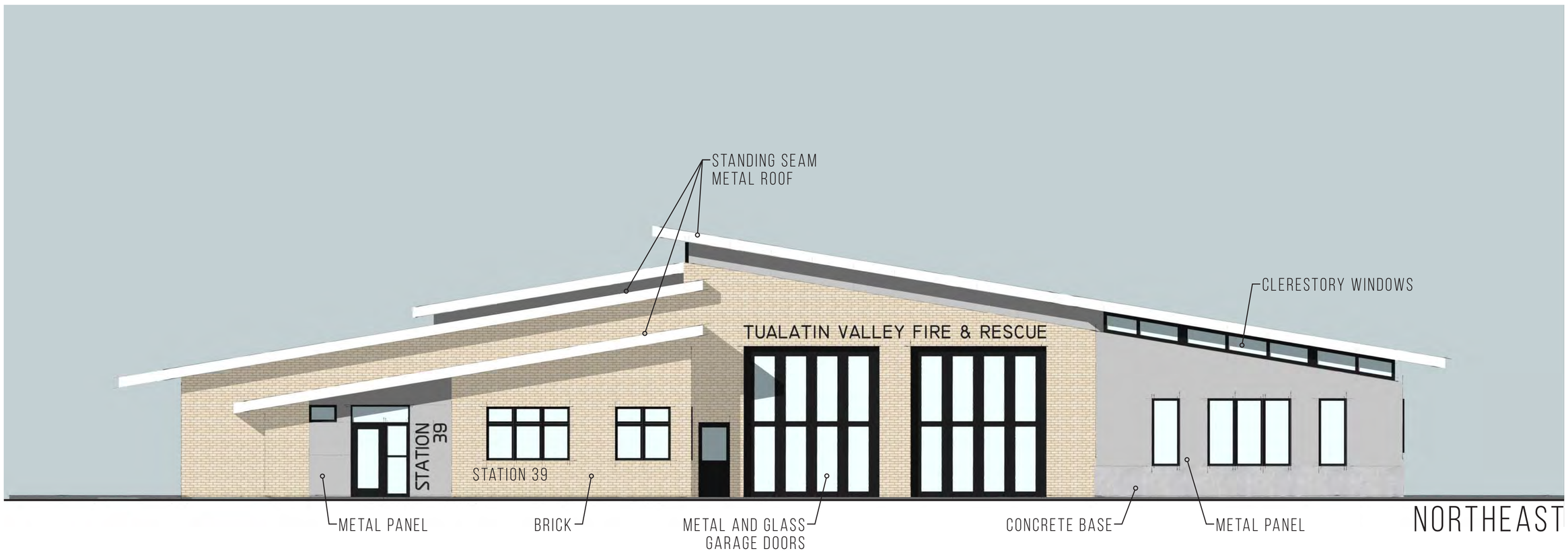


Tualatin Valley Fire & Rescue

FIRE STATION 39

TUALATIN / 11.07.2017

Ankrom Moisan



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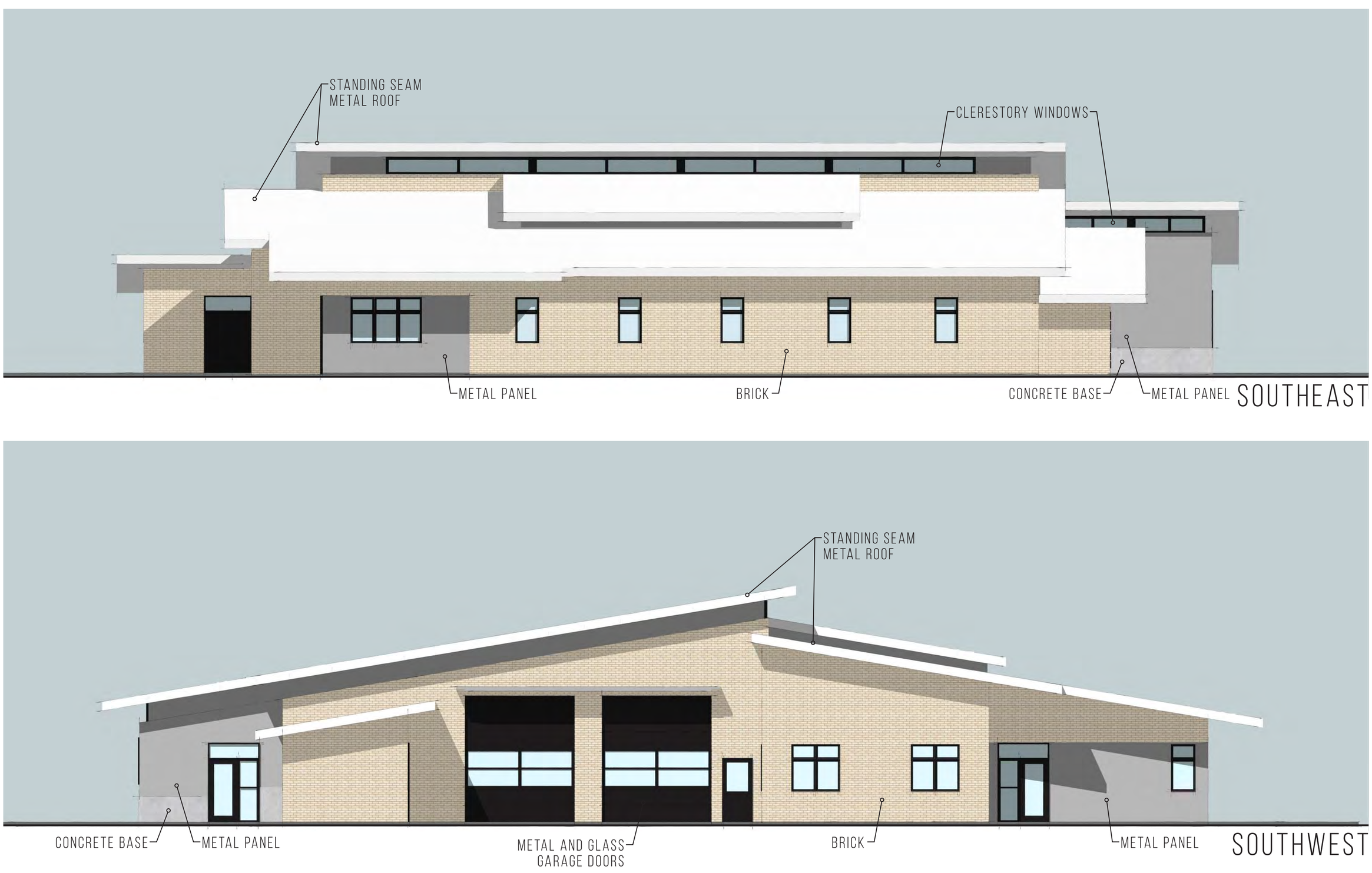
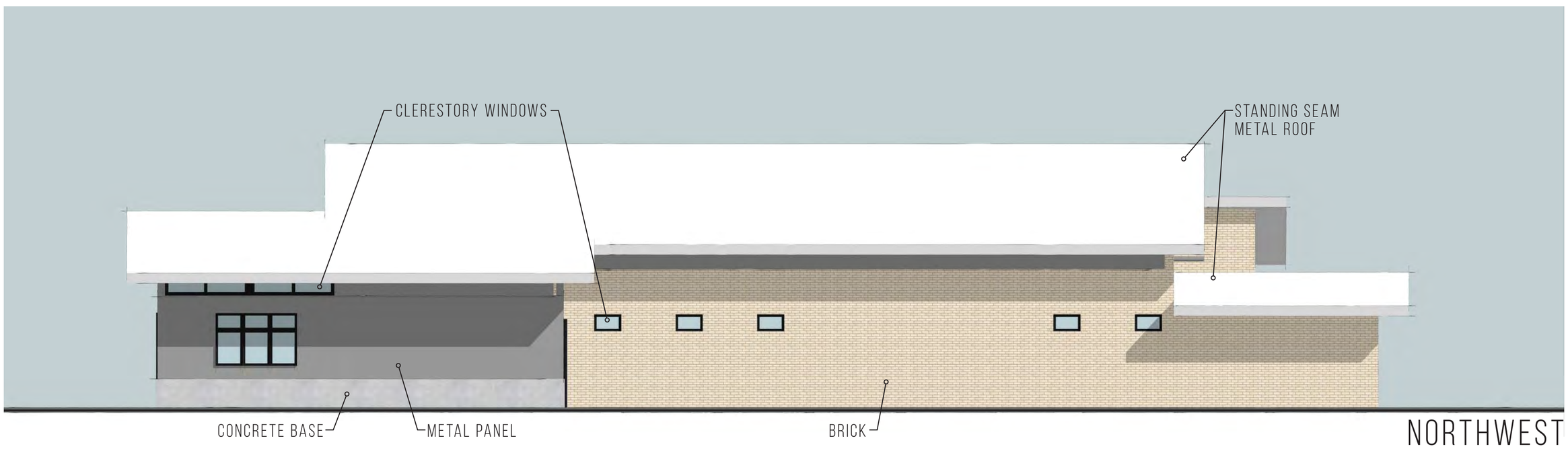


SOUTHEAST

SOUTHWEST



NORTHWEST

FIRE STATION 39

TUALATIN / 11.07.2017

Tualatin Valley Fire & Rescue

Ankrom Moisan

Tualatin Valley Fire & Rescue

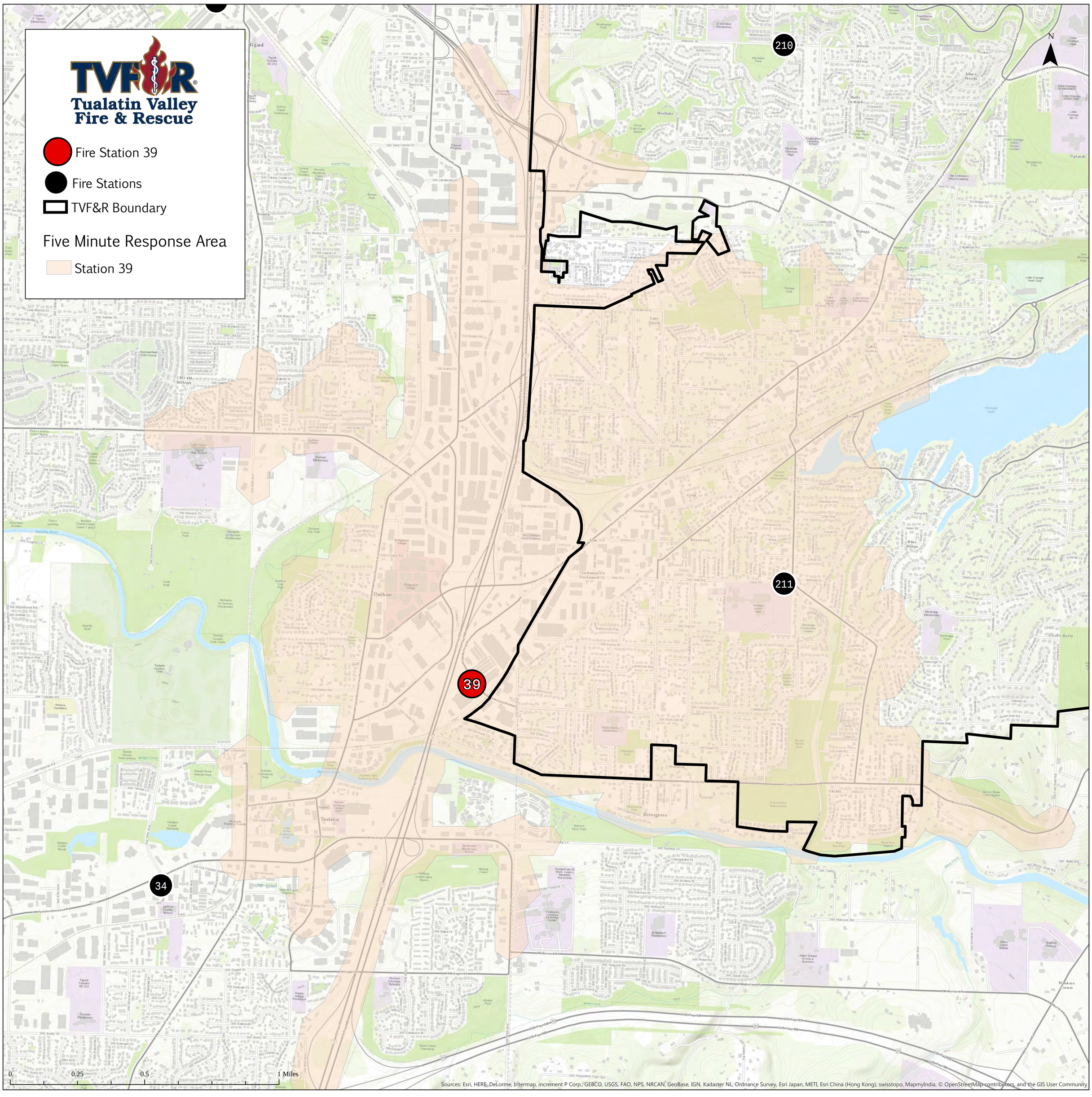
Fire Station 39

Fire Stations

TVF&R Boundary

Five Minute Response Area

Station 39



Tualatin Valley Fire & Rescue

FIRE STATION 39

TUALATIN / 11.07.2017

Ankrom Moisan

Exhibit 7

Order Granting Plaintiff's Motion of Immediate Possession (Case No. 17CV14497)

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IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF WASHINGTON

TUALATIN VALLEY FIRE AND RESCUE, a rural fire protection district, Plaintiff, v. AMERCO REAL ESTATE COMPANY, a Nevada corporation Defendant.	Case No. 17CV14497 ORDER GRANTING PLAINTIFF'S MOTION OF IMMEDIATE POSSESSION

IT APPEARING TO THE COURT that: Plaintiff Tualatin Valley Fire and Rescue ("Plaintiff") served a Notice of Immediate Possession ("Notice") on the defendant Amerco Real Estate Company ("Defendant") named in the above captioned proceeding on April 18, 2016; Defendant failed to file an objection that complies with ORS 35.352(2) in the time provided; and this Order is supported by the Declaration of Cynthia Fraser filed herewith as required by ORS 35.352(3) along with Plaintiff's Motion for Entry of Order for Immediate Possession and Response to Defendant's Reservation of Right to Object to Immediate Possession.

The Court further finding that Defendant submitted a "Non-Opposition to Plaintiff's Motion for Entry of Order for Immediate Possession" on May 19, 2017 and advised the Court that it did not object to the form of Order for Immediate Possession.

IT IS FURTHER APPEARING TO THE COURT that a deposit as required by ORS

GARVEY SCHUBERT BARER
A PARTNERSHIP OF PROFESSIONAL CORPORATIONS
eleventh floor
121 s.w. morrison street
portland, oregon 97204-3141
503 228 3939

35.265 has been made. Now, therefore,

IT IS HEREBY ORDERED THAT Plaintiff has the right to take and exercise immediate possession of such property and interests on May 4, 2017, as provided in the notice and provided in ORS 35.352.

Signed: 6/9/2017 09:34 AM

Circuit Court Judge, Janelle Factora Wipper

Submitted by:

Cynthia M. Fraser, OSB #872246
Paul H. Trinchero, OSB # 014397
GARVEY SCHUBERT BARER
121 SW Morrison Street
Portland, OR 97204
Telephone: (503) 228-3939
Fax: (503) 226-0259

Of Attorneys for Plaintiffs

CERTIFICATE OF READINESS

UTCR 5.100

This proposed order or judgment is ready for judicial signature because:

1. ☐ Each opposing party affected by this order or judgment has stipulated to the order or judgment, as shown by each opposing party's signature on the document being submitted.

2. ☐ Each opposing party affected by the order or judgment has approved the order or judgment, as shown by signature on the document being submitted or by written confirmation of approval sent to me.

3. ☒ I have served a copy of this order or judgment on all parties entitled to service and:

   a. ☒ No objection has been served on me.

   b. ☐ I received objections that I could not resolve with Defendant despite reasonable efforts to do so. I have filed a copy of the objections I received and indicated which objections remain unresolved.

   c. ☐ After conferring about objections, Defendant agreed to independently file any remaining objection.

4. ☐ The relief sought is against an opposing party who has been found in default.

5. ☐ An order of default is being requested with this proposed judgment.

6. ☐ Service is not required pursuant to ORS 35.352(3).

7. ☐ This is a proposed judgment that includes an award of punitive damages and notice has been served on the Director of the Crime Victims' Assistance Section as required by subsection (4) of this rule.

DATED this 5th day of June, 2017.

s/Cynthia M. Fraser
Cynthia M. Fraser
Of Attorneys for Plaintiff

GARVEY SCHUBERT BARER
A PARTNERSHIP OF PROFESSIONAL CORPORATIONS
eleventh floor
121 s.w. morrison street
portland, oregon 97204-3141
503 228 3939

CERTIFICATE OF SERVICE

I hereby certify that I served the proposed **ORDER GRANTING PLAINTIFF'S MOTION OF IMMEDIATE POSSESSION** on the following:

Peter C Richter
Alex Naito
Miller Nash Graham & Dunn LLP
111 SW 5th Ave Ste 3400
Portland OR 97204
peter.richter@millernash.com
alex.naito@millernash.com

by mailing to them a copy of the original thereof, contained in a sealed envelope, addressed as above set forth, with postage prepaid, and deposited in the mail in Portland, Oregon, on this 4th day of May, 2017 and provided them a copy of this Order on June 5, 2017.

s/ Cynthia M. Fraser
Cynthia M. Fraser, OSB #872243
Of Attorneys for Plaintiff

GSB:8632935.2 [37746.00200]

GARVEY SCHUBERT BARER
A PARTNERSHIP OF PROFESSIONAL CORPORATIONS
eleventh floor
121 s.w. morrison street
portland, oregon 97204-3141
503 228 3939

PORTLAND OFFICE
eleventh floor
121 sw morrison street
portland, oregon 97204-3141
TEL *503 228 3939* FAX *503 226 0259*

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new york, new york
seattle, washington
washington, d.c.
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A PARTNERSHIP OF PROFESSIONAL CORPORATIONS

Please reply to CYNTHIA M. FRASER
cfraser@gsblaw.com
Direct Dial 503 553 3223

October 11, 2017

VIA EMAIL AND U.S. MAIL

Sean Brady
City Attorney
City of Tualatin Oregon
18880 SW Martinazzi Ave
Tualatin, OR 97062

Re: Tualatin Valley Fire & Rescue

Dear Sean:

I have been hired by Tualatin Valley Fire & Rescue ("TVFR") to work with TVFR's general counsel, Bob Blackmore, on the acquisition of property necessary for TVFR to build a new fire station for the health, safety and welfare of its fire district. One of the issues that came up recently with your planning department was the legal ability of TVFR to proceed with the land use process necessary to build the facility because TVFR does not have title to the property.

Prior to joining this law firm, I was a Senior Assistant Attorney General at the Oregon Department of Justice in the trial division, where I specialized in condemnation. Since returning to private practice, I have represented several government entities in the acquisitions of properties for public use. Most recently, I was the condemnation attorney for the City of Lake Oswego-Tigard Water Partnership. I worked closely with City Attorney David Powell on all of the necessary property acquisitions for that project.

The Oregon Condemnation Procedures Act ORS Chapter 35 governs and describes the condemnation powers a government entity has and the procedures it must follow. When a public condemnor commences an action for condemnation of property, and immediate possession of the property is considered necessary by the public condemnor, the condemnor may deposit funds into the court where the action was commenced for the use of the defendants in the action. ORS 35.265. TVFR filed a complaint in Washington County Circuit Court on April 6, 2017 against Amerco Real Estate Company ("U-Haul") and deposited funds into court in compliance with the statute. Thereafter, on April 18, 2017, TVFR filed a Notice of Immediate Possession of Property with the court. Any time after a condemnation action is commenced, the public condemnor may serve notice on the property owner that it will take immediate possession of the property that is the subject of the condemnation action.

ORS 35.352. On May 4, 2017, the Washington County Circuit Court granted plaintiff's Motion for Entry of an Order of Immediate Possession.

Accordingly, as of May 5, 2014, TVFR has immediate legal possession of the property, and as such may proceed with moving forward with its project.[1] Even if there is an appeal to the action from the judgment, the appeal will not stay the proceeding as to prevent the condemnor from taking possession of the property and using it for the purposes for which it is being appropriated. ORS 35.355. Thus, the legislature intended that the condemnor – TVFR – could proceed with the project while the property owner has the right to contest the amount of just compensation. TVFR has the necessary legal authority to proceed as if it had legal title to the property. The condemnation proceeding is scheduled for a jury trial March 5, 2018 to March 9, 2018.

Feel free to contact either Bob Blackmore at (503) 479-7175 or myself if you have any questions. I understand that a meeting to discuss next steps is being set up and we thought setting out the legal status of TVFR in advance would assist you.

Very truly yours,

GARVEY SCHUBERT BARER

By
Cynthia M. Fraser

GSB:9003400.1 [37746.00100]

[1] It should also be noted that there is a statutory presumption of necessity that when TVFR declared the taking of the U-Haul property necessary for its purposes of the health and safety of its district, there is a presumption of evidence of the necessity of the property. See *Port of Umatilla v. Richmond*, 212 Or 596 321 P2d 338 (1958). In the absence of fraud, bad faith or abuse of discretion, the necessity propriety or expediency of appropriation of the property for the public use, the location of the property taken and it suitableness for the proposed use are legislative questions and therefore not subject to review by the court.

CUP17-0002

To lessen the bulk of the notice of application and to address privacy concerns, this sheet substitutes for the photocopy of the mailing labels. A copy is available upon request.

TVF&R USE FOR NEW FIRE STATION 39

CONDITIONAL USE PERMIT APPLICATION (CUP-17-0002)

ATTACHMENT C: ANALYSIS AND FINDINGS

The issue before the City Council is consideration of a conditional use permit for a fire station use (Station 39) operated by Tualatin Valley Fire & Rescue (TVF&R) adjacent to 7100 SW McEwan Road (Tax Map 2S1 13DD, Tax Lot 1601).

In order to grant the proposed Conditional Use Permit, the request must meet the approval criteria of Tualatin Development Code (TDC) Section 32.030. The applicant prepared a narrative that addresses the criteria, which is within the application materials (Attachment B), and staff has reviewed this and other application materials and included pertinent excerpts below.

The following materials and descriptions are based largely on the applicant's narrative; staff has made some minor edits. Staff comments, findings, and conditions of approval are in Italic font.

(1) The use is listed as a conditional use in the underlying planning district.

Applicant Response: Station 39 is located in the ML zoning district. As noted in TDC Section 60.040(1)(f), a Fire Station is permitted in the ML zone as a Conditional Use.

Staff finds that Criterion 1 is met.

(2) The characteristics of the site are suitable for the proposed use, considering size, shape, location, topography, existence of improvements, and natural features.

Applicant Response:

Size: The site characteristics are compatible with other TVF&R stations throughout the District. The site size (1.16 acres) is consistent with comparable TVF&R stations and can accommodate the building program for Station 39.

Staff finds that the site size is suitable for the use.

Shape: *The applicant did not provide a response specific to the shape of the property. The site is generally rectangular. The applicant has provided a conceptual site plans to show that the proposed use could be accommodated on the property.*

Location: TVF&R has identified the location as an appropriate location to meet required service response standards and needs of the District. It's location near Interstate 5 will provide quick response to incidents on the freeway as well as quick emergency response to the surrounding community. TVF&R's Station 34 is located in the City of Tualatin but is on the westside of Interstate 5 just off Tualatin Sherwood Road (19365 SW 90th Court). Station 39's location on the eastside of Interstate 5 will significantly enhance response times for emergency services, making this location very suitable for the proposed use.

Staff finds that the location is suitable for the use. The property is located in an industrial area and surrounded by a storage facility and medical office uses, which are compatible with the proposed fire station use.

Topography: There are no topographic or natural features on the site that will impact construction of the Station 39.

Staff finds that the topography is suitable for the proposed use.

Improvements: *The applicant did not provide a response to the existing improvements on the site. The project site is a park-like green space within property that was formerly part of the U-Haul site and is surrounded on three sides by the remaining U-Haul business. The site features all utilities in the fully improved street that fronts the project site. Staff finds that the improvements on the site are appropriate for the proposed use.*

Natural Features: There are no topographic or natural features on the site that will impact construction of the Station 39.

Staff finds that—with the exception of on-site landscaping that includes trees and taller shrubs—there are no natural features on the subject site and the proposed use will not affect natural features.

As noted, the Conditional Use Permit does not authorize any construction and only analyzes the use on the site. No construction or site modifications are directly resulting from this permit. It is understood that approval of this Conditional Use Permit does not approve any site redevelopment or exterior building designs, and that after Conditional Use Permit approval is obtained, the applicant will seek approval from the City pursuant to TDC 73.040(1) and TDC 73.100 (1) and (2) for Architectural Review.

Staff finds that the following condition of approval is required to meet Criterion 2:

Condition of Approval No. 1: The approval of Conditional Use Permit 17-0002 does not approve any site redevelopment or exterior building modifications, and the applicant shall obtain approval from the City for any site or exterior designs, pursuant to TDC 73.040(1) and TDC 73.100(1) and (2).

(3) The proposed development is timely, considering the adequacy of transportation systems, public facilities, and services existing or planned for the area affected by the use.

Applicant Response:

Transportation Systems

The construction of the proposed Station 39 is funded through General Fund and a Local Option Levy approved by District voters in 2014 to upgrade and improve the safety and operations of TVF&R's fire stations. TVF&R identified the need for a station in this location to ensure quick response times in the future as development continues in Tualatin, Lake Oswego, and Tigard. Public services are immediately available to the site. As noted in the Traffic Impact Analysis submitted with this application, Station 39 traffic will not adversely impact the existing transportation system. The analysis notes that Station 39 will generate a small number of daily trips that can easily be accommodated on the transportation system.

Access to the subject site will be from SW McEwan which is generally improved and appropriate for the use, though additional improvements may be required during the Architectural Review phase. .

Off-Street Parking

The applicant did not address parking specifically. Section 73.370 of the TDC explains how many spaces are required for specific uses. A Fire Station use is not listed. In the event that a use is not listed,

subsection 1.g explains that the Community Development Director will compare the use to other uses to determine the appropriate number of parking spaces needed. Again, the intent of this evaluation is to determine the appropriateness of the site for the proposed conditional use, a fire station; actual review of the spaces will be determined with the Architectural Review. The applicant has provided a conceptual site plan that shows parking that has been designed similar to the needs of other fire stations in the TVF&R system. The site plan suffices, for the purposes of a CUP, to demonstrate the site is suitable. Staff finds that the off-street parking conditions are suitable for the proposed use.

Public Facilities and Services

The applicant did not specifically address the public facilities available at the site. Through evaluation with the City engineering staff, it has been determined that the site has full utilities available in the fronting street except storm water. The conceptual site plan includes a detention basin for purposes of storm water, thus illustrating that the site is suitable for the use. Staff finds that the existing and proposed public facilities and services are adequate to service the proposed use.

Staff finds that Criterion 3 is met.

(4) The proposed use will not alter the character of the surrounding area in any manner, which substantially limits, impairs, or precludes the use of surrounding properties for the primary uses listed in the underlying Planning District.

Applicant Response: The location of Station 39 will allow uses on the property immediately adjacent to Station 39 to continue operating and will not limit or preclude the use of surrounding property. As can be seen on the attached Station 39 site plan, TVF&R will take direct access to SW McEwan Road and will not impede or conflict with access to surrounding properties. The Traffic Impact Analysis submitted with this application indicates that Station 39 traffic will not adversely impact the existing transportation system. The analysis notes that Station 39 will generate a small number of daily trips that can easily be accommodated on the transportation system.

The site plan also notes how stormwater will be accommodated on-site and in a manner that will not impact adjacent properties. As well landscaping provided with the project will create a visual buffer between Station 39 and adjacent properties.

The emergency services use is not out of character with surrounding land uses in the ML zone. Medical offices are located across SW McEwan from Station 39. As can be seen from the building elevations submitted with this application Station 39 will be an appropriate design and will not be out of character with existing industrial and office buildings on surrounding properties.

The use (fire station) being proposed for Conditional Use approval will not alter the character of the surrounding area in any manner that substantially limits, impairs, or precludes the use of surrounding properties for the primary uses listed in the underlying planning district (Light Manufacturing - ML). The new station will be constructed on a legal tax lot (2S1 13 DD TL 1601) – see Exhibit 5 in the Application Appendix. As noted, existing properties in the surrounding area are a mix of industrial, office and vehicle storage. A fire station as a use is compatible with these types of uses from an operational and design perspective.

In response to staff comments, the applicant understands their concern that the physical nature of the new tax lot may raise issues about the use of the adjacent northern triangle of the U-Haul property. The use of the northern triangle for the cell tower will not be impacted, but there will be reduced parking. However, the parking issue is being addressed separately through the land acquisition and

compensation process the District has followed to secure the property and would be present whether or not a new fire station was constructed on Tax Lot 1601. The parcel could remain vacant and fenced and the concerns staff has expressed would remain. Staff concerns about the new parcel potentially impeding use of the northern parking area is not a use compatibility issue, which is the intent of the Conditional Use review and the focus of the decision criteria. The concern that's raised would exist regardless of the use proposed or if the District was proposing nothing at all on their property.

Staff notes that the proposed use would not alter the overall character of the immediate area defined by the properties abutting the site. In looking at the design of the station, as shown in the materials submitted for the CUP, it would seem that the station would eliminate several parking spaces from the existing conditions enjoyed by U-Haul. However, it is important to understand that the loss of the spaces was the result of the condemnation of the property, not the conditional use permit.

Staff finds that Criterion 4 is met.

(5) The proposal will satisfy those objectives and policies of the Tualatin Community Plan which apply to the proposed use.

The Tualatin Community Plan, which is the City comprehensive plan, is integrated within the Tualatin Development Code (TDC) as Chapters 1-30. Based on discussions with City of Tualatin staff, the following two sections of the TDC are applicable to the proposed use:

A. Section 7.040 Manufacturing Planning District Objectives.

This section describes the purpose of each manufacturing planning district.

(2) Light Manufacturing Planning District (ML)

(a) Suitable for warehousing, wholesaling and light manufacturing processes that are not hazardous and that do not create undue amounts of noise, dust, odor, vibration, or smoke. Also suitable, with appropriate restrictions, are the retail sale of products not allowed for sale in General Commercial areas, subject to the Special Commercial Setback from arterial streets and Commercial Services Overlay as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035, and office commercial uses where any portion of a legally created lot is within 60 feet of a CO Planning District boundary. Also suitable is the retail sale of products manufactured, assembled, packaged or wholesaled on the site provided the retail sale area, including the showroom area, is no more than 5% of the gross floor area of the building not to exceed 1,500 square feet. Also suitable for the retail sale of home improvement materials and supplies provided it is not greater than 60,000 square feet of gross floor area per building or business and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035. Rail access and screened open storage allowed in these areas will conform to defined architectural, landscape and environmental design standards.

B. Chapter 60: Light Manufacturing Planning District (ML)

Section 60.010 Purpose.

> The purpose of this district is to provide areas of the City that are suitable for industrial uses and compatible with adjacent commercial and residential uses. The district serves to buffer heavy manufacturing uses from commercial and residential areas. The district is suitable for warehousing, wholesaling, and light manufacturing processes that are not hazardous and do not create undue amounts of noise, dust, odor, vibration, or smoke. The district is also suitable for retail sale of products manufactured, assembled, packaged or wholesaled on the site provided the retail sale area, including the showroom area, is no more than 5% of the gross floor area of the building not to exceed 1,500 square feet and, with appropriate restrictions, for retail sale of products not allowed for sale in General Commercial Planning Districts, and office commercial uses where any portion of a legally created lot is within 60 feet of a CO Planning District boundary. Railroad access and screened outdoor storage will be allowed in this district, conforming to defined architectural, landscape, and environmental design standards. In accordance with the Industrial Business Park Overlay District, TDC Chapter 69, and TDC 60.037-60.038 selected small-scale mixed uses that are supportive of and secondary to industrial uses are allowed to provide services to businesses and employees. The purpose is also to allow certain commercial service uses in the Commercial Services Overlay shown in the specific areas illustrated on Map 9-5 and selected commercial uses subject to distance restrictions from residential areas and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035.

Locating TVF&R Station 39 in the ML district is appropriate. As noted in TDC Section 60.040(1)(f), a Fire Station is permitted in the ML zone as a Conditional Use. The use is not hazardous and will not create undue amounts of noise, dust, odor, vibration, or smoke. Any noise generated will be limited. Station 39 will not require sirens to sound at or near the site. Fire personnel are not required to sound sirens when leaving the station, the lights on the apparatus normally are sufficient to stop traffic. The only time the fire apparatus operators would be required to use their sirens would be when they pass through a traffic signal. Regardless, there are no noise sensitive uses near the site.

The City's comprehensive plan is designed to promote public health, safety, and welfare. Providing opportunities for emergency services to operate within the City is a critical aspect of community health, safety, and welfare. As noted earlier, locating Station 39 at this site will allow TVF&R to achieve their emergency services response times. As well, the Traffic Impact Analysis submitted with this application indicates that Station 39 traffic will not adversely impact the existing transportation system. The analysis notes that Station 39 will generate a small number of daily trips that can easily be accommodated on the transportation system.

Staff additionally finds that Section 32.030 Criteria for Conditional uses applies. The purpose for this section states:

> *The City Council may allow a conditional use, after a hearing conducted pursuant to TDC 32.070, provided that the applicant provides evidence substantiating that all the requirements of this Code relative to the proposed use are satisfied.*

The Analysis and Findings included in this document address the five (5) identified criteria listed in Section 32.030 to aid in the City Council decision on whether or not a proposed conditional use meets applicable TDC requirements.

Staff finds that the following conditions of approval are required to meet Criterion 5:

Condition of Approval No. 2: The applicant shall operate the use consistent with all application materials submitted to the City dated December 2017 (City stamp reads December 8, 2017).

Condition of Approval No. 3: The applicant shall comply with the noise standards in TDC 60.085.

Condition of Approval No. 4: The applicant shall—separately from the CUP—submit any sign permit applications pursuant to and in compliance with TDC Chapter 38.

Condition of Approval No. 5: The approval period shall be pursuant to TDC 32.090 Automatic Termination of Conditional Use as reproduced:

(1) Unless otherwise provided by the Council in the resolution granting approval of the conditional use permit, a conditional use permit shall automatically become null and void two years after the effective date upon which it was granted unless one of the following events occur:

(a) The applicant or his successor in interest has secured a building permit within said two-year period, if a building permit is required, and has actually commenced construction of the building or structure authorized by the permit within said two-year period.

(b) The applicant or his successor in interest has commenced the activity or installation of the facility or structure authorized by the conditional use permit within said two-year period.

(2) The applicant may submit a written request to the City Council for an extension of time on the conditional use permit to avoid the permit's becoming null and void. The request for extension must be submitted prior to the expiration of the times established by Subsection (1) above. The City Council may, in the resolution granting such conditional use permit, provide for an extension of time beyond 1 year.

Condition of Approval No. 6: The applicant shall comply with all applicable TDC policies and regulations.

SUMMARY OF ANALYSIS AND FINDINGS

Based on the application materials, conditions of approval, and the analysis and findings presented above, staff finds that CUP-17-0001 meets all criteria of TDC 32.030 "Criteria for Review of Conditional Uses."

Tualatin Valley Fire & Rescue

TVF&R FIRE STATION 39
CONDITIONAL USE PERMIT
CUP-17-0002

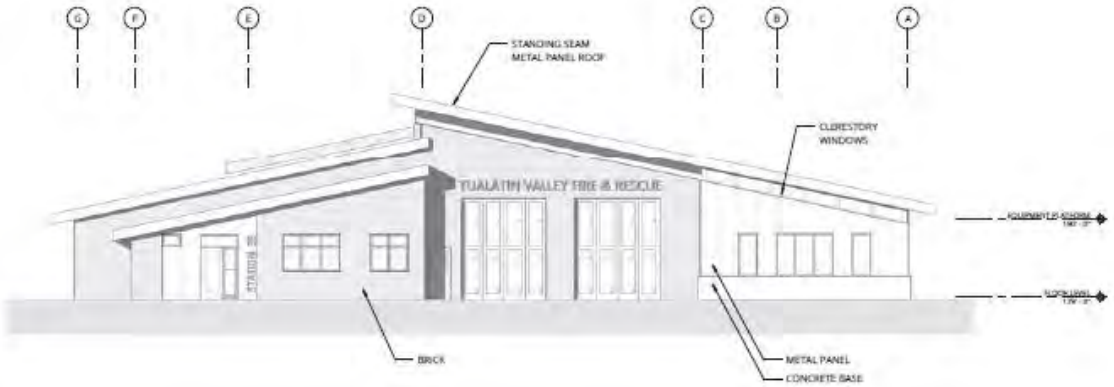
CUP-17-0002
TVF&R FIRE SATION USE

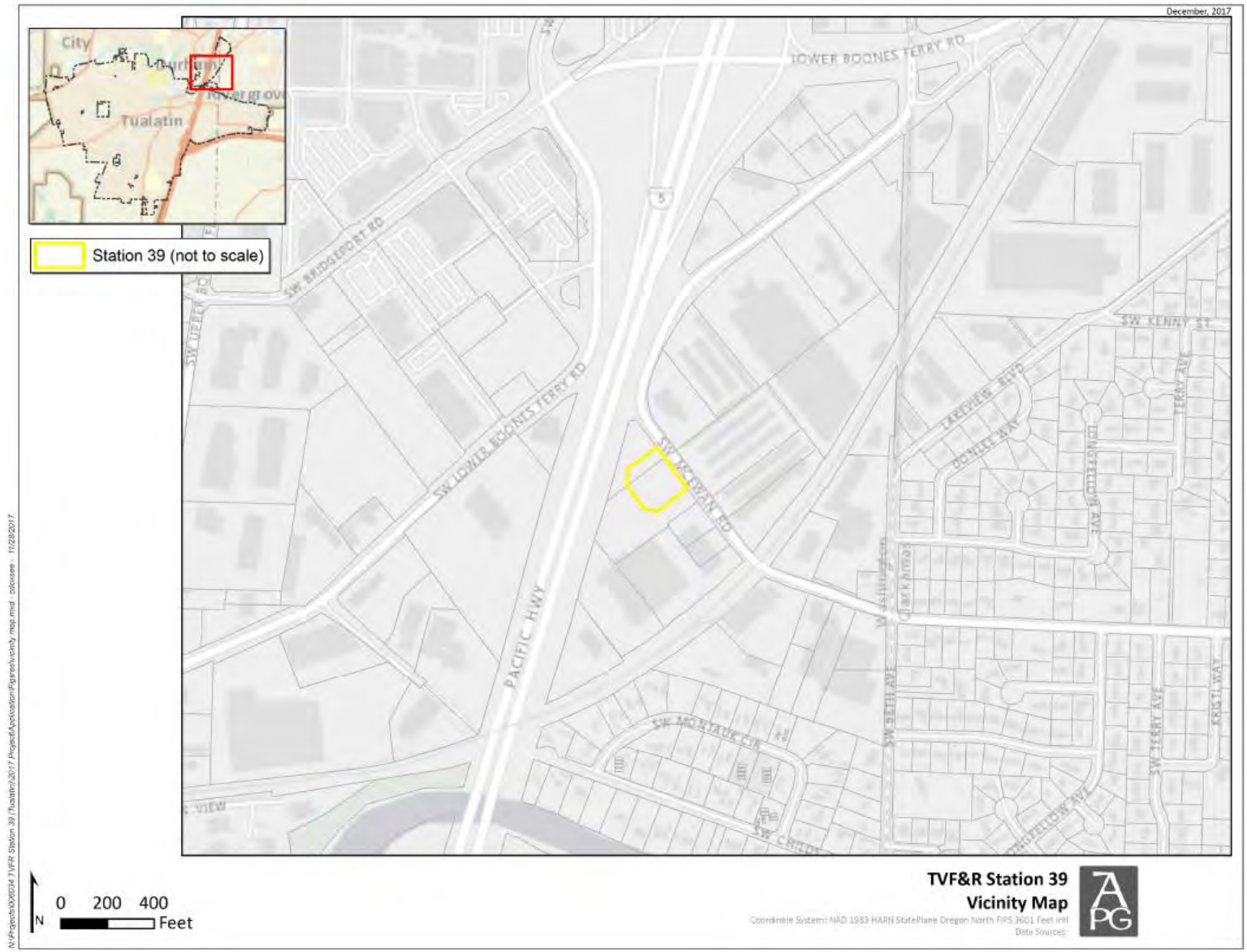
TUALATIN CITY COUNCIL PUBLIC HEARING
APRIL 9, 2018

PURPOSE OF HEARING

- Consideration of a conditional use permit for a new Fire Station use in the Light Manufacturing (ML) Planning District

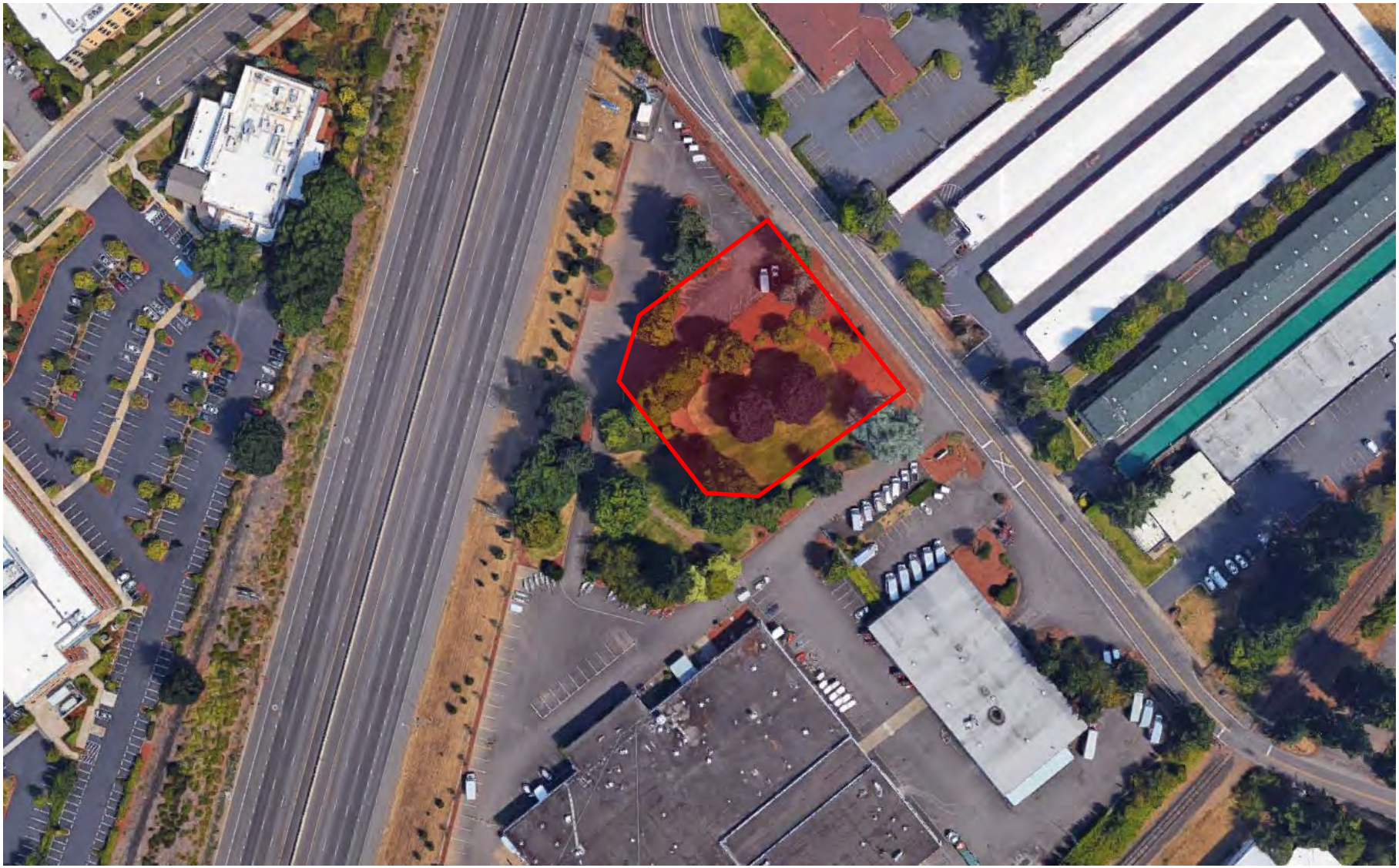
- City Council must find that the proposed conditional use meets the five criteria listed in Tualatin Development Code (TDC) 32.030





CUP-17-0002
TVF&R FIRE SATION USE

TUALATIN CITY COUNCIL PUBLIC HEARING
APRIL 9, 2018

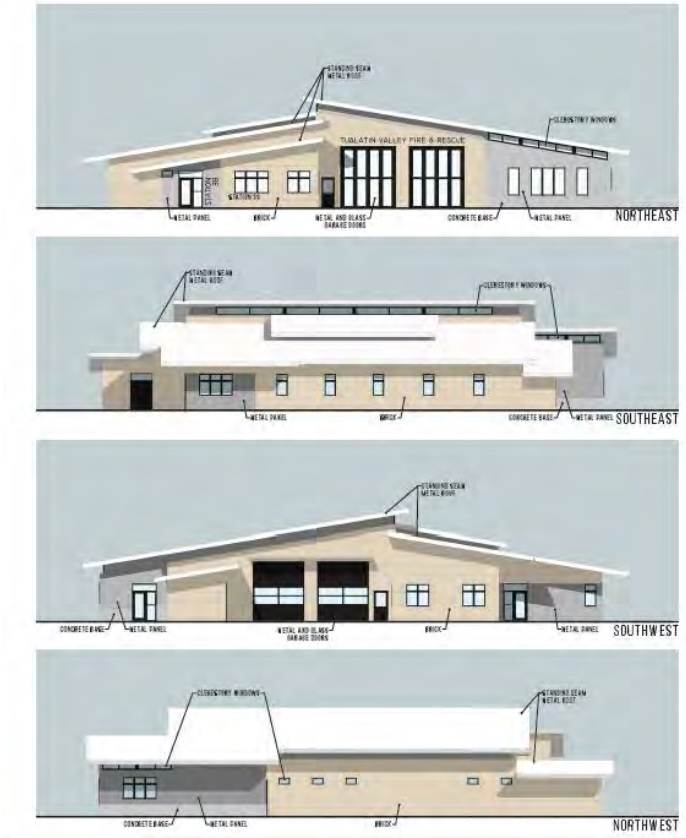


CUP-17-0002
TVF&R FIRE SATION USE

TUALATIN CITY COUNCIL PUBLIC HEARING
APRIL 9, 2018

APPLICANT PROPOSAL

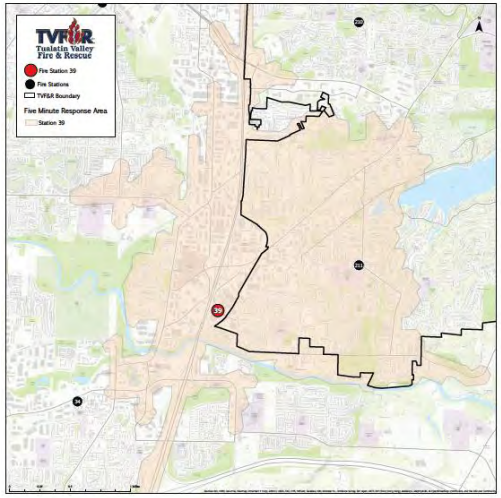
- 1.16 Acres
- Fire Station Use
  - 9,500 Sq Ft
  - 600 Sq Ft Community Room
  - 33 Parking Spaces
  - 24 Hour

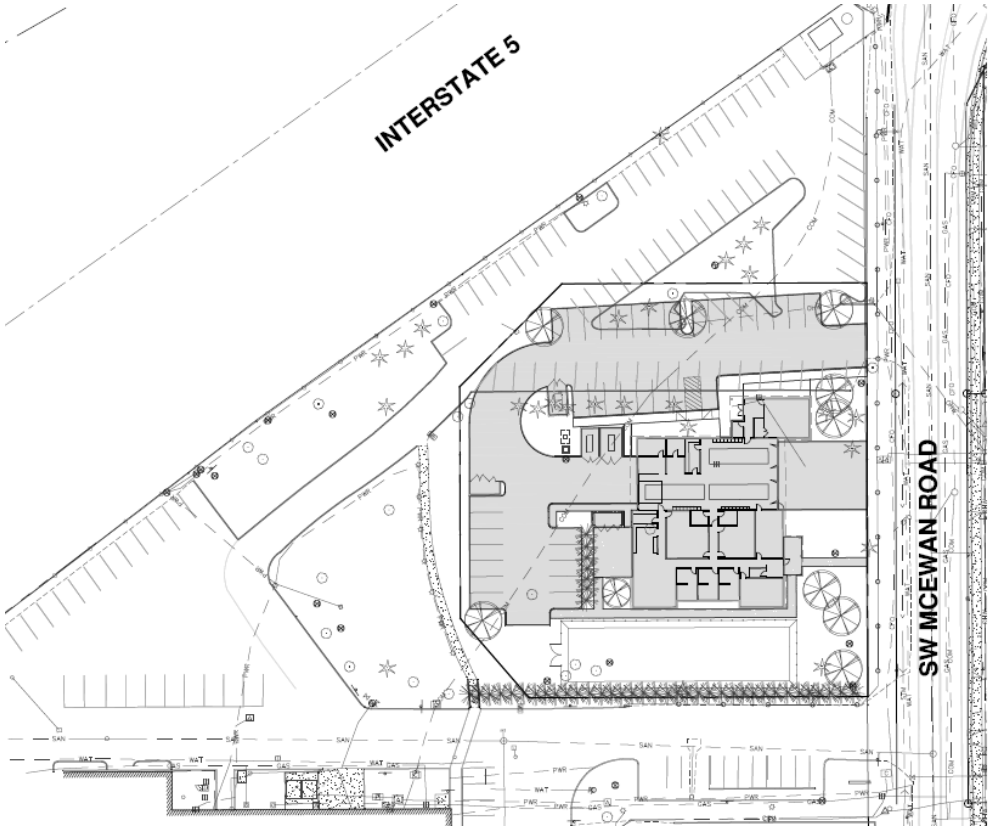


CUP APPROVAL CRITERIA

1. *Listed as a CUP in Zone.*

2. *Size, Shape, Location, Topo, Improvements & Natural features*

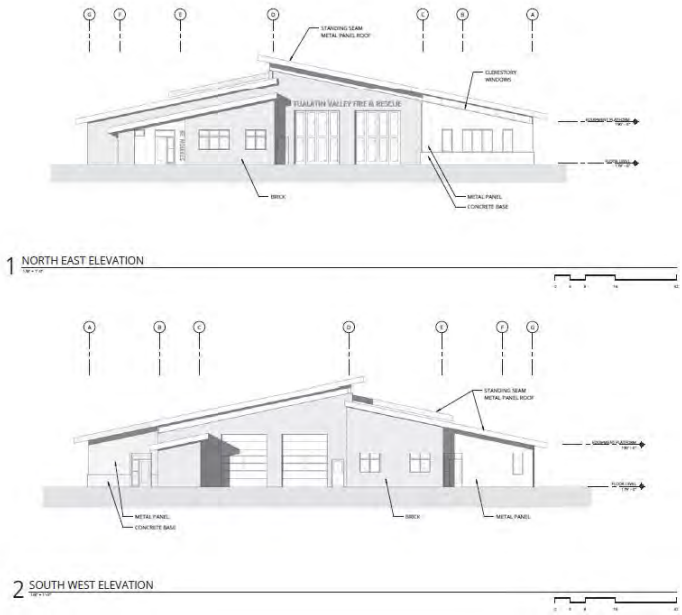




CUP APPROVAL CRITERIA

1. Listed as a CUP in Zone.

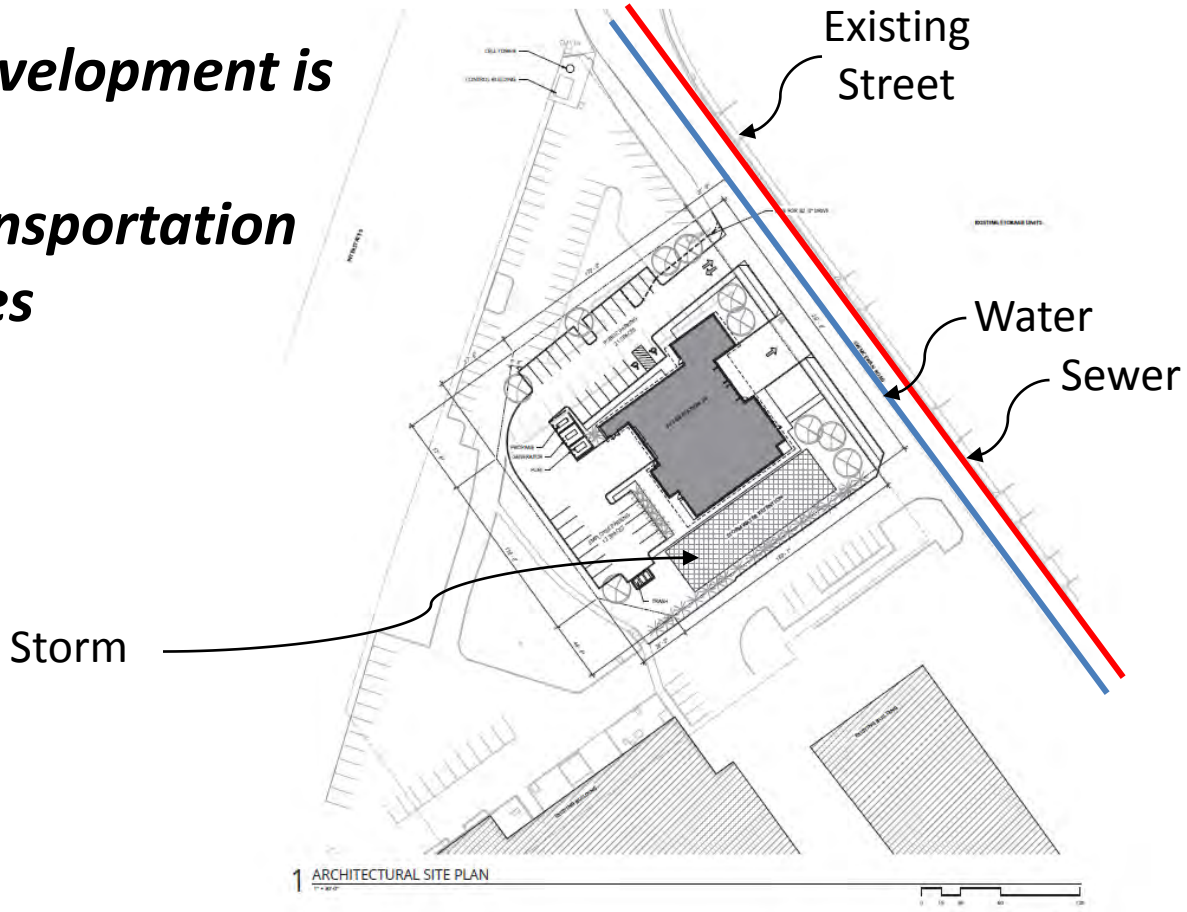
2. Size, Shape, Location, Topo, Improvements & Natural features



COA- Requires Architectural Review

CUP APPROVAL CRITERIA

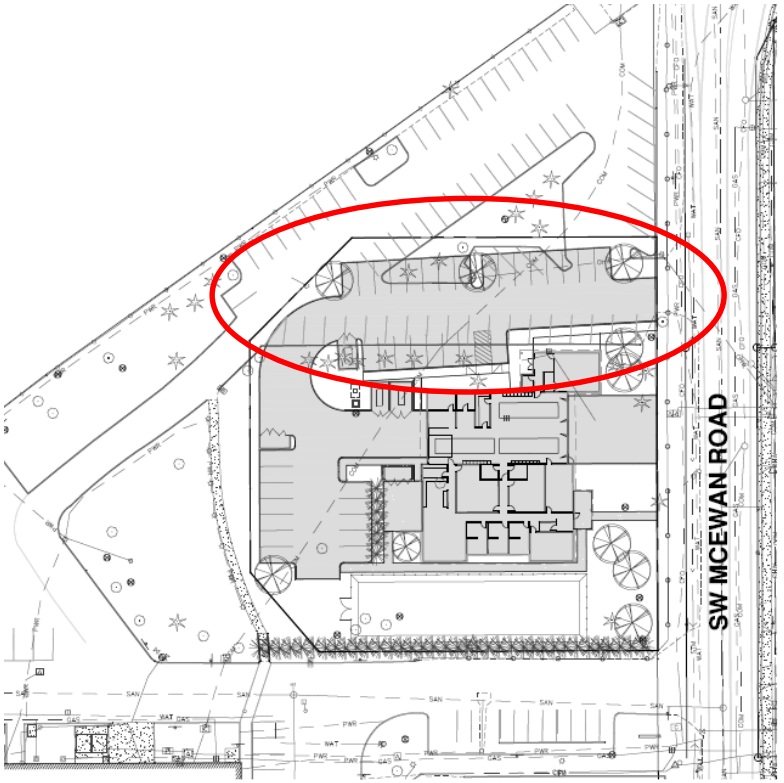
3. ***The proposed development is timely.***
   - ***Adequate Transportation***
   - ***Public Facilities***



CUP APPROVAL CRITERIA

4. The proposed use is compatible with surrounding area.

- Three sides- U-Haul
- East- Offices/Storage



CUP APPROVAL CRITERIA

5. The proposed development satisfies applicable objectives and policies of the Tualatin Community Plan.

- Operate CUP consistent with application materials
- Comply with noise standards
- Sign permits separately
- Time frames
- Comply with all applicable TDC policies and regulations

STAFF RECOMMENDATION

Based on staff analysis and findings, the proposed use meets the CUP criteria listed in TDC 32.030 Staff recommends approval of CUP-17-0002 with the conditions identified in the staff report.

NEXT STEPS

- Applicant Presentation
- Public Comment
- Council Deliberation and Decision

STAFF REPORT
CITY OF TUALATIN

TO: Honorable Mayor and Members of the City Council

THROUGH: Sherilyn Lombos, City Manager

FROM: Aquilla Hurd-Ravich, Community Development Director

DATE: 04/09/2018

SUBJECT: Request for Review (Appeal) of a Planning Commission Decision Approving a Variance (VAR17-0001) to the Separation Requirements of Wireless Communication Facilities

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ISSUE BEFORE THE COUNCIL:

Acom consulting submitted an application for a Variance to the Wireless Communication Facility separation requirements (VAR17-0001) and was approved by the Planning Commission on January 18, 2018. The Tualatin Development Code requires a minimum separation of 1,500 feet between wireless communication facilities, however the City may grant a variance to this provision if an applicant can demonstrate compliance with certain criteria. The Planning Commission considered a Variance request for a Wireless Communication Facility, POR Durham, to locate at 10290 SW Tualatin Road which is within 1,500 feet of an existing Facility. The existing facility is located at 10699 SW Herman Road which is the location of the City's Public Works site and it is approximately 750 feet southwest of the proposed WCF location.

Spectrasite Communications (subsidiary of American Tower Corporation) filed an appeal of the Planning Commission's decision. This public hearing is a new review or de novo hearing of the Variance application. Therefore, the City Council must consider the application for a Variance to the Wireless Communication Facility separation requirements.

RECOMMENDATION:

Staff recommends the City Council consider this staff report, analysis and findings, the applicant's and apellant's materials, and all materials from the previous three Planning Commission hearings including November 16, 2017, December 7, 2017 and January 18, 2018. Based on the applicant's narrative and photo simulations (included as exhibits to the analysis and findings) staff finds the application meets the variance criterion 33.025(1)(b).

EXECUTIVE SUMMARY:

Acom Consulting, Inc. proposed to construct a new unmanned wireless communication facility (WCF) on behalf of Lendlease (US) Telecom Holdings LLC - c/p PI Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. on the southwest corner of 10290 SW Tualatin Road. The proposed WCF would include a new 100-foot monopole support tower with antennas mounted at the top and opportunities for ancillary ground equipment including equipment cabinets, natural gas generator, cabling and an ice bridge, which will be located below in a new 25 foot by 48 foot secure fenced lease area surrounding the tower. It is anticipated that the proposed WCF will generate approximately one to two visits per month from a site technician.

The proposed WCF would be located within 1,500 feet of an existing WCF at 10699 SW Herman Road. Tualatin Development Code 73.470(9) requires that WCFs are separated by 1,500 feet:

"The minimum distance between WCF monopoles shall be 1500 feet. Separation shall be measured by following a straight line from one monopole to the next. For purposes of this section, a wireless communication facility monopole shall include wireless communication facility monopole for which the City has issued a development permit, or for which an application has been filed and not denied."

The applicant, Acom Consulting, seeks a variance from this code requirement. As stated in TDC Section 33.025(1) "The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1,500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b)." The original application provided findings for 33.025(1)(a)(i) through (iii). The applicant has provided a revised narrative to demonstrate findings for 33.025(1)(b).

TDC 33.025(1)(b) Site Characteristics
The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

The applicant stated that the proposed location includes tall, dense, evergreen trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity. The applicant submitted photo simulations to demonstrate this assertion.

Staff found, based on the materials submitted by the applicant, that the application meets this criteria. Staff's full analysis and findings are included as Attachment A and the applicant's narrative and photo simulations are Exhibits A and B to staff's analysis and findings.

The full staff reports from January 18, 2018, December 7, 2017 and November 16, 2017 are included as Attachment F.

OUTCOMES OF DECISION:

Approval of VAR17-0001 would result in the following:

- Allows the applicant to locate a Wireless Communication Facility (WCF) at 10290 SW Tualatin Road; and
- Allows staff to review an Architectural Review (AR) for the proposed WCF project.

Denial of VAR17-0001 would result in the following:

- Prohibits the applicant from locating a WCF at 10290 SW Tualatin Road.
- An Architectural Review decision must be denied as it could not meet the separation standard.

ALTERNATIVES TO RECOMMENDATION:

The City Council has two options:

1. Approve the proposed variance with appropriate findings that state the application meets the criteria of TDC 33.025(1)(b); or
2. Deny the proposed variance with appropriate findings that the application fails to meet the criteria of TDC 33.025(1)(b)

FINANCIAL IMPLICATIONS:

The Fiscal Year 2017/18 budget allocated revenue to process current planning applications, and the appellant and applicant have submitted payment per the City of Tualatin Fee Schedule to process the application.

Attachments:

Attachment A - Analysis and Findings
Attachment B - Appellant Narrative
Attachment C - Applicant Response
Attachment D - Signed Resolution
Attachment E - Planning Commission meeting minutes
Attachment F - Previous Staff Reports Jan 2018, Dec 2017, Nov 2017
Attachment G - Presentation for City Council April 9, 2018
Attachment H - Public Comments received as of March 27, 2018

POR DURHAM WIRELESS COMMUNICATION FACILITY (WCF)

VARIANCE APPLICATION (VAR-17-0001)

ATTACHMENT A: ANALYSIS AND FINDINGS

The issue before the Tualatin City Council is consideration of a Variance (VAR) request for Wireless Communication Facility (WCF) separation that would allow the construction of a new 100-foot-tall monopole with antennas mounted at the top and opportunities for ancillary ground equipment within 1,500 feet of an existing WCF located at 10699 SW Herman Road approximately 750 feet southwest of the proposed WCF location. The proposed WCF would be located at 10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 000800) on a property owned by Tote 'N Stow and operates as a storage facility for recreational vehicles.

Specifically, the applicant is asking for a variance from one of the Community Design Standards regulating wireless communication facilities. That standard (TDC 73.470(9)) requires a 1,500 foot separation between wireless communication facility monopoles.

> "The minimum distance between WCF monopoles shall be 1500 feet. Separation shall be measured by following a straight line from one monopole to the next. For purposes of this section, a wireless communication facility monopole shall include wireless communication facility monopole for which the City has issued a development permit, or for which an application has been filed and not denied."

In order to grant the proposed variance, the request must meet the approval criteria of Tualatin Development Code (TDC) Section 33.025(1). The applicant prepared a narrative that addresses the criteria, which is included here as Exhibit A, and staff has reviewed this and other application materials and included pertinent excerpts below.

The following materials and descriptions are based largely on the applicant's narrative; staff has made some minor edits. Staff comments, findings, and conditions of approval are in Italic font.

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.

(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has

been filed and not denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Applicant Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)(b) as discussed below.

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and

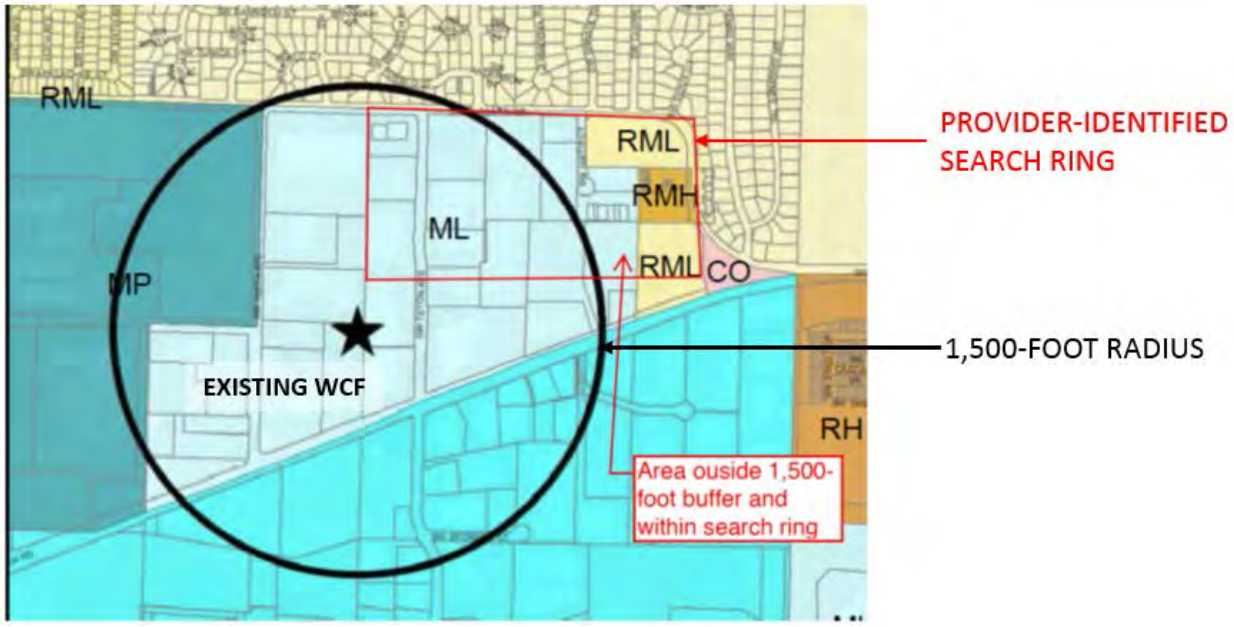
Applicant Response: Not applicable – Applicant has demonstrated compliance with Section 33.025 (1)(b) as discussed below.

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Applicant Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps below.

(Excerpts from applicant material)



Existing Tower 1,500' radius with Verizon Search Ring Overlap

½ Mile radius of proposed tower

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Applicant Response: Proposed monopole location includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity. See attached photo simulations from various locations within the nearby RL District. A balloon test was used to verify height and location of the proposed monopole which was virtually invisible from most locations within the RL District.

Staff Response: The subject property, located at 10699 SW Herman Road, is bound on the north by a Low Density Residential (RL) planning district, directly on the east, west and south by a Light Manufacturing (ML) Planning District. The surrounding area to the east includes Medium Low Density (RML) and Medium High Density (RMH) residential planning districts. There are no small lot subdivisions in the RML district in the surrounding area to the east of the subject property.

The applicant has submitted photo simulations included here at Exhibit B. Photos were taken in five different locations including from the RL planning district and the RML and RMH planning districts. Photos were also taken from the ML planning district. These photos demonstrate the subject project has tall evergreen trees that will screen 50% of the monopole.

View #1 shows that looking south from the RL planning district toward the site tall evergreens completely block the view of the property. View #2 is from the ML planning district and although the criterion does not require screening from ML this photo shows there are tall evergreens and other dense trees along the eastern property line. View #3 was taken from the RMH and RML area to the east. In this photo evergreens are present and other tall trees but the monopole is not as well screened as from other vantage points. View #4 is from the border of the RL and ML planning districts, and in these photos no evergreens are present and the tower is somewhat visible beyond an existing industrial building. View #5 is taken from the RL planning district looking southeast. Evergreens are present in this photo as well as other tall trees that help screen the proposed monopole.

The photo simulations of the proposed monopole in views #1, #4 and #5 are most applicable given that the criterion is specific to screening from an RL district or an RML district with a small lot subdivision. There is not a small lot subdivision in the surrounding area to the east where RML is located. Views 1, 4 and 5 were taken from the RL planning district or the boundary of RL and ML. View #1 shows the location completely screened by dense tall evergreens. View #4 does not show evergreens in the photo but screening from an existing building. View #5 shows the presence to tall evergreens and some screening. Staff finds that at least 50% of the proposed monopole will be screened by tall dense evergreen trees from the RL planning district.

This criterion is met.

Exhibits

Exhibit A: Applicant Narrative January 8, 2018

Exhibit B: Photo Simulations January 9, 2018

APPLICATION FOR VARIANCE

UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY AT:

10290 SW Tualatin Road
Tualatin, OR 97062

Prepared By

Date
January 08, 2018

Project Name
POR Durham

Applicant:	Lendlease (US) Telecom Holdings LLC c/o PI Tower Development LLC 909 Lake Carolyn Parkway Irving, TX 75039
Co-Applicant:	Verizon Wireless (VAW), LLC dba, Verizon Wireless 5430 NE 122nd Avenue Portland, OR 97230
Representative:	Acom Consulting, Inc. Reid Stewart 5200 SW Meadows Road, Suite 150 Lake Oswego, OR 97035
Property Owner:	Tote 'N Stow, Inc. 10290 SW Tualatin Road Tualatin, OR 97062

Project Information:

Site Address:	10290 SW Tualatin Road, Tualatin, OR 97062
Parcel:	2S123B000800
Parcel Area:	3.63 acres
Zone Designation:	ML (Light Manufacturing Planning District)
Existing Use:	Storage Facility
Project Area:	1,200 square foot lease area (25' x 48' fenced equipment area)

Chapter 33: Variances

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.

(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not

denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)b) as discussed below.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and,

Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)b) as discussed below.

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps below.

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Response: Proposed monopole location includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity. See attached photo simulations from various locations within the nearby RL District. A balloon test was used to verify height and location of the proposed monopole which was virtually invisible from most locations within the RL District.

(2) The City may grant a variance to the maximum allowable height for a WCF if the applicant demonstrates:

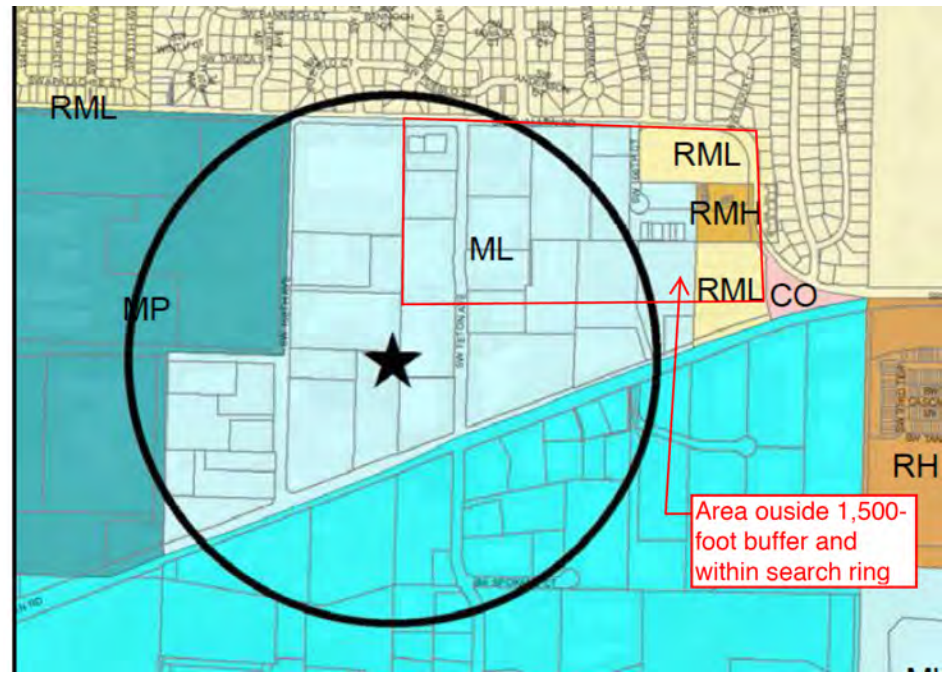
(a) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide at a height that meets the TDC requirements. The needed capacity or coverage shall be documented with a Radio Frequency report; and,

(b) The collocation report, required as part of the Architectural Review submittal, shall document that existing WCFs, or a WCF for which an application has been filed and not denied, cannot be modified to provide the capacity or coverage the tower is intended to provide.

Response: Not applicable – Applicant is not requesting a variance to the maximum allowable height for the proposed WCF.

VERIZON SEARCH RING

EXISTING TOWER 1,500' RADIUS WITH VERIZON SEARCH RING OVERLAP



½ MILE RADIUS OF PROPOSED TOWER

TIM BRADLEY IMAGING

PHOTO SIM LOCATION MAP

lendlease

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

TIM BRADLEY IMAGING

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

lendlease

VIEW #1

TOWER NOT SEEN

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #2 LOOKING SOUTHWEST
ON SW 100TH COURT

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #3 LOOKING SOUTHWEST
ON SW TUALATIN ROAD

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #4 LOOKING SOUTHEAST
ON SW TUALATIN RD. AT SW TETON AVE.

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #5 LOOKING SOUTHEAST
ON SW 105TH COURT & SW PUEBLO ST.

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

City of Tualatin

www.tualatinoregon.gov

CITY OF TUALATIN
RECEIVED
FEB 07 2018
COMMUNITY DEVELOPMENT
PLANNING DIVISION

REQUEST FOR REVIEW

A Request for Review must be received by the Community Development Department - Planning Division or Engineering Department by 5:00 p.m. of the 14th calendar day after the Notice of the Decision. Only those persons who submitted comments during the notice period may submit a request for review. You must provide all of the information requested on this form, as required by TDC 31.075. This form must be signed and submitted in writing. You will be notified of the hearing date.

Name of Party requesting review: Spectrasite Communications, LLC (wholly owned subsidiary of American Tower Corporation)

Address: 250 Church St SE, Suite 200, Salem, Oregon, 97301

Date: Jan. 24, 2018 Telephone: (503) 399 - 1070

Did you submit comments on the proposal during the notification period? Yes

You represent or you are:

____ The applicant
____ City Councilor
____ Government agency
___ Architectural Review Board (ARB) member
___ City Manager
_X_ Other Impacted Party
____ City-recognized neighborhood association

I request a review of Case No. **VAR - 17 - 0001**

This form is used in part to determine the appropriate hearing body for review. Check which portion of the decision for which you are requesting review:

_____ AR/Arch. Features
_____ AR/Public Facilities
_____ Historic Landmark
_____ Industrial Master Plan
_____ Interpretations
_____ Partitions
_____ Reinstatement of Use
_____ Sign Variance
_____ Subdivisions
_____ Transitional Use Permit
__X__ Variances

Project: PI Tower Development Project OR-Tualatin-Durham/ 10290 SWTualatin Road
(Give description of subject property or proposed name of project)

Explain clearly which portions of the decision you are asking to be reviewed (attach separate sheet if needed). This should specify how you are adversely affected by the decision and how the decision is allegedly not in conformance with applicable TDC requirements:
Please see attached letter outlining the request for review in detail.

Appeal of Staff Architectural Review decision to ARB: $0. Appeal of Decision to Council: Please see current fee schedule.

By _____ Margaret Robinson, Senior Counsel
Your signature

FOR OFFICE USE ONLY
Received by Planning ____ Received by Engineering ____ Date received: 2-7-18
Fee received 145.00 Receipt No. 4792 Check # 46777
The review will be heard by the _____ARB _____City Council Date of hearing: _____

February 7, 2018

VIA HAND DELIVERY

Saalfeld Griggs PC

City of Tualatin City Council
c/o: Aquilla Hurd-Ravich, Planning Manager
Community Development Dept – Planning Division
18880 SW Martinazzi Ave
Tualatin, OR 97062-7092

RE: Appeal of PI Tower Development Project OR-Tualatin-Durham/10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 000800) (VAR-17-0001)
Our File No: 00000-28543

Dear Ms. Hurd-Ravich and Honorable City Council Members:

I represent American Tower Corporation, a Delaware corporation, and Tower Asset Sub, Inc., a Delaware corporation (collectively, "***ATC***"), which owns a wireless communications facility (the "***ATC Tower***") located within a dense evergreen stand in the rear yard of the City of Tualatin's Public Works Department Building, located at 10699 SW Herman Road, Tualatin, Oregon 67062 (the "***ATC Tower Location***"). ATC will be adversely impacted by the wireless communication facility proposed on behalf of Lendlease (US) Telecom Holdings LLC - c/o PI Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. (herein collectively "***Applicant***") on the southwest corner of 10290 SW Tualatin Road, Tualatin, Oregon, more particularly described as Tax Lot 800 of Assessor Map 2S123B (herein the "***Subject Property***"). Accordingly, ATC submits this Request for Review of Planning Commission Resolution No. TDC-609-17 (the "***Resolution***").

Executive Summary

In 1999, the City granted ATC approval to construct a wireless communication facility up to 146 feet in total height (the "***Existing Decision***"). In 2000, the City granted ATC a lease for a portion of the City's property located in the rear of the City's Public Works Building within a dense stand of evergreen trees. A 130-foot monopole together with a 16-foot whip antenna were subsequently constructed (the antenna is no longer attached to the tower). ATC may extend or replace the existing pole to 146 feet pursuant to the existing variance approval or obtain a non-discretionary approval under federal law extending the ATC Tower to a total of 166 feet. ATC has demonstrated it can accommodate an additional carrier upon expanding the tower to 146 feet, and will offer additional evidence of its coverage capacity at 166 feet. No trees need to be removed for ATC to accommodate an additional carrier. For these reasons, Applicant cannot satisfy Applicant's burden of proof under Tualatin Development Code (TDC) 33.025(a). Additionally, Applicant has argued that it can justify a variance based on the screening of buildings, deciduous trees, and shrubs located on the Subject Property and

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Salem, Oregon 97308

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evergreen trees located thorough the neighboring residential zones. These arguments are inconsistent with the plain text of TDC 33.025(b), and Applicant's requested interpretation invites an error of law. For these reasons, as more particularly described below and in the record, the City Council must reverse the Planning Commission's decision approving Applicant's variance request.

1. Summary of Criteria

As set forth below, the Planning Commission erred as a matter of law and a matter of fact when it determined that Applicant had satisfied its burden of proof as to the criteria set forth in TDC 33.025. The applicable provisions of TDC 33.025 state as follows:

> **Section 33.025 Criteria for Granting a Variance for a Wire-less Communication Facility**
> No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.
>
> (1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.
>
> (a) coverage and capacity.
>
> (i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not denied. The needed capacity or coverage shall be documented with a Radio Frequency report;
>
> (ii) *The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and,*
>
> (iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.
>
> (b) site characteristics. *The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.*

It is ATC's position that Applicant has failed to provide substantial evidence in the record that it has satisfied either of the criteria set forth in TDC 33.025(1)(a) and (b).

2. ***ATC has standing to request a review of the Planning Commission's Decision as ATC provided oral and written comments during the notice period and at the public hearing as well as submitting a Request for Review within fourteen (14) days of the mailing date of the Notice of Adoption.***

Applicant's proposed tower is located approximately 750 feet from the ATC Tower, which is within the 1,500-foot buffer area for Wireless Communication Facilities ("***WCF***") required by TDC 73.470(9). Therefore, under TDC 33.025(1)(a), a variance is needed. On January 18, 2018, the City of Tualatin Planning Commission adopted Resolution No. TPC-609-17 granting Applicant's requested variance. ATC submitted both oral and written testimony at several points prior to the closing of the public hearing, including, but not limited to, oral testimony given on November 17, 2017; written comments submitted on November 22, 2017; and written comments submitted on January 18, 2018. Therefore, ATC has standing to submit a Request for Review under TDC 31.078 and has met the requirements set forth within that section.

3. ***Planning Commission's determination that Applicant satisfies the variance criteria because the ATC Tower cannot provide the necessary coverage and capacity is factually incorrect.***

The Resolution states as justification for the variance to the 1,500-foot radius requirement from an existing tower an assertion that the existing ATC Tower is not suitable for co-location of additional carriers because of interference from the trees surrounding the site and has provided an RF interference letter in addition to its RF report. ATC acknowledges that under the current circumstances, the height of the trees would create interference for new co-location of carriers below the existing carrier heights; however, the interference from the trees can be eliminated by expanding the existing monopole. ATC has provided supplemental RF coverage analysis in the record supporting ATC's position.

4. ***Applicant has the burden of providing substantial evidence in the record that it satisfies the criteria set forth in TDC 33.025(1)(a).***

Under Oregon law, the appropriate standard of review upon appeal of a land use decision to the Land Use Board of Appeals ("***LUBA***") is whether there is substantial evidence in the record that Applicant has satisfied the criteria set forth in the Tualatin Development Code (the "***Code***"). ORS 197.835. Meaning that upon review by LUBA, if, viewing the only the evidence in the record, a reasonable person could not make the determination that Applicant has satisfied all approval criteria, the Resolution will be deemed to be not supported by substantial evidence. *S. St. Helens, LLC v. City of St. Helens*, 352 P.3d 746, 271 Or. App. 680 (2015). Applicant has failed to meet this burden.

ATC does not carry a burden of proof in this matter. Arguments by Applicant and comments by the Planning Commission members suggested that there was confusion on this matter. Specifically, Applicant argued that ATC needed to prove that ATC would modify its tower within a date certain, and that it could provide the exact same coverage as Verizon's proposed coverage from the Subject Property. In addition to mischaracterizing the scope of the criteria, Applicant unlawfully urges for a shift of the burden of proof from itself to ATC.

The issue under TDC 33.025(1)(a)(ii) is whether the ATC Tower can be modified to accommodate another carrier. It is not whether it can provide the *exact same* RF coverage map as projected by Verizon from Applicant's location. Such a standard is inconsistent with the text and context of the criterion. TDC 33.025(1)(a) requires evidence that alternative coverage is "technically not practicable"

or whether an alternative can "still provide the approximate coverage the tower is intended to provide." Applicant's assertion that ATC must prove 1) it will expand the tower by a date certain; and 2) ATC can provide the exact same coverage as Verizon is inconsistent with the text and context of the criterion. Rather, the burden of proof for Applicant is best understood as requiring Applicant to prove the ATC Tower cannot be modified to accommodate another carrier's approximately similar needs.

5. Planning Commission erred in finding that ATC is unable to modify the ATC Tower to allow for co-location on the existing tower.

ATC has provided substantial evidence in the record demonstrating that it is able to modify the existing conditions to increase the capacity and coverage of the ATC Tower. TDC 33.025(1)(a)(ii) states:

> The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied cannot be modified to accommodate another provider

This section of the Code specifically allows for modifications to an existing tower in order to allow for co-location on an existing tower that may not currently be possible. The Resolution states that the ATC Tower cannot be modified in a way that would allow it to provide the necessary coverage and capacity without being removed and replaced; however, as further detailed below, this is factually inaccurate.

6. Alternatively, ATC may under the Existing Decision seek an extension of the ATC Tower from the existing height of 100 feet to a permissible height of 146 feet.

In the alternative, ATC may pursue an extension of the height of the ATC Tower. The Existing Decision allowed for a "monopole tower, antenna platform and whip antennae [that] shall not exceed 146 ft. in height above grade." Therefore, under the Existing Decision, ATC is authorized to either extend the ATC Tower up to 146 feet or replace it with a larger tower.

7. The Spectrum Act Authorizes an Extension of the ATC Tower to 166 feet.

Additionally, in 2012, after ATC had received a variance via the Existing Decision, Congress enacted the Middle Class Tax Relief and Job Creation Act (the "***Act***"). Within the Act, Congress included Section 6409, a provision intended to expand upon the Telecommunications Act of 1996, and to expedite non-substantial modifications to existing wireless communications facilities (the "***Spectrum Act***") (codified at 47 U.S.C. 1455). Specifically, the Spectrum Act, and its implementing rules, requires state or local government agencies to approve any "eligible facilities request" related to the modification of existing wireless communications that does not substantially change the physical dimensions of the existing facility within sixty days of receipt of a completed application. 47 C.F.R. § 1.40001(a). With respect to the current circumstances, an eligible facilities request includes an extension of the greater of ten percent (10%) of the eligible structures or twenty (20) feet to be a non-substantial modification for purposes of allowing co-location of an additional carrier. 47 C.F.R. § 1.40001(b)(7)(i).

47 C.F.R. § 1.40001 (b)(7)(i)(A) provides a definition of "eligible structures" and how to measure their height. It provides:

> Changes in height should be measured from the original support structure in cases where deployments are or will be separated horizontally, such as on buildings' rooftops; in other circumstances, **changes in height should be measured from the dimensions of the tower or base station, inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the Spectrum Act**. *Id. (emphasis added).*

The Existing Decision specifically authorizes ATC to construct a 130-foot monopole, a 16-foot whip antenna, two 6 feet in diameter microwave dishes, and twelve 5-foot panel antennae located on a platform at the top of the pole so long as all such improvements do not exceed 146 feet in total height. The permitted height extensions under the Spectrum Act allow at minimum a 20-foot increase in the applicable height standard, which includes all originally approved appurtenances. ATC provided a letter from Bryan Lanier, an Oregon licensed P.E., S.E., who is of the expert opinion that the existing site can accommodate an extension of this size. This letter was previously entered into the record.

Therefore, it is ATC's position that the City of Tualatin must ultimately approve an extension of the ATC Tower of up to twenty feet to the existing 146-foot height limit, i.e., a height limit of 166 feet for the tower and all antenna and related appurtenances which may or may not include the replacement of the ATC Tower. This extension or replacement is considered a non-substantial modification in accordance with Spectrum Act and its implementing rules. While the Spectrum Act does not entirely divest review authority from the City of the extension request, the City's review is limited to a reasonable approval process not to exceed sixty days from the date of filing a completed application, and federal law preempts the City's authority to deny such a request absent legitimate health or safety concerns.

8. The Spectrum Act Preempts the TDC in Part

Generally, the City of Tualatin (the "***City***") requires both a building permit and a Minor Architectural Review ("***MAR***") in order to grant approval of a proposed expansion of an existing wireless tower. The approval of a building permit itself is ministerial in nature because it is subject to clear and objective standards and there is no right to a hearing.[1] When viewed in the context of state and local law, the MAR qualifies as a land use decision under Oregon law. TDC 73.040 provides that existing wireless communication facilities may not be altered until the architectural review plan required by TDC 31.071 has "been approved by Community Development Director and City Engineer or their designees or by the Architectural Review Board or City Council for conformity with applicable standards or criteria" under the Code. TDC 31.071 further provides that the alteration of wireless communication facilities is processed as a Level II (Discretionary) Architectural Review, which is conducted as a limited land use decision according to the process outlined in Section 31.074. TDC 31.074(1). However, as stated above, ATC's proposed request qualifies under federal law as an "eligible facilities request ***that does not substantially change the physical dimensions of the existing facility," and therefore, the City's

[1] Under Oregon law, a land use decision specifically excludes the approval or denial by a local government of "a building permit issued under clear and objective land use standards." ORS 197.015(10)(b)(B). In *Bell v. Klamath County*, the Oregon Court of Appeals determined that a denial of a building permit is not a land use decision if it is a ministerial decision * * * * made under clear and objective standards contained in an acknowledged comprehensive plan or land use regulation and for which no right to a hearing is provided by the local government ****". *Bell v. Klamath County*, 11 Or. App. 131, 711 P.2d 209 (1985) *citing* ORS 197.015(10)(b).

discretionary review is preempted by federal law.[2] As a result of this preemption, the City's review and approval of federal law is not a "land use decision" under Oregon law, and the City must approve the application within 60 days of submittal.

Based on the analysis of the interplay between federal, state, and local laws, ATC's proposed expansion qualifies as an eligible facilities request, and therefore, ATC's proposed expansion would not require a variance under the Code. As such, it is ATC's position that this expansion is permitted as of right under federal law and must be approved within 60 days of submittal of a complete MAR application. Accordingly, the assertion that ATC cannot, as a matter of law, provide the requested coverage is inaccurate. Therefore, Applicant has not met its burden to satisfy the variance criteria based on a lack of coverage and capacity.

9. The Planning Commission erred in its determination Applicant satisfies the variance criteria under TDC 33.025(1)(b).

9.1 Applicant has the burden of providing substantial evidence in the record that it satisfies the criteria set forth in TDC 33.025(1)(b).

TDC 33.025(1)(b) requires Applicant to prove that the "*proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole* from the RL District or from a small lot subdivision in the RML District (emphasis added)." Applicant has failed to meet this burden regarding TDC 33.025(1)(b).

9.2 Applicant misinterprets "location" to include the conjoining tax lot under common ownership.

TDC 33.025(1)(b) requires Applicant to prove that the "proposed monopole location includes tall, dense evergreen trees." Applicant has misinterpreted the meaning of "location" within the variance criteria. Applicant's evidence and arguments before the Planning Commission changed; however, they appear to include two possible definitions of the word "location." First, Applicant argued that the term "location" extended to the entirety of the tax lot as well as the conjoining tax lot under common ownership by Applicant. Such a definition of the word "location" is inconsistent with the plain language of the Resolution under review, which states "a resolution for a Variance application for a Wireless Communication Facility to locate at 10290 SW Tualatin Rd within 1,500 feet of an existing Wireless Communication Facility. (Tax Map 2S123BO00800) (emphasis added)."

Second, Applicant's arguments and the comments of the Planning Commissioners suggest a second even more broad definition. Specifically, it was suggested that screening trees located on nearby properties in the zoning district or even outside of the zoning district could support a variance application. These broad interpretations are inconsistent with the text, context and purpose of the TDC. The Planning Commission's reliance on Applicant's proposed interpretation is an error of law.

[2] ORS 197.015(10)(a)(A) defines a land use decision as a final decision by the City that concerns "the adoption, amendment or application of: (i) The goals; (ii) A comprehensive plan provision; A land use regulation; or (iv) A new land use regulation." "Land use regulations" are limited to local government zoning ordinance, land division ordinance adopted under ORS 92.044 or 92.046 or similar general ordinance establishing standards for implementing a comprehensive plan." ORS 197.015(11). "Land use regulations" do not include federal laws, and "land use decisions" do not include discretionary application of federal laws.

9.3 Applicant has failed to show that the Subject Property contains "tall, dense evergreen trees."

TDC 33.025(1)(b) requires Applicant to prove that the "proposed monopole location includes tall, dense evergreen trees." This is a foundational requirement. Failure to show that the Subject Property contains such "tall, dense evergreen trees" prohibits a granting of variance under the second variance criteria. This is a very specific requirement and the text is unambiguous. Staff's report and Applicant's proposal ignore the fact that the Subject Property fails to have this inherent characteristic even if the definition of the "location" is to be expanded to include the adjoining tax lot under common ownership. Simply, there are no tall, dense evergreen trees on Applicant's property that provide screening to the adjoining residential zoned lands. Applicant may have one such tree on its over eight-acre tract; however, it is impossible to find that a single evergreen tree screens fifty percent of the proposed monopole.

Applicant's evidence fails to meet the requirement for "tall, dense evergreen trees" in TDC 33.025(1)(b) on every count. Applicant does not include any photos of "tall, dense evergreen trees" on the Subject Property *because no such tall, dense evergreen trees exist*. The only photo of the Subject Property provided in the supplemental staff report and submitted by Applicant shows a single line of primarily deciduous trees bordering the southern boundary of the Subject Property and a portion of the western boundary of the Subject Property. *See* Applicant Photo Simulation 1 of 6, Exhibit B to Applicant's Analysis and Findings dated January 18, 2018. ATC previously submitted a photo from Google Maps that provides evidence that the few trees located on the Subject Property are sparsely located and deciduous in nature. ATC provided a picture of its own property in order to demonstrate the type of coverage required under TDC 33.025(1)(b) and approved by the City. *See* Revised Staff Report, pg. 66, 80-86. Unlike the ATC Tower property, there is nothing inherent to the Subject Property that will provide the requisite year-round natural screening from the nearby RL and RML districts. There is no ambiguity in the text and no evidence provided by Applicant suggesting otherwise. Thus, the Planning Commission erred in approving the variance request.

9.4 The photo simulations provided by Applicant fail to provide substantial evidence of that the variance criteria is satisfied.

Applicant submitted only five photo simulations. Photo Simulation No. 1 was taken north of the intersection of SW Pueblo Street and SW Jurgens Ave. Applicant points to three tall evergreen trees located along the SW Tualatin Road right-of-way as evidence of satisfactory screening. The criterion clearly requires the evidence of evergreen screening to be those trees located on the Subject Property. Taking a photo behind an off-site tree to guarantee an image of screening is gross distortion of the text, purpose, and policy behind the variance criteria. Were this to be allowed as satisfactory evidence, the Planning Commission could never deny an application where even one tree existed in the abutting residential neighborhood to hide behind. Photo Simulation No. 1 is not evidence, and Applicant and staff are incorrect to suggest it can substantiate approval.

Photo Simulation No. 2 is from the SW 100th Court turnaround. This photo was taken from the ML district. The criterion clearly requires evidence that the proposed tower is screened from the surrounding RL and RML districts. This evidence is of no value in determining whether Applicant has met its burden of proof. The inclusion by Applicant of this photo as evidence demonstrates an ignorance, willful or unintentional, of the text, purpose, and policy of the variance criteria. Moreover, the photo shows the tower not screened by any evergreen trees. Rather, it is clearly visible

notwithstanding the previously mentioned deciduous trees in the area. The low angle of the photo, which suggests that the tower is screened by the hedge (which is roughly the height of a low-profile van), suggests the simulations lack professional credibility. Photo Simulation No. 2 is not evidence, and it should be disregarded except as evidence as to the questionable credibility of the simulations themselves.

Applicant's final three photo simulations were all taken behind buildings. Even if the tower was screened by buildings, such a fact is not the type of evidence needed to satisfy the criteria. As explained above, Applicant needed to prove that onsite, tall, and dense evergreen trees screen at least fifty percent of the proposed tower, like they do for the existing ATC Tower. Applicant's simulations are irrelevant and are clearly "cherry-picked" photos. If an applicant were able to satisfy a variance criterion by taking photo simulations from behind a building, no variance request would ever be denied. Clearly, individuals who are inside those buildings, including the multi-family buildings shown in Photo Simulation No. 3 and the residence shown in Photo Simulation No. 5, would be able see the tower. If anything, these simulations are evidence that Applicant cannot satisfy the criteria. The Planning Commission must reject the invitation to "water-down" TDC 33.025(1)(b) so that it is effectively meaningless. An approval of Applicant's variance request is a misinterpretation TDC 33.025(1)(b).

9.5 Applicant's proposed interpretation is inconsistent with the text, context, purpose, and policy of the variance chapter and inconsistent with general variance laws.

As explained above in detail, the text of TDC 33.025(1)(b) is unambiguous, and it requires showing that onsite tall, dense evergreen trees screen fifty percent or more of the proposed tower. Applicant's requested interpretation is as follows: offsite trees and offsite buildings that screen the proposed tower can substantiate the variance under TDC 33.025(1)(b). In addition to being inconsistent with the unambiguous text, such an interpretation is inconsistent with the context, purpose, and policy of the variance chapter and inconsistent with general variance laws.

Variances are generally subject to the review criteria under TDC 33.020; however, variances for towers are subject to the criteria under TDC 33.025. While ATC acknowledges TDC 33.020 is not the mandatory approval criteria, it is relevant context. TDC 33.020(1) requires the applicant to prove a hardship exists and that it "is created by exceptional or extraordinary conditions applying to the property that do not apply generally to other properties in the same planning district or vicinity and the conditions are a result of lot size or shape, topography, or other physical circumstances applying to the property over which the applicant or owner has no control." These elements, while stated slightly differently and with greater specificity, are also present in TDC 33.025. The requirement for a hardship is reflected in the obligation for Applicant to prove that an existing tower cannot technically provide the needed coverage and cannot be modified to accommodate another provider under TDC 33.025(1)(a). Similarly, the requirement for "extraordinary circumstances applying to the property" is reflected in the requirement under 33.025(1)(b) that onsite "tall, dense evergreen trees" screen the proposed tower. Applicant's request essentially removes any factor that would differentiate this proposal and this property from any other future variance case or other property. Essentially, the Planning Commission's approval would be precedent that the "criteria" means nothing. Put differently, what is to stop the application for a third tower on the neighboring property? A fourth tower next to that?

Variances are supposed to be difficult. They allow a proposal that is in violation of the Code's development standards. They should not be granted with ease or based on evidence that is inconsistent with the text, context, purpose, and policy of the Code. For these reasons, ATC respectfully requests

that the City Council reverse the Resolution of the City of Tualatin Planning Commission and deny the proposed variance request.

Sincerely,

ALAN M. SOREM
asorem@sglaw.com
Voice Message #303

AMS:myg

March 21, 2018

VIA EMAIL

City Council
City of Tualatin
Attn: Aquilla Hurd-Ravich
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Tualatin, OR 97062
ahurd-ravich@tualatin.gov

Re: Variance for Wireless Communications Facility - 10290 SW Tualatin Rd.
Application No. VAR-17-0001
Applicant's Response to American Tower Corporation's Appeal

Dear Mayor Ogden & Councilors:

This firm represents the applicant for the above-referenced matter, Lendlease (US) Telecom Holdings, LLC, c/o PI Tower Development, LLC, Verizon Wireless and the property owner (the "Applicant"). We are submitting this response to American Tower Corporation's ("ATC") written appeal, dated February 7, 2018 (the "Appeal"), of the Planning Commission's Resolution No. TDC-609-17 unanimously approving the Applicant's variance application for a Wireless Communications Facility ("WCF") to be placed within 1,500 feet of an existing wireless communications facility (the "Application"). For the reasons set forth in this letter, the City Council should deny the Appeal and affirm the Planning Commission's unanimous decision.

Background

The Applicant is proposing a 100-foot WCF tower and associated equipment on a 3.63-acre property located at 10290 SW Tualatin Rd. (the "Property"). The Property is zoned Light Manufacturing ("ML") and is currently being used as a storage facility (Tote 'N Stow). The WCF is designed to accommodate two wireless carriers – Verizon Wireless and T-Mobile.

ATC currently operates a 130-foot wireless communications tower located at 10699 SW Herman Rd. (the "ATC Tower"). The ATC Tower is within 1,500 feet of the proposed WCF. Tualatin Development Code ("TDC") 73.470(9) does not allow a new wireless communications tower within 1,500 feet of an existing tower unless a variance is granted pursuant to TDC 33.025. Given that the ATC Tower cannot accommodate the two wireless facilities and satisfy their coverage and capacity objectives for this site, the Applicant filed the Application seeking a variance for the proposed tower under TDC 33.025.

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TDC 33.025(1) allows for a variance under two separate and independent grounds. First, TDC 33.025(1)(a) allows for a variance if the existing WCF within 1,500 feet cannot accommodate the intended wireless carriers and provide the necessary wireless capacity or coverage the proposed tower is intended to provide. Second, TDC 33.025(1)(b) allows for a variance if the proposed WCF location includes tall, dense evergreen trees that will screen at least 50% of the proposed WCF from the RL District or from a small lot subdivision in the RML District.

After multiple public hearings and extensive testimony from the Applicant and ATC, the Planning Commission unanimously approved the Application under both TDC 33.025(1)(a) and (b). Although ATC raised many of the same arguments it is raising in the Appeal, the Planning Commission rejected those arguments and approved the Application. The Planning Commission's decision is consistent with the express language of the applicable TDC sections and is supported by substantial evidence in the record.

Response to ATC's Arguments

A. The Planning Commission correctly determined that the Application satisfied TDC 33.025(1)(a) based on the applicable code provisions and substantial evidence in the record.

ATC acknowledges that the ATC Tower cannot accommodate the two wireless facilities and provide the intended wireless capacity or coverage under the existing circumstances, but nonetheless maintains that the Application should be denied because it can modify the ATC Tower to accommodate these facilities. However, ATC's position on the legal standards and necessary requirements to modify the ATC Tower has morphed and changed throughout the Application process as ATC runs into various problems defending its position. Originally, ATC argued that the ATC Tower could be modified to accommodate the proposed wireless facilities by removing the screening trees located within a 155-foot radius of the ATC Tower and/or seeking a variance to increase the height of the ATC Tower. Letter from Alan Sorem, dated November 16, 2017, p.1-2.[1] After it became apparent that these proposed modifications were not desirable, feasible and/or did not provide a legitimate basis for denying the Application, ATC began changing its position during the Planning Commission process and completely abandoned its initial position for purposes of the Appeal.

ATC now argues that it can accommodate the proposed wireless facilities solely by increasing the height of the ATC Tower to 166 feet, which it claims it is entitled to do as a matter of law regardless of the City's position or application requirements. ATC bases this argument on its claim that: (1) the City Council's approval of the ATC Tower authorizes it to increase the height of the tower to 146 feet without City review or approval; and (2) Section 6409 of the Middle Class Tax Relief and Job Creation Act (the "Spectrum Act") legally compels the City to allow an additional 20 feet of height for a 166-foot tower. Appeal, p.4-5. ATC raised these new arguments at the last Planning Commission hearing, but the Planning Commission rejected these arguments. For the reasons provided below, the City Council should similarly reject ATC's arguments.

[1] We have attached a copy of Mr. Sorem's November 16 letter for the City Council convenience.

1. **The ATC Tower is only approved for 130 feet and will require a new variance to extend it to 146 feet or more.**

A critical component of ATC's argument is that the ATC Tower has been approved up to 146 feet and it can extend the height of the current 130-foot tower an additional 16 feet without any additional land use approvals. ATC claims that under the City Council's approval of the ATC Tower "ATC is authorized to either extend the ATC Tower up to 146 feet or replace it with a larger tower." Appeal, p.4. ATC's assertion is directly contrary to the express language in the City Council's variance approval for the ATC Tower (VAR-99-02).

Since the City code requires a variance for any tower that is greater than 100 feet, ATC had to file a variance application for the proposed 130-foot tower. The City Council approved the variance for the ATC Tower pursuant to Resolution No. 3672-50, dated January 24, 2000, and attached findings. *See* Staff Report, dated December 7, 2017, Attachment A, Exhibit A, p.19-20.

Contrary to ATC's claim, the City Council Resolution and findings expressly limited the height of the tower to 130 feet. *See* Staff Report, dated December 7, 2017, Attachment A, Exhibit A, p.19-20. The title for Resolution No. 3672-50 provides: "A RESOLUTION GRANTING A VARIANCE (VAR-99-02) TO ALLOW A 130' HIGH WIRELESS TELECOMMUNICATION TOWER WITH 16' ANTENNA * * *." Staff Report, Attachment A, Exhibit A, p.19. The Resolution further notes that the City Council was considering "the application of Nextel Communications and the City of Tualatin, for a variance from TDC 60.090(4) to allow a 130' high structure and 16' antenna * * *." Staff Report, Attachment A, Exhibit A, p.19. The City Council findings supporting the Resolution mirror this language, specifically referring to the variance application as a request for "a 130 foot wireless communications monopole tower with up to 16 ft. of antenna * * *." Staff Report, Attachment A, Exhibit A, p.11.

Based on this express language in the City Council's Resolution and findings for the variance approval for the ATC Tower (VAR-99-02), there is no question that the approval was limited to a 130-foot tower. That is why the ATC Tower is currently 130 feet, as opposed to a 146-foot tower. The mere fact that the City Council's decision authorized a 16-foot antenna does not mean that ATC can replace the existing tower with a 146-foot tower. Since the City has only approved a variance for a 130-foot tower, ATC will be required to obtain a new variance in order to extend the ATC Tower to 146 feet.

2. **TDC 33.025(1)(a) does not require the Applicant to consider an existing tower that would require a variance approval to modify and certainly not if the variance application has not even been filed.**

Since ATC will be required to obtain a variance approval in order to increase the height of the ATC Tower, it does not provide a basis for denying the Application. TDC 73.470(9) and TDC 33.025(1)(a) require the Applicant to consider existing towers within 1,500 feet that can be modified to accommodate the a wireless facility, but not if the modification would require new land use permits and approvals.

The tower separation and variance criteria do not require an applicant to consider an existing tower that must obtain additional land use permits or approvals in order to accommodate the wireless

facility. Neither TDC 73.470(9), which contains the 1,500-foot separation requirement, nor the variance criteria for tower separation in TDC 33.025(1)(a) require an applicant to consider existing towers that require additional permits and approvals in order to accommodate the wireless communications facility. TDC 33.025(1)(a)(ii) requires documentation that existing towers within 1,500 feet "cannot be modified to accommodate another provider," but it does not require the applicant to consider possible modifications to the tower that would require additional permits and approvals from the City. Since the ATC Tower cannot accommodate the wireless facilities unless and until ATC obtains a new variance approval, the ATC Tower cannot be used as a basis for denying the Application.

To the extent an applicant is required to consider a tower that needs additional permits or approvals, it is expressly limited to those towers for which the required application has already been filed. TDC 73.470(9) defines the types of "wireless communication facility monopoles" that must be considered for purposes of satisfying the tower separation requirement as follows: "For purposes of this section, a wireless communication facility monopole shall include wireless communication facility monopole for which the City has issued a development permit, or for which an application has been filed and not denied." (Emphasis added). Similarly, TDC 33.025(1)(a)(i) requires an applicant to demonstrate that it is technically not practicable to collocate from "an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not denied." (Emphasis added). This language demonstrates that the City Council intended to limit the types of towers that must be considered to those that either have the necessary permits or have already filed for the necessary permits. Since ATC has not filed a variance application, the Applicant was not required to consider the ATC Tower.

ATC's claim that any existing tower within 1,500 feet that can theoretically be modified to accommodate the wireless communication facility, regardless of whether it would require multiple consents and land use approvals, or how likely it would be to obtain those approvals, automatically precludes a variance for a new tower is inconsistent with the express language in TDC 73.470(9) and TDC 33.025(1). It also presents practical problems as well. Even if ATC could file for a variance to increase the height of the ATC Tower, ATC has not and cannot demonstrate that such a variance approval is feasible or likely. Additionally, ATC is not obligated to pursue a variance and has absolutely no time constraints. ATC can take as much time as it wants to commence the actions necessary to modify the ATC Tower and neither the Applicant, Verizon nor T-Mobile can force the issue. Even if ATC started the process immediately, it will still take a considerable amount of time to negotiate a new lease with the City, obtain the City's consent as a property owner, obtain a new variance approval and do the construction work necessary to increase the height of the tower. Meanwhile, Verizon and T-Mobile have existing coverage and capacity gaps that need to be addressed immediately and they will be completely beholden to ATC's schedule. TDC 73.470(9) and TDC 33.025(1) were not intended to give existing tower operators such broad authority to force carriers to wait months or years until the operator can obtain the necessary approvals to modify the existing tower.

3. The Spectrum Act does not legally compel the City to allow ATC to increase the height of the ATC Tower to 166 feet.

Given that the City code does not support ATC's position, ATC now argues that federal law (the Spectrum Act) legally compels the City to allow ATC to increase the height of the ATC Tower to 166 feet. This argument is a red herring and has multiple flaws.

The Spectrum Act does not entitle ATC to unilaterally increase the existing ATC Tower by 20 feet without going through the required City application process. Rather, the Spectrum Act permits a carrier to increase the height of an existing tower by "10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater." 14 C.F.R. 1.40001(b)(7)(i). (Emphasis added). So ATC would only be entitled to increase the height necessary to accommodate one additional antenna array up to a maximum of 20 feet. In this case, the proposed tower is designed to accommodate two wireless carriers – Verizon Wireless and T-Mobile. So ATC would only be able to increase the height of the ATC Tower sufficient to accommodate one of those carriers, but not both.

Even if ATC could increase the height of the ATC Tower by 20 feet under the Spectrum Act, it would not be sufficient because it would only allow up to a height of 150 feet. As previously explained, the ATC tower is only 130 feet and is only approved up to 130 feet. Twenty more feet will only increase the height to 150 feet. Since ATC acknowledges that it must be at least 166 feet to provide the intended coverage and capacity, and in reality it would need to be even taller, the modified ATC Tower would still not be tall enough.

The Spectrum Act precludes ATC from unilaterally modifying the ATC Tower in a way that "would defeat the concealment elements of the eligible support structure." 14 C.F.R. 1.40001(b)(7)(v). If ATC were to increase the height of the ATC Tower to 166 feet, it would clearly defeat a key concealment element the City Council relied on when it originally approved the tower – the surrounding screening trees. The City Council relied heavily on the screening effect of the surrounding trees to justify the variance when it approved it in 2000. In fact, the City Council specifically relied on these screening trees as one of the primary bases for determining compliance with approval criteria 1, 3 and 4. For example, the City Council concluded that "[t]all trees such as the subject property will obscure the tower and visually mitigate the tower and antennae for persons viewing it from off site and from the residential areas to the north" and "[t]he location and siting of the proposed Nextel tower will minimize the visual impact of the facility by blending in with the trees and the tower's surroundings and meets Objectives 1 and 3." City Council's findings for the variance approval for the ATC Tower (VAR-99-02), p. 2 & 4. Since the variance approval specifically relied on these trees for screening and mitigating the visual impacts, ATC's proposal to increase the height of the tower so it significantly exceeds the height of the surrounding trees would defeat this concealment element of the original variance approval.

The Spectrum Act does not compel the City to accept a 166-foot ATC Tower because the City is the owner of the property where it is located. The Spectrum Act only affects the regulation of these towers and does not compel a property owner to accept these modifications. As the property owner, the City is entitled to deny or condition any ATC request to increase the height of the ATC Tower in its complete discretion.

Finally, ATC failed to demonstrate that a 166-foot tower would be sufficient to provide the necessary coverage and capacity for the carriers. The Applicant demonstrated below that even if the ATC Tower was increased in height as proposed by ATC, it still would not satisfy Verizon's coverage and capacity objectives for this site, in particular the residential area north of SW Tualatin Rd which is the primary area of concern for this new facility. The Applicant submitted a RF Usage and Facility Justification analysis, dated November 20, 2017, prepared by a Verizon RF engineer, supporting this conclusion. Although ATC submitted its own RF analysis, that analysis is not reliable because ATC has not spoken with Verizon about the coverage and capacity objectives for this site, does not have access to all of the same network data and other proprietary information as Verizon's RF engineers do and it cannot speak for Verizon. Verizon's new RF Usage and Facility Justification analysis represents Verizon's position on this matter and it clearly states that the ATC Tower, even if modified, will not work. Verizon's RF analysis is the evidence the Planning Commission relied upon and should be the evidence the City Council relies upon as well since it is the most relevant and reliable evidence on this issue.

4. The Planning Commission based its decision on substantial evidence in the record and did not shift the burden of proof to ATC.

ATC's claim that the Planning Commission was confused about the evidence and improperly shifted the burden of proof to ATC is erroneous. Indeed, there is no dispute between the parties regarding the most significant evidentiary issue – ATC acknowledged that the existing ATC Tower cannot provide the intended wireless capacity or coverage due to its height and the surrounding trees. While ATC claims that it could accommodate the carriers if it increased the height of the ATC Tower, it provided no evidence that it was pursuing the necessary variance and related approvals to increase the height or that such approvals are even feasible. Instead, ATC argued below that the Application must be denied because the ATC Tower could theoretically be increased in height regardless of whether or not it pursues such permits or is able to obtain such permits.

The Planning Commission's decision was based predominately on its interpretation of the relevant code sections and not the evidence in the record. The Planning Commission concluded that since ATC would be required to obtain a variance and related approvals in order to increase the height of the ATC Tower, had not yet filed for such approvals and provided no evidence that such approvals were feasible or likely, the Applicant satisfied the requirements of TDC 33.025(1)(a).

ATC also mischaracterizes the Applicant's position below. The Applicant did not argue that ATC must prove that it would modify the ATC Tower by a certain date. The Applicant argued that to the extent TDC 33.025(1)(a) requires an applicant to consider a tower that needs additional permits or approvals to accommodate the wireless facility, it is expressly limited to those towers for which the required application has already been filed. Nor did the Applicant argue that a taller ATC Tower must provide the "same exact coverage." The Applicant submitted a RF Usage and Facility Justification analysis from Verizon's RF engineer which concludes that Verizon's coverage and capacity objectives cannot be satisfied even if the ATC Tower is increased in height.

For all of the reasons provided in this Section A, the City Council should affirm the Planning Commission's conclusion that the Application satisfies TDC 33.025(1)(a).

B. The Planning Commission correctly determined that the Application satisfied TDC 33.025(1)(b) based on the applicable code provisions and substantial evidence in the record.

TDC 33.025(1)(b) allows for a variance to the 1,500 foot separation requirements if: "The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District." This criteria is an independent basis for approving the variance and does not require the Applicant to demonstrate that the ATC Tower is not a viable option. Based on the photosims and related information regarding the property and surrounding area, the Planning Commission concluded that the proposed location has tall, dense evergreen trees that will screen at least 50% of the proposed tower from the residential districts and therefore complies with TDC 33.025(1)(b).

Although ATC does not dispute the fact that the proposed WCF tower will be significantly screened by the trees in the area as reflected in the photosims, ATC claims that the Planning Commission did not properly apply TDC 33.025(1)(b) in this case. ATC's position is based on an erroneous interpretation of TDC 33.025(1)(b) and mischaracterization of the evidence.

1. The Planning Commission did not misinterpret the term "location" in TDC 33.025(1)(b).

ATC argues that the Planning Commission misinterpreted the term "location" in TDC 33.025(1)(b) because it did not accept ATC's argument that only trees on the same site or property that the tower is proposed can be considered for purposes of evaluating the screening. The Planning Commission rejected ATC's interpretation and concluded that the term "location" is broader than the site or property and therefore the City may consider the screening effect of other surrounding trees. The Planning Commission considered the screening effect of trees on the subject property and the immediate surrounding area, in particular the adjacent tax lot that is owned by the same property owner. The Planning Commission's interpretation is consistent with the plain language of TDC 33.025(1)(b).

The Planning Commission's interpretation is based primarily on the fact that TDC 33.025(1)(b) does not limit the inquiry to trees on the subject "site" or property. TDC 33.025 and TDC 73.450 through 73.470 consistently refer to the term "site" when they intend to describe the property in which the tower is proposed. This is consistent with the definition of the term "site," which "refers to the property upon which a development is proposed." TDC 31.060. Therefore, when the City intended to apply a standard to the subject property it uses the term "site".

TDC 33.025(1)(b) clearly does not limit the inquiry to trees on the site. It requires a finding that the "proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole" from certain residential areas. The fact that the City choose to use the term "location" in TDC 33.025(1)(b), as opposed to the term "site," demonstrates that the City intended the standard to apply more broadly than just the subject site. *See PGE v. Bureau of Labor and Industries*, 317 Or 606, 611, 859 P2d 1143 (1993); *Dale v. Electrical Board*, 109 Or App 613, 616, 820 P2d 868 (1991) (the use of different language in similar provisions demonstrates an intended different meaning).

The Planning Commission's interpretation also makes more practical sense. If the primary purpose of the TDC 33.025(1)(b) is to determine if there are trees that will provide significant screening to mitigate visual impacts on residential areas, there is no reason to limit the inquiry to the subject site. If there are tall, dense evergreen trees on neighboring properties that significantly screen the tower from residential areas, why wouldn't the City consider this screening under TDC 33.025(1)(b). Especially if the adjacent lot is owned by the same property owner as is the case here.

2. The Applicant did show that the proposed location has tall, dense evergreen trees.

Once again, ATC attempts to conflate the terms "location" and "site" by arguing that the Applicant failed to show that the "subject site" has tall, dense evergreen trees. As previously explained, the Planning Commission correctly determined that the location has tall, dense evergreen trees that screen more than 50% of the tower from the residential areas.

The Applicant's photosim material includes a "Photo Sim Location Map" that shows an overhead view of the property and surrounding area. This location map clearly shows tall, dense evergreen trees on the same property as the tower, the adjacent tax lot under common ownership and the immediate surrounding area. The photosims themselves, in particular photosim #1, clearly shows the row of tall, dense evergreen trees along the northern border of the property, which significantly screens the tower from the residential area to the north.

ATC's suggestion that the trees that provide screening should be disregarded because they allegedly are not evergreen is undermined by the photosims themselves. The photosims were taken in early January, in the dead of winter when deciduous trees do not have their leaves. Therefore, the photosims show a worst case scenario. The fact that the trees provide more than 50% screening even in the middle of the winter demonstrates that ATC's argument is factually incorrect.

3. The Planning Commission correctly determined that the photosims were accurate and provided substantial evidence of compliance with TDC 33.025(1)(b).

ATC raises a number of subjective arguments about the accuracy and sufficiency of the photosims the Applicant provided. While ATC accuses the Applicant of "gross distortion" and "cherry-picked" photos, it failed to mention that both the City staff and the Planning Commission concluded that the photosims were accurate and sufficient to demonstrate compliance with TDC 33.025(1)(b). In fact, the Applicant specifically sought input from the City staff before it performed the photosims. So ATC's opinion of the photosims is not shared by the Planning Commission and City staff, and is obviously self-serving.

More importantly, ATC's failed to explain what standard or criteria the photosims allegedly failed to comply. TDC 33.025(1)(b) does not require photosims or impose specific standards on how to conduct the photosims. The same is true with respect to the general WCF standards set forth in TDC 73.450 through 73.470. The mere fact that ATC does not believe the photosims are sufficient is hardly a basis for denying the Application.

TDC 33.025(1)(b) requires a finding that the trees will screen at least 50% of the proposed tower from the RL District or from a small lot subdivision in the RML District. In this case, there is a

RL District north and east of SW Tualatin Rd. The Applicant provided five photosims from various vantage points in these locations, some of which are closer to the site and some further away. As the Planning Commission and City staff concluded, these photosims are sufficient to reflect the screening effect of the trees on the properties in this RL District. ATC failed to provide its own photosims or any other evidence that contradicts the Applicant's photosims. In the absence of any standard or criteria that requires something more than these photosims, or evidence to the contrary, ATC's argument should be rejected.

4. The Planning Commission's interpretation is consistent with the text, context, purpose and policy of TDC 33.025(1)(b).

Ironically, ATC's argument that the Planning Commission's interpretation of TDC 33.025(1)(b) is inconsistent with the text and purpose of this code provision is based predominately on another code provision that is clearly not relevant to the Application. ATC argues that the Planning Commission's interpretation is contrary to TDC 33.020 because the Applicant did not demonstrate "exceptional or extraordinary circumstances" to justify the variance request as required by TDC 33.020. Not only is TDC 33.020 not an applicable approval criteria, it expressly provides that it is not applicable to WCF variance requests. The title of TDC 33.020 is "Conditions for Granting a Variance that is not For a Sign or a Wireless Communication Facility." ATC does not explain why the City should disregard the plain language of TDC 33.025(1)(b) and impose an additional requirement that is expressly excluded from this type of variance request. The fact that the City expressly excluded WCF variance requests from TDC 33.020 demonstrates that the City did not want to impose this variance criteria on WCFs.

There is another irony in ATC's assertion that variances are supposed to be difficult so the City should rigorously apply these standards in this case. ATC had to request a variance when it proposed the 130-foot ATC Tower. As previously explained, ATC would be required to obtain a new variance under TDC 33.025(2) in order to increase the height of the ATC Tower to 166 feet. To satisfy TDC 33.025(2)(b), ATC is required to demonstrate that there are no "existing WCFs, or a WCF for which an application has been filed and not denied" that could provide the intended wireless coverage and capacity without exceeding the height limit of 100 feet. The Applicant's tower satisfies the 100-foot height limit and the Applicant has obviously filed an application already. So it is not possible for ATC to satisfy TDC 33.025(2) unless the Application is denied. That is why ATC is fighting the Application so vigorously – it needs the City to deny the Application so it can file its own variance application to increase the height of the ATC Tower to 166 feet or more. So apparently, ATC is okay with variances, even one that exceeds the 100-foot height limit by 66 feet, unless one of ATC's competitors is the one requesting it.

Conclusion

The Planning Commission's decision is consistent with the applicable criteria in TDC 33.025 and is supported by substantial evidence in the record. There is no dispute that the ATC Tower cannot accommodate the proposed wireless facilities and TDC 73.470(9) and TDC 33.025 do not require the Applicant to delay this project simply because ATC could or may request a variance at some undefined time in the future. Moreover, the variance requirements and evidence indicate that it is

unlikely that ATC will be able to obtain that approval. And even if ATC was able to increase the height of the ATC Tower, it still would not satisfy the coverage and capacity objectives for this site.

ATC is the only party that is fighting this Application and it is only doing so because it involves a competitor. None of the neighbors or surrounding community members are opposing the Application. The City staff recommended approval. After extensive testimony and multiple hearings, the Planning Commission unanimously approved the Application under both TDC 33.025(1)(a) and (b). As explained in this letter, the Planning Commission's decision is consistent with the express language of the applicable TDC sections and is supported by substantial evidence in the record. Therefore, the City Council should deny the Appeal and affirm the Planning Commission's unanimous decision.

We look forward to discussing these issues further with the City Council's appeal hearing.

Very truly yours,

HATHAWAY LARSON LLP

E. Michael Connors

E. Michael Connors
EMC/mo
Enclosure

cc: ACOM Consulting Inc.
Lendlease

November 16, 2017

VIA ELECTRONIC MAIL: ahurd-ravich@tualatin.gov
Original to follow via hand delivery

City of Tualatin Planning Commission
Attn: Aquilla Hurd-Ravich
18880 SW Martinazzi Ave
Tualatin, OR 97062-7092

RE: PI Tower Development Project OR-Tualatin-Durham/ 10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 000800) (VAR-17-0001)
Our File No. 00000-28543

Dear Ms. Hurd-Ravich and Honorable Planning Commissioners:

I represent American Tower Corporation, a Delaware corporation, and Tower Asset Sub, Inc., a Delaware corporation (***"ATC"***), which owns a wireless communications facility located at 10318 SW Herman Road, Tualatin, Oregon (the ***"ATC Tower"***). ATC is impacted by the proposed wireless communication facility on behalf of Lendlease (US) Telecom Holdings LLC - c/o PI Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. (herein collectively ***"Applicant"***) on the southwest corner of 10290 SW Tualatin Road, Tualatin, Oregon (herein the ***"Subject Property"***). Applicant's proposed tower is located within 1,500 feet of the ATC Tower; specifically, the proposed tower is approximately 750 feet from the ATC Tower. Therefore, under the Tualatin Development Code Section 33.025(1)(a) a variance is needed. Applicant's proposed findings as justification for the variance to the 1,500-foot radius requirement from an existing tower is an assertion that the existing ATC Tower is not suitable for co-location of additional carriers because of interference from the trees surrounding the site and has provided an RF interference letter in addition to its RF report. ATC acknowledges that under the current circumstances, the height of the trees would create interference for new co-location of carriers below the existing carrier heights; however, the interference from the trees can be eliminated. ATC has provided supplemental RF coverage analysis, which is attached hereto and incorporated by this reference herein, that supports ATC's position.

ATC submits these comments for the purpose of correcting the factual record and the proposed legal conclusions contained in the staff report; specifically, the decision granting ATC the variance to construct its existing tower (VAR-99-02) does not contain a condition of approval prohibiting any further clearing of trees (the ***"Existing Decision"***). The Existing Decision did include findings of fact that contemplated some tree removal and trimming of trees in a manner as less impactful as necessary. However, in the approximately 17 years following the issuance of the Existing Decision, the circumstances have changed and the surrounding trees have grown. Therefore, upon issuance of a tree

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250 Church Street SE
Salem, Oregon 97301

Post Office Box 470
Salem, Oregon 97308

tel 503 399.1070
fax 503 371.2927

www.sglaw.com

removal permit and with the consent of the City of Tualatin as the landlord and owner of the surrounding property, it is feasible for ATC to remove the existing trees within the approximately 155-foot radius of the ATC Tower. As the supplemental RF report and map identify, if ATC were to remove the trees creating such interference, coverage would be acceptable for the service parameters provided in the record. Therefore, the staff report contains an incorrect finding of fact in finding that removal of the trees cannot occur. A copy of the VAR-99-02 decision is attached hereto and incorporated herein for your reference.

Alternatively, ATC could potentially file a new variance application requesting permission to further extend the height of the ATC Tower by approximately twenty feet in recognition of the change in circumstances created by the passage of time and the annual growth of the trees and data coverage needs existing today as compared to 1999, when ATC originally applied for the Existing Decision. Such a variance application, if requested, would likely be approved and is certainly feasible. Therefore, ATC has two options in obtaining the necessary approvals for servicing the coverage request as identified in the existing record. Accordingly, the assertion that ATC cannot, as a matter of law, provide the requested coverage is inaccurate.

ATC requests the Planning Commission to deny the proposed variance request. In the alternative, ATC requests the Planning Commission to keep the record open for a period of not less than 21 days to give ATC an opportunity to provide additional evidence and argument as it pertains to the proposed variance request.

Thank you for your time and attention.

Sincerely,

ALAN M. SOREM
asorem@sglaw.com
Voice Message #303

AMS:jsm
Enclosures
cc: Client

RESOLUTION NO. TPC-609-17

A RESOLUTION OF THE PLANNING COMMISSION Approves THE VARIANCE APPLICATION FOR A WIRELESS COMMUNICATION FACILITY TO LOCATE AT 10290 SW TUALATIN ROAD WITHIN 1,500 FEET OF AN EXISTING WIRELESS COMMUNICATION FACILITY. (VAR-17-0001).

WHEREAS, on January 18, 2018, a quasi-judicial public hearing was held before the Planning Commission for consideration of a variance upon the application of Acom Consulting, Inc.; and

WHEREAS, notice of public hearing was given as required by the Tualatin Development Code; and

WHEREAS, the Planning Commission heard and considered the testimony and evidence presented on behalf of the applicant, City staff, and those appearing at the public hearing; and

WHEREAS, after the conclusion of the public hearing the Planning Commission deliberated and by this resolution makes its decision;

BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF TUALATIN, OREGON, that:

Section 1. Variance (VAR-17-0001), considered by the Planning Commission is hereby (check one):

☒ Approved;

☐ Approved with Conditions;

☐ Denied.

Section 2. The Planning Commission adopts as its findings the *Analysis and Findings* set forth in Exhibit 1[1], which includes the list of conditions, if any, and which is attached and incorporated herein.

Section 3. This resolution is effective upon adoption.

Adopted by the Planning Commission this 18th day of January, 2018.

CITY OF TUALATIN, OREGON

BY _____
CHAIR ALAN W. APLIN

APPROVED AS TO FORM

BY _____
City Attorney

ATTEST:

BY _____
Recorder

1. Exhibit 1 includes the applicant's analysis and findings submitted to the Planning Commission on November 17, 2017 and staff's and applicant's analysis and findings

submitted to the Planning Commission on January 18, 2018.

APPLICATION FOR
VARIANCE

UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY AT:

10290 SW Tualatin Road
Tualatin, OR 97062

Prepared By

Acom
CONSULTING, INC

Date
October 03, 2017

Project Name
POR Durham

Applicant:	Lendlease (US) Telecom Holdings LLC c/o PI Tower Development LLC 909 Lake Carolyn Parkway Irving, TX 75039
Co-Applicant:	Verizon Wireless (VAW), LLC dba, Verizon Wireless 5430 NE 122nd Avenue Portland, OR 97230
Representative:	Acom Consulting, Inc. Reid Stewart 5200 SW Meadows Road, Suite 150 Lake Oswego, OR 97035
Property Owner:	Tote 'N Stow, Inc. 10290 SW Tualatin Road Tualatin, OR 97062

Project Information:	
Site Address:	10290 SW Tualatin Road, Tualatin, OR 97062
Parcel:	2S123B000800
Parcel Area:	3.63 acres
Zone Designation:	ML (Light Manufacturing Planning District)
Existing Use:	Storage Facility
Project Area:	1,200 square foot lease area (25' x 48' fenced equipment area)

Chapter 33: Variances

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.

(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not

denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Response: Verizon Wireless, the co-applicant, has done extensive research looking at opportunities in the area to collocate on existing towers or buildings, as that is always a preferred option when available. If an existing tower or structure is not available at the specified height or not attainable because of space constraints or unreliable structural design, then Verizon Wireless will propose a new tower. In this instance, there is one existing tower, the ATC tower, which is located outside of the search area designated as usable by Verizon Wireless' RF department, but within the 1,500-foot radius of the proposed facility. This tower is not viable as a solution to meet their coverage and capacity objectives due to the existing trees that would cause interference. There are no other existing towers available to collocate on within the area of interest thus a new tower is being proposed, which will in turn be available for other providers to collocate on in the future.

In order to meet the Verizon's coverage and capacity objectives, it is necessary to site a tower within the search ring provided by Verizon's RF department as shown below. Moving outside this search ring is technically not practicable and has adverse effects on providing the needed coverage and capacity objectives the tower is intended to provide, which include nearby high-traffic residential areas to the North. Siting outside the search ring can also create interference with other nearby network sites where coverage may overlap.

The Applicant is requesting a variance to the 1,500-foot tower separation requirement. There is an existing 146-foot ATC monopole support structure outside of the search ring, approximately 750 feet to the SW of the proposed support tower, located at 10699 SW Herman Road. Per the tower owner, there is currently available space on the tower at the 100-foot level, however this is not high enough to avoid interference from multiple trees surrounding the tower and still meet coverage and capacity objectives to the North, as detailed in the attached RF Usage and Facility Justification Report and RF Engineer Interference Letter.

Locating the tower within the search ring and outside the 1,500-foot radius of the nearby existing ATC tower is also not a desirable alternative as it would mean locating in another part of the ML zone without existing screening or in the RML or RMH zone, where a conditional use permit would be required and where it would be very visible to nearby residential areas.

In addition, T-Mobile has also indicated that they intend on co-locating on the proposed WCF, if approved, as the existing ATC tower to the SW will not meet their coverage and capacity requirements either as noted in the attached Letter from T-Mobile RF.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and,

Response: The only existing monopole tower located within 1,500 feet of the proposed location cannot be modified as it is not designed to be extended to the necessary height required to avoid interference from the tall trees currently surrounding the tower. The existing tower would need to be removed and replaced with a new tower at least 20-30 feet taller to avoid interference unless the trees were to be removed or reduced in height to approximately the 100-foot level or lower.

Topping the trees would create undesirable visual impacts to nearby residential areas, whereas the proposed location is well screened to nearby residential areas to the North and does not require the removal or trimming of any existing trees. The topped trees would also create a negative visual impact on their own, as over a third of the height would need to be removed to avoid interference.

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps below.

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Response: Application has demonstrated compliance with Section 33.025(1)(a) above, however proposed location also meets this requirement and includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity.

(2) The City may grant a variance to the maximum allowable height for a WCF if the applicant demonstrates:

(a) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide at a height that meets the TDC requirements. The needed capacity or coverage shall be documented with a Radio Frequency report; and,

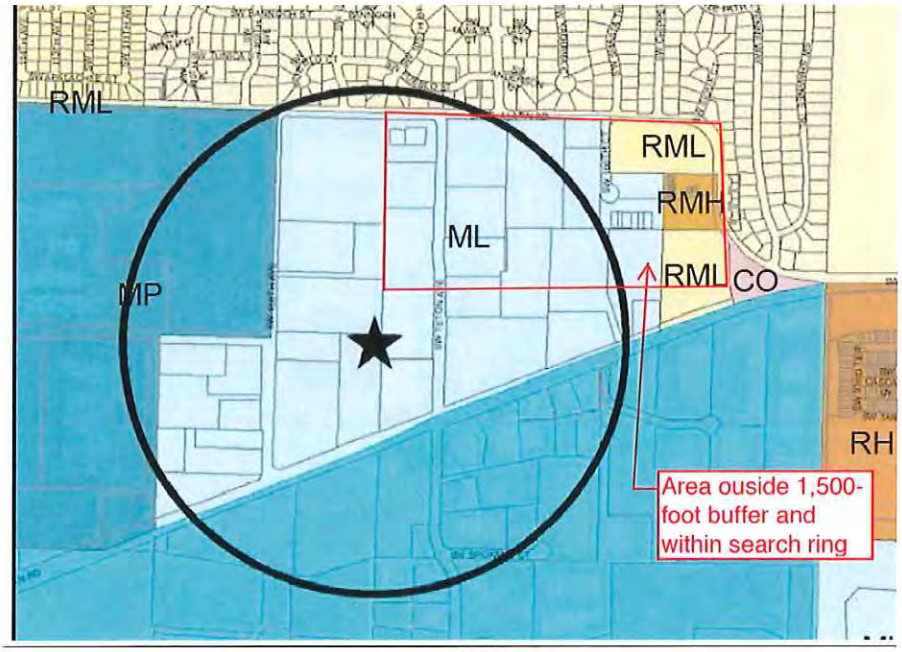
(b) The collocation report, required as part of the Architectural Review submittal, shall document that existing WCFs, or a WCF for which an application has been filed and not denied, cannot be modified to provide the capacity or coverage the tower is intended to provide.

Response: Not applicable – Applicant is not requesting a variance to the maximum allowable height for the proposed WCF.

Acom
CONSULTING, INC

VERIZON SEARCH RING

EXISTING TOWER 1,500' RADIUS WITH VERIZON SEARCH RING OVERLAP



Acom
CONSULTING, INC

½ MILE RADIUS OF PROPOSED TOWER

RF Usage and Facility Justification

Durham

Prepared by Verizon Wireless Walid Nasr

Jun 14, 2017

verizon

Introduction:

There are two main drivers that prompt the need for a new cell site. One is coverage and the other is capacity.

Coverage is the need to expand wireless service into an area that either has no service or bad service. The request for service often comes from customers or emergency personnel. Expansion of service could mean improving the signal levels in a large apartment complex or new residential community. It could also mean providing new service along a newly built highway.

Capacity is the need for more wireless resources. Cell sites have a limited amount of resources to handle voice calls, data connections, and data volume. When these limits are reached, user experience quickly degrades. This could mean customers may no longer be able to make/receive calls nor be able to browse the internet. It could also mean that webpages will be very slow to download.

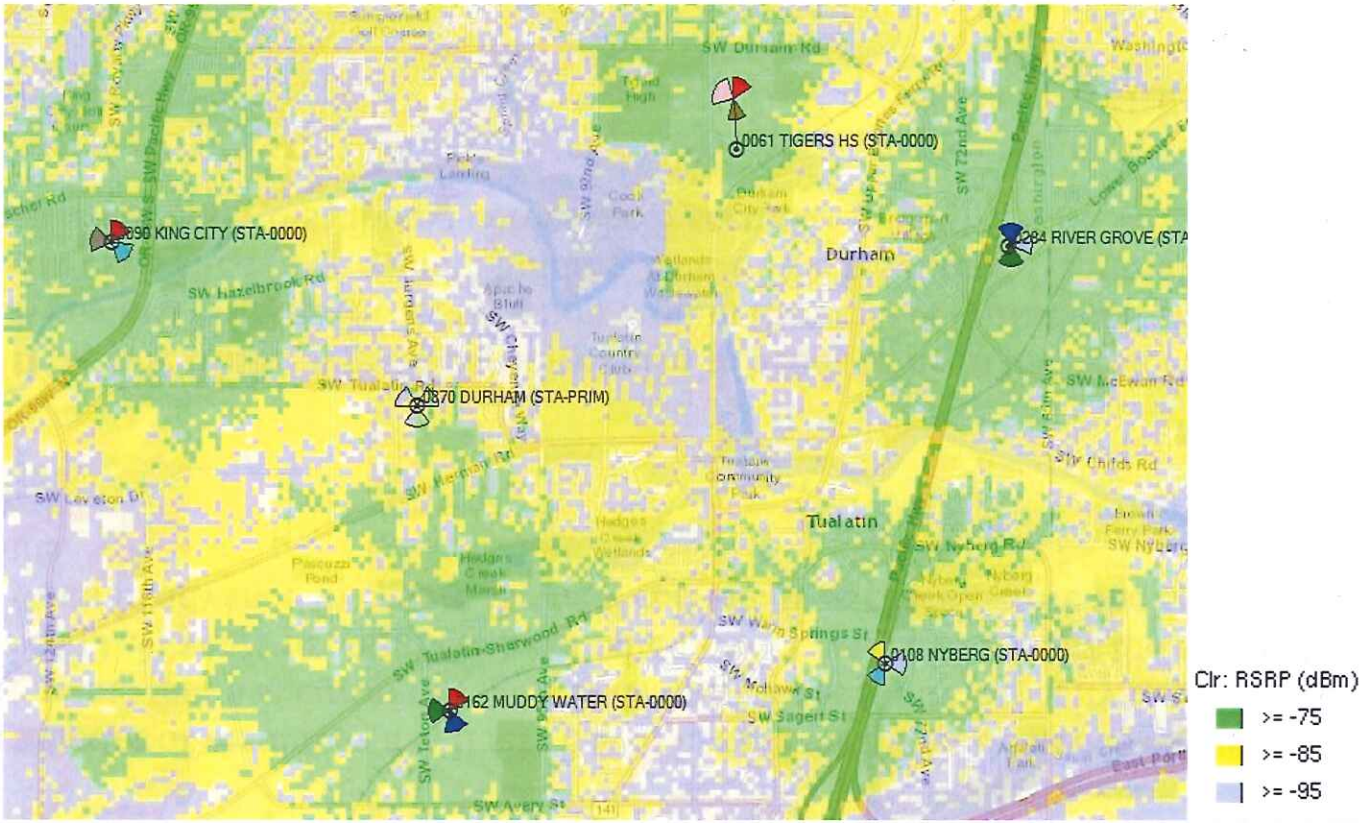
verizon

Capacity is the amount of resources a cell site has to handle customer demand. We utilize sophisticated programs that use current usage trends to forecast future capacity needs. Since it takes an average of (1-3) years to complete a cell site project, we have to start the acquisition process several years in advance to ensure the new cell site is in place before the existing cell site hits capacity limits.

Location, Location, Location. A good capacity cell site needs to be in the center of the user population which ensures even traffic distribution around the cell. A typical cell site is configured in a pie shape, with each slice (aka. sector) holding 33% of the resources. Optimal performance is achieve when traffic is evenly distributed across the 3 sectors.

Coverage Area of Existing Site

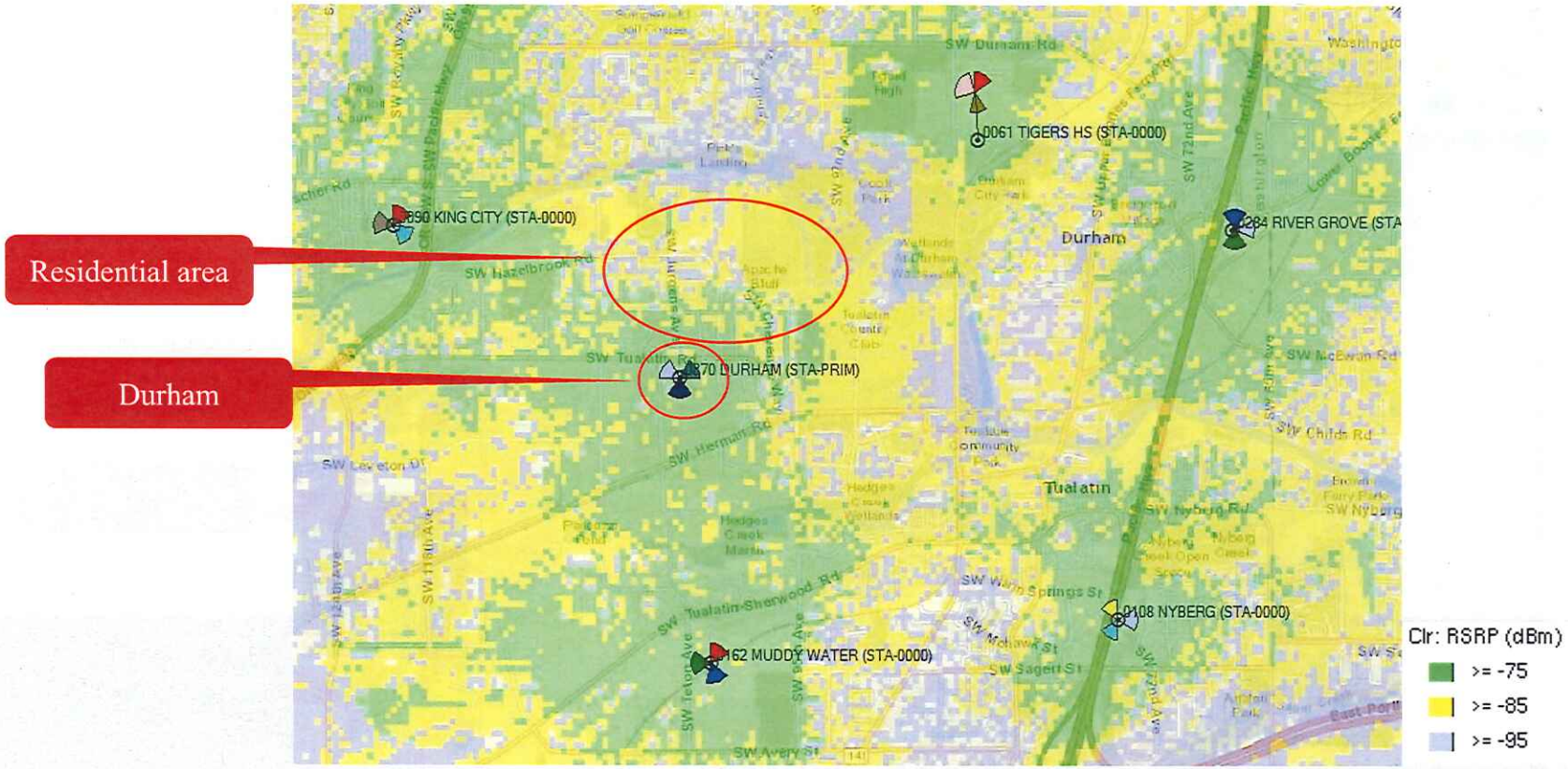
The proposed Durham site is a capacity site. This site will offload the existing sites King City, Muddy Water, TigerHS.



verizon

Coverage Area Offloaded by New Site

The proposed Durham site is a capacity site. This site will offload the existing sites King City, Muddy Water, TigerHS.



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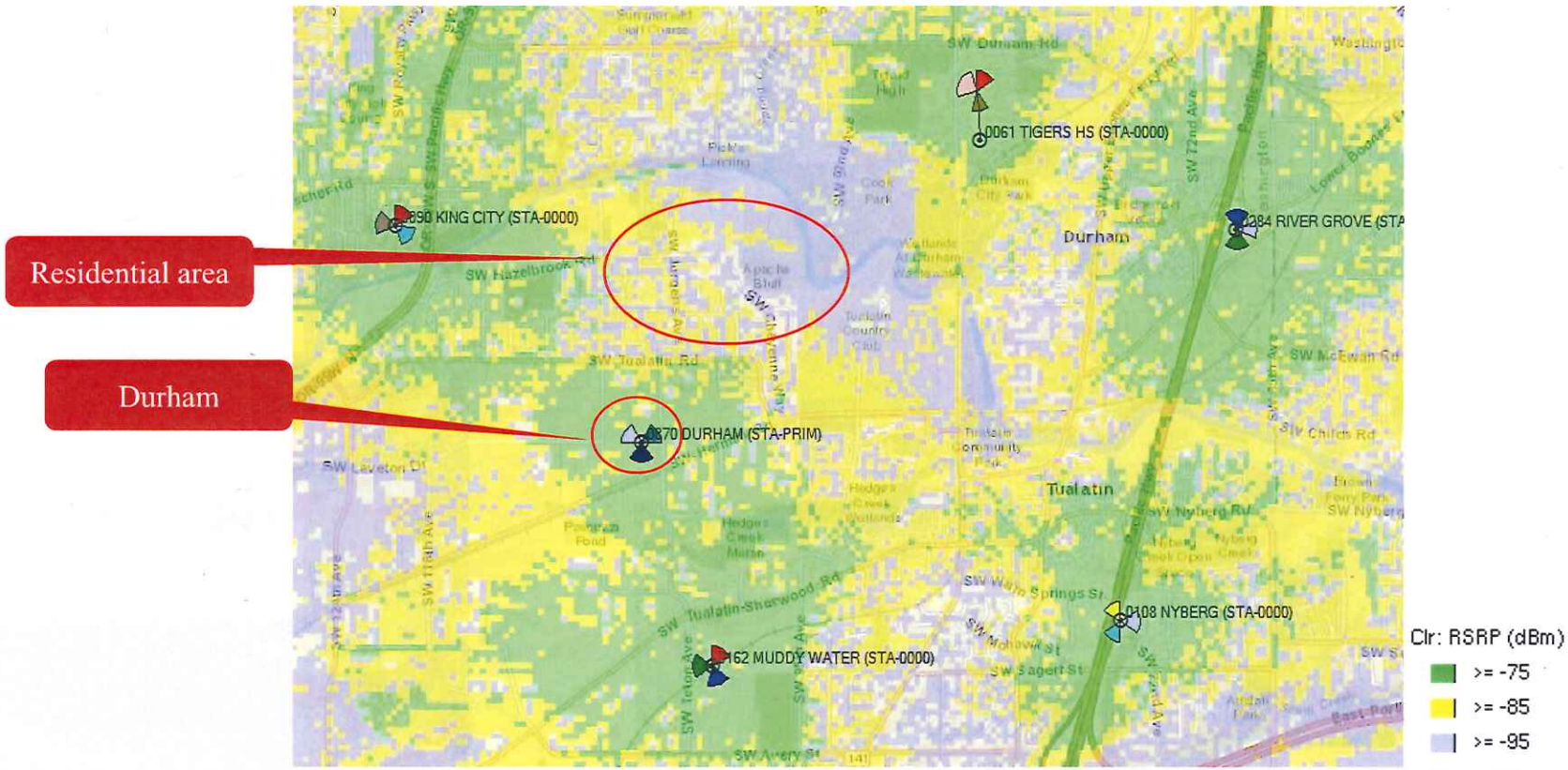
Coverage Area Offloaded by New Site at New Proposed Location

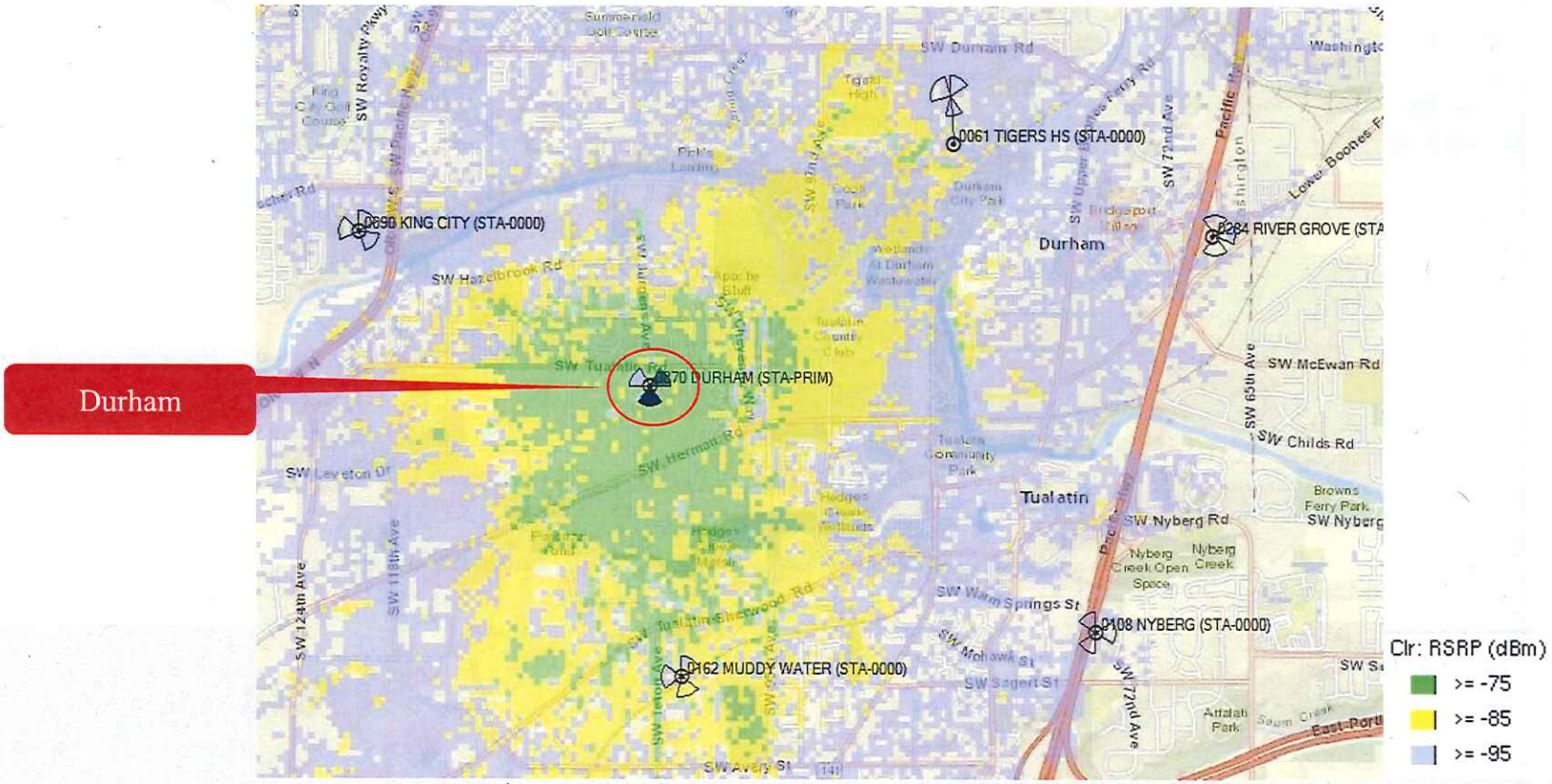
The proposed Durham site is a capacity site. This site will offload the existing sites King City, Muddy Water, TigerHS.



Marginal coverage in residential area due to surrounding trees at existing ATC tower

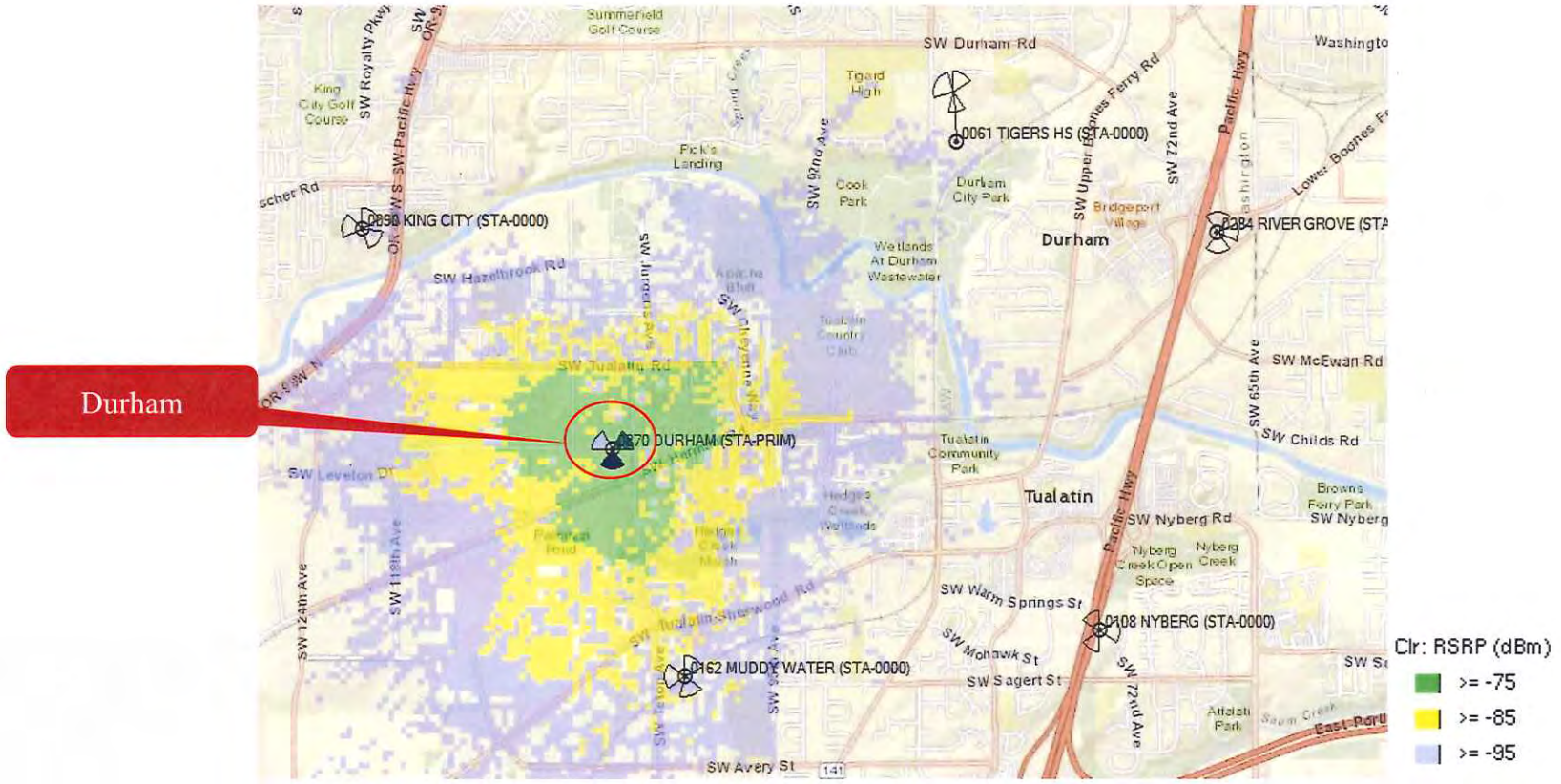
verizon

Coverage with Durham Site



verizon

Coverage with Durham Site at New Proposed Location



verizon

Need Case for: Durham

Summary: The existing sites King City, Muddy Water, TigerHS cannot carry the data traffic that exists in the area it serves.

Detail below:

- Exact data about sites is proprietary and cannot be disclosed due to competitive reasons.

- The existing cell sites King City, Muddy Water, TigerHS are forecasted to reach capacity in the near future.

- The new cell site Durham will provide additional resources to existing sites. It will take some users off of existing sites, which will alleviate the capacity constraint.

- This will improve customer experience (faster webpage downloads and fewer drop calls).

- Without the new site Durham, existing sites in area will reach capacity which will negatively impact customer's ability to make/receive calls and browse the internet.

verizon

Andrew H. Thatcher
Environmental Health Physics

July 13, 2017

To:
Acom Consulting, Inc.
5200 SW Meadows Rd
Suite 150
Lake Oswego, OR 97035

Acom consulting has requested that I review the existing antenna site at 10699 SW Herman Road, Tualatin OR, and evaluate the interference potential due to the existing tree canopy as shown in Figure 1. In performing this evaluation I'll review the basics of wireless transmission, what cellular technology can compensate for and what results in a deficient site. Included in the review is Verizon's propagation models[1] for both their proposed Durham site and the existing ATC tower.

In a perfect world for wireless transmission, an un-attenuated radio signal would be sent by the antenna and received by the user without any interference. This is rarely the case as buildings, hills and trees all combine to make the signals propagate along multiple pathways. The three primary components of signal propagation paths are reflection, diffraction and scattering. Reflection occurs from large smooth surfaces such as roadways or buildings. Diffraction occurs when a large object is in the direct line of sight path, such as a hill or building. Scattering occurs when the radio waves contact objects similar or smaller than the wavelength of the frequency of interest. For wireless transmission that can be from 700 MHz (~17" wavelength) to 2100 MHz (~6" wavelength). Scattering would be the dominant interaction with trees while all sources of interference serve to attenuate the signal to some degree with each interaction.

So the presence of trees creates scattering which causes signal distortion in addition to signal attenuation. The transmitted signals received by the end user (a person's cell phone) will consist not only of the original (un-attenuated) signal but also several secondary signals traveling on different paths. These multi-path signals, since they are a result of scattering (since we're concerned with the effects of trees), travel a longer signal path and therefore arrive at an end user (cell phone) later than the original un-attenuated signal. These late signal arrivals become interference and can result in distortion of the original signal. This type of distortion is frequency dependent with greater distortion occurring at higher frequencies. Multi-path signals are a common occurrence in our environment but such multi-path signals are due to stationary objects such as homes, rooftops, and even trees at a distance. Such distortions can readily be corrected due to the use of a RAKE[2] receiver in the phone. However, for a tree canopy in a near field environment such as in Figure 1 the obstruction is not constant but in fact continuously

[1] Propagation modeling provided by W. Nasr, Verizon RF Engineer, 7/5/2017.
[2] Briefly, RAKE receivers are used in the receiver phones of Code Division Multiple Access (CDMA) systems. The receiver collects and treats each time shifted version of the original signal as an independent signal and then combines them into a single signal provided the delay is not too long.

522 NORTH E ST • TACOMA, WA • 98403
PHONE: 253.617.1449 • THATCHER.DREW@COMCAST.NET

changing. The result is scattered signals that may be stronger than direct signal due to signal attenuation since the tree canopy density is not uniform and the signals going through the tree will be attenuated differently. Further, the motion of the trees with wind presents a continuously changing foliage density that results in selective signal fading with time. For the tree canopy shown in Figure 1, the near field environment could easily result in signal attenuation of 10 dB to as much as 20 dB. Combine this attenuation with the constantly changing signal fading environment and the result in a constantly changing delay (due to wind) that the RAKE receiver would have difficulty separating as noise. Reviewing Figure 1 again and one can see that the antennas are near the tops of the trees so the tree movement would include swaying of the trees in addition to individual branch movements.

Figure 2 is the predicted propagation to the residential location of interest from the existing antenna located within the trees. Figure 3 shows the same residential area with the antenna located in the proposed location. Both figures are provided to support the previous qualitative analysis. The figures show that the Reference Signal Received Power (RSRP) is at least 10 dBm lower for each location. Note that this analysis does not consider the effect of wind.

Trees at a distance from the antennas may present acceptable interference as the overall impact could be managed. For antennas placed well beneath the tree canopy in a near field environment affecting all three radiating sectors, it would be difficult to envision a wireless network that could compensate for these factors, the presence of wind, and remain effective in terms of capacity for the site and successful integration with the surrounding wireless sites. The attenuation and scattering of the signal through the trees would result in a lower transmitted power level that could not be improved by increasing the power as that would only serve to also increase the power of the multipath signals. In short, such a setup in the trees would present a problem regardless of the transmitted power level.

To summarize, the existing ATC tower is not a suitable antenna site without substantial modification based on the information provided in this report.

Figure 1: Photo of existing tower surrounded by a dense tree canopy in a near field environment

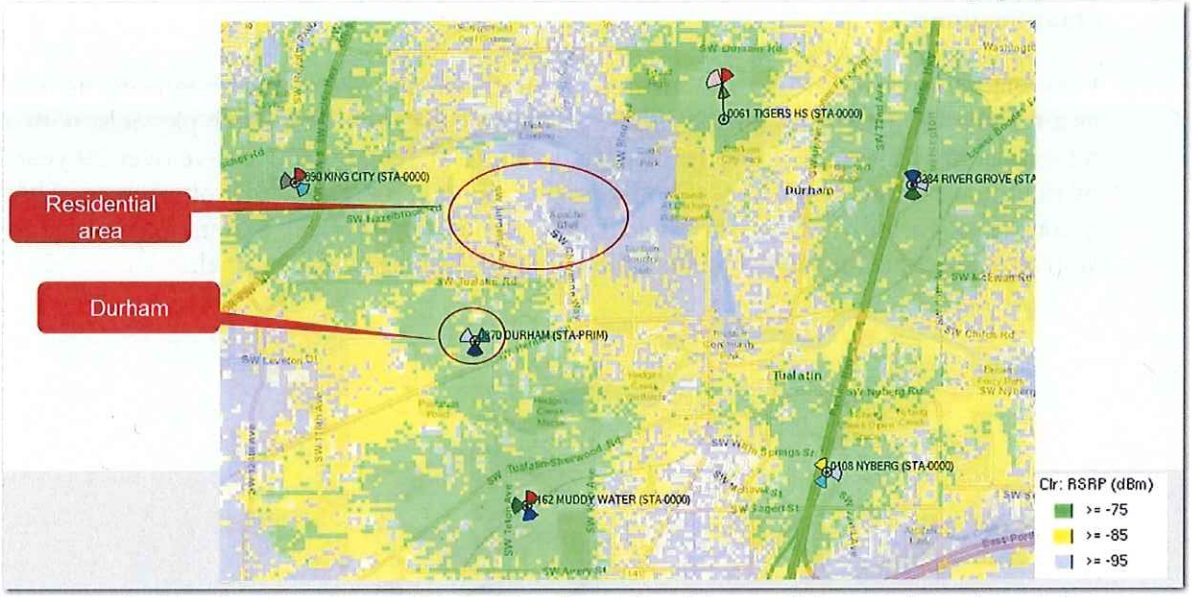


Figure 2: Predicted propagation model showing the residential area of interest from the existing antenna.

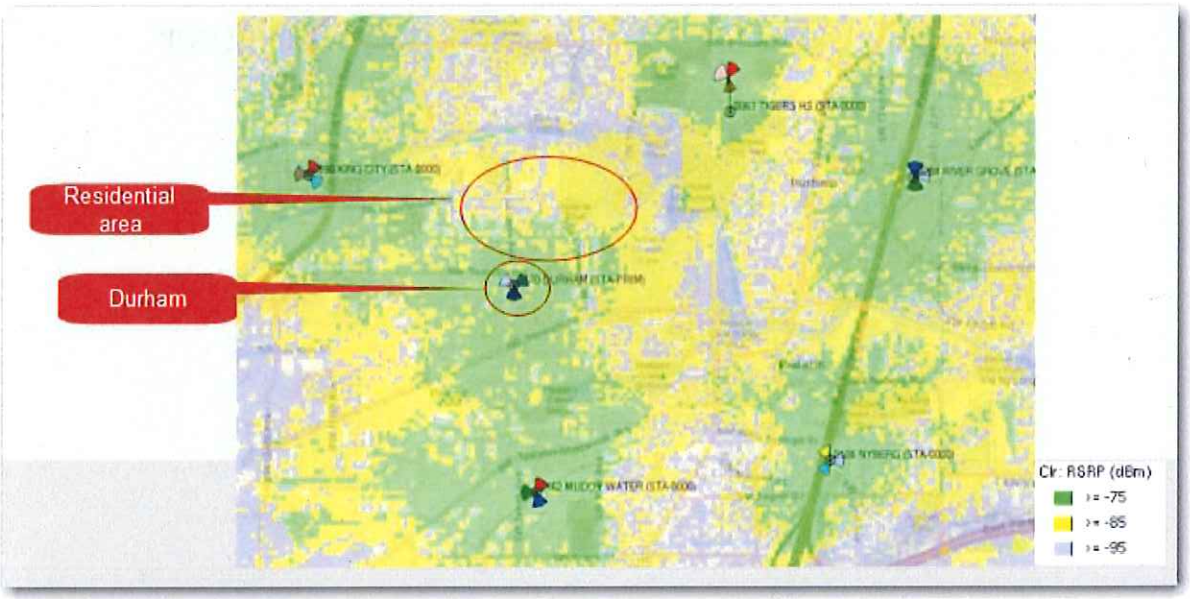


Figure 3: Predicted propagation model showing the RSRP for the residential area of interest with the proposed antenna location.

Qualifications

I am a member of the IEEE, the Institute of Electrical and Electronics Engineers as well as a member of the Health Physics Society. I am a board certified health physicist with a masters in health physics from the Georgia Institute of Technology. I have over 29 years of experience in the evaluation of both ionizing and non ionizing radiation sources. I am a consultant to the ACGIH Threshold Limit Values for Physical Agents Committee as well as a non ionizing subject matter editor for the Health Physics Journal.

Regards,

Andrew H. Thatcher, MSHP, CHP

T-Mobile

September 12, 2017

RE: PI Tower Development Project OR-Tualatin-Durham / 10290 SW Tualatin Road

To Whom It May Concern:

T-Mobile West LLC has been seeking to address a significant gap in network coverage in and around the subject vicinity. After assessing the viability of the existing infrastructure in the area, we have identified the proposed PI Tower Development wireless telecommunications facility to be located at 10290 SW Tualatin Rd in Tualatin, Oregon, as the only candidate that will address and eliminate this network gap in coverage. As a result, once the site is completed, T-Mobile intends to proceed with entering into a lease agreement with PI Tower Development and ultimately install equipment on site.

Best regards,

Julio Brown
Sr. RF Engineer
T-Mobile West LLC
Portland, Oregon

T-Mobile USA, Inc.
Fax: (503) 736-3014
1500 NE Irving St., Suite 530
Portland, OR 97232

POR DURHAM WIRELESS COMMUNICATION FACILITY (WCF)

VARIANCE APPLICATION (VAR-17-0001)

ATTACHMENT A: ANALYSIS AND FINDINGS

The issue before the Tualatin Planning Commission (TPC) is consideration of a Variance (VAR) request for Wireless Communication Facility (WCF) separation that would allow the construction of a new 100-foot-tall monopole with antennas mounted at the top and opportunities for ancillary ground equipment within 1,500 feet of an existing WCF located at 10699 SW Herman Road approximately 800 feet southwest of the proposed WCF location. The proposed WCF would be located at 10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 000800) on a property owned by Tote 'N Stow and operates as a storage facility for recreational vehicles.

Specifically, the applicant is asking for a variance from one of the Community Design Standards regulating wireless communication facilities. That standard (TDC 73.470(9)) requires a 1,500 foot separation between wireless communication facility monopoles.

> "The minimum distance between WCF monopoles shall be 1500 feet. Separation shall be measured by following a straight line from one monopole to the next. For purposes of this section, a wireless communication facility monopole shall include wireless communication facility monopole for which the City has issued a development permit, or for which an application has been filed and not denied."

In order to grant the proposed variance, the request must meet the approval criteria of Tualatin Development Code (TDC) Section 33.025(1). The applicant prepared a narrative that addresses the criteria, which is included here as Exhibit A, and staff has reviewed this and other application materials and included pertinent excerpts below.

The following materials and descriptions are based largely on the applicant's narrative; staff has made some minor edits. Staff comments, findings, and conditions of approval are in Italic font.

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.

(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has

been filed and not denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Applicant Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)(b) as discussed below.

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and

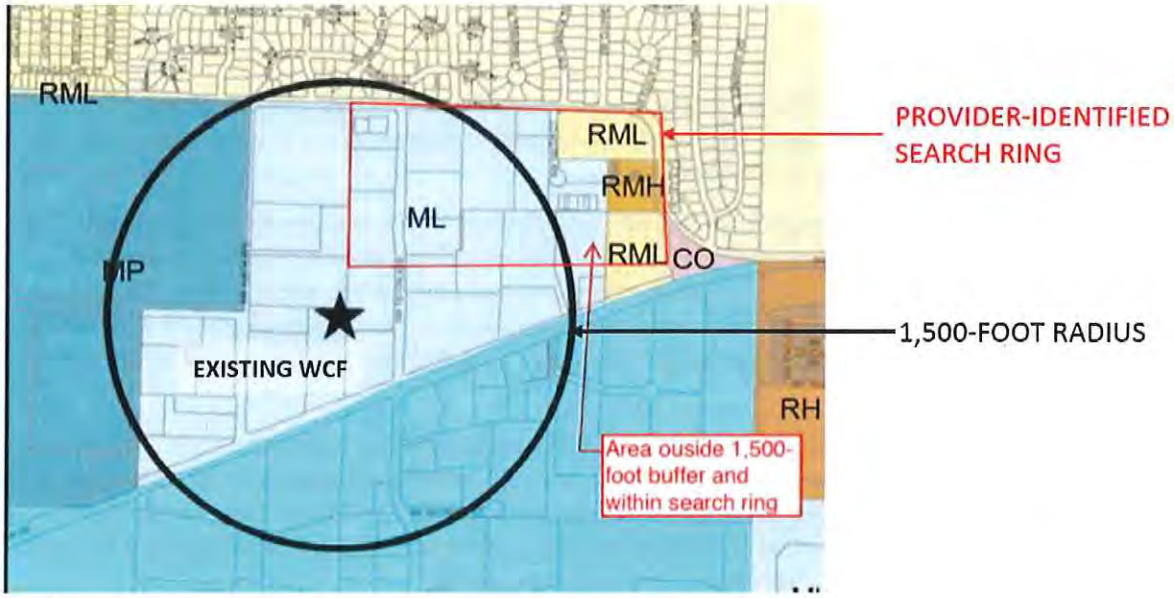
Applicant Response: Not applicable – Applicant has demonstrated compliance with Section 33.025 (1)(b) as discussed below.

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Applicant Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps below.

(Excerpts from applicant material)



Existing Tower 1,500' radius with Verizon Search Ring Overlap

½ Mile radius of proposed tower

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Applicant Response: Proposed monopole location includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity. See attached photo simulations from various locations within the nearby RL District. A balloon test was used to verify height and location of the proposed monopole which was virtually invisible from most locations within the RL District.

Staff Response: The subject property, located at 10699 SW Herman Road, is bound on the north by a Low Density Residential (RL) planning district, directly on the east, west and south by a Light Manufacturing (ML) Planning District. The surrounding area to the east includes Medium Low Density (RML) and Medium High Density (RMH) residential planning districts. There are no small lot subdivisions in the RML district in the surrounding area to the east of the subject property.

The applicant has submitted photo simulations included here at Exhibit B. Photos were taken in five different locations including from the RL planning district and the RML and RMH planning districts. Photos were also taken from the ML planning district. These photos demonstrate the subject project has tall evergreen trees that will screen 50% of the monopole.

View #1 shows that looking south from the RL planning district toward the site tall evergreens completely block the view of the property. View #2 is from the ML planning district and although the criterion does not require screening from ML this photo shows there are tall evergreens and other dense trees along the eastern property line. View #3 was taken from the RMH and RML area to the east. In this photo evergreens are present and other tall trees but the monopole is not as well screened as from other vantage points. View #4 is from the border of the RL and ML planning districts, and in these photos no evergreens are present and the tower is somewhat visible beyond an existing industrial building. View #5 is taken from the RL planning district looking southeast. Evergreens are present in this photo as well as other tall trees that help screen the proposed monopole.

The photo simulations of the proposed monopole in views #1, #4 and #5 are most applicable given that the criterion is specific to screening from an RL district or an RML district with a small lot subdivision. There is not a small lot subdivision in the surrounding area to the east where RML is located. Views 1, 4 and 5 were taken from the RL planning district or the boundary of RL and ML. View #1 shows the location completely screened by dense tall evergreens. View #4 does not show evergreens in the photo but screening from an existing building. View #5 shows the presence to tall evergreens and some screening. Staff finds that at least 50% of the proposed monopole will be screened by tall dense evergreen trees from the RL planning district.

This criterion is met.

Exhibits

Exhibit A: Applicant Narrative

Exhibit B: Photo Simulations

APPLICATION FOR
VARIANCE

UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY AT:

10290 SW Tualatin Road
Tualatin, OR 97062

Prepared By

Acom
CONSULTING, INC

Date
January 08, 2018

Project Name
POR Durham

Applicant:	Lendlease (US) Telecom Holdings LLC c/o PI Tower Development LLC 909 Lake Carolyn Parkway Irving, TX 75039
Co-Applicant:	Verizon Wireless (VAW), LLC dba, Verizon Wireless 5430 NE 122nd Avenue Portland, OR 97230
Representative:	Acom Consulting, Inc. Reid Stewart 5200 SW Meadows Road, Suite 150 Lake Oswego, OR 97035
Property Owner:	Tote 'N Stow, Inc. 10290 SW Tualatin Road Tualatin, OR 97062

Project Information:	
Site Address:	10290 SW Tualatin Road, Tualatin, OR 97062
Parcel:	2S123B000800
Parcel Area:	3.63 acres
Zone Designation:	ML (Light Manufacturing Planning District)
Existing Use:	Storage Facility
Project Area:	1,200 square foot lease area (25' x 48' fenced equipment area)

Chapter 33: Variances

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

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(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not

denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)b) as discussed below.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and,

Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)b) as discussed below.

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps below.

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Response: Proposed monopole location includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity. See attached photo simulations from various locations within the nearby RL District. A balloon test was used to verify height and location of the proposed monopole which was virtually invisible from most locations within the RL District.

(2) The City may grant a variance to the maximum allowable height for a WCF if the applicant demonstrates:

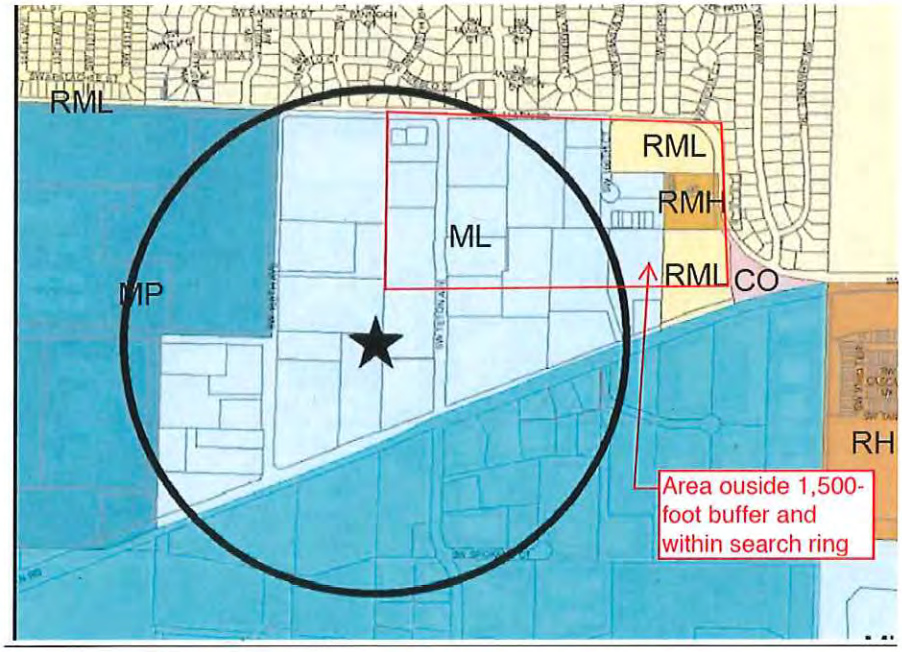
(a) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide at a height that meets the TDC requirements. The needed capacity or coverage shall be documented with a Radio Frequency report; and,

(b) The collocation report, required as part of the Architectural Review submittal, shall document that existing WCFs, or a WCF for which an application has been filed and not denied, cannot be modified to provide the capacity or coverage the tower is intended to provide.

Response: Not applicable – Applicant is not requesting a variance to the maximum allowable height for the proposed WCF.

VERIZON SEARCH RING

EXISTING TOWER 1,500' RADIUS WITH VERIZON SEARCH RING OVERLAP



Acom
CONSULTING, INC

½ MILE RADIUS OF PROPOSED TOWER

TIM BRADLEY IMAGING

PHOTO SIM LOCATION MAP

lendlease

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

Exhibit 1 to TDC -609-17

TIM BRADLEY IMAGING

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

lendlease

VIEW #1

TOWER NOT SEEN

Exhibit 1 to TDC -609-17

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

32 of 36

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #2 LOOKING SOUTHWEST
ON SW 100TH COURT

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #3 LOOKING SOUTHWEST
ON SW TUALATIN ROAD

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #4 LOOKING SOUTHEAST
ON SW TUALATIN RD. AT SW TETON AVE.

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #5 LOOKING SOUTHEAST
ON SW 105TH COURT & SW PUEBLO ST.

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

City of Tualatin
www.tualatinoregon.gov

OFFICIAL

TUALATIN PLANNING COMMISSION **MINUTES OF January 18, 2018**

TPC MEMBERS PRESENT:	**STAFF PRESENT**
Alan Aplin	Aquilla Hurd-Ravich
Janelle Thompson	Sean Brady
Mona St. Clair	Jeff Fuchs
Angela DeMeo	Lynette Sanford
Travis Stout	

TPC MEMBER ABSENT: Kenneth Ball, Bill Beers

GUESTS: E. Michael Connors, Alan Sorem, Reid Stewart, Nick Caezza

1. CALL TO ORDER AND ROLL CALL:

Alan Aplin called the meeting to order at 6:30 pm and reviewed the agenda. Roll call was taken.

Motion by DeMeo, SECONDED by Thompson to appoint Mr. Aplin Pro Tempore Chair. MOTION PASSED 5-0.

2. APPROVAL OF MINUTES:

Mr. Aplin asked for review and approval of the December 7, 2017 TPC minutes. MOTION by DeMeo SECONDED by Thompson to approve the minutes as written. MOTION PASSED 5-0.

3. COMMUNICATION FROM THE PUBLIC (NOT ON THE AGENDA):

Jonathan Taylor, Economic Development Manager, introduced himself to the Planning Commission. He stated that he previously worked in Trinidad, Colorado.

4. ACTION ITEMS:

A. Elect a Chair and Vice Chair to Represent the Tualatin Planning Commission.

MOTION by DeMeo, SECONDED by Stout to postpone the election of a Chair and Vice Chair to our next meeting. MOTION PASSED 5-0.

B. Continued Public Hearing to consider a Variance to the Wireless

Communication Facility (WCF) Separation Requirement for the POR Durham project in the Light Manufacturing (ML) Planning District at 10290 SW Tualatin Road (Tax Map/Lot 2S1 23B 000800) (VAR-17-0001) (RESO TDC 609-17).

Mr. Aplin, Pro Tempore Chair, opened up the record and read the script for Quasi-judicial hearings. Mr. Aplin asked the Commission members if they had a conflict of interest, bias, or ex parte contact with the applicant. No members expressed ex parte contact.

Ms. Hurd-Ravich, Planning Manager, entered the staff report and attachments into the record. Ms. Hurd-Ravich stated that she is here to present the revised staff report and presentation based on the revised findings from the applicant.

Ms. Hurd-Ravich stated that the applicant is requesting to construct a new unmanned wireless communication facility (WCF) to be located within 1,500 feet of an existing WCF at 10699 SW Herman Rd. Tualatin Development Code 73.470(9) requires that WCFs are separated by 1,500 feet. The applicant, Acom Consulting, seeks a variance to this code requirement. The Planning Commission must find that the applicant can demonstrate compliance with Tualatin Development Code (TDC) 33.025(1)(a) or 33.025(a)(b).

Ms.Hurd-Ravich noted that the first public hearing began on November 16, 2017. At that hearing, a request was made to leave the record open. The Planning Commission granted this request and reconvened on December 7, 2017. At that hearing the applicant requested a continuance “to enable the Applicant to provide additional information regarding compliance with TDC 33.025(1)(b).

Ms. Hurd-Ravich went through the PowerPoint slides, which detailed the proposed site located on the southwest corner of 10290 SW Tualatin Rd. as well as the existing facility, which is located on City property. The other slides detailed photo simulations that showed the proposed tower location includes tall, dense, evergreen trees that will screen at least 50% of the proposed monopole from adjacent residential areas. In addition, the proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity.

Ms. Hurd-Ravich acknowledged that based on the photo simulations, the applicant has demonstrated that 50% of the monopole will be screened by tall, dense, evergreen trees from the RL (Residential Low Density) Planning District. The Planning Commission’s options are to:

- Approve VAR17-0001 as drafted;
- Deny VAR17-0001 and cite which criteria applicant fails to meet; or
- Continue discussion to a later date.

E. Michael Connors, Hathaway Larson LLP, 1331 NW Lovejoy St, Suite 950, Portland, OR

Mr. Connors noted that he is representing the applicant, Acom Consulting. Mr. Connors stated that he believe the applicant complies with both of the approval criteria.

Mr. Connors noted that additional photo simulations were submitted from five different vantage points. He believes the photo simulations prove that the 50% screening requirement satisfies the criteria

Mr. Connors addressed a letter submitted by American Tower. Mr. Connors noted that the letter states that the subject property does not contain “tall, dense evergreen trees”. Mr. Connor disagrees. The subject property is long and there are many trees to the north which provide screening and one very large evergreen in photo simulation 1. Mr. Connors also acknowledged that the code does not state that the trees have to be on the same site; tree screening can be adjacent to the site. Mr. Connors added that the pictures were taken in the winter and that greater screening will be provided throughout other seasons.

Reid Stewart, ACOM Consulting, 4015 SW Battaglia Ave, Gresham, OR 97080

Mr. Stewart stated that he was present when the photo simulations were conducted and acknowledged that they were taken at the correct height and location.

Ms. St. Clair inquired about the current tree ordinance and if there is a limit on how many trees can be removed without a permit. Ms. Hurd-Ravich replied that commercial properties have been through an architectural review process and a landscape plan has been identified. In order to remove trees after the architectural review process, a tree removal permit is required along with an arborist report. Ms. Hurd-Ravich noted that there is a process to save certain trees by identifying them in the review process. Furthermore, site visits are conducted before the removal of trees.

Mr. Connors noted that in order for American Tower to use the existing tower, a variance application would be required to increase the height of the tower and for the removal of trees. Mr. Connors stated that in the year 2000, the Council was clearly relying on the screening of trees for the justification of approving the existing height of 130 feet. American Tower has not demonstrated that they have filed for a variance to increase the tower height or for a tree removal permit. He added that the majority of trees subject to removal are not on City property.

Mr. Connors added that there is no evidence that American Tower will be able to extend their lease with the City by 2020 and they fail to demonstrate that the existing tower will be able to satisfy the necessary coverage and capacity.

Alan Sorem, Saalfeld Griggs, 250 Church Street SE, Salem, OR 97301
Nick Caezza, American Tower Corp. Boston, MA

Mr. Sorem stated that the existing tower could provide adequate coverage if the tower was extended to 146 feet from 130 feet and if trees were removed. Mr. Sorem added that under federal law, the tower could be extended to 166 feet and a variance would not be required. Mr. Caezza added that federal law is on their side for the extension of the tower height.

Ms. DeMeo stated they she researched FCC requirements for towers and heritage trees and was curious if Mr. Sorem knew the specifics. Mr. Sorem replied that part of the process will be to review the FCC's requirements and they will be met. Ms. DeMeo asked about approximate age of trees and if they qualify as heritage trees. Mr. Sorem responded that he is uncertain.

Mr. Sorem added that does not believe the photo simulations demonstrate that there are tall, dense evergreen trees that will screen at least 50% of the proposed monopole on the subject property. Mr. Sorem added that there is a reason for the limitation of new towers being built, which benefits the community.

Mr. Connors reiterated that American Tower would not be able to remove the trees due to FCC rules. Furthermore, they have not attempted to file a variance. Mr. Connors added that the applicant has proven there is sufficient screening on the site.

Mr. Aplin closed the public hearing.

Mr. Aplin stated that the he feels the applicant meets the technical requirements of part A and B.

Ms. DeMeo agrees and is in favor of the variance. Ms. DeMeo believes that Tualatin is a tree city and is in favor of retaining older trees.

Ms. Thompson also agrees that the applicant meets the requirements of part A and B and there is no evidence that American Tower is moving forward with an application for a variance.

Mr. Stout agreed that the applicant has met the criteria of both A and B and the photo simulations confirmed that.

Ms. St. Clair agreed that the application meets the requirements of A and B.

MOTION by DeMeo, SECONDED by Thompson to approve the proposed variance on the criteria of 1A and 1B. MOTION PASSED 5-0.

C. A Resolution for the Variance Request to the Wireless Communication Facility Separation Requirements

MOTION by DeMeo, SECONDED by Thompson to approve the resolution as written. MOTION PASSED 5-0.

5. COMMUNICATION FROM CITY STAFF

A. Capital Improvement Plan Update

Jeff Fuchs, Public Works Director and City Engineer, presented the Capital Improvement Plan (CIP) Update, which included a PowerPoint presentation.

Mr. Fuchs stated that this is the third year of the Capital Improvement Plan, which looks ten years into the future. The project categories include:

- Facilities and Equipment
- Parks and Recreation
- Technology
- Transportation
- Utilities

Mr. Fuchs noted that priorities include Council goals, health and safety, regulatory requirements, master plans, and service delivery needs. Funding sources include system development charges, water, sewer and storm rates, gas taxes, general fund, and grants and donations.

Mr. Fuchs went through the slides, which detailed the CIP Summary and the individual projects listed for Facilities, Parks and Recreation, Technology, Transportation, Utilities (storm), and Utilities (water).

Mr. Aplin inquired about how the Basalt Creek area will affect the CIP. Mr. Fuchs responded that all of the master plans have all taken into consideration the Basalt Creek plan.

Mr. Fuchs noted that they are going to Council January 25, 2018 to present transportation analysis for $14-$28 million in congestion relief and safety projects.

Ms. DeMeo asked for clarification of the transportation relief presentation going to Council on January 25th. If the bond measure is passed, how will the CIP be affected? Mr. Fuchs answered that the bond measure will provide a new revenue stream and projects will be funded earlier.

6. FUTURE ACTION ITEMS

Ms. Hurd-Ravich stated that at our February meeting, elections will be held for a Chair and Vice Chair. The annual report will also be presented. Ms. Hurd-Ravich added that a variance may be on the agenda in March.

7. ANNOUNCEMENTS/PLANNING COMMISSION COMMUNICATION

None.

8. ADJOURNMENT

MOTION by Aplin SECONDED by DeMeo to adjourn the meeting at 8:24 pm.

Lynette Sanford, Office Coordinator

STAFF REPORT
CITY OF TUALATIN

TO: Tualatin Planning Commissioners

FROM: Aquilla Hurd-Ravich, Planning Manager

DATE: 01/18/2018

SUBJECT: Continued Public Hearing to consider a Variance to the Wireless Communication Facility (WCF) Separation Requirement for the POR Durham project in the Light Manufacturing (ML) Planning District at 10290 SW Tualatin Road (Tax Map/ Lot: 2S1 23B 0008000) (VAR17-0001)(RESO TDC609-17)

ISSUE BEFORE TPC:

A public hearing began on November 16, 2017 to consider a request by Acom Consulting for a variance to the separation standards of wireless communication facilities. At the hearing a request was made to leave the record open. The Planning Commission granted this request and reconvened on December 7, 2017. At that hearing the applicant requested a continuance "to enable the Applicant to provide additional information regarding compliance with TDC 33.025(1)(b)."

The applicant has submitted a new narrative and photo simulations for Planning Commission consideration regarding the request for a variance of separation standards.

RECOMMENDATION:

Staff recommends the Tualatin Planning Commission consider this staff report, analysis and findings and the applicants materials. Based on the applicant's narrative and photo simulations (included as exhibits to the analysis and findings) staff finds the application meets variance criterion 33.025(1)(b).

EXECUTIVE SUMMARY:

Acom Consulting, Inc. proposed to construct a new unmanned wireless communication facility (WCF) on behalf of Lendlease (US) Telecom Holdings LLC - c/p PI Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. on the southwest corner of 10290 SW Tualatin Road. The proposed WCF would include a new 100-foot monopole support tower with antennas mounted at the top and opportunities for ancillary ground equipment including equipment cabinets, natural gas generator, cabling and ice bridge will be located below in a new 25' 48' secure fenced lease area surrounding the tower. It is anticipated that the proposed WCF will generate approximately 1-2 visits per month from a site technician.

The proposed WCF would be located within 1,500 feet of an existing WCF at 10699 SW Herman Road. Tualatin Development Code 73.470(9) requires that WCFs are separated by 1,500 feet:

"The minimum distance between WCF monopoles shall be 1500 feet. Separation shall be measured by following a straight line from one monopole to the next. For purposes of this section, a wireless communication facility monopole shall include wireless communication facility monopole for which the City has issued a development permit, or for which an application has been filed and not denied."

The applicant, Acom Consulting, seeks a variance from this code requirement. As stated in TDC Section 33.025(1) "The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1,500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) **or** (b)." The original application provided findings for 33.025(1)(a)(i) through (iii). The applicant has provided a revised narrative to demonstrate findings for 33.025(1)(b).

TDC 33.025(1)(b) Site Characteristics

The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

The applicant stated that the proposed location includes tall, dense, evergreen trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity. The applicant submitted photo simulations to demonstrate this assertion.

Staff found, based the materials submitted by the applicant, that the application meets this criteria. Staff's full analysis and findings are included as Attachment A and the applicants narrative and photo simulations are Exhibits A and B to staff's analysis and findings.

The full staff reports from December 7, 2017 and November 16, 2017 are included as Attachment B.

OUTCOMES OF DECISION:

Approval of VAR17-0001 would result in the following:

- Allows the applicant to locate a Wireless Communication Facility (WCF) at 10290 SW Tualatin Road; and
- Allows staff to review an Architectural Review (AR) for the proposed WCF project.

Denial of VAR17-0001 would result in the following:

- Prohibits the applicant from locating a WCF at 10290 SW Tualatin Road.
- An Architectural Review decision must be denied as it could not meet the separation standard.

ALTERNATIVES TO RECOMMENDATION:

The Tualatin Planning Commission has two options

1. Approve the proposed variance with appropriate findings that state the application meets the criteria of TDC 33.025(1)(b); or
2. Deny the proposed variance with appropriate findings that the application fails to meet the criteria of TDC 33.025(1)(b)

Attachments: Attachment A - Analysis and Findings with Exhibits A and B
Attachment B - Previous Staff Reports and Attachments
Attachment C - Applicant Request for Continuance Dec 7 2017

POR DURHAM WIRELESS COMMUNICATION FACILITY (WCF)

VARIANCE APPLICATION (VAR-17-0001)

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Specifically, the applicant is asking for a variance from one of the Community Design Standards regulating wireless communication facilities. That standard (TDC 73.470(9)) requires a 1,500 foot separation between wireless communication facility monopoles.

> "The minimum distance between WCF monopoles shall be 1500 feet. Separation shall be measured by following a straight line from one monopole to the next. For purposes of this section, a wireless communication facility monopole shall include wireless communication facility monopole for which the City has issued a development permit, or for which an application has been filed and not denied."

In order to grant the proposed variance, the request must meet the approval criteria of Tualatin Development Code (TDC) Section 33.025(1). The applicant prepared a narrative that addresses the criteria, which is included here as Exhibit A, and staff has reviewed this and other application materials and included pertinent excerpts below.

The following materials and descriptions are based largely on the applicant's narrative; staff has made some minor edits. Staff comments, findings, and conditions of approval are in Italic font.

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(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has

been filed and not denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Applicant Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)(b) as discussed below.

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and

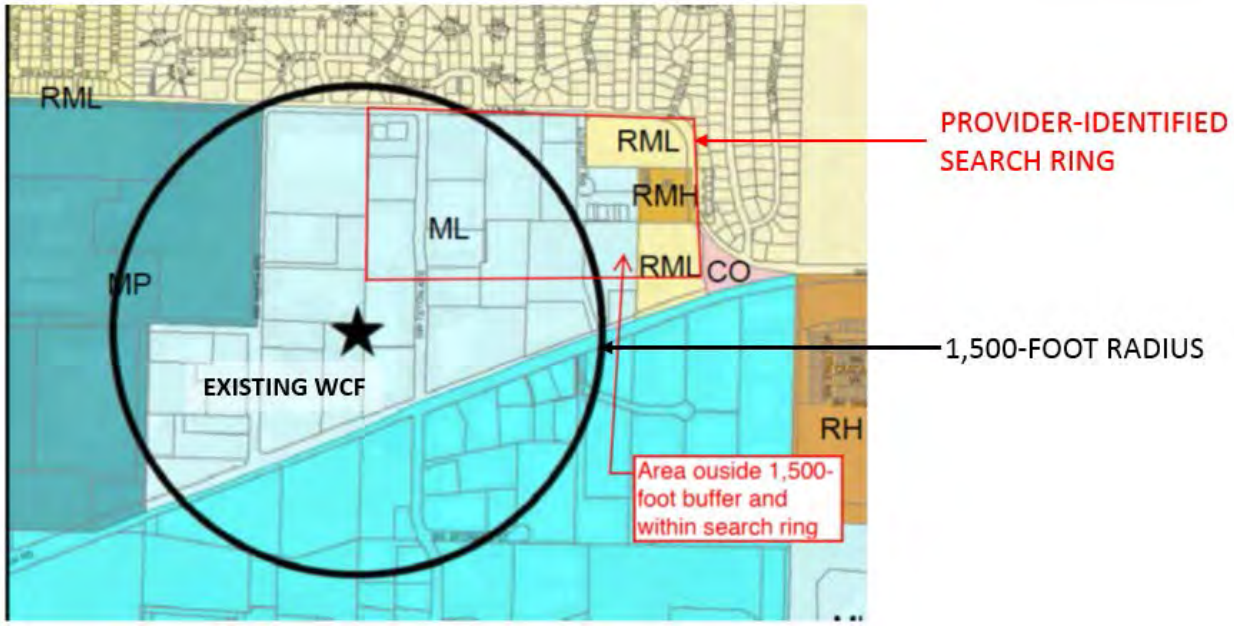
Applicant Response: Not applicable – Applicant has demonstrated compliance with Section 33.025 (1)(b) as discussed below.

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Applicant Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps below.

(Excerpts from applicant material)



Existing Tower 1,500' radius with Verizon Search Ring Overlap

½ Mile radius of proposed tower

Staff notes that the applicant has revised their findings included in the original staff report dated November 16, 2017. The revised findings address criterion in section 33.025(b) and not criteria in 33.025(a).

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Applicant Response: Proposed monopole location includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity. See attached photo simulations from various locations within the nearby RL District. A balloon test was used to verify height and location of the proposed monopole which was virtually invisible from most locations within the RL District.

Staff Response: The subject property, located at 10699 SW Herman Road, is bound on the north by a Low Density Residential (RL) planning district, directly on the east, west and south by a Light Manufacturing (ML) Planning District. The surrounding area to the east includes Medium Low Density (RML) and Medium High Density (RMH) residential planning districts. There are no small lot subdivisions in the RML district in the surrounding area to the east of the subject property.

The applicant has submitted photo simulations included here at Exhibit B. Photos were taken in five different locations including from the RL planning district and the RML and RMH planning districts. Photos were also taken from the ML planning district. These photos demonstrate the subject project has tall evergreen trees that will screen 50% of the monopole.

View #1 shows that looking south from the RL planning district toward the site tall evergreens completely block the view of the property. View #2 is from the ML planning district and although the criterion does not require screening from ML this photo shows there are tall evergreens and other dense trees along the eastern property line. View #3 was taken from the RMH and RML area to the east. In this photo evergreens are present and other tall trees but the monopole is not as well screened as from other vantage points. View #4 is from the border of the RL and ML planning districts, and in these photos no evergreens are present and the tower is somewhat visible beyond an existing industrial building. View #5 is taken from the RL planning district looking southeast. Evergreens are present in this photo as well as other tall trees that help screen the proposed monopole.

The photo simulations of the proposed monopole in views #1, #4 and #5 are most applicable given that the criterion is specific to screening from an RL district or an RML district with a small lot subdivision. There is not a small lot subdivision in the surrounding area to the east where RML is located. Views 1, 4 and 5 were taken from the RL planning district or the boundary of RL and ML. View #1 shows the location completely screened by dense tall evergreens. View #4 does not show evergreens in the photo but screening from an existing building. View #5 shows the presence to tall evergreens and some screening. Staff finds that at least 50% of the proposed monopole will be screened by tall dense evergreen trees from the RL planning district.

This criterion is met.

Exhibits

Exhibit A: Applicant Narrative

Exhibit B: Photo Simulations

APPLICATION FOR
VARIANCE

UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY AT:

10290 SW Tualatin Road
Tualatin, OR 97062

Prepared By

Date
January 08, 2018

Project Name
POR Durham

Applicant:	Lendlease (US) Telecom Holdings LLC c/o PI Tower Development LLC 909 Lake Carolyn Parkway Irving, TX 75039
Co-Applicant:	Verizon Wireless (VAW), LLC dba, Verizon Wireless 5430 NE 122nd Avenue Portland, OR 97230
Representative:	Acom Consulting, Inc. Reid Stewart 5200 SW Meadows Road, Suite 150 Lake Oswego, OR 97035
Property Owner:	Tote 'N Stow, Inc. 10290 SW Tualatin Road Tualatin, OR 97062

Project Information:

Site Address:	10290 SW Tualatin Road, Tualatin, OR 97062
Parcel:	2S123B000800
Parcel Area:	3.63 acres
Zone Designation:	ML (Light Manufacturing Planning District)
Existing Use:	Storage Facility
Project Area:	1,200 square foot lease area (25' x 48' fenced equipment area)

Chapter 33: Variances

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.

(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not

denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)b) as discussed below.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and,

Response: Not applicable – Applicant has demonstrated compliance with Section 33.025(1)b) as discussed below.

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps below.

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Response: Proposed monopole location includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity. See attached photo simulations from various locations within the nearby RL District. A balloon test was used to verify height and location of the proposed monopole which was virtually invisible from most locations within the RL District.

(2) The City may grant a variance to the maximum allowable height for a WCF if the applicant demonstrates:

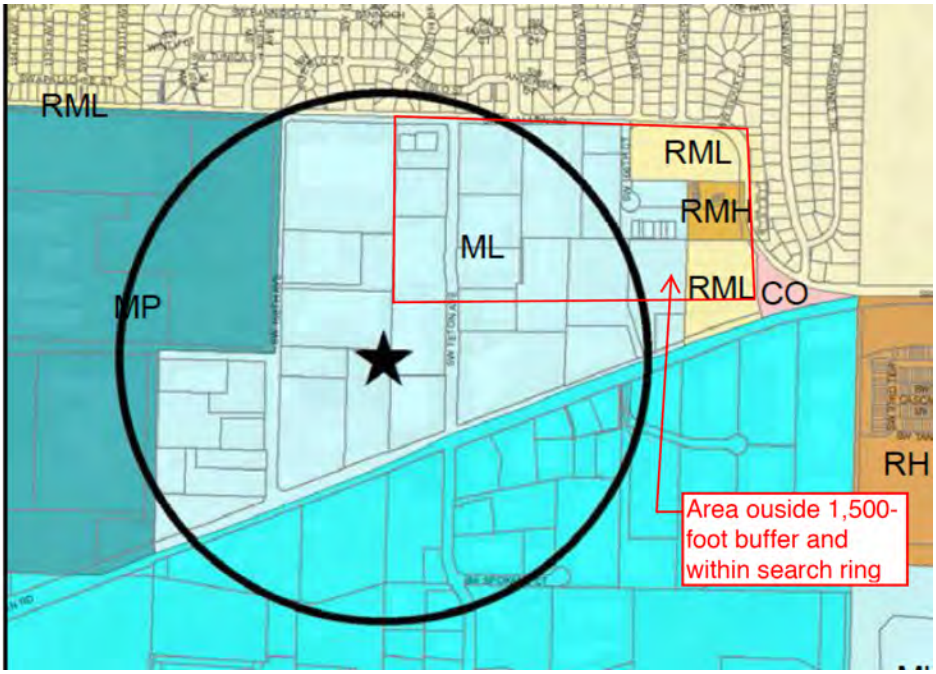
(a) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide at a height that meets the TDC requirements. The needed capacity or coverage shall be documented with a Radio Frequency report; and,

(b) The collocation report, required as part of the Architectural Review submittal, shall document that existing WCFs, or a WCF for which an application has been filed and not denied, cannot be modified to provide the capacity or coverage the tower is intended to provide.

Response: Not applicable – Applicant is not requesting a variance to the maximum allowable height for the proposed WCF.

VERIZON SEARCH RING

EXISTING TOWER 1,500' RADIUS WITH VERIZON SEARCH RING OVERLAP



½ MILE RADIUS OF PROPOSED TOWER

TIM BRADLEY IMAGING

PHOTO SIM LOCATION MAP

lendlease

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

TIM BRADLEY IMAGING

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

lendlease

VIEW #1

TOWER NOT SEEN

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #2 LOOKING SOUTHWEST
ON SW 100TH COURT

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #3 LOOKING SOUTHWEST
ON SW TUALATIN ROAD

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #4 LOOKING SOUTHEAST
ON SW TUALATIN RD. AT SW TETON AVE.

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

POR DURHAM

10290 SW TUALATIN RD.,TUALATIN, OR

CURRENT

VIEW #5 LOOKING SOUTHEAST
ON SW 105TH COURT & SW PUEBLO ST.

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

TIM BRADLEY IMAGING

STAFF REPORT
CITY OF TUALATIN

TO: Tualatin Planning Commissioners

FROM: Aquilla Hurd-Ravich, Planning Manager

DATE: 12/07/2017

SUBJECT: Reconvene to consider a Variance to the Wireless Communication Facility (WCF) Separation Requirement for the POR Durham project in the Light Manufacturing (ML) Planning District at 10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 0008000) (VAR17-0001)(RESO TDC609-17)

ISSUE BEFORE TPC:

A public hearing began on November 16, 2017 to consider a request by Acom Consulting for a variance to the separation standards of wireless communication facilities. At the hearing, an opponent to the proposal requested the record to be left open for 21 days. The Planning Commission granted this request under statutory obligation ORS 197.763. The applicant and opponent submitted new evidence on November 22, 2017. This new evidence was posted and distributed for consideration by the Planning Commission. The applicant has seven days to rebut any evidence prior to the Planning Commission reconvening on December 7, 2017.

RECOMMENDATION:

Staff recommends that the Tualatin Planning Commission consider the staff report and supporting attachments. Since the public hearing on November 16, 2017, staff was made aware of new evidence submitted by the opponent that claims the existing wireless communication facility can be modified to support another provider. Based on this new evidence staff no longer finds that the application meets the variance criteria in 33.025 (1)(a)(ii).

EXECUTIVE SUMMARY:

Acom Consulting, Inc. proposes to construct a new unmanned wireless communication facility (WCF) on behalf of Lendlease (US) Telecom Holdings LLC - c/o PI Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. on the southwest corner of 10290 SW Tualatin Road. The proposed WCF would include a new 100-foot monopole support tower with antennas mounted at the top and opportunities for ancillary ground equipment including equipment cabinets, natural gas generator, cabling and ice bridge will be located below in a new 25' x 48' secure fenced lease area surrounding the tower. It is anticipated the the proposed WCF will generate approximately 1-2 visits per month from a site technician.

The proposed WCF would be located within 1,500 feet of an existing WCF at 10699 SW Herman Road. Tualatin Development Code 73.470(9) requires that WCFs are separated by 1,500 feet:

The minimum distance between WCF monopoles shall be 1500 feet. Separation shall be measured by following a straight line from one monopole to the next. For purposes of hteis section, a wireless communication facility monopole shall include wireless communication facility monopole for which the City has issued a development permit, or for which an application has been filed and not denied.

The applicant, Acom Consulting, seeks a variance from this code requirement. As stated in TDC Section 33.025(1) " The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1,500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) **or** (b)." The original application provided findings for 33.025(1)(a)(i) through (iii).

Staff has revised our findings since receiving evidence from American Tower Corporation stating that the existing monopole at 10699 SW Herman Road can be modified to accommodate another provider, revised Analysis and Findings are included as Attachment A. The original staff report and all attachments are included as Attachment D.

The grand the requested variance, the TPC must find the applicant has demonstrated compliance with the following:

TDC 33.025(1)(a): Coverage and Capacity

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not denied. The needed capacity or coverage shall be documented with a Radio Frequency report.

The applicant states that the potential sites outside of the 1,500- foot radius from the existing WCF at 10699 SW Herman Road were eliminated from consideration due to the lack of adequacy of service improvements from these locations and their close proximity to residential areas where these facilities are not permitted or where visual impacts may occur. The applicant also noted that the existing WCF at 10699 SW Herman Road was not a suitable location due to interference from trees surrounding the site (which would affect coverage) and the applicant provided a RF Engineer Interference Letter in addition to the required RF report.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which an application has been filed and not denied, cannot be modified to accommodate another provider.

The applicant states that modifications to the existing WCF at 10699 SW Herman Road required to host the proposed antennas would result in greater impacts than those of constructing an entirely new monopole structure at the proposed Tote 'N Stow site, namely increasing the height of the 146-foot tall existing WCF (which required a variance to permit its construction in 2000) or the topping or removal of trees that were preserved as a condition of that variance (VAR99-02). The maximum permitted height of the WCFs in the Light Manufacturing (ML) Planning District is 100 feet and the proposed WCF would not require a height variance.

Staff has modified the original findings for this criterion based on evidence submitted by the opponent's representatives of American Tower Corporation, Saalfeld Griggs, at the public hearing on November 16, 2017. The opponent evidence stated:

"The decision granting ATC the variance to construct its existing tower (VAR-99-02) does not contain a condition of approval prohibiting any further clearing of trees (the "***Existing Decision"***). The Existing Decision did include findings of fact that contemplated some tree removal and trimming of trees in a manner as less impactful as necessary. [...] Therefore, upon issuance of a tree removal permit and with the consent of the City of Tualatin as the landlord and owner of the surrounding property, it is feasible for ATC to remove the exiting trees within the approximately 155-foot radius of the ATC tower. As the supplemental RF report and map identify, if ATC were to remove the trees creating such interference, coverage would be acceptable for the service parameters provided in the record. Therefore, the staff report [from November 16, 2017] contains an incorrect findings of fact in finding that removal of the trees cannot occur."

Staff notes there are two alternatives to modify the existing tower pending property owner concurrence and approval. One alternative is to request a Tree Removal Permit in order to remove trees that could be causing interference. The second alternative is to extend the height of the existing tower either to the total height granted by VAR99-02 of 146- feet total inclusive of monopole and antennas or request a height variance. The modified analysis and findings and related exhibits are included as Attachment A.

Additional materials from the applicant and the opponent are included as Attachment B- Materials from applicant and Attachment C- Materials from opponent.

OUTCOMES OF DECISION:

Approval of VAR17-0001 would result in the following:

- Allows the applicant to locate a Wireless Communication Facility (WCF) at 10290 SW Tualatin Road; and
- Allows staff to review an Architectural Review (AR) for the proposed WCF project with an appropriate location.

Denial of VAR17-0001 would result in the following:

- Prohibits the applicant from locating a WCF at 10290 SW Tualatin Road.

ALTERNATIVES TO RECOMMENDATION:

The Tualatin Planning Commission has two options

1. Approve the proposed variance with appropriate findings that state the application meets the criteria of TDC 33.025(1); or
2. Deny the proposed variance with appropriate findings that the application fails to meet the criteria of TDC 33.025(1)

Attachments: Attachment A- Revised Analysis and Findings and Exhibits
Attachment B- Supplemental materials from Acom (applicant)
Attachment C- Supplemental materials from ATC (opponent)
Attachment D - Staff Report and Attachments from November 17, 2016
Attachment E - Applicant Rebuttal November 29, 2017

POR DURHAM WIRELESS COMMUNICATION FACILITY (WCF)

VARIANCE APPLICATION (VAR-17-0001)

ATTACHMENT A: ANALYSIS AND FINDINGS

The issue before the Tualatin Planning Commission (TPC) is consideration of a Variance (VAR) request for Wireless Communication Facility (WCF) separation that would allow the construction of a new 100-foot-tall monopole with antennas mounted at the top and opportunities for ancillary ground equipment within 1,500 feet of an existing WCF located at 10699 SW Herman Road approximately 800 feet southwest of the proposed WCF location. The proposed WCF would be located at 10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 000800) on a property owned by Tote 'N Stow and operates as a storage facility for recreational vehicles.

In order to grant the proposed variance, the request must meet the approval criteria of Tualatin Development Code (TDC) Section 33.025(1). The applicant prepared a narrative that addresses the criteria, which is included within the application materials (Attachment B), and staff has reviewed this and other application materials and included pertinent excerpts below.

The following materials and descriptions are based largely on the applicant's narrative; staff has made some minor edits. Staff comments, findings, and conditions of approval are in Italic font.

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.

(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Applicant Response: Verizon Wireless, the co-applicant, has done extensive research looking at opportunities in the area to collocate on existing towers or buildings, as that is always a preferred option when available. If an existing tower or structure is not available at the specified height or not attainable because of space constraints or unreliable structural design, then Verizon Wireless will propose a new tower. In this instance, there is one existing tower, the ATC tower, which is located outside of the search area designated as usable by Verizon Wireless' RF department, but within the 1,500-foot radius of the

proposed facility. This tower is not viable as a solution to meet their coverage and capacity objectives due to the existing trees that would cause interference. There are no other existing towers available to collocate on within the area of interest thus a new tower is being proposed, which will in turn be available for other providers to collocate on in the future.

In order to meet the Verizon's coverage and capacity objectives, it is necessary to site a tower within the search ring provided by Verizon's RF department as shown below. Moving outside this search ring is technically not practicable and has adverse effects on providing the needed coverage and capacity objectives the tower is intended to provide, which include nearby high-traffic residential areas to the North. Siting outside the search ring can also create interference with other nearby network sites where coverage may overlap.

The Applicant is requesting a variance to the 1,500-foot tower separation requirement. There is an existing 146-foot ATC monopole support structure outside of the search ring, approximately 750 feet to the SW of the proposed support tower, located at 10699 SW Herman Road. Per the tower owner, there is currently available space on the tower at the 100-foot level, however this is not high enough to avoid interference from multiple trees surrounding the tower and still meet coverage and capacity objectives to the North, as detailed in the attached RF Usage and Facility Justification Report and RF Engineer Interference Letter.

Locating the tower within the search ring and outside the 1,500-foot radius of the nearby existing ATC tower is also not a desirable alternative as it would mean locating in another part of the ML zone without existing screening or in the RML or RMH zone, where a conditional use permit would be required and where it would be very visible to nearby residential areas. In addition, T-Mobile has also indicated that they intend on co-locating on the proposed WCF, if approved, as the existing ATC tower to the SW will not meet their coverage and capacity requirements either as noted in the attached Letter from T-Mobile RF.

Staff notes that the search ring is defined by the service provider based on their coverage and capacity objectives. As highlighted in the "RF Usage and Facility Justification" report, the proposed WCF is intended to improve service to the residential areas immediately adjacent to and on both sides of the Tualatin River (see Figures C-1 and C-2). Areas within the search ring but outside of the 1,500-foot radius of the existing WCF at 10699 SW Herman Road are either within or closer to residential planning districts which either prohibit completely or restrict heights of WCFs (see Figure C-3).

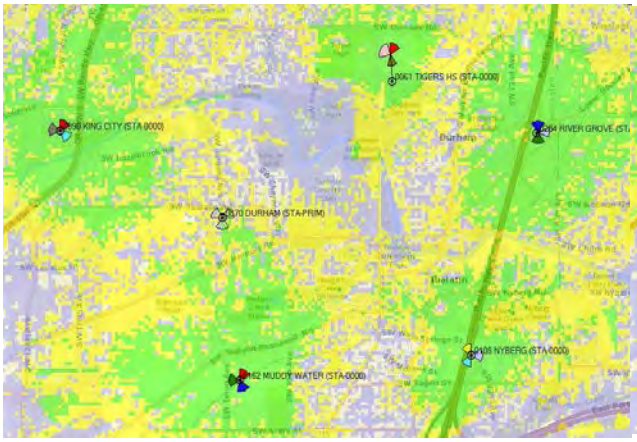


Figure C-1: Existing Coverage

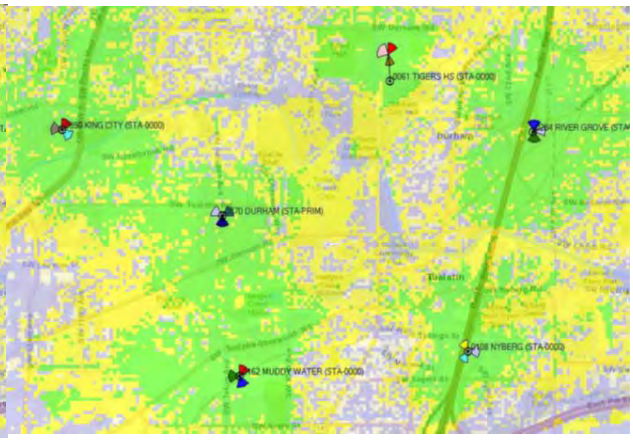


Figure C-2: Proposed Coverage

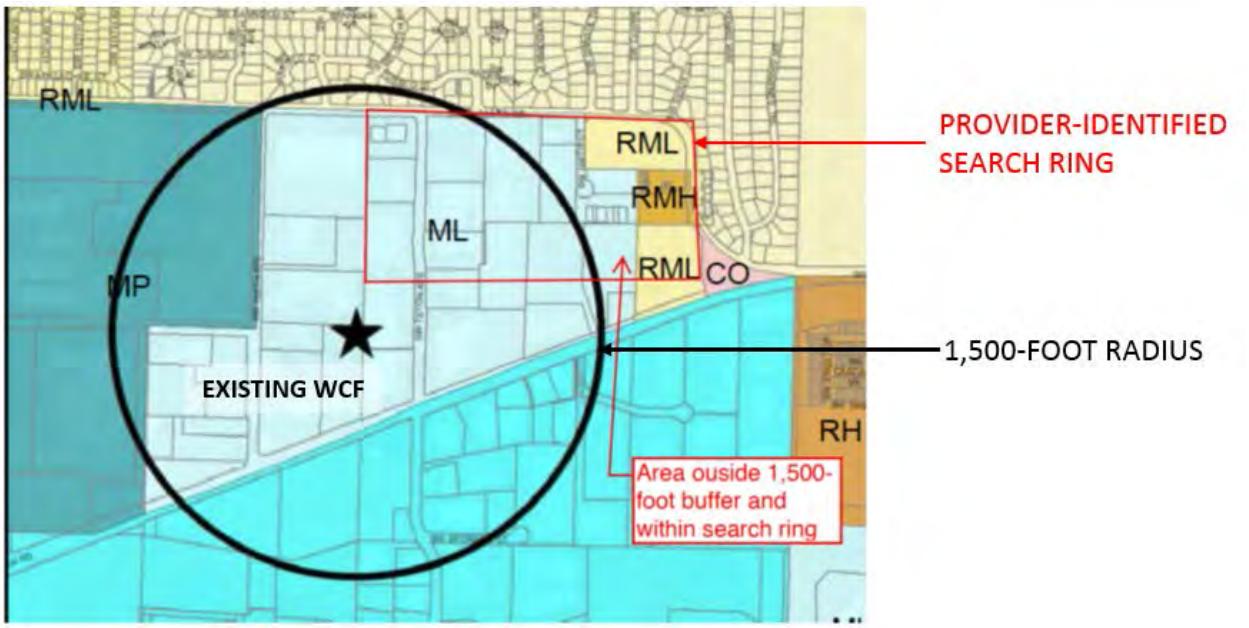


Figure C-3: Search Ring and 1,500-Foot Separate Overlap Map

Staff finds that this criteria is met.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and

Applicant Response: The only existing monopole tower located within 1,500 feet of the proposed location cannot be modified as it is not designed to be extended to the necessary height required to avoid interference from the tall trees currently surrounding the tower. The existing tower would need to be removed and replaced with a new tower at least 20-30 feet taller to avoid interference unless the trees were to be removed or reduced in height to approximately the 100-foot level or lower.

Topping the trees would create undesirable visual impacts to nearby residential areas, whereas the proposed location is well screened to nearby residential areas to the North and does not require the removal or trimming of any existing trees. The topped trees would also create a negative visual impact on their own, as over a third of the height would need to be removed to avoid interference.

Opponent (Saalfeld Griggs/ATC) Response: The variance (VAR-99-02) that allowed the construction of the existing ATC WCF at 10699 SW Herman Road did not contain a condition of approval prohibiting any further clearing of trees; in addition, this decision did include findings of fact that contemplated some tree removal and trimming of trees in a manner as less impactful as necessary. Therefore, upon issuance of a tree removal permit and with the consent of the City of Tualatin as the landlord and owner of the surrounding property, it is feasible for ATC to remove the existing trees within the approximately 155-foot radius of the ATC tower (see Exhibit A). As the supplemental RF report and map identify (see Exhibit B), if ATC were to remove the trees creating such interference, coverage would be acceptable for the service parameters provided in the record. Therefore, the staff report contains an incorrect finding of

fact in finding that removal of the trees cannot occur. A copy of the VAR-99-02 decision is attached hereto and incorporated herein for your reference. ATC requests the Planning Commission to deny the proposed variance request.

~~*Based on the conditions at 10699 SW Herman Road, modifying the existing WCF to attach functioning antennas would require either an additional height variance for the existing WCF (which already received one to permit its construction in 2000) or a forced height reduction in the trees adjacent to the existing monopole. In the analysis and findings for the variance (VAR 99-02) that allowed the construction of the existing 146-foot-tall WCF, it was noted that one of the reasons for the granting of that variance was to preserve the grove of approximately 50 tall conifers at heights of 100 to 120 feet (the construction of the existing WCF resulted in the removal of 6 trees). VAR-99-02 included the following:*~~

> ~~*"The City as the landowner desires to retain the large conifer trees on the subject portion of the Operations Center property and requires that development such as the proposed communications facility disturb as few conifer trees on the site as possible. The applicant states that wireless RF signals must travel in an unobstructed path from the facility to the user. Because the tower and antennae are proposed to be located in the grove of 100'-120' tall conifers and the City as the property owner does not wish to have the obstructing trees removed, the antennae must be at a height greater than the height of the neighboring trees (with consideration of the future growth of the trees)."*~~

~~*As such, barring a reversal in the City's preference to not remove trees on its Operations Center site, the options for locating a new WCF in this area include either further increasing the height of the existing 146-foot-tall WCF (the maximum allowed WCF height in the Light Manufacturing [ML] Planning District is 100 feet) or constructing a new structure. The applicant is making the case that a new 100 foot tall structure would result in less impacts than extending the height of the existing WCF at 10699 SW Herman Road.*~~

Staff notes that barring a discussion of impacts to removing more than 50 tall conifer trees within 155 feet of the existing ATC tower at 10699 SW Herman Road, the opponent assertion that the existing facility can be modified accommodate another provider—which would require at minimum a tree removal permit and some form of architectural review yet to be determined—is factually correct.

Staff finds that this criteria is not met.

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Applicant Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps.

Staff notes that—through field visits—the applicant is correct in their assertion that there are no other structures of suitable height to attach antennas that would provide approximate coverage as the proposed WCF, also noting the maximum structure height (outside of flagpoles and WCFs) of 50 feet in the Light Manufacturing (ML) Planning District.

Staff finds that this criteria is met.

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Applicant Response: Application has demonstrated compliance with Section 33.025(1)(a) above, however proposed location also meets this requirement and includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity.

Staff notes that the applicant has chosen to demonstrate compliance with TDC Sections 33.025(1)(a)(i) through (iii) above; therefore, a compliance determination with TDC Section 33.025(1)(b) is not required and the standards in this section do not apply.

SUMMARY OF ANALYSIS AND FINDINGS

~~Based on the application materials and the analysis and findings presented above, staff finds that VAR-17-0001 meets all criteria of TDC 32.025(1)(a), "Criteria for Granting a Variance for a Wireless Communication Facility."~~ As staff finds that the VAR-17-0001 proposal does not meet TDC 32.025(1)(a)(ii), the Planning Commission should not grant a variance from the 1500-foot-separation provisions of TDC 73.470(9).

Exhibits

Exhibit A: Operations Cell Tower Site with 155-foot radius

Exhibit B: Complete Saalfeld Griggs/ATC Response Packet

November 16, 2017

VIA ELECTRONIC MAIL: ahurd-ravich@tualatin.gov
Original to follow via hand delivery

City of Tualatin Planning Commission
Attn: Aquilla Hurd-Ravich
18880 SW Martinazzi Ave
Tualatin, OR 97062-7092

RE: PI Tower Development Project OR-Tualatin-Durham/ 10290 SW Tualatin Road
(Tax Map/Lot: 2S1 23B 000800) (VAR-17-0001)
Our File No: 00000-28543

Dear Ms. Hurd-Ravich and Honorable Planning Commissioners:

I represent American Tower Corporation, a Delaware corporation, and Tower Asset Sub, Inc., a Delaware corporation ("***ATC***"), which owns a wireless communications facility located at 10318 SW Herman Road, Tualatin, Oregon (the "***ATC Tower***"). ATC is impacted by the proposed wireless communication facility on behalf of Lendlease (US) Telecom Holdings LLC - c/o PI Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. (herein collectively "***Applicant***") on the southwest corner of 10290 SW Tualatin Road, Tualatin, Oregon (herein the "***Subject Property***"). Applicant's proposed tower is located within 1,500 feet of the ATC Tower; specifically, the proposed tower is approximately 750 feet from the ATC Tower. Therefore, under the Tualatin Development Code Section 33.025(1)(a) a variance is needed. Applicant's proposed findings as justification for the variance to the 1,500-foot radius requirement from an existing tower is an assertion that the existing ATC Tower is not suitable for co-location of additional carriers because of interference from the trees surrounding the site and has provided an RF interference letter in addition to its RF report. ATC acknowledges that under the current circumstances, the height of the trees would create interference for new co-location of carriers below the existing carrier heights; however, the interference from the trees can be eliminated. ATC has provided supplemental RF coverage analysis, which is attached hereto and incorporated by this reference herein, that supports ATC's position.

ATC submits these comments for the purpose of correcting the factual record and the proposed legal conclusions contained in the staff report; specifically, the decision granting ATC the variance to construct its existing tower (VAR-99-02) does not contain a condition of approval prohibiting any further clearing of trees (the "***Existing Decision***"). The Existing Decision did include findings of fact that contemplated some tree removal and trimming of trees in a manner as less impactful as necessary. However, in the approximately 17 years following the issuance of the Existing Decision, the circumstances have changed and the surrounding trees have grown. Therefore, upon issuance of a tree

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removal permit and with the consent of the City of Tualatin as the landlord and owner of the surrounding property, it is feasible for ATC to remove the existing trees within the approximately 155-foot radius of the ATC Tower. As the supplemental RF report and map identify, if ATC were to remove the trees creating such interference, coverage would be acceptable for the service parameters provided in the record. Therefore, the staff report contains an incorrect finding of fact in finding that removal of the trees cannot occur. A copy of the VAR-99-02 decision is attached hereto and incorporated herein for your reference.

Alternatively, ATC could potentially file a new variance application requesting permission to further extend the height of the ATC Tower by approximately twenty feet in recognition of the change in circumstances created by the passage of time and the annual growth of the trees and data coverage needs existing today as compared to 1999, when ATC originally applied for the Existing Decision. Such a variance application, if requested, would likely be approved and is certainly feasible. Therefore, ATC has two options in obtaining the necessary approvals for servicing the coverage request as identified in the existing record. Accordingly, the assertion that ATC cannot, as a matter of law, provide the requested coverage is inaccurate.

ATC requests the Planning Commission to deny the proposed variance request. In the alternative, ATC requests the Planning Commission to keep the record open for a period of not less than 21 days to give ATC an opportunity to provide additional evidence and argument as it pertains to the proposed variance request.

Thank you for your time and attention.

Sincerely,

ALAN M. SOREM
asorem@sglaw.com
Voice Message #303

AMS:jsm
Enclosures
cc: Client

Micah Hawthorne

Framingham, MA **c: 617-828-3967**
linkedin.com/in/micahhawthorne **micah.hawthorne@yahoo.com**

SUMMARY

Proven implementation and results driven professional with 10+ years of technical program management and 5+ years of pre-sales engineering/consulting experience planning, implementing, deploying, and integrating wireless mobile networks. Recognized as a strategic thinker, consistent finisher, creative problem solver, and successful team leader. Exceptional oral and written communicator with an ability to influence through collaboration, business acumen, and technical subject matter expertise.

CORE COMPETENCIES

- Program & project management
- Multi-project engagement and coordination
- Cross-functional collaboration
- Speed-to-market risk analysis and planning
- RF/BH site planning and network deployment
- Pre-sales technical analyst and support

EDUCATION & TRAINING

MBA - High Technological Focused — Northeastern University, Boston, MA
Certificate in Applied Project Management — Boston University Corporate Education, Waltham, MA
BS in Electrical Engineering — University of South Alabama, Mobile, MA
Candidate for BS in Electrical Engineering — Massachusetts Institute of Technology, Cambridge, MA

PROFESSIONAL EXPERIENCE

AMERICAN TOWER, Woburn, MA **2012-2017**
Principal Sales Engineer - Project Manager & Network Development Planning Partner; 5+ yrs.

- Proactively investigate and pursue incremental business with Sales team by driving coverage solutions in challenging areas. Additionally support Sales team to achieve two commercial $100K+ MRR deals.
- Support Business Development efforts by analyzing requirements, understanding network coverage goals, and recommending innovative solutions to win comprehensive deals. Research technology trends to identify roadmaps that enhance long term contract value with Carrier and Vertical Market customers. Successes include 20+ new sites RFP with Pitkin County, CO., 200+ sites deal for AT&T In-Flight project, and 20+ sites deal with Pacific Data Vision long term equipment upgrade plans.
- Acquire and analyze carrier network performance data and develop metrics paired with site intelligence to proactively identify multi-tenant tower location opportunities. Released 400+ search areas over 1 year based on lack of 3G voice and 4G LTE data service in suburban growth markets and several heavily trafficked thoroughfares with no tower infrastructure. Partnered with Network Development teams to evaluate and lease land assets for proactive tower development.

ERICSSON (RF/BH organization spun off from Clearwire), Waltham, MA **2004-2012**
RF/BH Manager New England – Program Manager; 9 mos.

- Directed a team of 10 Project Managers accountable for network performance monitoring, trouble ticket administration and closeout for post launch service optimization. The team served as 1st line local engineering support for capacity augments, RF repeaters, and In-Building DAS, for Clearwire's 4G network of 850+ sites stretching across 7 Northeast markets from Upstate NY to Boston, MA. Achieved Bonus Level for 35% of network KPIs within 6 months of customer launch weathering 30% head count reduction. Target exceeded on remaining 65% of KPIs. Coordinated action plans with Field Operations team to exceed 99.75% network availability target and timely trouble ticket closeouts in all markets.

CLEARWIRE (4G RF/BH organization spun off from Sprint Nextel), Waltham, MA
RF/BH Manager New England – Program Manager; 2.5 yrs.

- Managed project team of up to 11 RF/BH Engineers responsible for designing, planning, integrating, and launching 450+ sites across 5 New England markets. Met strategic coverage objectives with over 8M POPs served. Achieved MW BH connectivity on 97% of sites reducing BH Opex by approx. 80%.

- Coordinated the RF/BH team's design efforts, aligning metrics and goals with local and remote cross-functional teams, including Site Acquisition, Construction, Field Operations, National Engineering, and Sales & Marketing teams. Regularly evaluated, adjusted, and presented project milestone progress to executive team. Challenges included on-the-fly network redesigns due to difficult zoning. Collaborated daily with Network Deployment's construction efforts ensuring on time 2010 market launches in line with End of Year investor commitment.
- Developed RF/BH team led On-Air site integration and network acceptance process. Removal of implementation bottle necks enabled run rate of 40+ sites per week and associated MW backhaul links.

SPRINT NEXTEL (Nextel merger with Sprint in 2005), Bedford, MA
RF Design Manager New England North – Project Management Lead; 2 yrs.

- Headed team of RF design engineers responsible for 400+ single- and multi- technology site build plan deployment throughout New England area. Deployments of note included site relocations and Cell-On-Wheels (COWs) for capacity expansion in Boston core and special events.
- Standardized zoning message and presentation format for 3rd party Site Acquisition and Design team. Debated the efficacy via mock trials. Enabled consistent message platform for better public awareness to towns, engineer-to-engineer scheduling flexibility, and shorter time to permit for quicker NTPs.

RF Engineer III – Project Manager; 1.5 yrs.

- Prepared and released coverage goals for new and replacement site locations in accordance with build plan budgets. Sites chosen based on network performance KPI improvement requirements and Sales team coverage expansion needs. Presented RF coverage to local boards for zoning permits.
- Served as New England North Design Team POC for cross-functional groups to meet deliverable timeframes for On Air integration. Created RF plan for new sites and assisted project teams with site integrations in line with customer growth expectations, service quality degradation, Sales team customer specific requests, and budgetary constraints. Met service quality and coverage expansion needs in the metro Boston area with emphasis on urban core and reduced network trouble tickets by 50% over 1 year from customers in poorly served areas.

NEXTEL, (Converted to full time employee), Bedford, MA **2004-2005**
RF Engineer II; 1 yr.
EXPERT WIRELESS SOLUTIONS, Vienna, VA **2003-2004**
RF Engineering Consultant; 1 yr.

- Positioned, designed, and assisted permitting by 3rd party site acquisition teams of new tower assets for Nextel in NH, ME, and MA. Created interstate coverage footprint north of NH along I-95 through to Bar Harbor, ME and Manchester, NH through to Lake Winnipesaukee area increasing sales opportunities to resort POIs.
- Reported in-field drive test analysis enabling service optimization for initial launch of Cingular's GSM network in San Antonio, TX.

RF CONSULTING SERVICES, Marietta, GA **2001-2003**
RF Engineering Consultant; 1.5 yrs.

- Implemented turnkey solutions for Cingular's dual band GSM conversion, including design, deployment, and drive test optimization in Puerto Rico market for on time launch of modernized network.
- Oversaw field-testing team responsible for beta testing in-house proprietary software tool for engineering release. Trained and mentored drive test engineers for data processing, coverage analysis, and frequency allocation tool properties for product release to Cingular in two OH and the PR markets.

GALAXY ENGINEERING SERVICES, Alpharetta, GA **2000-2001**
RF Design Engineering Consultant; 3 mos.

- Proposed search locations in Northeast region for American Tower's Build-To-Fill project. Maximized potential interested carriers per tower for preemptive site builds with shortest ROI.

RF Associate Engineering Consultant; 1 yr.

AWARDS

Perfect Performance for achieving Bonus Level KPI performance supporting the Clearwire network

CITY OF TUALATIN
PO BOX 369
TUALATIN, OREGON 97062-0369
(503) 692-2000
TDD 692-0574

MEETING NOTICE FOR THE

CITY COUNCIL AND THE TUALATIN DEVELOPMENT COMMISSION

FOR THE CITY OF TUALATIN

MONDAY January 10, 2000

Mayor/Chairman Ogden; Councilors/Commissioners Bergstrom, Cain, Chrisman, Forrest, Lamb, Weller

The Council/Commission will meet for the work session meetings at 6:00 p.m. on the second floor of the Council Building and will meet for the regular meetings at 7:30 p.m. in the Council Building, Council Chambers, 18884 SW Martinazzi Avenue.

Assistive Listening Devices for persons with impaired hearing can be scheduled for this meeting by calling 692-2000 (voice) or 692-0574 (Text Telephone) no later than 24 hours prior to the meeting. The City will also upon request endeavor to arrange for a qualified sign language interpreter for persons with speech or hearing impairments. Since these services must be scheduled with outside service providers, it is important to allow as much lead time as possible. Please notify the City of your need by 5:00 p.m. two working days prior to the meeting date (same phone numbers as listed above): 692-2000 or 692-0574.

- SEE ATTACHED AGENDA -

MTG\CCNOTICE.COV

LOCATED AT: 18880 SW Martinazzi Avenue

OFFICIAL CALENDAR OF THE COUNCIL OF THE CITY OF TUALATIN

The following is a summary of issues to come before the Council at its regular session to be held on Monday, January 10, 2000 at 7:30 p.m. in the Council Chambers.

Procedure for Legislative Hearings - (matters which affect the general welfare of the entire City rather than a specific piece of property.)
1. Open hearing and identify subject.
2. Review staff report, receive testimony from the public, close hearing or continue for further testimony or investigation.
3. Council action: approve, deny or continue.

Procedure for Quasi-Judicial Hearings - (zone changes, variances, conditional use permits, comprehensive land changes, subdivision plats and land partitioning to comply with "quasi-judicial" requirements of Supreme Court ruling.)
1. Open public hearing and identify subject.
2. Review staff report; receive testimony of proponents, testimony of opponents, proponents' rebuttal; cross examination follows each presentation; close hearing or continue for further testimony or investigation.
3. Council action: approve, deny or continue.

Time Limits for Public Hearings - The purpose of time limits on testimony is to provide all interested persons with an adequate opportunity to present and respond to testimony while at the same time ensuring that the hearing can be conducted in an efficient and timely manner. All persons providing testimony shall be limited to 10 minutes, subject to the right of the Mayor to amend or waive the time limits.

Resolution No. Begin with 3668-00
Ordinance No. Begin with 1041-00

1. ANNOUNCEMENTS

   A. Howland Award Ceremony for Skate Park Development

   B. Swearing-in of Reserve Police Officers

2. OPEN MIKE - For matters not appearing elsewhere on the agenda. Matters requiring further investigation or detailed answers will be referred to City staff for follow-up and report at a future meeting. Please limit your comments to no more than 3 minutes. Total time allocated to OPEN MIKE is 15 minutes at the beginning of the meeting. If there is insufficient time to hear all those wishing to speak, the OPEN MIKE will be continued to the end of the agenda.

3. CONSENT AGENDA - Items marked with "c" are considered routine and are part of the consent agenda. The items have been discussed by the Council in work session. They will be adopted by one motion unless a Councilor or person in the audience requests, before the vote on the motion, to have an item considered at its regular place on the agenda.

4. ACTION ITEMS

   A. PUBLIC HEARINGS - Quasi-Judicial

      1. Request: CUP-99-05—A Conditional Use Permit to Allow a Family Recreation Center (Outdoor Aquatic Facility) in a General Commercial (CG) Planning District
         Applicant: Dale Williams, Vice-President, Leisure Sports, Inc.
         Site: 18120 SW Lower Boones Ferry Road (2S1 24AB, 800, 500 & 501)

A. PUBLIC HEARINGS - Quasi-Judicial *[continued from Page 1]*

2. Request: VAR-99-02---A Variance from Section 60.090(4) to Allow a 130' High Wireless Telecommunication Tower with 16' Antennae Where a 100' High Support Structure and Antenna is Allowed in a Light Manufacturing (ML) Planning District
   Applicant: John Silenzi, Nextel Communications and Dan Boss, City of Tualatin Operations Director
   Site: 10699 SW Herman Road - Tax Map 2S1 22A, Tax Lot 900

B. RECOMMENDATIONS FROM CITY ATTORNEY

c 1. Resolution No. _____ Granting a Variance to Allow a 10' Setback of 10' Where 30' is Required in a Light Manufacturing (ML) Planning District at 18075 SW Boones Ferry Road (2S1 13ED, 1900) (VAR-99-01)

c 2. Resolution No. _____ Approving the Transfer of the Solid Waste Franchise from United Disposal Service Inc. and Keller Drop Box Service to Allied Waste Industries Inc.

3. Ordinance No. _____ Vacating a Portion of SW Marilyn Street and SW 112th Avenue

4. Ordinance No. _____ Vacating a 30' Public Right-of-Way on SW Marilyn Street

5. Ordinance No. _____ Vacating a Portion of SW 119th Avenue

6. Ordinance No. _____ Relating to Emergency Management; Delegating the Authority to Adopt and Amend the Emergency Management Plan to the City Manager; Amending TMC 1-7.020; Repealing TMC 1-7.030; and Rescinding Resolution Nos. 1789-86, 2714-92

7. Ordinance No. _____ Relating to Northwest Natural Gas Franchise; Correcting a Typographical Error; and Declaring an Emergency

C. RECOMMENDATIONS FROM PLANNING DIRECTOR - None Additional.

D. RECOMMENDATIONS FROM CITY ENGINEER

c 1. Change Order No. 4 to the Contract Documents for the Construction of SW Tualatin Road

c 2. Authorize City Engineer to Apply for 124th Avenue / Portland & Western (SPRR) Railroad Crossing Improvements

E. RECOMMENDATIONS FROM CITY MANAGER

c 1. Approval of Minutes for the Meeting of November 22, 1999 and December 13, 1999

c 2. Resolution No. _____ Approving Accounts Payable for Payment

c 3. Liquor License - New - Oregon Grape and Gourmet

F. RECOMMENDATIONS FROM COMMUNITY SERVICES DIRECTOR

c 1. Authorization to Proceed with Phase Two of Park and Recreation District Feasibility Study

G. RECOMMENDATIONS FROM ECONOMIC DEVELOPMENT DIRECTOR

c 1. Resolution No. _____ Authorizing Acceptance of Deed of Dedication in Association with the Construction of SW 124th Avenue and SW Leveton Drive

5. EXECUTIVE SESSION: The Tualatin City Council may go into Executive Session under the provisions of ORS 192.660 (1)(a)(D) to discuss personnel; ORS 192.660 (1)(d) to discuss labor relations; ORS 192.660 (1)(e) to discuss real property transactions; or ORS 192.660 (1)(h) to discuss current and pending litigation issues. All discussions within this session are confidential; therefore nothing from this meeting may be disclosed by those present. Representatives of the news media are allowed to attend this session, but must not disclose any information discussed during this session.

6. COMMUNICATIONS FROM COUNCILORS

OFFICIAL CALENDAR OF THE TUALATIN DEVELOPMENT COMMISSION

The following is a summary of issues to come before the Commission at its regular session to be held on Monday, January 10, 2000 at 7:30 p.m. in the Council Building Council Chambers.

Resolution No. Begin with 338-00

Time Limits for Public Hearings - The purpose of time limits on testimony is to provide all interested persons with an adequate opportunity to present and respond to testimony while at the same time ensuring that the hearing can be conducted in an efficient and timely manner. All persons providing testimony shall be limited to 10 minutes, subject to the right of the Chairman to amend or waive the time limits.

1. ANNOUNCEMENTS

2. OPEN MIKE - For matters not appearing elsewhere on the agenda. Matters requiring further investigation or detailed answers will be referred to City staff for follow-up and report at a future meeting. Please limit your comments to no more than 3 minutes. Total time allocated to OPEN MIKE is 15 minutes at the beginning of the meeting. If there is insufficient time to hear all those wishing to speak, the OPEN MIKE will be continued to the end of the agenda.

3. CONSENT AGENDA - Items marked with "c" are considered routine and are part of the consent agenda. The items have been discussed by the Commission in work session. They will be adopted by one motion unless a Commissioner or person in the audience requests, before the vote on the motion, to have an item considered at its regular place on the agenda.

4. ACTION ITEMS

A. PUBLIC HEARINGS - None.

B. RECOMMENDATIONS FROM ECONOMIC DEVELOPMENT DIRECTOR

c 1. Change Order No. 6 to the Contract Documents for Construction of SW 124th Avenue / SW Leveton Drive

c 2. Resolution No. _____ Authorizing Compensation for Dedication of Right-of-Way Associated with Construction of SW 124th Avenue and SW Leveton Drive

c 3. Resolution No. _____ Authorizing Commencement of Negotiations to Acquire Rights-of-Way and Easements for the SW 124th Avenue / SW Leveton Drive to SW Myslony Street Improvements

c 4. Resolution No. _____ Approving a Certificate of Completion for Tracts 6C and 6D (Villas on the Lake III) at Tualatin Commons

C. RECOMMENDATIONS FROM ADMINISTRATOR

c 1. Approval of Minutes of the November 22, 1999 meeting and December 13, 1999 meeting

c 2. Approving Accounts Payable for Payment

5. EXECUTIVE SESSION: The Tualatin Development Commission may go into Executive Session under the provisions of ORS 192.660(1)(a)(D) to discuss personnel; ORS 192.660 (1)(d) to discuss labor relations; ORS 192.660 (1)(e) to discuss real property transactions; or ORS 192.660 (1)(h) to discuss current and pending litigation issues. All discussions within this session are confidential; therefore nothing from this meeting may be disclosed by those present. Representatives of the news media are allowed to attend this session, but must not disclose any information discussed during this session.

6. COMMUNICATIONS FROM COMMISSIONERS

City of Tualatin, Oregon
COUNCIL AGENDA STATEMENT

A 2

Meeting Date January 10, 2000 **Agenda Item No.** _____

Item Title
VAR-99-02—A VARIANCE FROM SECTION 60.090(4)TO ALLOW A 130' HIGH WIRELESS TELECOMMUNICATION TOWER WITH 16' ANTENNAE WHERE A 100' HIGH SUPPORT STRUCTURE AND ANTENNA IS ALLOWED IN A LIGHT MANUFACTURING (ML) PLANNING DISTRICT AT 10699 SW HERMAN ROAD ON TAX MAP 2S1 22A, TAX LOT 900.

Prepared by Jim Jacks **Department** Planning

Explanation
This is a quasi-judicial land use decision. This application requests a variance to the allow a 130' high wireless communication monopole tower and 16' antennae on the City of Tualatin Operations Center property. The significant issues of the proposal are:

- Nextel Communications (Nextel) seeks to expand its wireless communication network in the Tualatin area and proposes to construct a wireless communication facility (monpole tower, antennae and equipment shelter) on a leased area of the City of Tualatin Operations Center. Nextel is negotiating with the City of Tualatin to lease a 3,600 s.f. area on the northeast corner of the property.
- The site is in a ML Planning District which allows a wireless communication facility as a permitted use. The maximum allowed height is 100' in the ML District.
- The site is in an existing industrial area and located approximately 1,400' from residential areas north of SW Tualatin Road. On the site is grove of 100' - 120' high conifer trees. The site was chosen for its location in an industrial area, distance from residential areas and for the buffering that the tall trees would provide for a tower and antennae.
- Because the radio signals to and from the antennae are blocked by trees and limbs, the proposed monopole tower and antennae must be taller than the nearby trees. This variance is needed to allow the antennae to be a height of up to 146' and be higher than the 100'-120' trees.
- Locating the tower and antennae in the grove of trees will screen and buffer the facility from nearby properties. No injury to adjoining properties is anticipated. The proposed facility will require the removal of six conifers so that the tower and equipment shelter can be constructed.

Applicant: John Silenzi, Nextel Communications and Dan Boss, City of Tualatin Operations Dir.

Special Issues
The statutory 120th day which a decision must be made is March 28, 2000. This hearing is on day 42.

Financial Statement Not applicable **Account No.** Not applicable

Recommendation Staff recommends the City Council adopt the staff report and direct staff to prepare a resolution granting VAR-99-02, with the following condition:
1. The monopole tower, antenna platform and whip antennae shall not exceed 146 ft. in height above grade.

Board/Commission Recommendation Not applicable

Attachments (Listed Below)
Staff Report, 1)Applicant's Reasons, 2)Vicinity Map & Site Plan, 3)Elevations, 4)Photo Simulation

A-2

CITY OF TUALATIN
PO BOX 369
TUALATIN, OREGON 97062-0369
(503) 692-2000
TDD 692-0574

January 10, 2000

City Council
City of Tualatin

Members of the Council:

VAR-99-02--A VARIANCE FROM SECTION 60.090(4)TO ALLOW A 130' HIGH WIRELESS TELECOMMUNICATION TOWER WITH 16' ANTENNAE WHERE A 100' HIGH SUPPORT STRUCTURE AND ANTENNA IS ALLOWED IN A LIGHT MANUFACTURING (ML) PLANNING DISTRICT AT 10699 SW HERMAN ROAD ON TAX MAP 2S1 22A, TAX LOT 900

REQUEST

On November 29, 1999, the City of Tualatin received an application for a variance request from Sections 60.090(4) of the Tualatin Development Code (TDC) to allow a 130 foot wireless communication monopole tower with up to 16 ft. of antennae for a total height of up to 146 ft. The proposed site is a 3,600 square foot lease area on the City of Tualatin Operations Center subject property located in the Light Manufacturing (ML) Planning District at 10699 SW Herman Road.

APPLICANT'S REASONS

The applicant's reasons and supporting material are made a part of this staff report (Attachment 1).

BACKGROUND

The co-applicants are John Silenzi representing Nextel Communications (Nextel) and Dan Boss, City of Tualatin Operations Director. Nextel seeks to expand its wireless communication network (Enhanced Specialized Mobile Radio, ESMR) coverage in the western area of Tualatin, Tigard and King City and along the I-5 corridor. Nextel identified the Operations Center property at 10699 SW Herman Road as a prospective wireless site. The Operations Center site offers a location for a wireless facility in an industrial area approximately 1,400 ft. or more away from the nearest residential areas north of Tualatin Road and with the proper antenna height, will provide an adequate radio frequency (RF) signal coverage in this geographic area. The site features a grove of over fifty 100'-120' (approximately) tall conifers (primarily Douglas Fir) that provide a natural buffer and screen for a monopole from nearby properties, public streets and residential areas (Attachments 1- 4).

ARRANGEMENTS CAN BE MADE TO PROVIDE THESE MATERIALS IN ALTERNATIVE FORMATS, SUCH AS LARGE TYPE OR AUDIO CASSETTE TAPE. PLEASE CONTACT THE PLANNING DEPARTMENT AND ALLOW AS MUCH LEAD TIME AS POSSIBLE.

A-2

Nextel has entered into negotiations with the City of Tualatin to lease a 3,600 s.f. (60' x 60') area on the vacant northeast corner of the Operations Center property for a tower, equipment shelter, landscaping, security fencing and access for construction and maintenance. The City as the landowner desires to retain the large conifer trees on the subject portion of the Operations Center property and requires that development such as the proposed communications facility disturb as few conifer trees on the site as possible. The applicant states that wireless RF signals must travel in an unobstructed path from the facility to the user. Because the tower and antennae are proposed to be located in the grove of 100'-120' tall conifers and the City as the property owner does not wish to have the obstructing trees removed, the antennae must be at a height greater than the height of the neighboring trees (with consideration of the future growth of the trees).

The applicant was informed in pre-application meetings that a variance would be needed to allow a wireless communication support structure and antennae greater than 100' in height [as per TDC 60.090(4)]. Architectural Review of the facility including tower design, access, fencing, tree preservation and landscaping is required following variance approval. To meet the siting and engineering requirements for a wireless facility at this location, Nextel proposes a 130 ft. monopole structure with three 16 ft. omni whip antennae attached at the top of the monopole. In addition to the proposed omni antennae, future expansion may also include two 6 ft. diameter microwave dishes, and twelve 5' panel antennae located on a platform at the top of the tower (Attachment 3). The submittal shows that six conifers are proposed for removal to allow construction of the tower. The remaining 50 or more trees in this portion of the property would not be disturbed.

ANALYSIS AND FINDINGS

1. Variance Criteria: Section 33.020 of the TDC authorizes the City Council to grant a variance from the requirements of the Code when it is shown that, owing to special and unusual circumstances related to a specific piece of property, the literal interpretation of the ordinance would cause an undue hardship. In granting a variance, the City Council may attach conditions that it finds necessary to protect the best interests of the surrounding property and to meet the purposes of the Code.

   No variance shall be granted by the City Council unless it can be shown that criterion (1) is met and three of the four approval criteria (2)-(5) are met. The burden is upon the applicant to demonstrate that each of the following criteria exist:

   (1) A hardship is created by exceptional or extraordinary conditions applying to the property that do not apply generally to other properties in the same planning district or vicinity, and the conditions are a result of lot size or shape, topography, or other physical circumstances applying to the property over which the applicant or owner has no control.

   (2) The hardship does not result from actions of the applicant, owner or previous owner, or from personal circumstances such as age or financial situation of the applicant, or from regional economic conditions.

   (3) The variance is necessary for the preservation of a property right of the applicant or owner substantially the same as is possessed by owners of other property in the same planning district or vicinity.

   (4) The variance shall not be detrimental to the applicable objectives of the Tualatin Community Plan and shall not be injurious to property in the planning district or vicinity in which the property is located.

   (5) The variance is the minimum remedy necessary to alleviate the hardship.

A-2

2. Criterion (1): A hardship is created by exceptional or extraordinary conditions applying to the property that do not apply generally to other properties in the same planning district or vicinity, and the conditions are a result of lot size or shape, topography, or other physical circumstances applying to the property over which the applicant or owner has no control.

Nextel identifies the hardship as the existing conifer trees on the Operations Center property and outlines why the site has exceptional or extraordinary circumstances (Attachment 1 pp. 4-5). One reason is the proposed location of the wireless facility on this site in the ML Planning District. Nextel seeks a location in the western portion of Tualatin to expand and improve the necessary communication network coverage in the Tualatin, Tigard and King City area. Both Nextel and the City of Tualatin desire to locate a facility such as the proposed telecommunications tower and antennae in an industrial area and in a location that minimizes visual impacts on residential areas. Wireless facilities such as Nextel utilizes are a permitted use in the ML and MG (General Manufacturing) Planning Districts [TDC 60.020(39), 61.020(1)], but are restricted in residential planning districts in Tualatin. Siting the facility in an industrial area such as the ML district is the preferred location.

The Operations Center site offers a location that with the proper height will provide an adequate radio frequency (RF) signal coverage in this geographic area and is located in an industrial area approximately 1,400 ft. or more away from residential areas north of Tualatin Road. The importance of locating the facility in an industrial district with 1,400 ft. of distance to the nearest residential property is an exceptional circumstance that applies to the property.

Another reason why this cellular tower needs to be 146 feet is outlined in the Project Description section of the application (Attachment 1, pp. 2-3). Nextel explains that "the design of a epecific ESMR site is further refined by considering local topographic and geographic factors, tree canopy, water bodies and the ability to mitigate the antenna support structure's visual impact, compatibility of the facility with existing uses,..."(Attachment 1 pg. 3). With these and other technical factors evaluated by the applicant's engineers, Nextel indicates that the 130 foot tall monopole (and antenna) at this site is the minimum necessary to provide adequate radio coverage to the surrounding area. Staff agrees that existing elevation and presence of trees at this site present a hardship and is an exceptional circumstance.

The grove of 100'-120' tall conifers on the site provide a natural buffer and screen for a telecommunication facility (See Attachment 4, Photo simulation of the proposed tower siting in the tree grove). Tall trees such as on the subject property will obscure the tower and visually mitigate the tower and antennae for persons viewing it from off site and from residential areas to the north. With the benefit of the trees comes the hardship imposed by trees interfering with a RF signal and by the need to have a direct "line of sight" from the antenna to the wireless user. A facility located in the vicinity of trees such as the Operations Center grove must be taller than the 100'-120' tall trees to operate effectively. The applicant states that the height of the trees makes it impossible to build a monopole and antenna within the 100' height limit. The height of the trees is an exceptional circumstance and creates the hardship.

Only a few of the properties in the ML or MG Districts in the western areas of Tualatin have a grove of tall conifers such as exists on the subject property. To locate the facility on a treeless site would forgo the visual buffering that the trees would provide for a tower and antenna structure. The City of Tualatin is a "Tree City USA" and as the property owner is guided by policies for preserving trees in TDC Chapters 15, 73 and 74 and the Operations Center Master Plan. Removal of the grove of trees to facilitate a development such as the proposed Nextel facility and

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avoid a variance for increase structure height is not a responsible or desirable solution for the City as a property owner. The physical circumstances of needing an unobstructed signal from a wireless tower and the requirement for retaining the grove of trees are not in the control of the applicant or property owner.

To minimize disruptions to traffic circulation and other current or planned activities on the Operations Center site, the facility needs to be located on the northeastern most edge of the property. Staff agrees that the requested location on the site would be the least disruptive to the existing and planned operations activities on the site.

The property has exceptional or extraordinary conditions due to the need to locate the wireless facility in an industrial district and removed from residential areas and the physical circumstances of the 110'-120' tall conifer trees on the site. The condition does not apply generally to other properties in the vicinity or in the ML Planning District.

Criterion "1" is met.

3. Criterion (2). The hardship does not result from actions of the applicant, owner or previous owner, or from personal circumstances such as age or financial situation of the applicant, or from regional economic conditions.

The applicant indicates that no hardship was created by the applicant, owner or previous owner and is a result of the natural physical conditions on the site (Attachment 1, pg. 5). The 100'-120' tall trees on the site prevent building the tower within the 100' height limit.

Staff agrees that the topography of the area and trees on this site require a tower greater than the 110'-120' height and are responsible for the applicant's need for a variance from the height requirements of the TDC. The hardship is not a result of personal circumstances or financial situation of the applicant or owner. Regional economic conditions are not a factor in this proposal.

Criterion "2" is met.

4. Criterion (3). The variance is necessary for the preservation of a property right of the applicant or owner substantially the same as is possessed by owners of other property in the same planning district or vicinity.

The property is in the ML Planning District. Surrounding properties and uses are:

N: ML, Crystal Lite Manufacturing
E: ML, Jane's Cookies
ML, Airefco
S: MG, Kem Equipment, Marshall Associated Industries (Across SW Herman Rd. and the SPRR tracks)
W: ML, Dot Storage
ML, Contractors Offices (Across SW 108th Avenue)

The applicant indicates the variance is necessary because Nextel would be denied the right to operate a wireless facility that is permitted by other property owners in the ML district (Attachment 1, pg. 5). The applicant states that the maximum structure height in the ML district must be exceeded "...so that the antennas can transmit in an unobstructed path free and clear of the surrounding trees."

A-2

A wireless facility is allowed as a permitted use in the ML district. There are no other wireless facilities in the vicinity of the proposed Nextel site at this time, but other facilities such as the AT&T facility on the Northwest Natural Gas property on SW McEwan Road are located in the ML District. Staff concurs with the applicant that the variance is necessary to preserve the property right of the applicant. The presence of the tall conifer trees on the site provide buffering and mitigation of a tower and are a substantial reason for locating on the Operations Center property and not locating somewhere else in the ML District.

This variance is necessary to preserve the owner's property right the same as provided to other property owners in the ML District.

Criterion "3" is met.

5. Criterion (4). The variance shall not be detrimental to the applicable objectives of the Tualatin Community Plan and shall not be injurious to property in the planning district or vicinity in which the property is located.

The applicant chose not to address Criterion "4" in the application materials.

The objectives for Wireless Communication Facilities in TDC Chapter 8, Public, Semi-public and Miscellaneous Land Uses (TDC 8.060) include:
(1) To minimize the visual impacts associated with wireless communication facilities.
(2) To provide a wide range of locations for wireless communication facilities.
(3) To encourage creative approaches in locating wireless communication facilities that will blend with their surroundings.

The location and siting of the proposed Nextel tower will minimize the visual impact of the facility by blending in with the trees and the tower's surroundings and meets Objectives 1 and 3. The Operations Center location is a publicly owned property in a ML District and is part of a wide range of locations for the wireless communication facility.

Criterion "4" is met.

6. Criterion (5). The variance is the minimum remedy necessary to alleviate the hardship.

The applicant states "At this location, the height of the existing trees is the reason why Nextel is asking for a variance to exceed the height limit. The proposed 146' is the minimum height required to provide adequate radio coverage to the surrounding area." (Attachment 1, pg. 5).

Staff has inspected the site and reviewed USGS topographic maps to determine if a height of less than 146' is workable. The site's base elevation is approximately 135'. The applicant indicates that the height of the trees is approximately 100'-120'. The area north of the site north of SW Tualatin Road has a ground elevation of approximately 165'-170'. The higher areas southeast and east of the site in the vicinity of downtown Tualatin have a ground elevation of 190'-260'. With the existing height of the trees in the Operations Center grove at 100'-120', the tower and antennae must be taller than the 100' maximum requirement of TDC 60.090(4).

The elevation drawings show a 130' monopole and antennae up to a height of 146'. (Attachment 3). The drawings show the trees at heights of up to 120', accounting for a slow increase in height with future growth (Attachment 4). Staff agrees the monopole and antennae must be higher than the trees for future growth. Given the

A-2

trees are estimated at 100'-120' in height, the proposed 146' height is the minimum necessary. To satisfy this criterion, the monopole tower, antenna platform and whip antennae shall not exceed 146 ft. in height above grade.

Criterion "5" is met.

7. Based upon the application and above findings and analysis, the approval criteria of Section 33.020 have been met.

RECOMMENDATION

Staff recommends the Council adopt the staff report and direct staff to prepare a resolution granting VAR-99-02 with the following condition:

1. The monopole tower, antenna platform and whip antennae shall not exceed 146 ft. in height above grade.

Respectfully submitted,

William Harper, AICP
Associate Planner

Attachments:
1. Applicant's Supporting Materials
2. Vicinity Map and Site Plan
3. Elevation Drawings
4. Photos of Simulated Tower Elevations

c: John Silenzi, Westower Communications

file: VAR-99-02

** TOTAL PAGE.13 **

CITY OF TUALATIN

PO BOX 369
TUALATIN, OREGON 97062-0369
(503) 692-2000
TDD 692-0574

SITE COPY

PLUMBING:
SITE UTILITIES: NEXTEL

1. All non-metallic underground yard piping, shall have an 18 gauge or heavier tracer wire along pipe in trench, green for sanitary and storm water piping. UPC 718.2 & 1106.1. blue for water main service piping, UPC 609.5.1

2. Piping for storm and sanitary sewer drainage shall be of approved materials within 5" of buildings including porches and steps whether covered or not. UPC 1104.1 and 718.3

3. Building sewer and storm piping shall be run in practical alignment at a uniform slope of ¼" per foot, where it is impractical to obtain a ¼" per foot slope, pipe grade maybe reduced to 1% or 1/8" per foot upon request to the Building Dept. UPC 708.0

4. Catch Basins shall be lynch type. In standard 24" catch basins outlets are to be a maximum of 6", if larger outlets are required, a drawing and specifications shall be submitted to the Building Dept. for approval. UPC - 1108

CITY OF TUALATIN
APPROVED PLANS

PERMIT NO. 00-444 DATE: 5/3/00

ADDRESS: 10699 SW HERMAN RD

APPROVED BY: MC

SITE COPY

This drawing is to be kept on the Building Site at all times

LOCATED AT: 18880 SW Martinazzi Avenue

Exhibit "A"

CITY OF TUALATIN

PO BOX 369
TUALATIN, OREGON 97062-0369
(503) 692-2000
TDD 692-0574

NOTICE OF ADOPTION

On January 24, 2000, the City of Tualatin adopted Resolution #3672-00 (File No. VAR-99-02) granting a variance to allow a 130' high wireless telecommunication tower with 16' antenna where a 100' high support structure and antenna is allowed in a light manufacturing (ML) planning district at 10699 SW Herman Road (2S1 22A, 900). A copy of the resolution is enclosed for review.

A copy of the resolution is also available for review at the Tualatin Planning Department located at 18884 SW Martinazzi Avenue from 8 a.m. to 12 noon and from 1 to 5 p.m., Monday through Friday.

Appeal of land use decisions is commenced by filing a Notice of Intent to Appeal with the Land Use Board of Appeals as provided in ORS 197.830 to 197.845. The notice of intent to appeal a land use decision must be filed no later than 21 days after the date the decision sought to be reviewed becomes final.

Date notice mailed: January 28, 2000

c: Sean Bell, NEXTEL Communications, 8405B SW Nimbus Avenue, Beaverton OR 97008
Daniel J. Boss, Operations Director, City of Tualatin, PO Box 369, Tualatin OR 97062-0369

File: VAR-99-02
10699 SW Herman Road

LOCATED AT: 18880 SW Martinazzi Avenue

RESOLUTION NO. 3672-00

A RESOLUTION GRANTING A VARIANCE (VAR-99-02) TO ALLOW A 130' HIGH WIRELESS TELECOMMUNICATION TOWER WITH 16' ANTENNA WHERE A 100' HIGH SUPPORT STRUCTURE AND ANTENNA IS ALLOWED IN A LIGHT MANUFACTURING (ML) PLANNING DISTRICT AT 10699 SW HERMAN ROAD ON TAX MAP 2S1 22A, TAX LOT 900.

WHEREAS a public hearing was held before the City Council of the City of Tualatin on January 10, 2000, upon the application of Nextel Communications and the City of Tualatin, for a variance from TDC 60.090(4) to allow a 130' high structure and 16' antenna in a Light Manufacturing (ML) Planning District at 10699 SW Herman Road (Tax Map 2S1 22A, Tax Lot 900); and

WHEREAS notice of public hearing was given as required by the Tualatin Development Code by posting the notice in two public and conspicuous places, which is evidenced by the Affidavit of Posting, marked "Exhibit A", attached and incorporated by this reference, and by mailing a copy of the notice to property owners located within 300 feet of the property, which is evidenced by the Affidavit of Mailing, marked "Exhibit B," attached and incorporated by this reference; and

WHEREAS the Council heard and considered the testimony and evidence presented on behalf of the applicant, the City staff, and those appearing at the public hearing; and

WHEREAS based upon the evidence and testimony heard and considered by the Council, the Council makes and adopts as its findings of fact the City staff report, dated January 10, 2000, which is marked "Exhibit C," attached and incorporated by reference; and

WHEREAS after the conclusion of the public hearing the Council vote resulted in approval of the application with all Councilors voting in favor, and all Councilors present; and

WHEREAS based upon the foregoing Findings of Fact the Council finds that the applicant has provided sufficient evidence to demonstrate that all of the requirements of the Tualatin Development Code relative to a variance have been satisfied and that granting the variance is in the best interest of the residents and inhabitants of the City, the applicant, and the public generally.

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

Section 1. Nextel Communications and the City of Tualatin are granted a variance to allow a 130' high wireless telecommunication tower with 16' Antenna at 10699 SW Herman Road in a Light Manufacturing (ML) Planning District, also described on the records of Washington County Department of Assessment and Taxation as Tax Map 2S1 22A, Tax Lot 900.

INTRODUCED AND ADOPTED this 24th day of January 2000.

CITY OF TUALATIN, Oregon

By _____
Mayor

ATTEST:

By _____
City Recorder

AMERICAN TOWER®
CORPORATION

November 16, 2017

RE: PI Tower Development Project OR—Tualatin Durham / 10290 SW Tualatin Rd

To Whom It May Concern:

My name is Micah Hawthorne and I am a Principal Sales Engineer at American Tower with an RF Engineering background. My resume has been provided in support of this statement.

Per Verizon Wireless' application, American Tower Corporation has an existing tower structure that would produce "marginal coverage in residential area due to surrounding trees." This tower is less than 750 ft. at 10318 SW Herman Road (Exhibit A). The RF coverage analysis of the immediate area (attached slides) supports Verizon Wireless claim if they were to install below the existing tenant at a proposed height of 110 ft., there would be significant impact to the coverage area due to exiting tree clutter up to a canopy height of 130 ft.

The coverage scenario with no tree clutter reflects tree clearance within the nearest ~155 ft. A clearance distance of 100 ft. would produce coverage in between the two 110 ft. tree clutter scenarios in both the 700 MHz and AWS 1700/2100 MHz respective examples.

With stated interest from T-Mobile and Verizon, the attached slides also suggest that Verizon, and thereby T-Mobile with operations in similar frequency bands, may be able to achieve their coverage objectives if the existing ATC 308345 tower structure were height modified to support both tenants. A 20 to 30 ft. increase in structure height would provide clearance over the existing trees at 130 ft., drastically improving the area coverage opportunity.

If an extension were approved to 150 ft. (or 160 ft.), to support 2 (or 3) of the remaining 3 carriers from the Big 4 that are not currently installed on this asset, there might be limited future need for additional structures of similar height.

Micah T Hawthorne,

Principal Sales Engineer

AMERICAN TOWER®
CORPORATION

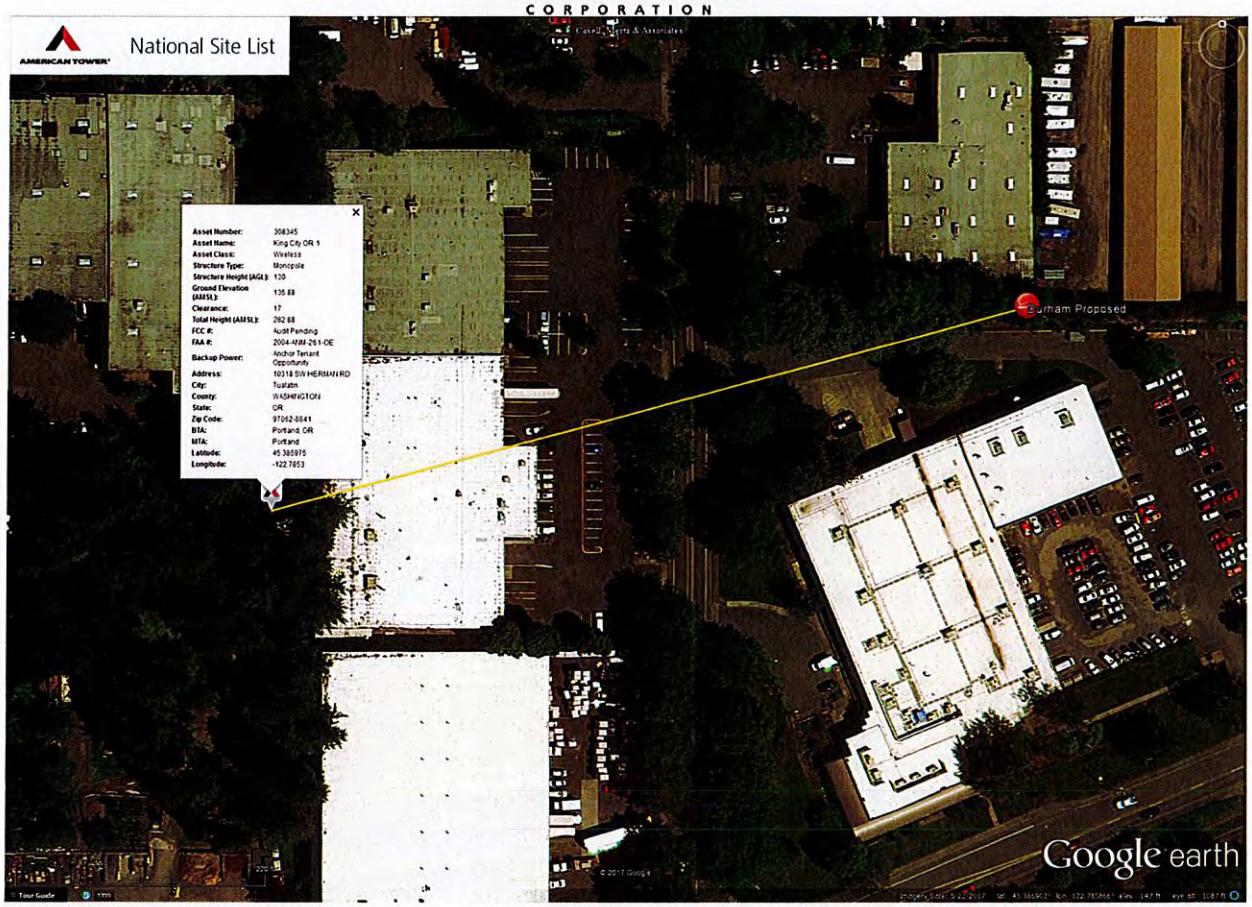
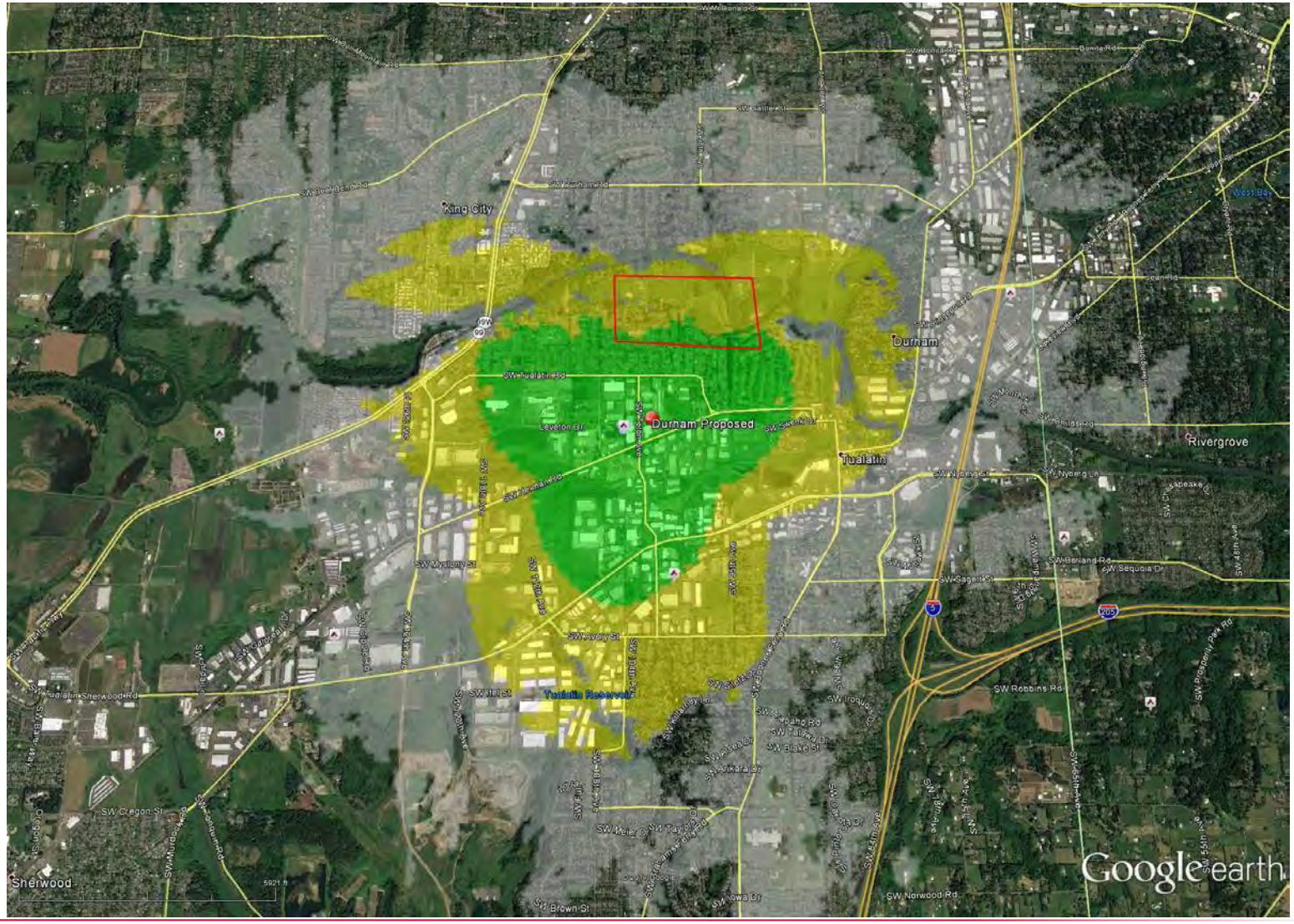
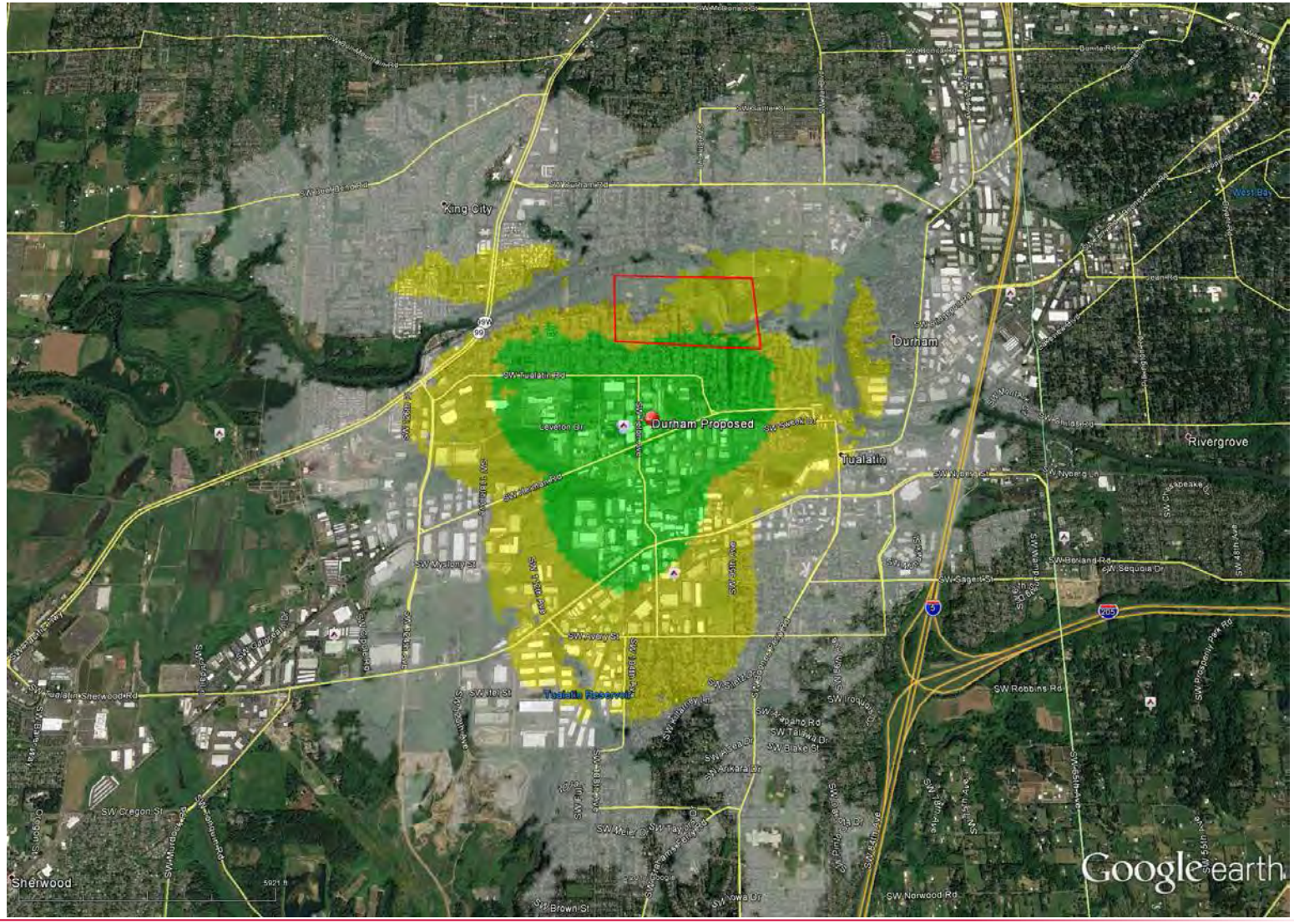


Exhibit A. ATC 308345 is approximately 750 ft. from the 10290 SW Tualatin Road location.

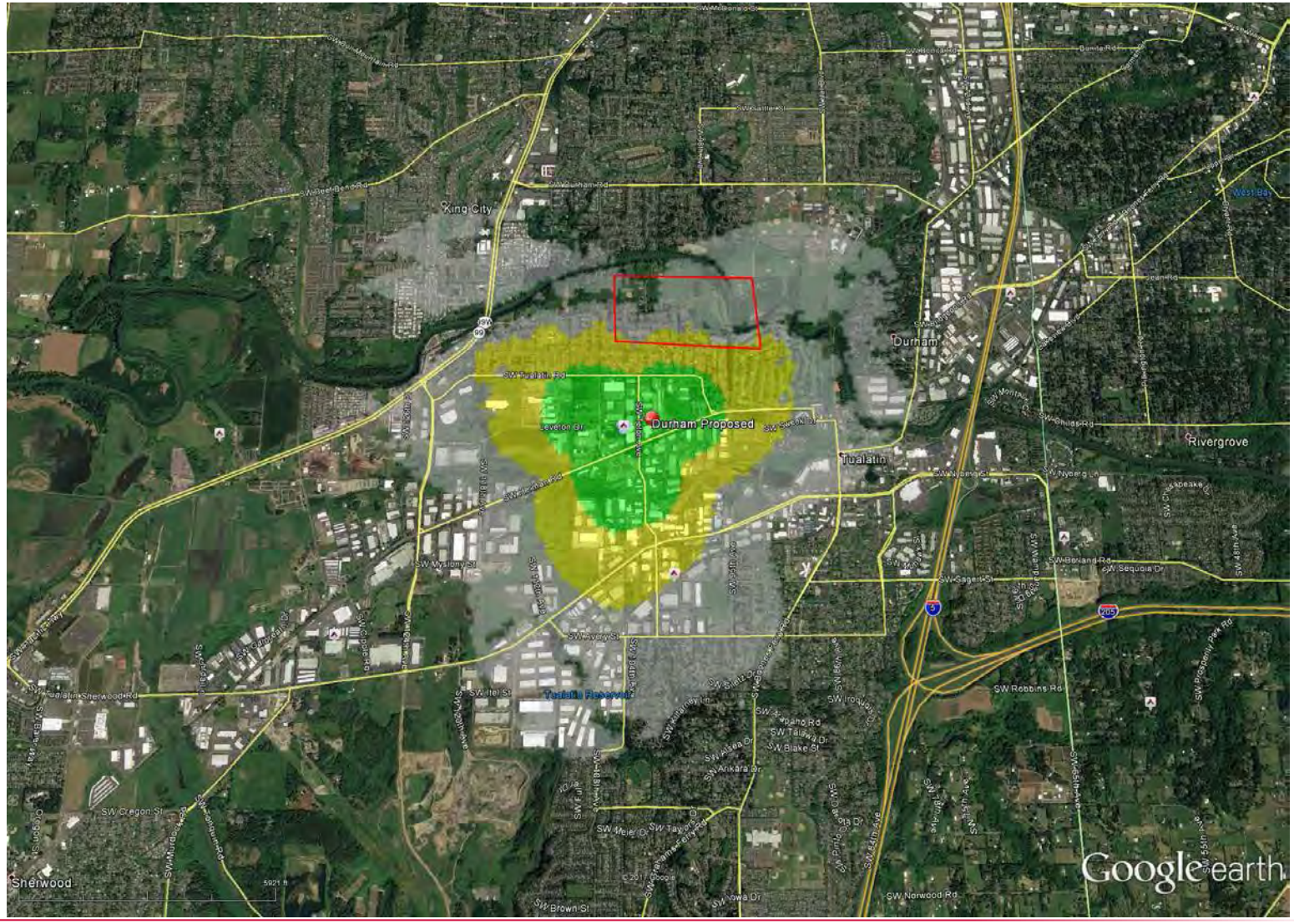
308345 700 MHz LTE Coverage:
@ 150 ft. with NO Tree Clutter



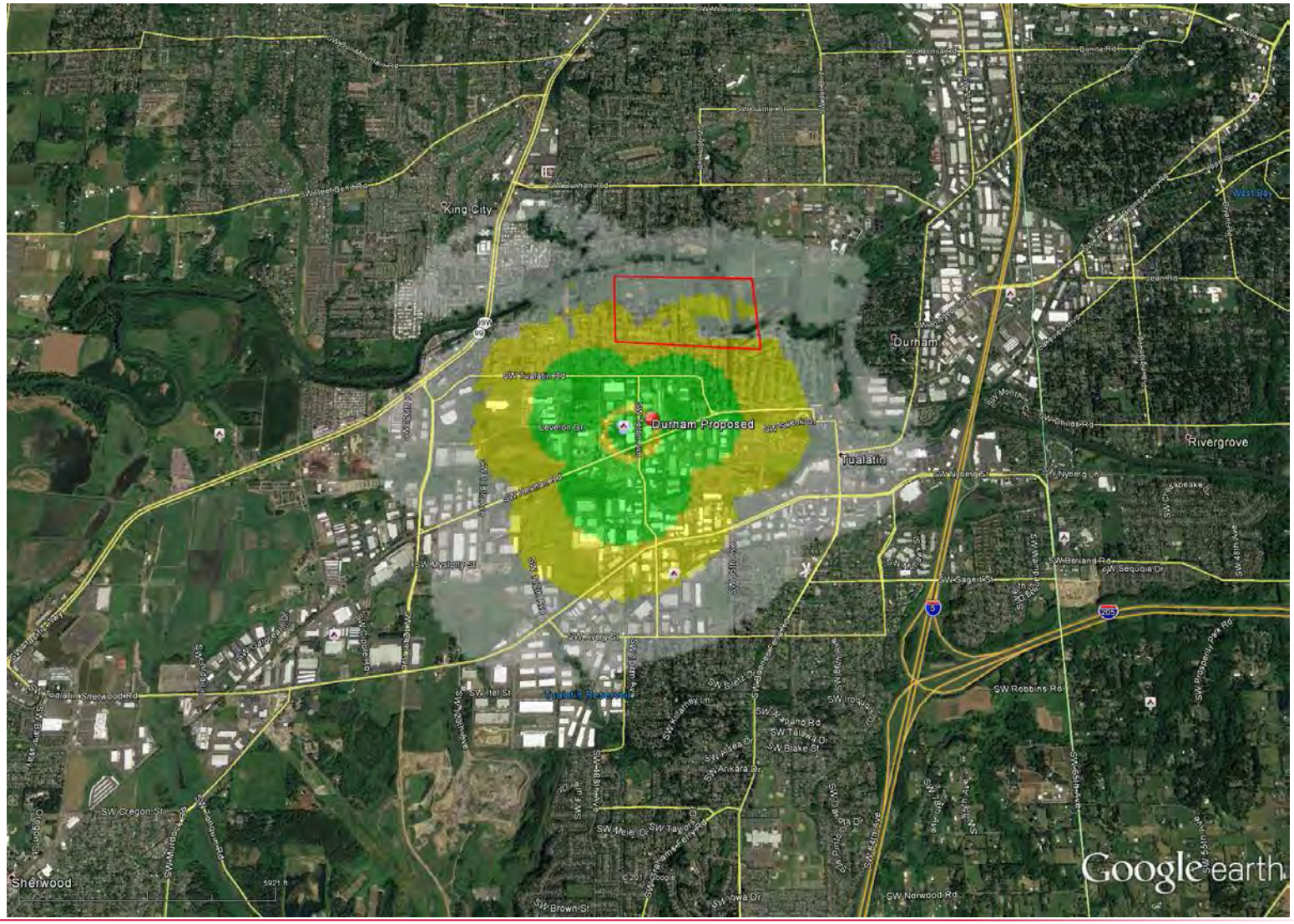
308345 700 MHz LTE Coverage:
@ 110 ft. with NO Tree Clutter



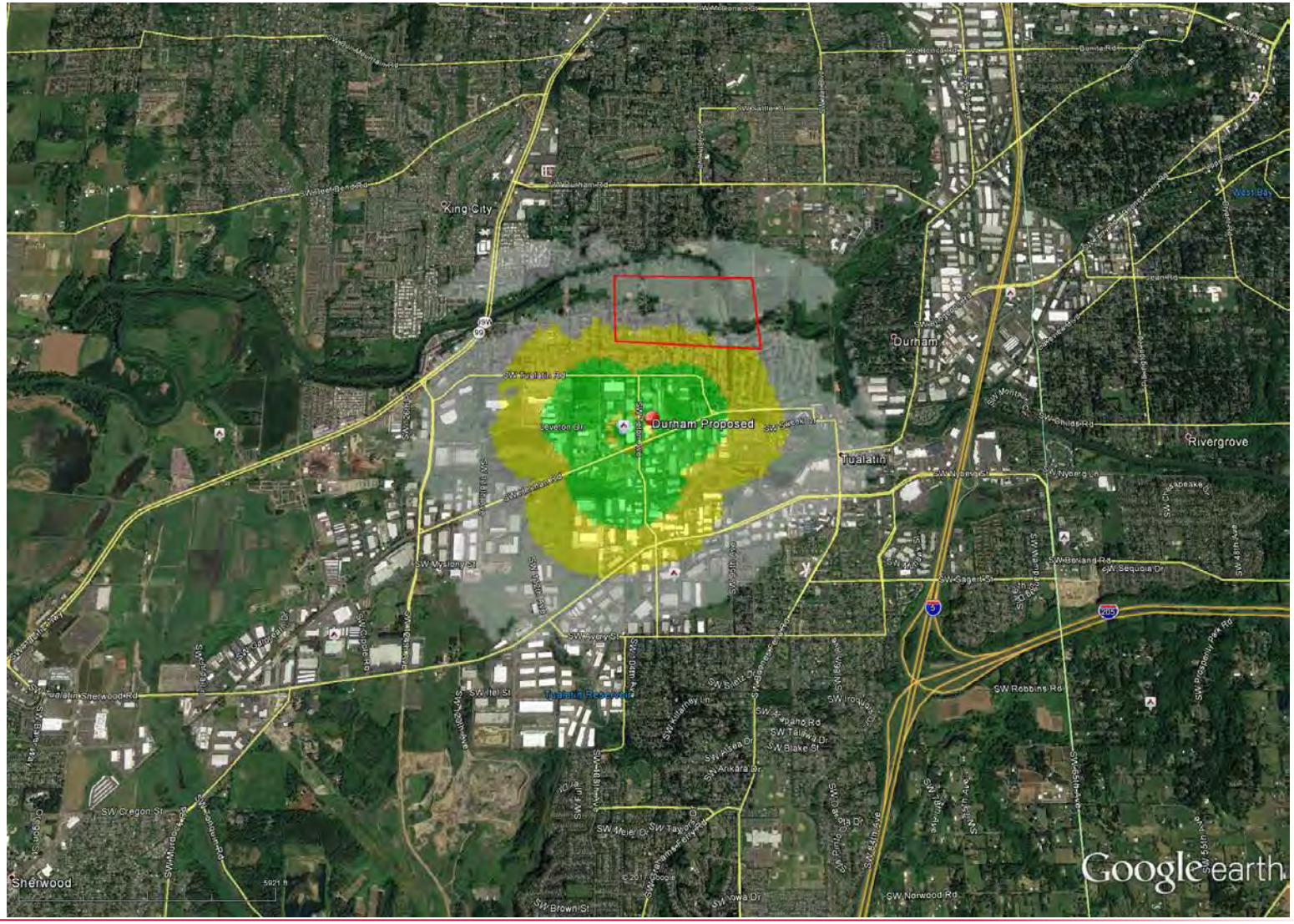
308345 700 MHz LTE Coverage: @ 110 ft. with Tree Clutter



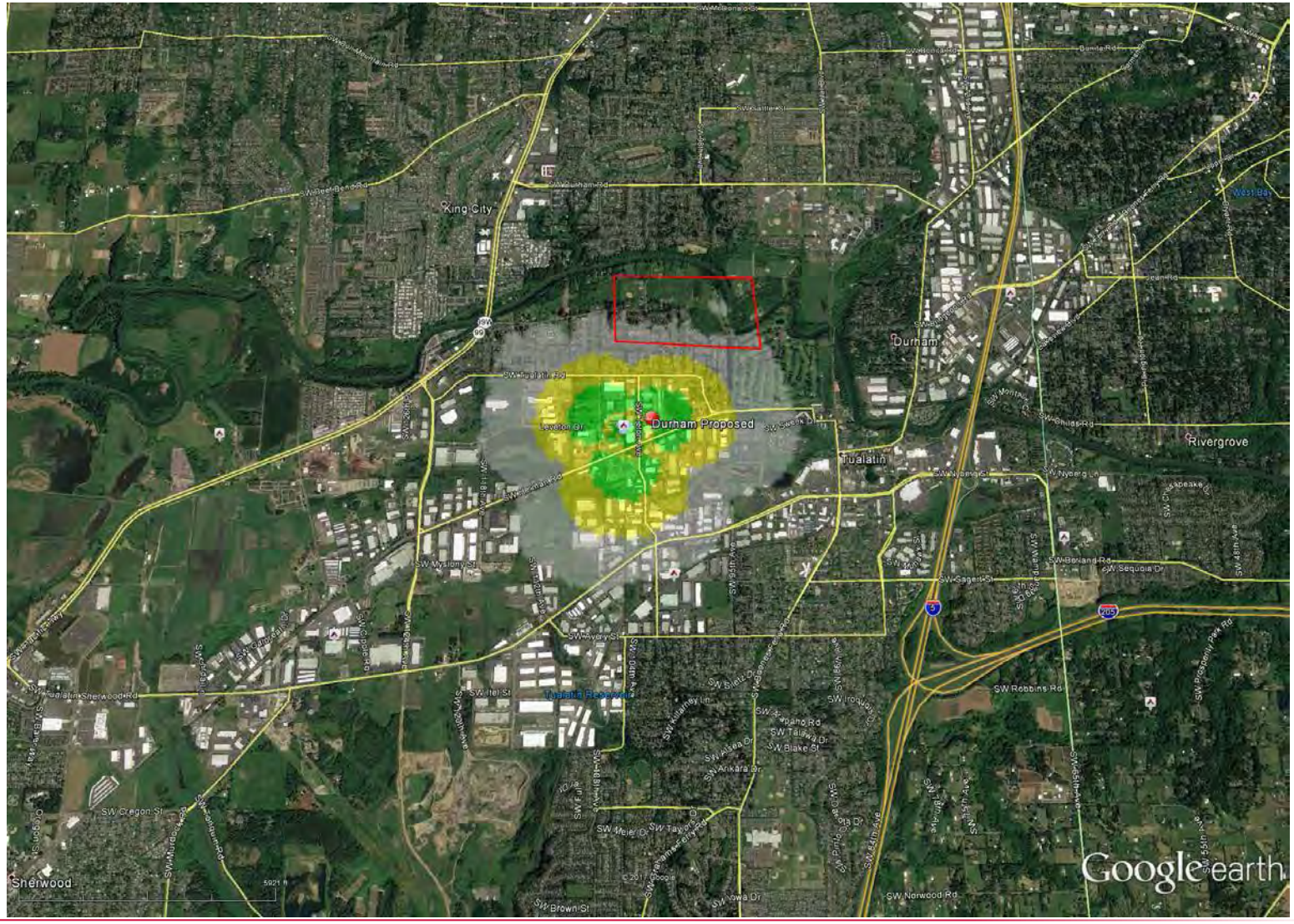
308345 2100 MHz (AWS) LTE Coverage: @ 150 ft. with NO Tree Clutter



308345 2100 MHz (AWS) LTE Coverage: @ 110 ft. with NO Tree Clutter



308345 2100 MHz (AWS) LTE Coverage: @ 110 ft. with Tree Clutter



Tualatin Operations Cell Tower site

TUALGIS

HATHAWAY LARSON

Koback · Connors · Heth

November 22, 2017

VIA EMAIL

Planning Commission
City of Tualatin
Attn: Aquilla Hurd-Ravich
18880 SW Martinazzi Avenue
Tualatin, OR 97062
ahurd-ravich@tualatin.gov

Re: Variance for Wireless Communications Facility - 10290 SW Tualatin Rd.
Application No. VAR-17-0001
Response to American Tower Corporation Submission

Dear Commissioners:

This firm represents the applicant for the above-referenced matter, Lendlease (US) Telecom Holdings, LLC, c/o PI Tower Development, LLC, Verizon Wireless and the property owner (the "Applicant"). We are submitting this letter and the enclosed material in response to the written and oral submissions by American Tower Corporation ("ATC") at the November 16, 2017 public hearing arguing that the variance application should be denied on the grounds that ATC's existing tower (the "ATC Tower") can accommodate the proposed wireless communications facility if certain modifications are made and additional approvals are obtained. The Applicant disputes ATC's claim for several reasons.

A. The City code does not require the applicant to consider an existing tower that would require additional permits or approvals, or at least those that have not yet been filed.

ATC acknowledged that "the existing ATC Tower is not suitable for colocation of additional carriers because of interference from the trees surrounding the site," but it claims that the ATC Tower could be used by the Applicant, if one of two modifications were made to the tower. Both modifications would require ATC to submit and obtain a permit and other approval in order to make these modifications. First, ATC claims that it could remove the existing trees within a 155-foot radius of the ATC Tower if it obtained a tree removal permit and the approval of the City as the property owner. Second, ATC claims that it could increase the height of the 130-foot tower by approximately 20 feet if it obtained an approval of a variance to further exceed the allowed height of

E. Michael Connors
1331 NW Lovejoy Street, Suite 950
Portland, OR 97209
mike@hathawaylarson.com
(503) 303-3111 direct
(503) 303-3101 main

the tower.[1] ATC claims that it is "feasible" to obtain the necessary permits and approvals for these options, but it provided no analysis or evidence to support this claim.

Regardless of whether or not it is feasible for ATC to obtain the necessary permits and approvals for these options, the Applicant is not required to consider the ATC Tower under the applicable approval criteria for two reasons. First, neither the tower separation nor variance criteria require the Applicant to consider existing towers that would require additional permits or approvals to accommodate the wireless communications facility. Second, to the extent the Applicant is required to consider existing towers that would require additional permits or approvals, it is only required to consider those for which the permit application has already been filed. Since ATC had not filed an application for the tree removal permit or variance by the time the Applicant filed this variance application, the ATC Tower cannot be used as a basis for denying the variance application in this case.

ATC claims that the Applicant must consider existing towers within 1,500 feet that could accommodate the wireless communications facility if additional City permits or approvals were obtained, but it fails to point to any language in the applicable sections of the Tualatin Development Code ("TDC") to support this assertion. Neither TDC 73.470(9), which contains the 1,500-foot separation requirement, nor the variance criteria for tower separation in TDC 33.025(1) require an applicant to consider an existing tower that must obtain additional permits and approvals in order to accommodate the wireless communications facility. TDC 33.025(1)(a)(ii) requires documentation that existing towers within 1,500 feet "cannot be modified to accommodate another provider," but it does not require the applicant to consider modifications that would require additional permits and approvals from the City. ATC's interpretation requires the City to insert additional terms or requirements that are not expressly set forth in TDC 73.470(9) or TDC 33.025.

To the extent an applicant is required to consider a tower that needs additional permits or approvals to accommodate the wireless communications facility, it is expressly limited to those tower proposals for which the application has already been filed. TDC 73.470(9) defines the types of "wireless communication facility monopoles" that must be considered for purposes of satisfying the tower separation requirement as follows: "For purposes of this section, a wireless communication facility monopole shall include wireless communication facility monopole for which the City has issued a development permit, or for which an application has been filed and not denied." (Emphasis added). Similarly, TDC 33.025(1)(a)(i) requires an applicant to demonstrate that it is technically not practicable to collocate from "an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not denied." (Emphasis added). This language demonstrates that the City Council intended to limit the types of towers that must be considered to those that either have the necessary permits or have filed for the necessary permits. Since ATC had not filed an application for the tree removal permit or variance by the time the Applicant filed this variance application, the Applicant was not required to consider the ATC Tower.

[1] It is important to clarify that ATC's Tower was approved at 130 feet, with an antenna tip height of 146 feet. Since there currently is an antenna at 146 feet, the tower would have to be increased close to an additional 20 feet in order to provide sufficient separation between the antennas.

While ATC's proposed interpretation serves its own financial interests, it is not consistent with the plain language or purpose of TDC 73.470(9) and TDC 33.025. Neither of these criteria require the Applicant to consider existing towers that would require additional permits or approvals, or at a minimum require consideration of those towers for which the permit application has already been filed. It would be virtually impossible to rule out existing towers within 1,500 feet because practically any tower could theoretically be modified in some way to accommodate another wireless communications facility if additional permits could be obtained. Applicants would then be beholden to the whims of the existing tower owner and would be subject to their timing and efforts to obtain the necessary approvals for the modifications. Even if the modifications may not be approved, applicants would be required to go through the modification permit process and wait until they are denied before even initiating an application like the variance application in this case. That is not the way TDC 73.470(9) and TDC 33.025 were intended to work.

B. ATC cannot demonstrate that it is feasible to obtain the necessary permits or approvals to modify the ATC Tower.

ATC repeatedly claims that it is "feasible" to obtain the necessary permits and approvals to modify the ATC Tower, but it failed to provide any analysis or evidence to support this claim. In order to demonstrate that it is "feasible" to obtain a subsequent permit or approval, the party must demonstrate that it is "possible, likely and reasonably certain to succeed." *Meyer v. City of Portland*, 67 Or App 274, 280 n.5, 678 P2d 741, *rev den* 297 Or 82 (1984); *Rhyne v. Multnomah County*, 23 Or LUBA 442 (1992). ATC has not even attempted to establish, nor can it establish, that it is more likely and reasonably certain that it would obtain the necessary permits and approvals to remove the trees or increase the height of the ATC Tower.

It is not feasible for ATC to obtain the necessary permits and approvals to remove the existing trees within a 155-foot radius of the ATC Tower for multiple reasons. The variance approval for the ATC Tower (VAR-99-02) relied heavily on the screening effect of the surrounding trees to justify the variance to the height standard. For example, the variance approval noted that "[t]all trees such as the subject property will obscure the tower and visually mitigate the tower an antennae for persons viewing it from off site and from the residential areas to the north" and concluded that "[t]he location and siting of the proposed Nextel tower will minimize the visual impact of the facility by blending in with the trees and the tower's surroundings and meets Objectives 1 and 3." Variance Decision, p.3 & 5. At a minimum, ATC would have to seek a modification to its variance approval in order to remove these screening trees since it relied so heavily on these screening trees. Since the removal of virtually all of these screening trees would undermine the key justification for granting the variance in the first place, it is highly unlikely that ATC could obtain the approval necessary to remove these trees.

Nor could ATC satisfy the tree removal permit criteria. While ATC gives the impression that it can remove the existing trees for practicably any reason, nothing could be further from the truth. The tree removal criteria are actually quite strict in order to minimize a property owner's ability to cut down trees. In order to justify the removal of the trees, ATC must demonstrate that the trees are diseased, a hazard or "[i]t is necessary to remove the tree to construct proposed improvements based on Architectural Review approval, building permit, or approval of a Subdivision or Partition Review." TDC 34.230(1). Clearly these trees are not diseased or a hazard, and ATC has not applied for or obtained any of these approvals. Therefore, ATC cannot obtain a tree

removal permit because none of the conditions precedent to obtaining such approval are present in this case.

ATC needs the City's consent to even consider removal of these trees. As the property owner, the City must agree to the removal of the surrounding trees on the City's property. ATC has not even broached this issue with the City, let alone submitted evidence demonstrating that the City is willing to agree to it. Nor is there any reason to believe that the City would support the clearing of a substantial number of trees on its property solely to support ATC's desire to generate more revenue on its tower.

ATC also needs the consent of the adjacent property to remove some of the trees since there is a row of trees to the north/northeast of the ATC Tower that are blocking the RF signals as well. We attached a tree survey, ATC King City OR1 308345, which identifies the surrounding trees that will need to be removed. A significant portion of the trees that need to be removed are located on the adjacent property to the north/northeast. ATC provided no evidence that this property owner is willing to have all of these trees removed from the property and it is highly unlikely that this adjacent owner will agree to do so in order to accommodate a taller and more visually impactful tower.

Finally, ATC suggested at the November 16 hearing that it may be possible to top or significantly trim the trees in order to remove the portion of the trees that are interfering with RF signals. There are several problems with this suggestion. Topping or significantly trimming the trees will look terrible and significantly undermine the visual screening that the trees currently provide. Similar to the proposal to remove the trees, topping or significantly trimming will require a modification to the variance approval. The Applicant also consulted with an arborist who confirmed that Topping or significantly trimming the trees could damage or kill some of the trees. These damaged trees will create hazards from falling limbs and may eventually led to their removal. The Applicant will be prepared to provide additional information on this issue if necessary at the December 7 hearing.

Similarly, it is not feasible for ATC to obtain a variance to further increase the height of the ATC Tower.[2] TDC 33.025(2) sets forth the criteria for obtaining a variance to the height limitation. TDC 33.025(2)(b) requires ATC to demonstrate that "existing WCFs, or a WCF for which an application has been filed and not denied, cannot be modified to provide the capacity or coverage the tower is intended to provide." (Emphasis added). ATC cannot satisfy this criteria because the proposed tower in this case is a WCF for which an application has been filed and not denied. In other words, there is a pending application for a new tower that can accommodate the wireless communications facility without exceeding the 100-foot height limit.

Additionally, it is unlikely that the City will approve a height variance to increase the height of an existing tower that already significantly exceeds the height limits. The ATC Tower already exceeds the allowed height by 30 feet or 30%, and it would be required to seek an approval for an additional 16 feet or more. If the City accepted ATC's interpretation, there would be virtually no limits on the

[2] ATC's attorney's letter, dated November 16, 2017, acknowledged that ATC would be required to obtain a new variance in order to increase the height of the ATC Tower. There is no question that ATC would be required to obtain a new variance since the prior variance approval was limited to 130-feet and was approved based on that specific height.

height of towers because tower companies could perpetually increase the height of the tower by seeking new variances to accommodate additional wireless communications facilities. That is clearly not what the City intended when it adopted a 100-foot height restriction and the variance criteria.

ATC also needs the City's consent to significantly increase the height of the ATC Tower. As the property owner, the City is required to consent to the filing of a variance application and the increased height of the tower. Once again, ATC failed to submit any evidence that it had broached this issue with the City. Nor is there any reason to believe that the City would support a significant increase in the height of the ATC Tower since its prior approval limited the height to 130-feet.

C. Verizon cannot achieve its coverage and capacity objectives even if the ATC Tower is increased in height or the screening trees are removed.

Even if ATC was able to increase the height of the ATC Tower to 146 feet or remove the screening trees, the ATC Tower would still not satisfy Verizon's coverage and capacity objectives for this site. We attached Verizon's new RF Usage and Facility Justification analysis, dated November 20, 2017, which includes propagation maps showing the coverage for the proposed site, the existing ATC Tower with no trees, and the ATC Tower at 146 feet both with and without the screening trees. The propagation maps show that none of these modified ATC Tower options provide the same coverage and capacity as the proposed site at 100 feet. Verizon's RF engineer specifically noted that the ATC Tower options do not improve coverage in the residential area north of SW Tualatin Rd as well as the proposed site, which is the primary area of concern for this new facility.

Since the ATC Tower cannot be modified in a way that satisfies Verizon's coverage and capacity objectives for this site, the Applicant demonstrated compliance with the applicable variance criteria. TDC 33.025(1)(a)(i) requires an applicant to demonstrate that "[i]t is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites * * *." Verizon's new RF Usage and Facility Justification analysis demonstrates that the ATC Tower cannot provide the needed capacity or coverage intended for this site.

At the November 16 hearing, ATC suggested that its own RF analysis concluded that the modified ATC Tower could meet the coverage and capacity objectives for this site, but such a claim is not reliable. ATC has not spoken with Verizon about the coverage and capacity objectives for this site, does not have access to all of the same network data and other proprietary information as Verizon's RF engineers do and it cannot speak for Verizon. Verizon's new RF Usage and Facility Justification analysis represents Verizon's position on this matter. ATC's RF analysis is based on incomplete and less reliable information, and is self-serving.

D. ATC has not demonstrated that the City will extend the lease beyond 2020.

ATC acknowledged that the current lease for the ATC Tower expires in 2020 and the City has not yet agreed to an extension or new lease. Given how much time it will take to obtain the approvals to either increase the height of the ATC Tower or clear the screening trees, do the actual work to increase the height or clear the trees, and obtain approval for the proposed wireless communications facilities, there will be very little time left on the existing lease term. Carriers cannot be required to

go through these time consuming and expensive processes for a site with very little time left on the existing lease. Unless and until ATC reaches an actual agreement with the City to extend or renew the lease, the ATC Tower cannot be used as a basis for denying the variance application.

E. T-Mobile is not interested in the ATC Tower.

At the November 16 hearing, ATC suggested that T-Mobile is more interested in the ATC Tower than the Applicant's proposed tower. That statement is simply not true. We attached an email exchange between the Applicant and T-Mobile, dated November 21, 2017, in which T-Mobile confirms that it did not communicate a desire to locate on the ATC Tower and that the ATC Tower will not work for the same reasons it does not work for Verizon.

As explained in the application material and the Staff Report, the Applicant demonstrated compliance with the variance criteria and therefore the variance application should be approved. There is no dispute that the ATC Tower cannot accommodate the proposed wireless communications facility and TDC 73.470(9) and TDC 33.025 do not require the Applicant to delay this project until ATC can determine if it will be able to get the necessary tree removal, variance and property owner approval to modify the ATC Tower. Moreover, the permit requirements and evidence indicate that it is not likely that ATC will be able to obtain these approvals. And even if ATC was able to increase the height of the ATC Tower or remove the screening trees, it still would not satisfy Verizon's coverage and capacity objectives for this site. For all of these reasons, the Commission should reject ATC's arguments and approve the application.

Very truly yours,

HATHAWAY LARSON LLP

E. Michael Connors

E. Michael Connors

EMC/pl
Enclosures
cc: ACOM Consulting Inc.
Lendlease

RF Usage and Facility Justification

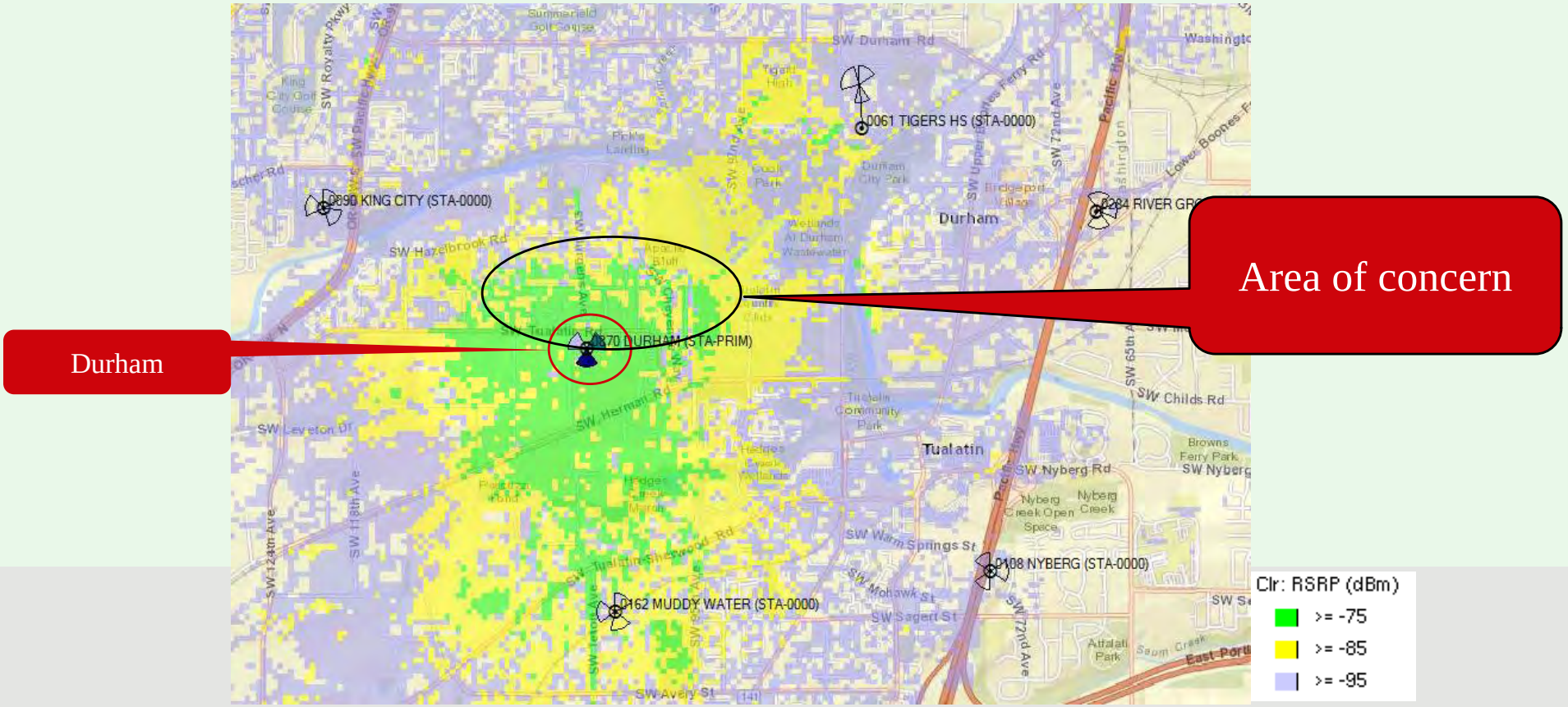
Durham

Prepared by Verizon Wireless Walid Nasr

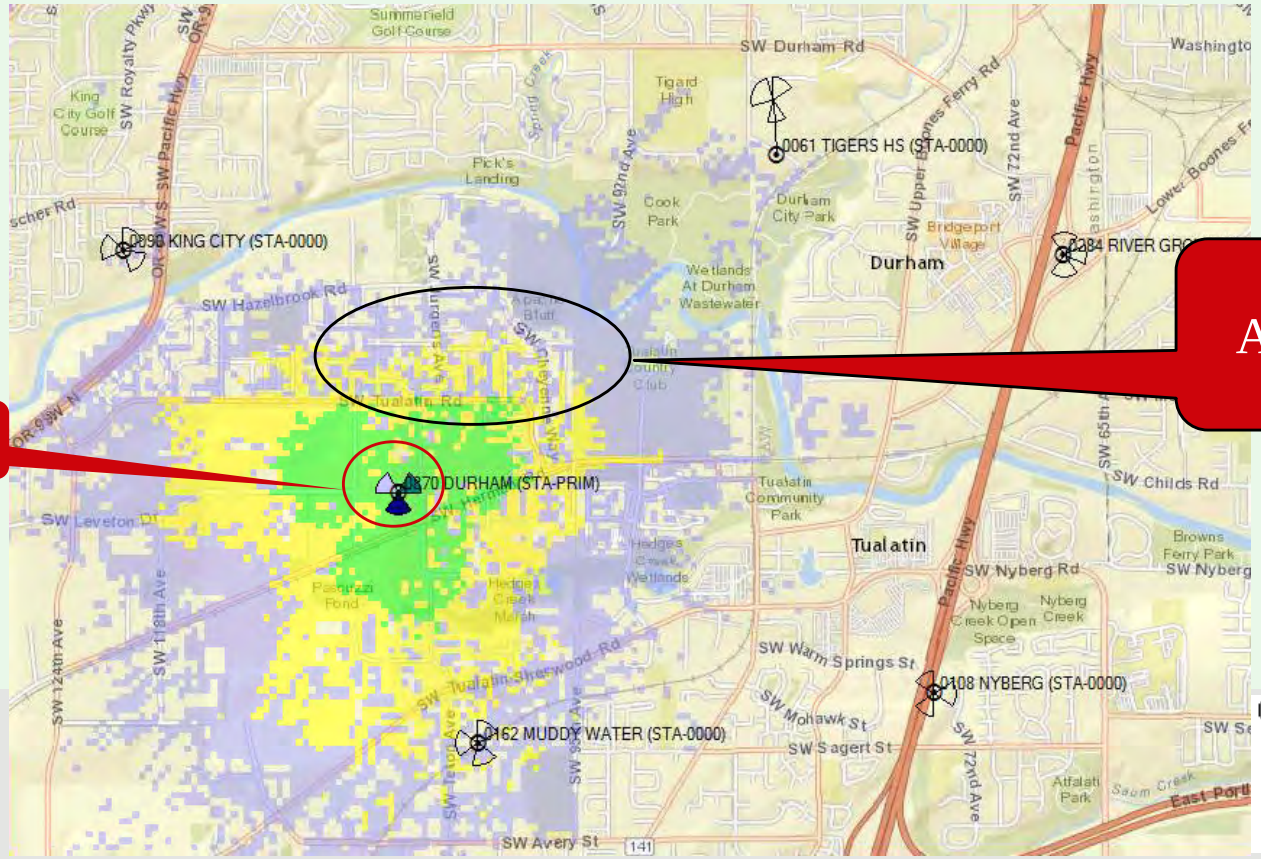
Nov 20, 2017

verizon

Coverage with Proposed Durham Site



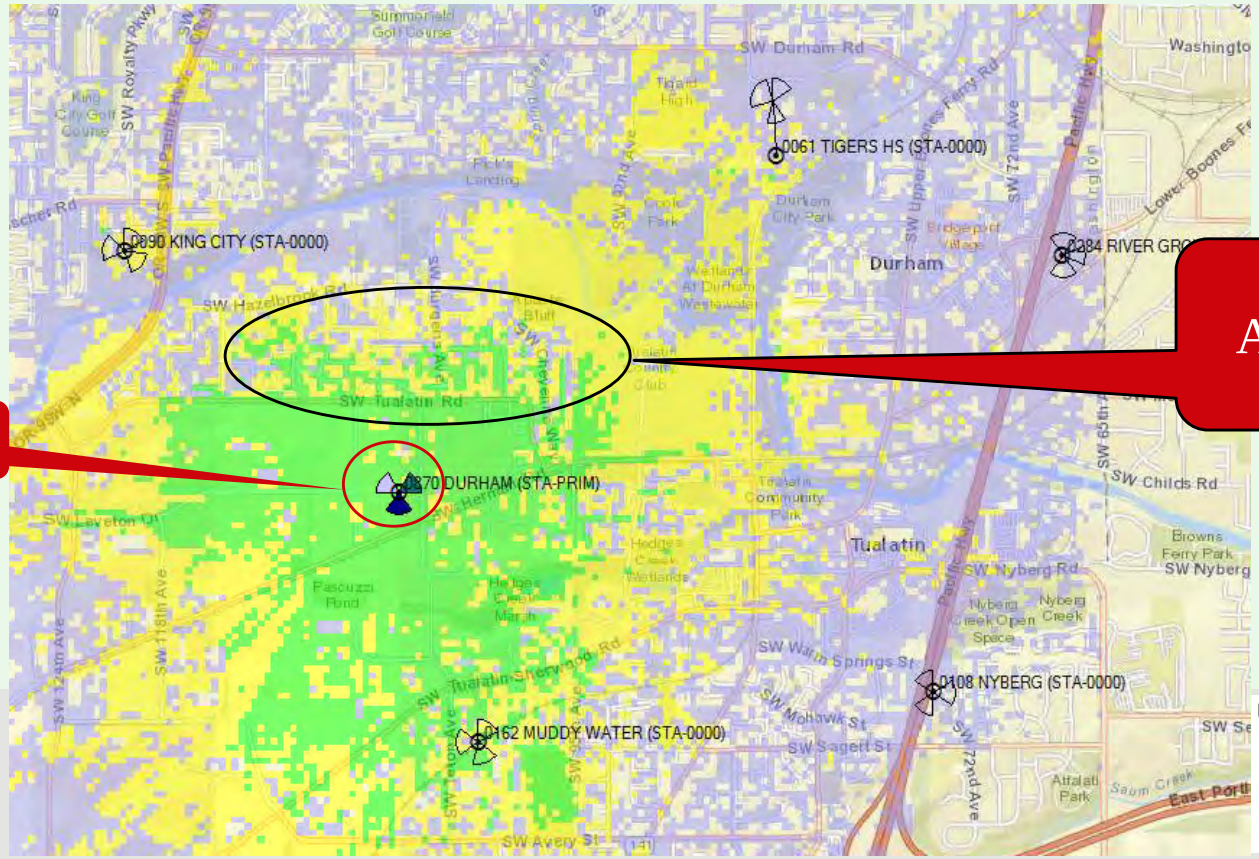
Coverage at ATC location at 146’ with trees



Area of concern

Durham

Coverage with Durham Site at ATC 146’ without trees

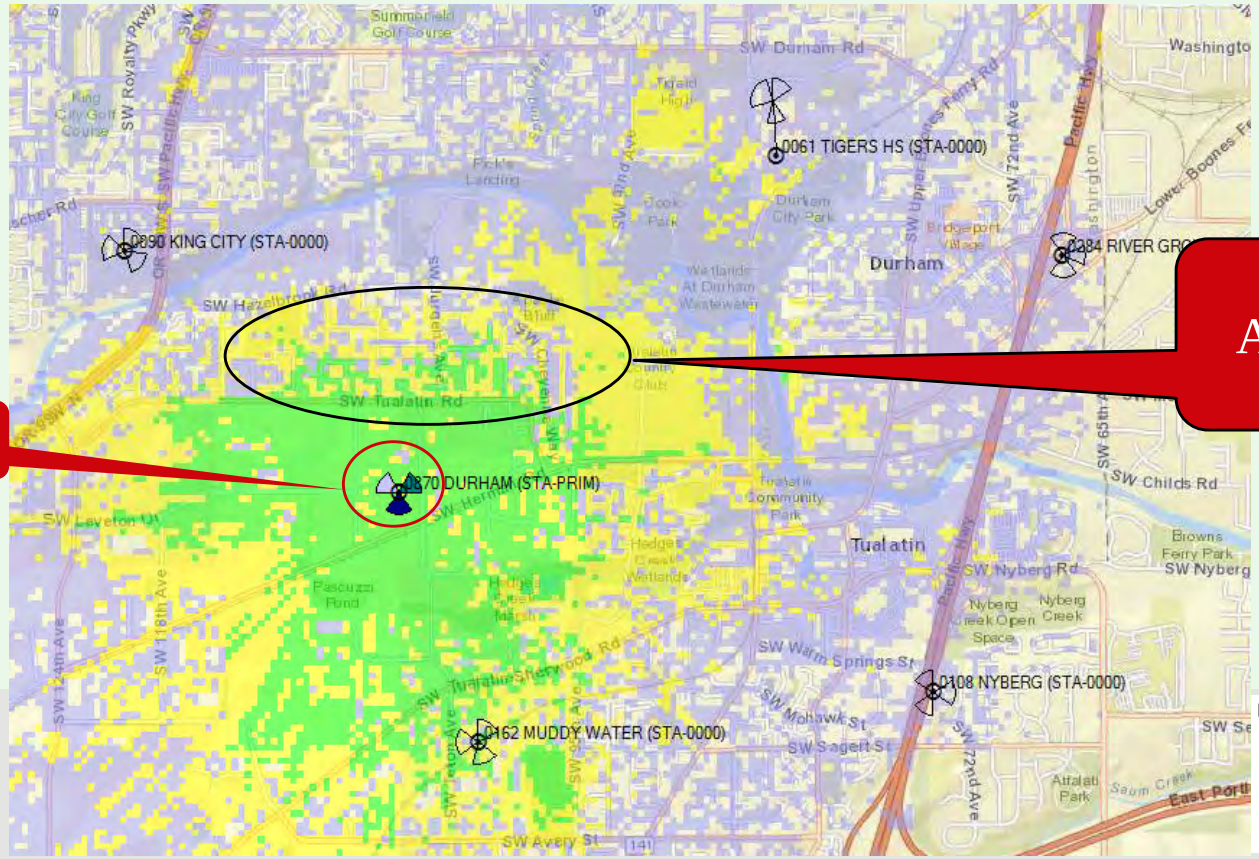


Area of concern

Durham

verizon

Coverage at ATC 120’ without trees



Summary

- ATC tower does not work at 146’ with the existing tree cover.
- With the trees removed the ATC tower using both 146’ and 120’ heights will function but the area of concern is better covered with the proposed Durham location at 100 feet.
- ATC tower doesn’t improve coverage in the residential area north of SW Tualatin Rd compare to proposed Durham tower location which is the area of concern.

ATC King City OR1 308345

onsite verification of trees 11/17/18

- The trees affecting the RF signal are in three main areas
  - The grove surrounding the tower.
  - The grove to the West / Southwest
  - The tree line to the North / Northeast on the adjacent property
- The affected trees are approximately 120-140 feet tall
- There are approximately 40-60 trees in the three areas shown


Tall Tree Line Blocking Signal
Tall Tree Groves Blocking Signal
ATC 130' Tower
1
2
SW Leveton Dr
SW 108th Ave
Tote
Kai USA

Looking North from ATC gate, along the fence line at tree grove

Looking West / Southwest from ATC Site at the tree grove

Looking South / Southeast from ATC Site at the tree grove

Looking East / Northeast through the ATC Site at the tree grove

Looking North from adjacent property at the tree line and tree grove (position 1)

Looking Southeast from adjacent property at the tree line and tree grove (position 2)

From: **Bloom, Aaron** Aaron.Bloom@lendlease.com
Subject: FW: [EXT]:RE: PI Tower: 10290 SW Tualatin Road
Date: November 21, 2017 at 11:58 AM
To: Sarah Blanchard sarah.blanchard@acomconsultinginc.com

AB

Aaron Bloom
Area Business Development Director
Telecom Infrastructure
12830 SW Park Way, Portland, OR 97225
T 503 880 4940
aaron.bloom@lendlease.com | www.lendlease.com

From: Brown, Julio [mailto:Julio.Brown@T-Mobile.com]
Sent: Tuesday, November 21, 2017 11:47 AM
To: Bloom, Aaron <Aaron.Bloom@lendlease.com>
Subject: RE: [EXT]:RE: PI Tower: 10290 SW Tualatin Road

He confirmed what I had relayed to you. There was no communication to ATC that said we were going to locate on their tower.

As you know, that tower has major issues (buried in the trees), so I do not want to use it. While there has been a suggestion that it could be extended, there is no guarantee that that would happen, nor a specific timeline. That makes it an inferior candidate.

Julio Brown
Sr. RF Engineer
T-Mobile Portland
julio.brown@t-mobile.com
503-820-9337

From: Bloom, Aaron [mailto:Aaron.Bloom@lendlease.com]
Sent: Tuesday, November 21, 2017 11:37 AM
To: Brown, Julio <Julio.Brown@T-Mobile.com>
Subject: PI Tower: 10290 SW Tualatin Road

Hi Julio,

I wanted to circle back with you to see if you had a chance to speak to Gurjeet about ATC's opposition to our site, and claim that T-Mobile prefers their location. Anything you can provide would be greatly appreciated. We have until 5 pm tomorrow to submit any further evidence supporting our zoning application, with the hearing resuming on 12/7.

Thanks so much for all your support with this!
Aaron

Aaron

Aaron Bloom
Area Business Development Director
Telecom Infrastructure
12830 SW Park Way, Portland, OR 97225
T 503 880 4940
aaron.bloom@lendlease.com | www.lendlease.com

November 22, 2017

VIA ELECTRONIC MAIL: ahurd-ravich@tualatin.gov

City of Tualatin Planning Commission
Attn: Aquilla Hurd-Ravich
18880 SW Martinazzi Ave
Tualatin, OR 97062-7092

RE: Pl Tower Development Project OR-Tualatin-Durham/ 10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 000800) (VAR-17-0001)
Our File No: 00000-28543

Dear Ms. Hurd-Ravich and Honorable Planning Commissioners:

Thank you for giving me and my client an opportunity to appear before you last week. As you know, I represent American Tower Corporation, a Delaware corporation, and Tower Asset Sub, Inc., a Delaware corporation ("***ATC***"), which owns a wireless communications facility located at 10318 SW Herman Road, Tualatin, Oregon (the "***ATC Tower***"). ATC submitted oral and written testimony regarding its concerns regarding the proposed wireless communication facility on behalf of Lendlease (US) Telecom Holdings LLC - c/o Pl Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. (herein collectively "***Applicant***") on the southwest corner of 10290 SW Tualatin Road, Tualatin, Oregon (herein the "***Subject Property***"). I am submitting this letter and the attached exhibits to address certain factual and legal questions of the Commissioners and staff. Below in italics are a summary of those questions followed by my answers.

1. *Can the ATC Tower accommodate additional users, if the tower was extended to 146 feet consistent with the existing approval?* Yes, ATC's existing variance approval granted a variance to the wireless communications facility standard of 100 feet, subject to the following condition of approval, which is the only condition of approval: "The monopole tower, antenna platform and whip antennae shall not exceed 146 feet in height above grade." ATC has the right under the existing permit to extend the tower to 146 feet without additional land use approval, so long as there is no additional antenna extending beyond such height. Attached as ***Exhibit 1***, you will find supplemental RF coverage maps that demonstrate the ATC tower can accommodate new uses in a manner substantially similar as represented by Applicant. Below are two images. The first is Applicant's proposed coverage map demonstrating projected Verizon coverage. The second is a coverage map by ATC demonstrating projected Verizon coverage on the ATC tower at 146 feet, without cutting any trees.

Park Place, Suite 200
250 Church Street SE
Salem, Oregon 97301

Post Office Box 470
Salem, Oregon 97308

tel 503.399.1070
fax 503.371.2927

www.sglaw.com

Image 1 – Applicant proposed coverage map:

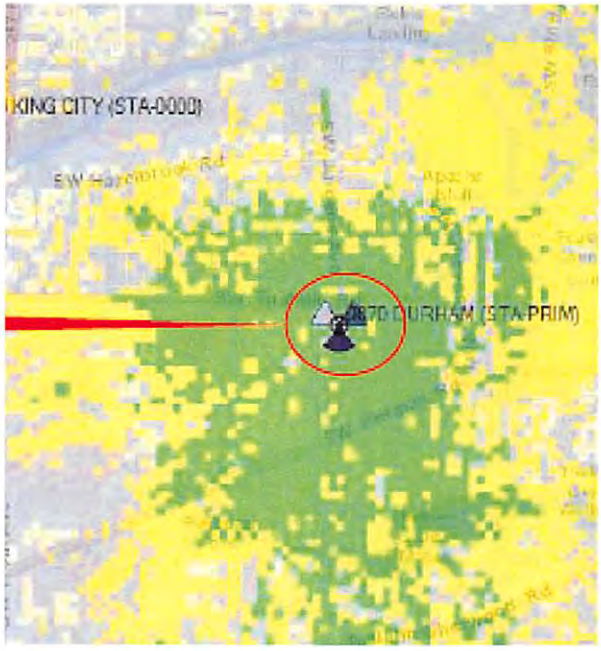
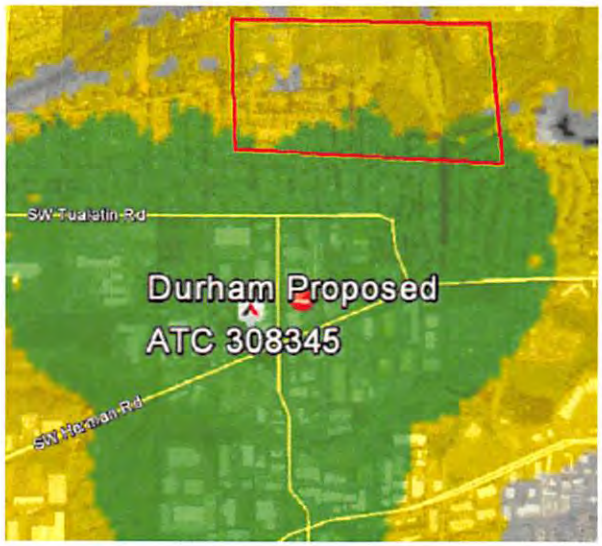


Image 2 – ATC proposed coverage map without modification of permit:



2. *Can the ATC Tower structurally accommodate an extension of the exiting pole?* Yes, ATC has submitted a letter from Bryan Lanier, an Oregon licensed P.E., S.E., who is of the expert opinion that the existing site can accommodate such an extension. *See* ***Exhibit 2***.

3. *What is the difference between green and yellow?* The color coding corresponds to the measurement of decibel-milliwatts as evidenced on the ATC RF maps (green equals greater or equal to -75 dBm and yellow equals greater or equal to -85 dBm; however, the distinction between green and yellow and how that relates to coverage on cell phones (i.e., how many

bars?) is proprietary to Verizon. ATC cannot directly answer that question, and directs the Commissioners and staff to Applicant for further information.

4. *Who determines if the ATC Tower "cannot be modified to accommodate another provider" as required under TDC 33.025(1)?* Applicant has requested a variance to the City's Wireless Communication Facilities development standards; therefore, it is Applicant's burden of proof to satisfy all applicable criteria. Because Applicant's proposed tower is within 1,500 feet of the ATC Tower, TDC 33.025(1)(a) requires Applicant to prove the ATC Tower "cannot be modified to accommodate another provider." This burden of proof is not on ATC. Nonetheless, ATC has reviewed Applicant's evidence and determined that it is not accurate. Applicant's error is due to its false assumption that ATC could not extend its tower and could not accommodate an additional provider. ATC has conclusively provided evidence that the ATC Tower can be extended without an additional variance and it has the needed capacity. Therefore, Applicant cannot meet its burden of proof, and the Commissioners must deny its variance request.

5. *Are other carriers interested in using the ATC Tower*? While this question is beyond the scope of the criteria, ATC has correspondence from T-Mobile demonstrating interest in the ATC Tower as a first option. *See* ***Exhibit 3***. The attached correspondence demonstrates this interest. As ATC has now demonstrated the ability to extend the ATC Tower above the tree-line, it believes it can satisfy additional carrier coverage.

6. *What are the terms of the ATC existing lease and proposed lease?* Again, review of ATC's existing lease is beyond the scope of review of Applicant's (Acom) evidence; however, in the spirit of open communication, ATC has submitted a copy of the existing lease and proposed lease amendment for the Commission's review. *See* ***Exhibit 4***. Please note, the monetary terms have been redacted and the proposed lease amendment is still subject to further changes by the parties. To the extent the existing lease is relevant, it does substantiate ATC's representation that the ATC Tower may be extended to the full 146 feet as there are no such restrictions on ATC's right to "erect, maintain and operate on the premises radio communication facilities, including without limitation an antenna tower or pole and foundation."

I believe this letter answers the Commission's questions. Please let me or staff know if ATC can be of further assistance.

Based on ATC's prior written and oral testimony, this letter, and the attached exhibits, ATC requests the Commission to deny Applicant's proposed variance request.

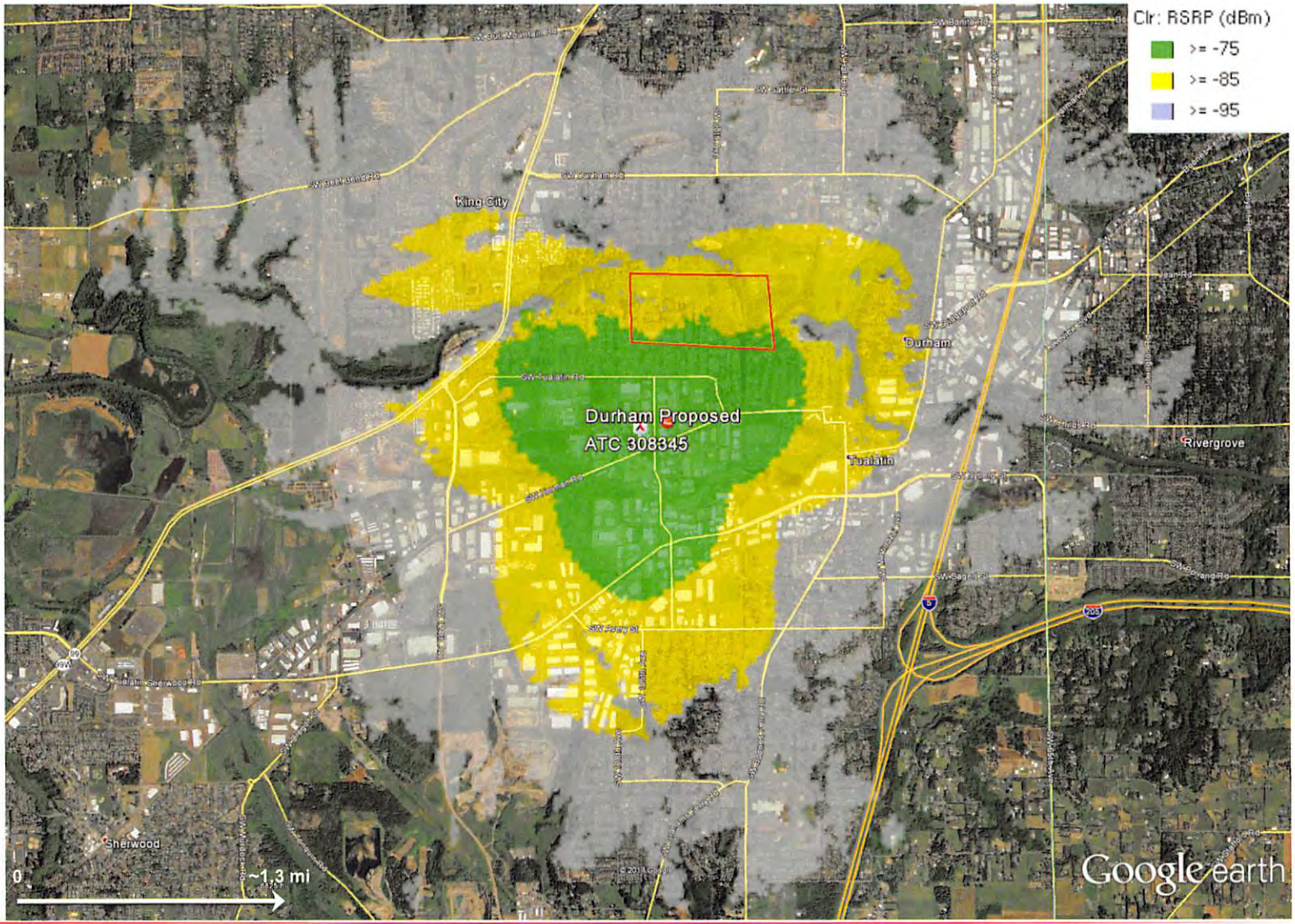
Thank you for your time and attention.

Sincerely,

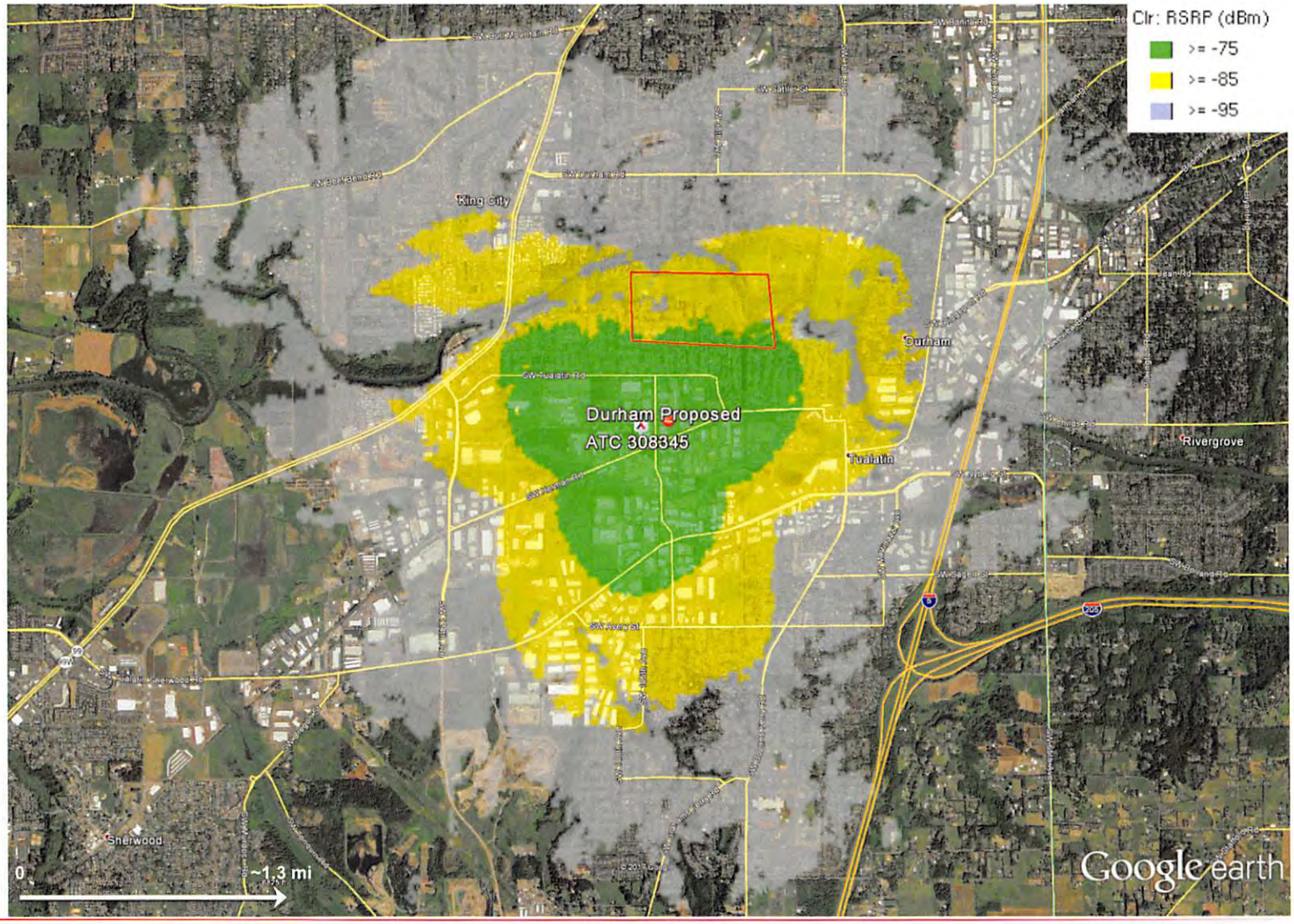
ALAN M. SOREM
asorem@sglaw.com
Voice Message #303

Enclosures
cc: Client

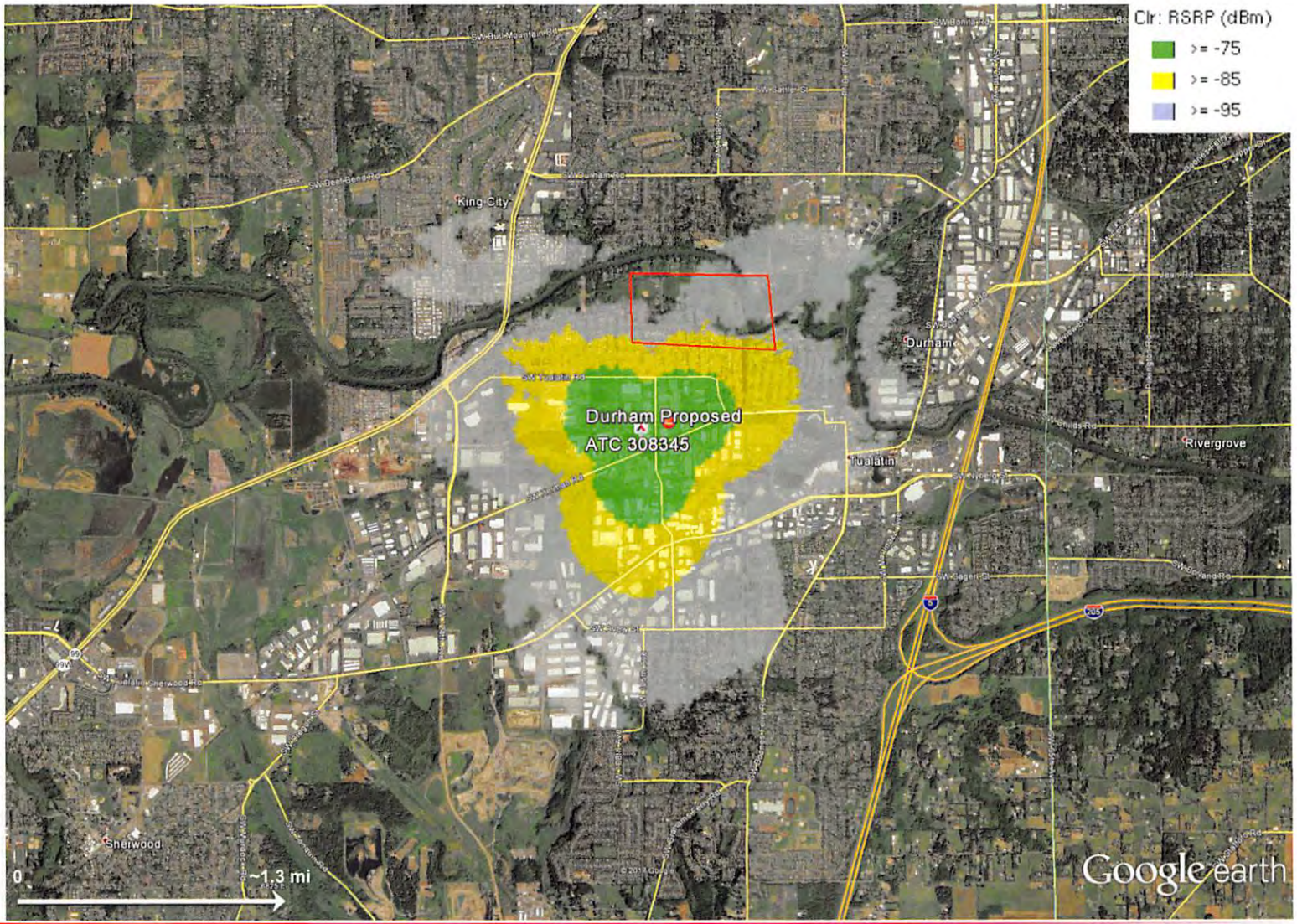
308345 700 MHz LTE Coverage @ 150 ft. Above Tree Line



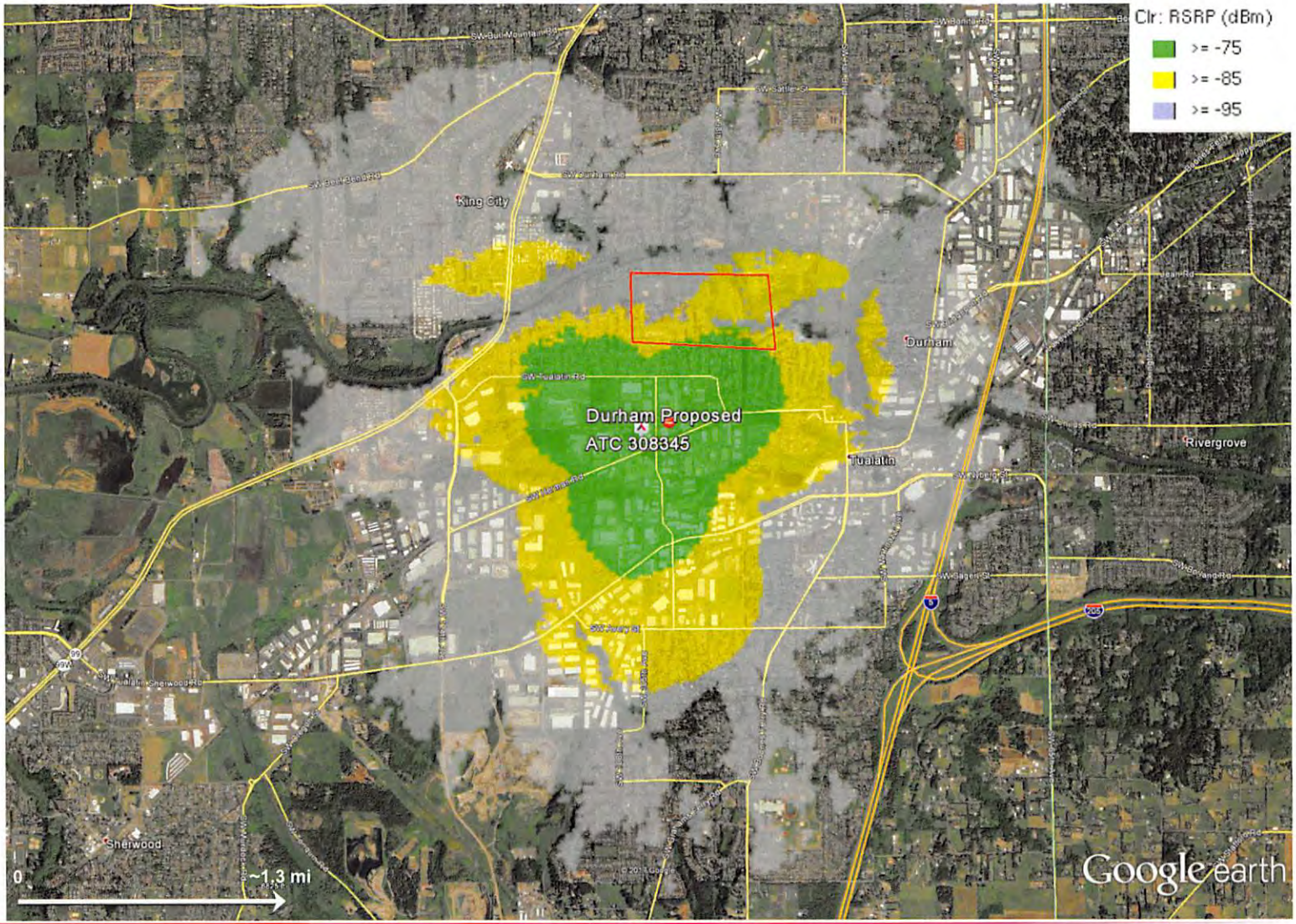
308345 700 MHz LTE Coverage @ 146 ft. Above Tree Line



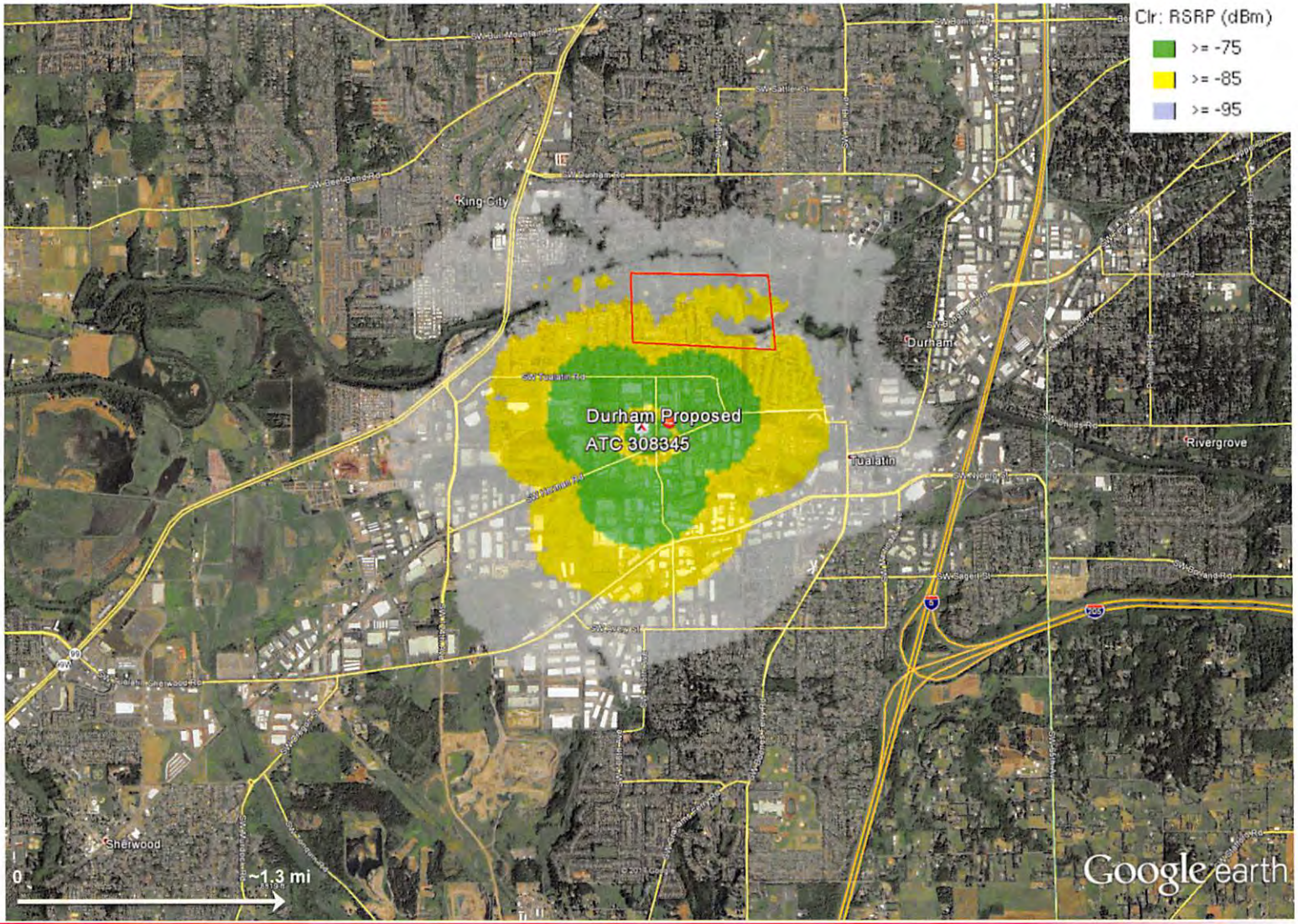
308345 700 MHz LTE Coverage @ 110 ft. Below Tree Line



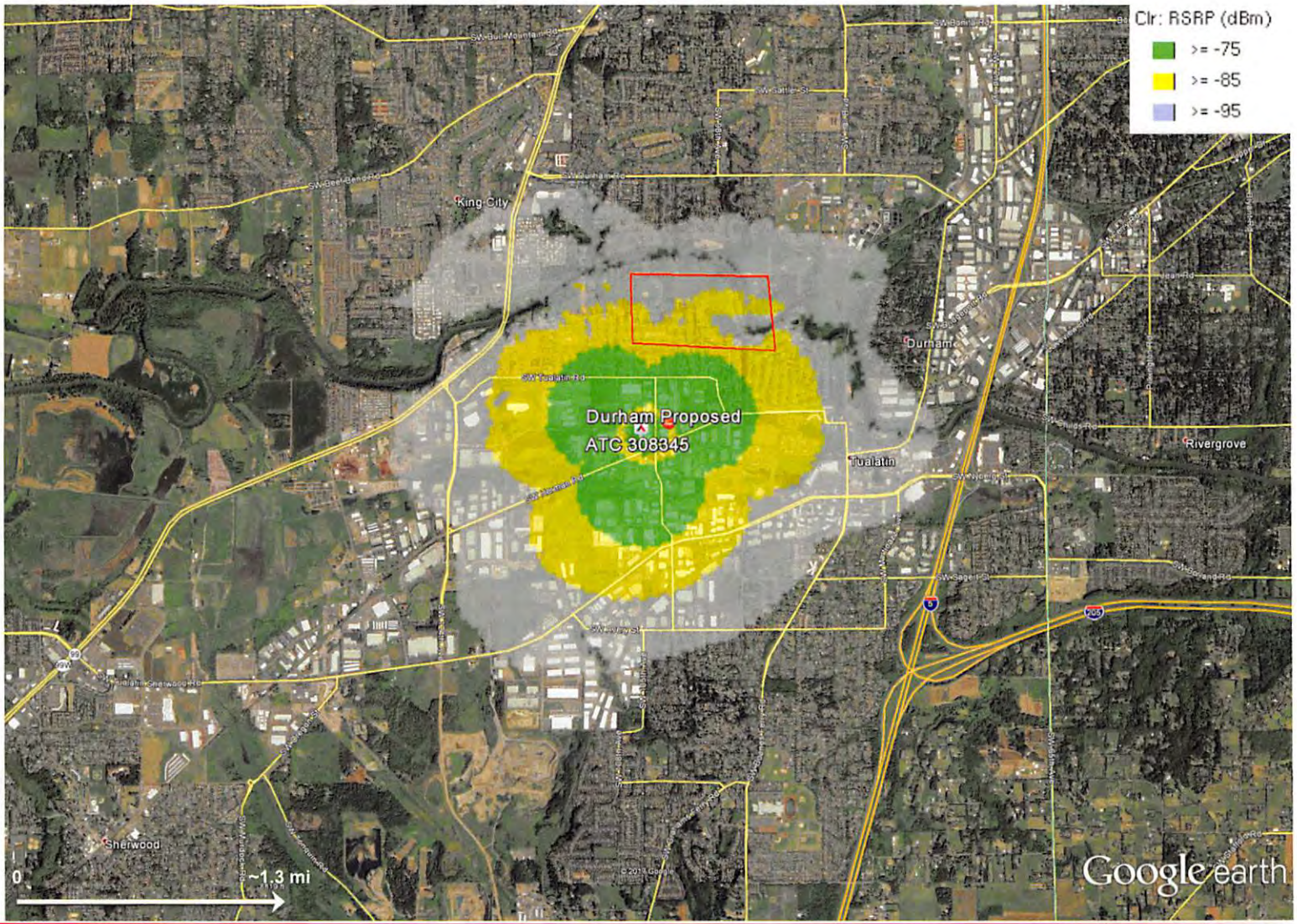
308345 700 MHz LTE Coverage @ 110 ft.
Trees Pruned 155 ft. Radially



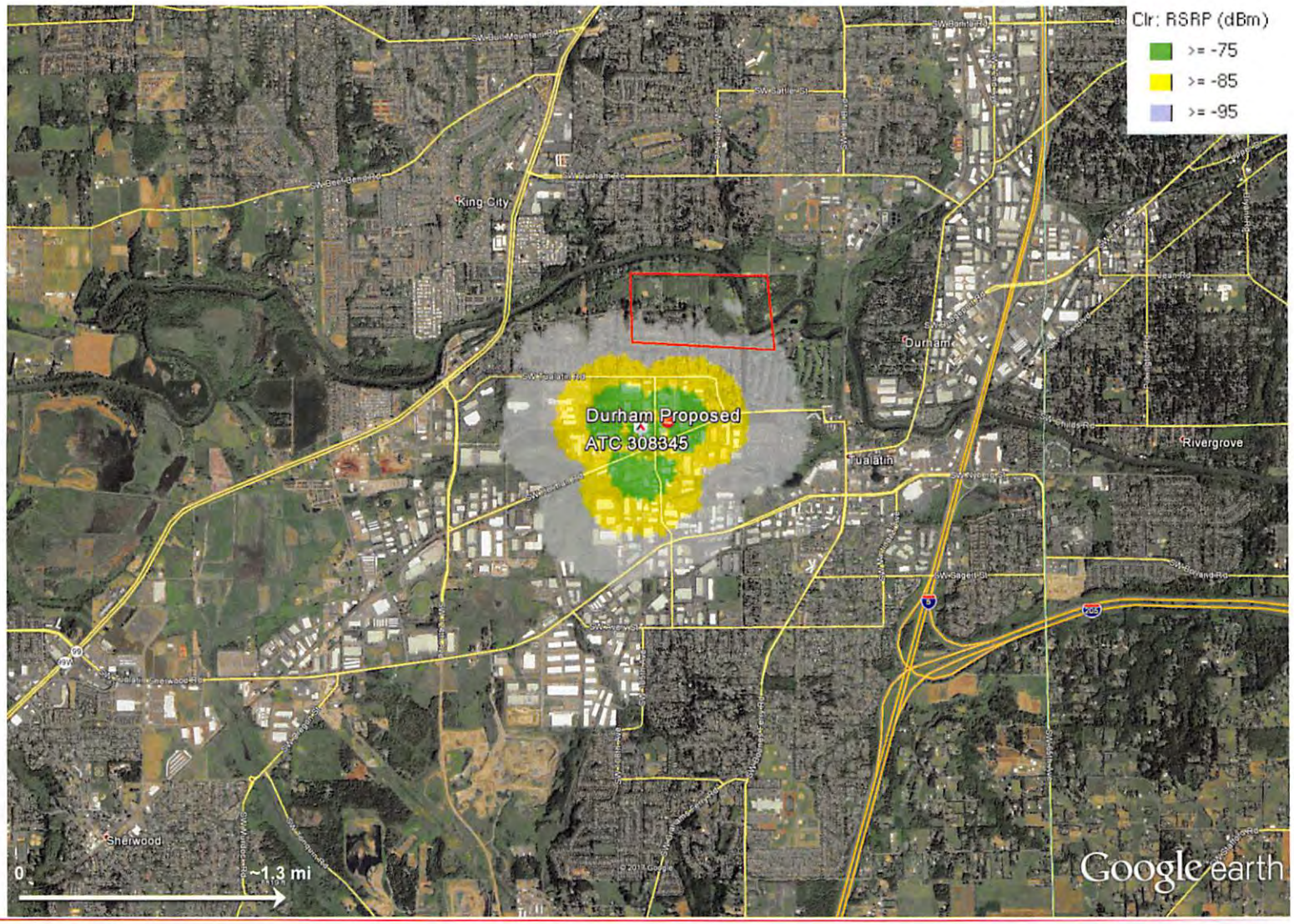
308345 2,100 MHz (AWS) LTE Coverage @ 150 ft. Above Tree Line



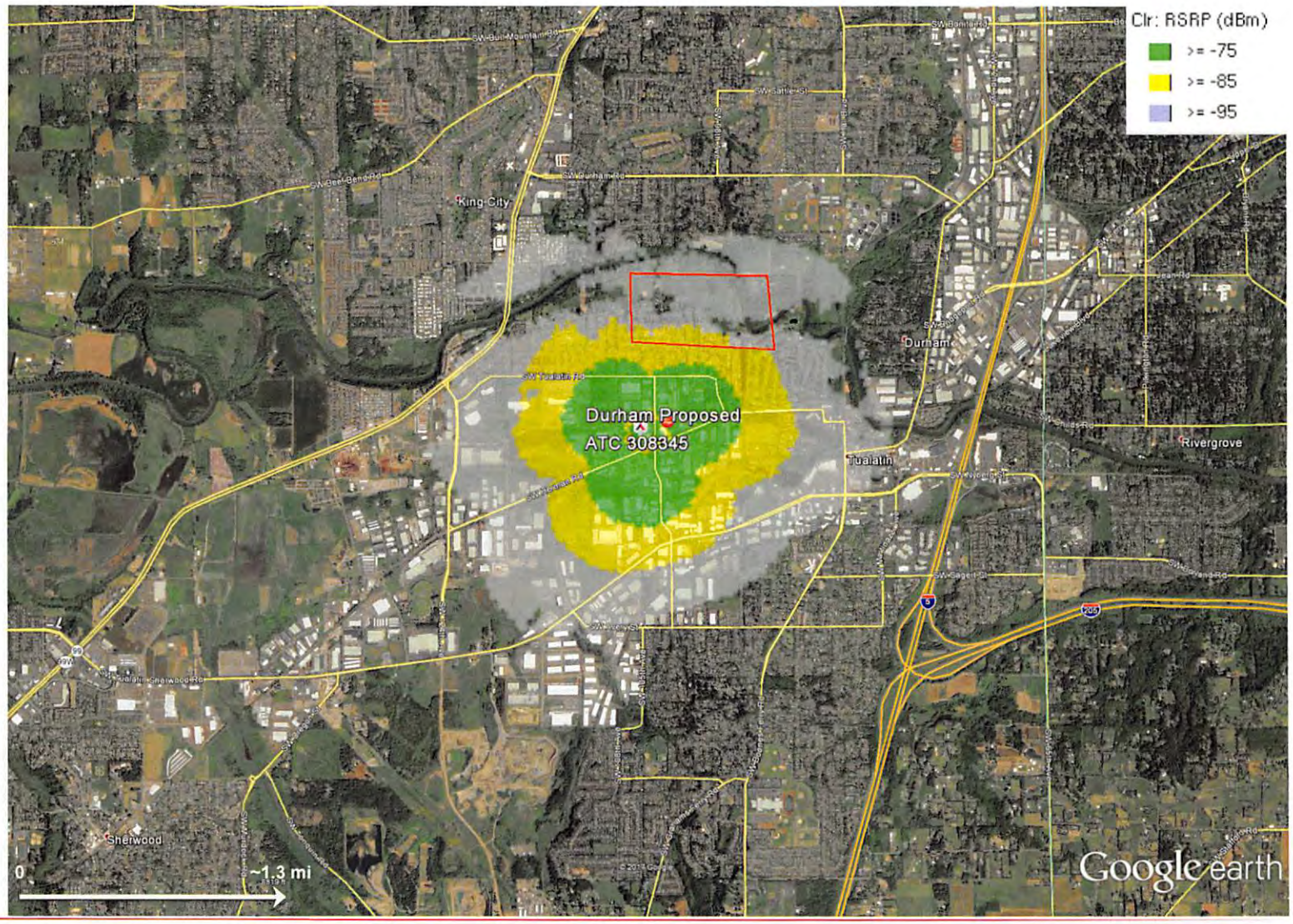
308345 2,100 MHz (AWS) LTE Coverage @ 146 ft. Above Tree Line



308345 2,100 MHz (AWS) LTE Coverage @ 110 ft. Below Tree Line



308345 2,100 MHz (AWS) LTE Coverage @ 110 ft.
Trees Pruned 155 ft. Radially



AMERICAN TOWER

Cantay Ozkan
American Tower Corporation
10 Presidential Way
Woburn, MA 01801
November 7, 2017

ATC Site: 308345 King City OR 1 (10318 SW Herman Rd, Tualatin, OR 97062-8841)

Tower: 130 ft. Monopole

Subject: Initial Structural Evaluation of Existing Tower

American Tower Engineering Services has completed an initial structural review of the above noted tower. The purpose of this review was to provide a preliminary evaluation as to if the tower can support T-Mobile and Verizon's newly proposed future equipment at the requested rad centers pertaining to two different scenarios. Both scenarios will keep the existing Sprint Nextel equipment and its corresponding rad height as existing at 130 ft.

Scenario 1: The existing 130 ft monopole to have a 20 ft proposed extension with Verizon obtaining a new rad height of 150 ft and T-Mobile of 140 ft. Both carriers will have the following loading scenario: (12) 8 ft panels and (12) RRU's on a platform w/ handrails.

Scenario 2: The existing 130 ft monopole to have Verizon obtain a new rad height of 120 ft and T-Mobile of 110 ft. Both carriers will have the following loading scenario: (12) 8 ft panels and (12) RRU's on a platform w/ handrails.

After review, the tower and foundation would be able to accommodate, structurally, both scenarios per ANSI/TIA-222-G specifications. No structural upgrades to the tower or foundation, aside from the extension, would be needed for either scenario.

Please contact the undersigned with any questions regarding this report at 919.466.5004.

Expires: 12/31/2019

Nov 7 2017 2:26 PM cosign

Bryan Lanier, P.E., S.E.
Director, Customer Engineering

EXHIBIT
tabbies
2

From: [redacted] [redacted]T-Mobile.com]
Sent: Thursday, November 02, 2017 10:12 AM
To: Mike Clarke
Subject: RE: ATC# 308345 - King City OR 1

Hi Mike,

This tower was my first choice but when we visited the location, we found it is surrounded by taller trees. We couldn't even see tower from road except from one spot. If we cando something about these trees, I would definitely like to go on this tower.

Thanks

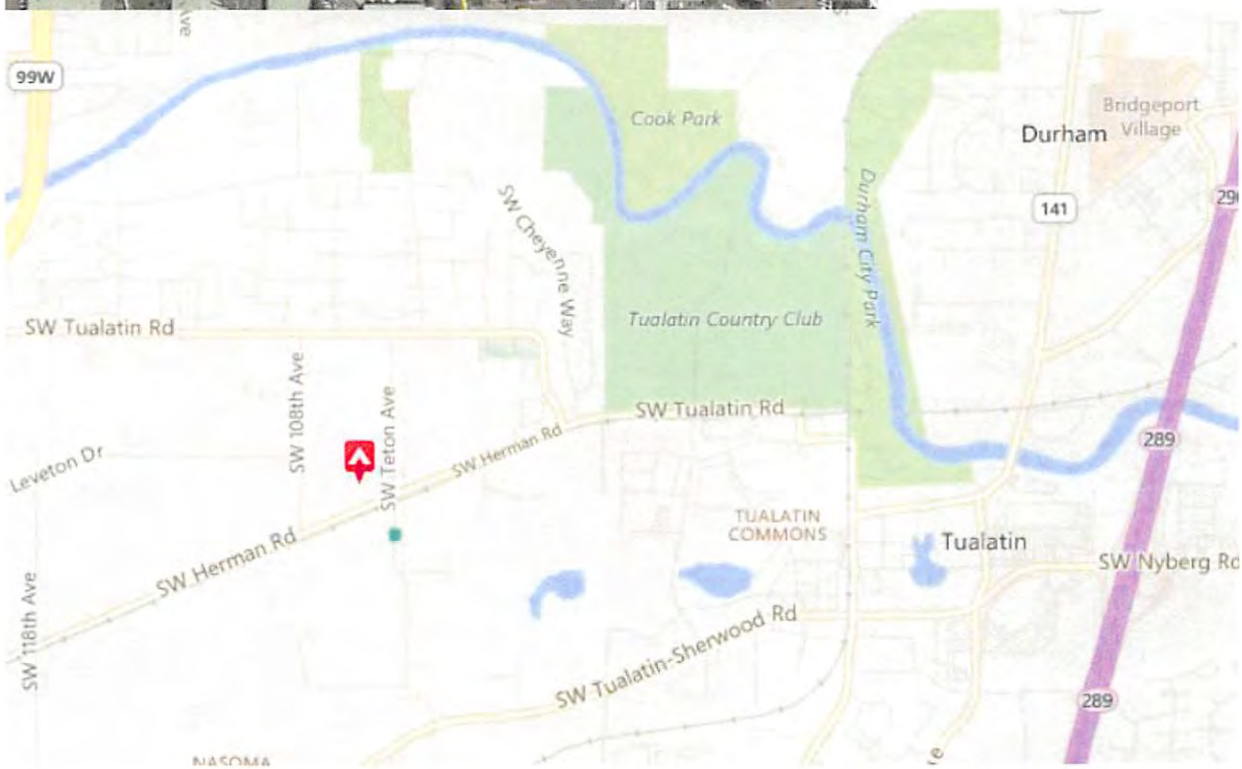
From: Mike Clarke [mailto:Michael.Clarke@americantower.com]
Sent: Thursday, November 02, 2017 10:04 AM
To: [redacted]@T-Mobile.com>
Subject: ATC# 308345 - King City OR 1

Hi [redacted],

I heard for outside source that you may be interested in this site area near Tualatin. Let me know if that is correct.
We have a 130' tower with plenty of space and capacity.
Lat/Long: 45.38597, -122.7853

EXHIBIT
tabbies
3


45.38597, -122.7853
SW Herman Rd
SW Teton Ave
Spokane Ct
SW 98th Ave
© 2017 Google


99W
Cook Park
Durham
Bridgeport Village
141
SW Cheyenne Way
Durham City Park
SW Tualatin Rd
Tualatin Country Club
SW 108th Ave
SW Teton Ave
SW Herman Rd
Leveton Dr
TUALATIN COMMONS
Tualatin
SW Nyberg Rd
289
SW 118th Ave
SW Tualatin-Sherwood Rd

Mike Clarke
Territory Manager - Business Development
Pacific Northwest, Alaska and Hawaii
American Tower Corporation
Carnation, WA
425-754-7533 Cell
michael.clarke@americantower.com
Find, Apply and Track Online with ON AIR Access.

COMMUNICATIONS SITE LEASE AGREEMENT

This Lease Agreement ("Agreement") is entered into this 13 day of March, 2000 between **Nextel West Corp.**, a Delaware corporation, d/b/a **Nextel Communications** ("Lessee"), and the **City of Tualatin, Oregon**, an Oregon municipal corporation ("City").

For good and valuable consideration, the receipt and sufficiency of which is acknowledged, the parties agree as follows:

1. **Premises.** City is the owner of a parcel of land (the "Land") located in the City of Tualatin, County of Washington, State of Oregon, commonly known as 10699 SW Herman Road, Tualatin, Oregon 97062. The Land is more particularly described in Exhibit A, which is attached. City hereby leases to Lessee approximately 3600 square feet of the Land and all access and utility easements, if any, (the "Premises"), described in Exhibits A-2 and B which are attached.

2. **Use.** Lessee may use the Premises for permitted uses only ("Permitted Uses"). Permitted Uses include any activity in connection with the provision of communications services. City agrees to cooperate with Lessee, at Lessee's expense, in making application for and obtaining all licenses, permits and all other necessary approvals that may be required for Lessee's intended use of the Premises. Subject to paragraphs 7 and 13 below, Lessee agrees to permit other telecommunications providers to colocate on Lessee's tower or pole provided the other telecommunications provider enters into an Agreement with Lessee for the tower or pole space.

3. **Tests and Construction.** After the full execution of this Agreement, Lessee may enter the Land at any time for the purpose of making appropriate engineering and boundary surveys, inspections, soil test borings, other reasonably necessary tests and constructing the Lessee Facilities, as described in Paragraph 6(a). As provided for in paragraph 6 below, the City may restrict or limit access to the Site when the City is operating its Emergency Command Center.

4. **Term.** The term of this Agreement is five (5) years, commencing eighteen months after full execution or upon the start of construction of Lessee Facilities, whichever occurs first ("Commencement Date") and terminating on the fifth anniversary of the Commencement Date (the "Term") unless otherwise terminated as provided in Paragraph 10. Lessee has the right to extend the Term for three (3) successive five (5) year periods (the "Renewal

EXHIBIT 4 tabbies

Terms") on the same terms and conditions as set forth in this Agreement. This Agreement shall automatically be extended for each successive Renewal Term unless Lessee notifies the City of its intention not to renew prior to the commencement of the succeeding Renewal Term.

5. Rent.

(a) Upon the Commencement Date and on the first day of each month thereafter, Lessee shall pay to City as rent [redacted] ("Rent"). Rent for any fractional month at the beginning or end of the Term or Renewal Term shall be pro rated. Rent shall be payable to City of Tualatin, at P.O. Box 369, Tualatin, Oregon 97062, Attention: Operations.

(b) Rent shall be [redacted]

6. Facilities; Utilities; Access.

(a) Lessee has the right to erect, maintain and operate on the premises radio communications facilities, including without limitation an antenna tower or pole and foundation, utility lines, transmission lines, air conditioned equipment shelters, electronic equipment, radio transmitting and receiving antennas, supporting equipment and structures ("Lessee Facilities"). In connection with these facilities, Lessee may do all work necessary to prepare, maintain and alter the Premises for Lessee's business operations and to install transmission lines connecting the antennas to the transmitters and receivers. All of Lessee's construction and installation work shall be performed at Lessee's sole cost and expense, in a good workmanlike manner. Title to Lessee's Facilities shall be held by Lessee. All of Lessee's facilities shall remain Lessee's personal property and are not fixtures. Lessee may remove all Lessee's Facilities at its sole expense on or before the expiration or earlier termination of the Agreement; provided, Lessee repairs any damage to the Premises caused by such removal. Upon termination of this Agreement, Lessee shall not be required to remove any foundation more than one foot below grade level.

(b) Lessee shall pay for the electricity it consumes in its operation at the rate charged by the servicing utility company. Lessee shall obtain separate utility service for its Facilities. City agrees to sign such documents or easements as required by the utility companies to provide services to the Premises, including the grant to Lessee or to the servicing utility company at no cost to Lessee, of an easement in,

over, across or through the Land as required by the utility company to provide utility service as provided in this Agreement in a location acceptable to the City and the servicing utility company.

(c) Lessee and the City shall work together to develop a system for Lessee access that will maintain security of the Premises and the Emergency Operations Center, when operating. Lessee, Lessee's employees, agents, subcontractors, lenders and invitees shall have access to the Premises 24 hours a day, 7 days a week at no charge. City grants a non-exclusive right and easement for pedestrian and vehicular ingress and egress across the portion of the Land described in Exhibit B to Lessee, its agents, employees, contractors, guests and invitees.

(d) The City shall maintain all access roadways from the nearest public roadway sufficient to allow pedestrian and vehicular access at all times under normal weather conditions. The City shall be responsible for maintaining and repairing such roadway at its sole expense, except for damage caused by Lessee's use of the roadways.

(e) Lessee agrees to retain an arborist, approved by the City, to determine tree type, health, growth potential and characteristics of trees at the Site that may be impacted by the Lessee Facilities. This information shall be used in the planning of the location of Lessee Facilities. Lessor grants to Lessee permission to construct an access road from (name of nearest public road) to the Premises (the "Access Road", across Land owned by Lessor and adjacent to the Premises, as more fully described in Exhibit B. Lessee will maintain the Access Road at its sole cost and expense, except for any damages resulting from use of the Access Road by Lessor, its agents, employees, licensees, invitees, or contractors, and which costs to repair such damage shall be Lessor's sole responsibility. Lessee agrees to work with the City to locate its Facilities and Access Road in a manner that minimizes the removal of and impact to existing trees. The timber value that results from Lessee removing trees from the Land to construct and operate the Lessee Facilities shall be agreed upon prior to removal and split 50/50 with the City.

7. Interference.

(a) Lessee shall operate the Lessee Facilities in a manner that will not cause interference to the City or to Tualatin Valley Fire and Rescue ("TVF&R"). Lessee shall operate the Lessee Facilities in a manner that will not cause interference to other lessees or licensees of the Land, provided that the lessees' or licensees' installations predate that of the Lessee Facilities and provided their operations are in compliance with all Federal Communications Commission ("FCC") requirements. All operations by Lessee shall be in compliance with all FCC requirements.

(b) Subsequent to the installation of the Lessee Facilities, City shall not permit its lessees or licensees to install new equipment on the Land or contiguous property which is owned or controlled by the City, if such equipment is likely to cause interference with Lessee's operations. Such interference shall be deemed a breach by City. Prior to the installation of any new equipment by City, TVF&R, future lessees or licensees, City agrees to provide Lessee not less than three (3) months prior written notice along with any relevant plans and specifications for Lessee's review. With respect to future lessees or licensees, Lessee shall review such plans and give its approval, request for changes, or in the event significant interference is likely to result, its refusal to approve the plans. Lessee's approval of the Equipment by other licensees or lessees ("Tenant") shall not be unreasonably withheld or delayed, but may be conditioned upon; (i) receipt of technical information and documentation from the Tenant, by Lessee, which may be reasonably needed in order to perform an analysis, and/or (ii) the implementation of specific measurers by Tenant to assure that interference does not occur. Any such analysis or consent by Lessee shall not constitute a warranty that Tenant's Equipment shall not interfere with Lessee's operations. Both the City and Lessee agree to cooperate and use best efforts in accommodating any future lessees or licensees to the extent technologically feasible. In the event interference occurs, City agrees to take all reasonable steps necessary to eliminate such interference, in a reasonable time period. Nothing in this Agreement shall prohibit the City or the TVF&R from installing, upgrading, or operating their current radio and communication systems, or any future radio and communications systems.

8. **Taxes.** Lessee shall pay all personal and real property taxes on the Land that are attributable to Lessee Facilities.

9. **Waiver of Lessor's Lien.**

(a) Lessor waives any lien rights it may have concerning the Lessee Facilities which are deemed Lessee's personal property and not fixtures. Lessee may remove such property at any time without the City's consent.

(b) City acknowledges that Lessee has entered into a financing arrangement including promissory notes and financial and security agreements for the financing of the Lessee Facilities (the "Collateral") with a third party financing entity and may in the future enter into additional financing arrangements with other financing entities. In connection to these arrangements, the City consents to the installation of the Collateral; disclaims any interest in the Collateral, as fixtures or otherwise; and agrees that the Collateral shall be exempt from

execution, foreclosure, sale, levy, attachment, or distress for any Rent due or to become due; and that the Collateral may be removed at any time without recourse by Lessee to legal proceedings.

10. Termination. This Agreement may be terminated without further liability on 30 days prior written notice as follows:

(a) by either party upon a default of a term of this Agreement by the other party which is not cured within 60 days of receipt of written notice; or
(b) by Lessee for any reason if Lessee delivers written notice of early termination to the City no later than 30 days prior to the Commencement Date; or
(c) by Lessee if it does not obtain or maintain any license, permit or other approval necessary for the construction and operation of Lessee Facilities, or
(d) by Lessee if Lessee is unable to occupy and utilize the Premises due to an action of the FCC, including without limitation, a take back of channels or change in frequencies; or
(e) by Lessee if Lessee determines that the Premises are not appropriate for its operations for economic or technological reasons, including without limitation, signal interference; or
(f) by the City, any time after the completion of the second Renewal Term, so long as City provides written notice to the Lessee at least 60 days prior to the third Renewal Term.

11. Destruction or Condemnation. If the Premises or Lessee Facilities are damaged, destroyed, condemned or transferred in lieu of condemnation, Lessee may elect to terminate this Agreement as of the date of the damage, destruction, condemnation or transfer in lieu of condemnation. If Lessee chooses not to terminate this Agreement, Rent shall be reduced or abated in proportion to the actual reduction or abatement of use of the Premises.

12. Insurance. Lessee, at Lessee's sole cost and expense, shall procure and maintain on the Premises and on the Lessee Facilities, bodily injury and property damage insurance with a combined single limit of at least One Million Dollars per occurrence. This insurance shall insure, on an occurrence basis, against all liability of Lessee, its employees and agents arising out of or in connection with Lessee's use of the Premises. The City, its officers, employees and agents shall be named as an additional insured on Lessee's policy. Lessee shall provide a certificate of insurance to the City evidencing the required coverage within 30 days of the Commencement Date.

13. Assignment and Subletting. Lessee may assign this Agreement or the Premises or any portion of the Premises to any entity, subject to the assignee assuming all of Lessee's obligations under this Agreement. Upon

assignment, Lessee shall be relieved of all future performance, liabilities, and obligations under this Agreement. Lessee may sublet this Agreement with the written consent of the City, such consent shall not be unreasonably withheld, conditioned or delayed. This Agreement shall run with the property and shall be binding upon and inure to the benefit of the parties, their respective successors, personal representatives, heirs and assigns. Notwithstanding anything to the contrary in this Agreement, Lessee may assign, mortgage, pledge, hypothecate or otherwise transfer without notice or consent, its interest in the Agreement to a financing entity or agent behalf of a financing entity to whom Lessee has obligations for borrowed money or in respect to guaranties for such obligations, has obligations evidenced by bonds, debentures, notes or similar instruments, or has obligations under or with respect to letters of credit, bankers, acceptances and similar facilities or in respect to such guarantees.

14. **Warranty of Title and Quiet Enjoyment.** The City warrants that it owns the Land in fee simple, has rights of access to the Land, and that the Land is free and clear of all liens, encumbrances and restrictions. The City has full right to make and perform this Agreement and covenants and agrees with Lessee that upon Lessee paying the Rent and observing and performing all the terms, covenants and conditions on Lessee's part to be observed and performed, Lessee may peacefully and quietly enjoy the Premises. The City agrees to indemnify and hold harmless Lessee from all claims on Lessee's leasehold interest.

15. **Repairs.** Lessee shall keep Lessee Facilities in a reasonable state of repair so that the Facilities are not unsightly or constitute a safety issue. If repairs are needed, Lessee shall make them within a reasonable time. Except as set forth in Paragraph 6(a), upon expiration or termination of this Agreement, Lessee shall restore the Premises to the condition in which it existed upon execution of this Agreement, reasonable wear and tear and loss by casualty or other causes beyond Lessee's control excepted.

16. **Hazardous Substances.** Lessee agrees that it will not use, generate, store or dispose of any Hazardous Material on, under, about or within the Land in violation of any law or regulation. The City represents, warrants and agrees that neither the City nor, to the City's knowledge, any third party has used generated, stored or disposed of, or permitted the use, generation, storage or disposal of any Hazardous Material on, under, about or within the Land in violation of any law or regulation, and that the City will not and will not permit a third party to use, generate, store or dispose of any Hazardous Material on, under, about or within the Land in violation of any law or regulation. The City and Lessee each agree to defend, indemnify and hold harmless the other and the other's officers, employees, and agents against all losses, liabilities, claims and costs, including reasonable attorney's fees and costs arising from a breach of any representation, warranty or agreement contained in this

paragraph. As used in this Agreement, "Hazardous Material" means petroleum or petroleum product, asbestos, any substance known by the State of Oregon to cause cancer or reproductive toxicity, or any substance, chemical or waste that is identified as hazardous, toxic or dangerous in any applicable federal, state, or local law or regulation. This paragraph shall survive the termination of this Agreement.

17. Miscellaneous.

(a) This Agreement constitutes the entire agreement and understanding between the parties, and supersedes all offers, negotiations and other agreements concerning the subject matter contained in this Agreement. Amendments to this Agreement must be in writing and executed by both parties.

(b) If any provision of this Agreement is invalid or unenforceable with respect to any party, the remainder of this Agreement or the application of such provision to person other than those as to whom it is held invalid or unenforceable, shall not be affected and each provision of the Agreement shall be valid and enforceable to the fullest extent permitted by law.

(c) This Agreement shall be binding and inure to the benefit of the successors and permitted assignees of the respective parties.

(d) Any notice or demand required to be given in this Agreement shall be made by certified or registered mail, return receipt requested, or reliable overnight courier to the address of the parties set forth below:

Lessee:
Nextel West Corp.
d/b/a Nextel Communications
1750 112th Avenue NE, Suite C-100
Bellevue, WA 98004

City: City of Tualatin
18880 SW Martinazzi
Tualatin, OR 97062
Attn: Operations Director

With a copy to:
Nextel West Corp.
d/b/a Nextel Communications
1750 112th Avenue NE, Suite C-100
Bellevue, WA 98004
Attn: System Development Mgr.

And a copy to:
Nextel Communications, Inc.
2001 Edmund Halley Drive
Reston, VA 20191
Mail Stop 6E630
Attn: Site Leasing Services, Contracts Mgr.

Lessor or Lessee may from time to time designate any other address for this purpose by written notice to the other party. Notices shall be deemed received upon actual receipt.

(e) This Agreement shall be governed by the laws of the State of Oregon.
(f) The City agrees to execute and record a Memorandum of Agreement, attached as Exhibit C, in the official records of Washington County, Oregon.
(g) Lessee may obtain title insurance on its interest in the Land. The City shall cooperate by executing documentation required by the title insurance company.
(h) Where the approval or consent of a party is required, requested or otherwise to be given under this Agreement, such party shall not unreasonably delay or withhold its approval or consent.
(i) All Riders and Exhibits attached to this Agreement are material parts of the Agreement.
(j) This Agreement may be executed in duplicate counterparts, each of which shall be deemed an original.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

LESSOR:

City of Tualatin, Oregon
an Oregon municipal corporation

By: Arthur R. Wells

Date: 3-13-00

Title: Mayor Pro Tem

Tax ID#: 93-6002269

LESSEE:

Nextel West Corp.
a Delaware corporation,
d/b/a Nextel Communications

By: Mark B. [illegible]

Date: 3/10/2000

Title: Vice President

STATE OF OREGON

COUNTY OF Washington

On 3-13-00, before me, the undersigned, a Notary Public for the state, personally appeared Tony Weller, personally known to me (or proved to me on the oath of _____, who is personally known to me) to be the person whose name is subscribed to the within instrument, as a witness thereto, who, being by me duly sworn, deposes and says that he/she was present and saw _____, the same person described in and whose name is subscribed to the within and annexed instrument in his/her/their authorized capacity(ies) as a party thereto, execute the same, and that said affiant subscribed his/her name to the within instrument as a witness at the request of _____.

WITNESS my hand and official seal.

Maureen A Smith (SEAL)
Notary Public

OFFICIAL SEAL
MAUREEN A SMITH
NOTARY PUBLIC-OREGON
COMMISSION NO. 300986
MY COMMISSION EXPIRES JULY 4, 2001

My commission expires: 7/4/2001

STATE OF ~~OREGON~~ Washington

COUNTY OF King

On March 10, 2000, before me, ~~Kasey D. Sebastian~~ Mary M. Murdoch Notary Public, personally appeared Mark B. Nelson, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

_____ (SEAL)
Notary Public

STATE OF WASHINGTON
NOTARY PUBLIC
M. M. MURDOCH
COMMISSION EXPIRES
7-7-01

My commission expires: 7/7/01

EXHIBIT A-1

DESCRIPTION OF LAND

to the Agreement dated March 13, 2000, by and between the City of Tualatin, Oregon, an Oregon municipal corporation, as Lessor, and Nextel West Corp., a Delaware corporation, d/b/a Nextel Communications, as Lessee.

The Land is described and/or depicted as follows:

APN: R0530134

The East 247 feet of Lot 11, GLENMORAG PARK, in the City of Tualatin, County of Washington and State of Oregon.

Initials

EXHIBIT A-2

DESCRIPTION OF PREMISES

to the Agreement dated March 13, 2000, by and between the City of Tualatin, Oregon, an Oregon municipal corporation, as Lessor, and Nextel West Corp., a Delaware corporation, d/b/a Nextel Communications, as Lessee.

The Premises is described and/or depicted as follows (metes and bounds):

APN: R0530134

A TRACT OF LAND IN THE NORTHEAST QUARTER OF SECTION 22, TOWNSHIP 2 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, IN WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT PROPERTY DESCRIBED IN THE PRELIMINARY REPORT BY FIRST AMERICAN TITLE INSURANCE COMPANY OF OREGON, PRELIMINARY TITLE REPORT NO. 885557, DATED AUGUST 26, 1999, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF LOT 11 OF GLENMORAG PARK, THENCE SOUTH 01°26'10" WEST ALONG THE EAST LINE OF SAID LOT 11, 60.00 FEET; THENCE LEAVING SAID EAST LINE, NORTH 88°33'50" WEST, 60.00 FEET; THENCE NORTH 01°26'10" EAST, 60.00 FEET; THENCE SOUTH 88°33'50" EAST, 60.00 TO THE POINT OF BEGINNING.

CONTAINS 3,600 SQUARE FEET, MORE OR LESS.

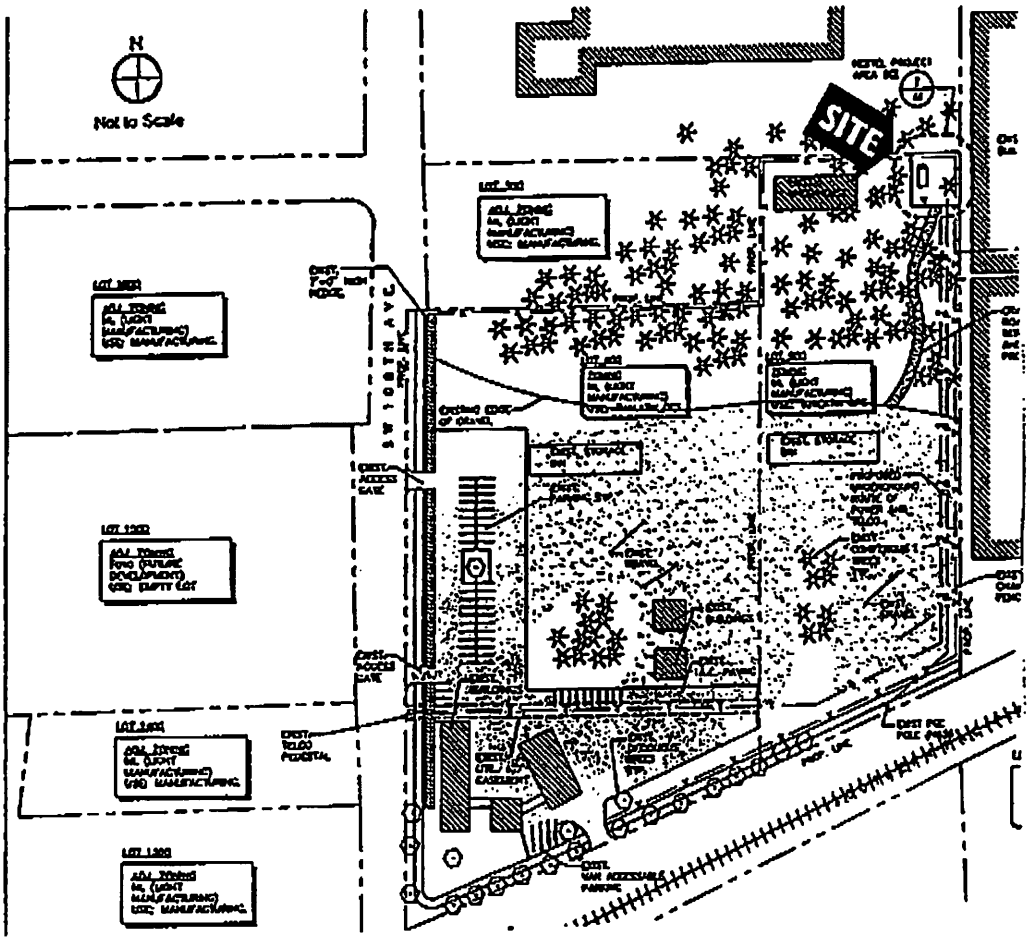
Initials

EXHIBIT B

DESCRIPTION OF PREMISES

to the Agreement dated March 13, 2000, by and between the City of Tualatin, Oregon, an Oregon municipal corporation, as Lessor and Nextel West Corp., a Delaware corporation, d/b/a Nextel Communications, as Lessee.

The Premises are described and/or depicted as follows:



Notes:

1. This Exhibit may be replaced by a land survey of the Premises once it is received by Lessee.
2. Setback of the Premises from the Land's boundaries shall be the distance required by the applicable governmental authorities.
3. Width of access road shall be the width required by the applicable governmental authorities, including police and fire departments.
4. The type, number and mounting positions and locations of antennas and transmission lines are illustrative only. Actual types, numbers, mounting positions may vary from what is shown above.
5. The location of any utility easement is illustrative only. Actual location shall be determined by the servicing utility company in compliance with all local laws and regulations.

Initials

CLERK: Please return this document to:
Nextel West Corp.
1750 112th Avenue NE, Suite C-100
Bellevue, WA 98004
Attn: Property Manager

EXHIBIT C

MEMORANDUM OF AGREEMENT
OR-0146-5
APN: R0530134

This Memorandum of Agreement is entered into on this _____ day of 2000, by and between the City of Tualatin, Oregon, an Oregon municipal corporation, with an address at 18880 SW Martinazzi, Tualatin, OR 97062 (hereinafter referred to as "Lessor") and Nextel West Corp., a Delaware corporation, d/b/a Nextel Communications, with an office at 1750 112th Avenue NE, Suite C-100, Bellevue, WA 98004 (hereinafter referred to as "Lessee").

1. Lessor and Lessee entered into a Communications Site Lease Agreement ("Agreement") on the ____ day of _____, 2000, for the purpose of installing, operating and maintaining a radio communications facility and other improvements. All of the foregoing are set forth in the Agreement.

2. The term of the Agreement is for five (5) years commencing on ("Commencement Date"), and terminating on the fifth anniversary of the Commencement Date with three (3) successive five (5) year options to renew.

3. The Land which is the subject of the Agreement is described in Exhibit A annexed hereto. The portion of the Land being leased to Lessee (the "Premises") is described in Exhibits A-2 and B annexed hereto.

Initials

IN WITNESS WHEREOF, the parties have executed this Memorandum of Agreement as of the day and year first above written.

LESSOR:
City of Tualatin, Oregon,
an Oregon municipal corporation

By: _____

Date: _____

Title: _____

LESSEE:
Nextel West Corp.
a Delaware corporation,
d/b/a Nextel Communications

By: _____

Date: _____

Title: _____

SUBSCRIBING WITNESS:

By: _____

Date: _____

Title: _____

Initals

STATE OF OREGON

COUNTY OF _____

On _____, before me, the undersigned, a Notary Public for the state, personally appeared _____, personally known to me (or proved to me on the oath of _____, who is personally known to me) to be the person whose name is subscribed to the within instrument, as a witness thereto, who, being by me duly sworn, deposes and says that he/she was present and saw _____ _____, the same person described in and whose name is subscribed to the within and annexed instrument in his/her/their authorized capacity(ies) as a party thereto, execute the same, and that said affiant subscribed his/her name to the within instrument as a witness at the request of _____ _____.

WITNESS my hand and official seal.

_____(SEAL)
Notary Public

My commission expires: _____

STATE OF OREGON

COUNTY OF _____

On _____, before me, _____, Notary Public, personally appeared _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

_____(SEAL)
Notary Public

My commission expires: _____

Initals

THE FIRST AMENDMENT TO LEASE AGREEMENT

This **First Amendment to Communications Site Lease Agreement** (this "***Amendment***") is made effective as of the latter signature date hereof (the "***Effective Date***") by and between **City of Tualatin, Oregon, an Oregon municipal corporation** ("***Landlord***") and **Tower Asset Sub, Inc., a Delaware corporation** ("***Tenant***") (Landlord and Tenant being collectively referred to herein as the "***Parties***").

RECITALS

WHEREAS, Landlord owns the real property described on **Exhibit A** attached hereto and by this reference made a part hereof (the "***Parent Parcel***"); and

WHEREAS, Landlord (or its predecessor-in-interest) and Tenant (or its predecessor-in-interest) entered into that certain **Communications Site Lease Agreement** dated **March 13, 2000** (as the same may have been amended from time to time, collectively, the "***Lease***"), pursuant to which the Tenant leases a portion of the Parent Parcel and is the beneficiary of certain easements for access and public utilities all as more particularly described in the Lease (such portion of the Parent Parcel so leased along with such portion of the Parent Parcel so affected, collectively, the "***Leased Premises***"), which Leased Premises are also described on **Exhibit A**; and

WHEREAS, Landlord and Tenant desire to amend the terms of the Lease to extend the term thereof and to otherwise modify the Lease as expressly provided herein.

NOW THEREFORE, in consideration of the foregoing recitals and the mutual covenants set forth herein and other good and valuable consideration, the receipt, adequacy, and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. **One-Time Payment**. Tenant shall pay to Landlord a one-time payment in the amount of [redacted], payable within thirty (30) days of the Effective Date and subject to the following conditions precedent: (a) Tenant's receipt of this Amendment executed by Landlord, on or before **September 31, 2017**; (b) Tenant's confirmation that Landlord's statements as further set forth in this Amendment are true, accurate, and complete, including verification of Landlord's ownership; (c) Tenant's receipt of any documents and other items reasonably requested by Tenant in order to effectuate the transaction and payment contemplated herein; and (d) receipt by Tenant of an original Memorandum (as defined herein) executed by Landlord.

2. **Lease Term Extended**. Notwithstanding anything to the contrary contained in the Lease or this Amendment, the Parties agree the Lease originally commenced on **April 1, 2000** and, without giving effect to the terms of this Amendment but assuming the exercise by Tenant of all remaining renewal options contained in the Lease (each an "***Existing Renewal Term***" and, collectively, the "***Existing Renewal Terms***"), the Lease is otherwise scheduled to expire on **March 31, 2020**. In addition to any Existing Renewal Term(s), the Lease is hereby amended to provide Tenant with the option to extend the Lease for each of **four (4) additional five (5)** year renewal terms (each a "***New Renewal Term***" and, collectively, the "***New Renewal Terms***"). Notwithstanding anything to the contrary contained in the Lease, (a) all Existing Renewal Terms and New Renewal Terms shall automatically renew unless Tenant notifies Landlord that Tenant elects not to renew the Lease at least sixty (60) days prior to the commencement of the next Renewal Term (as defined below) and (b) Landlord shall be able to terminate this Lease only in the event of a material default by Tenant, which default is not cured within sixty (60) days of Tenant's receipt of written notice thereof, provided, however, in the event that Tenant has diligently commenced to cure a material default within sixty (60) days of Tenant's actual receipt of notice thereof and reasonably requires additional time beyond the sixty (60) day cure period described herein to effect such cure, Tenant shall have such additional time as is necessary (beyond the sixty [60] day cure period) to effect the cure. References in this Amendment to "***Renewal Term***" shall refer, collectively, to

the Existing Renewal Term(s) and the New Renewal Term(s). The Landlord hereby agrees to execute and return to Tenant an original Memorandum of Lease in the form and of the substance attached hereto as **Exhibit B** and by this reference made a part hereof (the "***Memorandum***") executed by Landlord, together with any applicable forms needed to record the Memorandum, which forms shall be supplied by Tenant to Landlord.

3. **Rent and Escalation**. Commencing on **April 1, 2020**, the rent payable from Tenant to Landlord under the Lease is hereby increased to [redacted] per month (the "***Rent***"). Commencing on **April 1, 2021** and on each successive annual anniversary thereof (the "***Increase Date***"), [redacted] In the event of any overpayment of Rent or Collocation Fee (as defined below) prior to or after the Effective Date, Tenant shall have the right to deduct from any future Rent payments an amount equal to the overpayment amount. Notwithstanding anything to the contrary contained in the Lease, all Rent and any other payments expressly required to be paid by Tenant to Landlord under the Lease and this Amendment shall be paid to **City of Tualatin, Oregon**. The escalations in this Section shall be the only escalations to the Rent and any/all rental escalations otherwise contained in the Lease are hereby null and void and of no further force and effect.

4. **Revenue Share**.

   a. Subject to the other applicable terms, provisions, and conditions of this Section, Tenant shall pay Landlord [redacted] of any rents actually received by Tenant under and pursuant to the terms and provisions of any new sublease, license or other collocation agreement for the use of any portion of the Leased Premises entered into by and between Tenant and a third party (any such third party, the "***Additional Collocator***") beginning **Effective Date** (any such amounts, the "***Collocation Fee***"). Notwithstanding the foregoing, Landlord shall not be entitled to receive any portion of any sums paid by a licensee or sublessee to reimburse Tenant, in whole or in part, for any improvements to the Leased Premises or any structural enhancements to the tower located on the Leased Premises (such tower, the "***Tower***"), or for costs, expenses, fees, or other charges incurred or associated with the development, operation, repair, or maintenance of the Leased Premises or the Tower. [redacted]

   b. The initial payment of the Collocation Fee shall be due within thirty (30) days of actual receipt by Tenant of the first collocation payment paid by an Additional Collocator. In the event a sublease or license with an Additional Collocator expires or terminates, Tenant's obligation to pay the Collocation Fee for such sublease or license shall automatically terminate upon the date of such expiration or termination. Notwithstanding anything contained herein to the contrary, Tenant shall have no obligation to pay to Landlord and Landlord hereby agrees not to demand or request that

Tenant pay to Landlord any Collocation Fee in connection with the sublease to or transfer of Tenant's obligations and/or rights under the Lease, as modified by this Amendment, to any subsidiary, parent or affiliate of Tenant.

c. Landlord hereby acknowledges and agrees that Tenant has the sole and absolute right to enter into, renew, extend, terminate, amend, restate, or otherwise modify (including, without limitation, reducing rent or allowing the early termination of) any future or existing subleases, licenses or collocation agreements for occupancy on the Tower, all on such terms as Tenant deems advisable, in Tenant's sole and absolute discretion, notwithstanding that the same may affect the amounts payable to the Landlord pursuant to this Section.

d. Notwithstanding anything to the contrary contained herein, Landlord hereby acknowledges and agrees that Tenant shall have no obligation to pay and shall not pay to Landlord any Collocation Fee in connection with: (i) any subleases, licenses, or other collocation agreements between Tenant, or Tenant's predecessors- in-interest, as applicable, and any third parties, or such third parties' predecessors or successors- in-interest, as applicable, entered into prior to the Effective Date (any such agreements, the "***Existing Agreements***"); (ii) any amendments, modifications, extensions, renewals, and/or restatements to and/or of the Existing Agreements entered into prior to the Effective Date or which may be entered into on or after the Effective Date; (iii) any subleases, licenses, or other collocation agreements entered into by and between Tenant and any Additional Collocators for public emergency and/or safety system purposes that are required or ordered by any governmental authority having jurisdiction at or over the Leased Premises; or (iv) any subleases, licenses or other collocation agreements entered into by and between Tenant and any Additional Collocators if the Landlord has entered into any agreements with such Additional Collocators to accommodate such Additional Collocators' facilities outside of the Leased Premises and such Additional Collocators pay any amounts (whether characterized as rent, additional rent, use, occupancy or other types of fees, or any other types of monetary consideration) to Landlord for such use.

5. **Landlord and Tenant Acknowledgments**. Except as modified herein, the Lease and all provisions contained therein remain in full force and effect and are hereby ratified and affirmed. The parties hereby agree that no defaults exist under the Lease. To the extent Tenant needed consent and/or approval from Landlord for any of Tenant's activities at and uses of the site prior to the Effective Date, Landlord's execution of this Amendment is and shall be considered consent to and approval of all such activities and uses. Landlord hereby acknowledges and agrees that Tenant shall not need consent or approval from, or to provide notice to, Landlord for any future activities at or uses of the Leased Premises, including, without limitation, subleasing and licensing to additional customers, installing, modifying, repairing, or replacing improvements within the Leased Premises, and/or assigning all or any portion of Tenant's interest in this Lease, as modified by this Amendment. Tenant and Tenant's sublessees and customers shall have vehicular (specifically including truck) and pedestrian access to the Leased Premises from a public right of way on a 24 hours per day, 7 days per week basis, together with utilities services to the Leased Premises from a public right of way. Upon request by Tenant and at Tenant's sole cost and expense but without additional consideration owed to Landlord, Landlord hereby agrees to promptly execute and return to Tenant building permits, zoning applications and other forms and documents, including a memorandum of lease, as required for the use of the Leased Premises by Tenant and/or Tenant's customers, licensees, and sublessees. Landlord hereby appoints Tenant as Landlord's attorney-in-fact coupled with an interest to prepare, execute and deliver land use and zoning and building permit applications that concern the Leased Premises, on behalf of Landlord with federal, state and local governmental authorities, provided that such applications shall be limited strictly to the use of the Leased Premises as a wireless telecommunications facility and that such attorney-in-fact shall

not allow Tenant to re-zone or otherwise reclassify the Leased Premises or the Parent Parcel. The terms, provisions, and conditions of this Section shall survive the execution and delivery of this Amendment.

6. **Limited Right of First Refusal**. Notwithstanding anything to the contrary contained herein, this paragraph shall not apply to any fee simple sale of the Parent Parcel from Landlord to any prospective purchaser that is not a Third Party Competitor (as herein defined). If Landlord receives an offer or desires to offer to: (i) sell or convey any interest (including, but not limited to, leaseholds or easements) in any real property of which the Leased Premises is a part to any person or entity directly or indirectly engaged in the business of owning, acquiring, operating, managing, investing in or leasing wireless telecommunications infrastructure (any such person or entity, a "***Third Party Competitor***") or (ii) assign all or any portion of Landlord's interest in the Lease to a Third Party Competitor (any such offer, the "***Offer***"), Tenant shall have the right of first refusal to purchase the real property or other interest being offered by Landlord in connection with the Offer on the same terms and conditions. If Tenant elects, in its sole and absolute discretion, to exercise its right of first refusal as provided herein, Tenant must provide Landlord with notice of its election not later than forty-five (45) days after Tenant receives written notice from Landlord of the Offer. If Tenant elects not to exercise Tenant's right of first refusal with respect to an Offer as provided herein, Landlord may complete the transaction contemplated in the Offer with the Third Party Competitor on the stated terms and price but with the express condition that such sale is made subject to the terms of the Lease, as modified by this Amendment. Landlord hereby acknowledges and agrees that any sale or conveyance by Landlord in violation of this Section is and shall be deemed to be null and void and of no force and effect. The terms, provisions, and conditions of this Section shall survive the execution and delivery of this Amendment.

7. **Landlord Statements**. Landlord hereby represents and warrants to Tenant that: (i) to the extent applicable, Landlord is duly organized, validly existing, and in good standing in the jurisdiction in which Landlord was organized, formed, or incorporated, as applicable, and is otherwise in good standing and authorized to transact business in each other jurisdiction in which such qualifications are required; (ii) Landlord has the full power and authority to enter into and perform its obligations under this Amendment, and, to the extent applicable, the person(s) executing this Amendment on behalf of Landlord, have the authority to enter into and deliver this Amendment on behalf of Landlord; (iii) no consent, authorization, order, or approval of, or filing or registration with, any governmental authority or other person or entity is required for the execution and delivery by Landlord of this Amendment; (iv) Landlord is the sole owner of the Leased Premises and all other portions of the Parent Parcel; (v) to the best of Landlord's knowledge, there are no agreements, liens, encumbrances, claims, claims of lien, proceedings, or other matters (whether filed or recorded in the applicable public records or not) related to, encumbering, asserted against, threatened against, and/or pending with respect to the Leased Premises or any other portion of the Parent Parcel which do or could (now or any time in the future) adversely impact, limit, and/or impair Tenant's rights under the Lease, as amended and modified by this Amendment; and (vi) the square footage of the Leased Premises is the greater of Tenant's existing improvements on the Parent Parcel or the land area conveyed to Tenant under the Lease. The representations and warranties of Landlord made in this Section shall survive the execution and delivery of this Amendment. Landlord hereby does and agrees to indemnify Tenant for any damages, losses, costs, fees, expenses, or charges of any kind sustained or incurred by Tenant as a result of the breach of the representations and warranties made herein or if any of the representations and warranties made herein prove to be untrue. The aforementioned indemnification shall survive the execution and delivery of this Amendment.

8. **Confidentiality**. Notwithstanding anything to the contrary contained in the Lease or in this Amendment, Landlord agrees and acknowledges that all the terms of this Amendment and the Lease and any information furnished to Landlord by Tenant in connection therewith shall be and remain confidential.

Except with Landlord's family, attorney, accountant, broker, lender, a prospective fee simple purchaser of the Parent Parcel, or if otherwise required by law, Landlord shall not disclose any such terms or information without the prior written consent of Tenant. The terms and provisions of this Section shall survive the execution and delivery of this Amendment.

9. **Notices**. All notices must be in writing and shall be valid upon receipt when delivered by hand, by nationally recognized courier service, or by First Class United States Mail, certified, return receipt requested to the addresses set forth herein: to Landlord at: **City of Tualatin, Oregon, 18880 SW Martinazzi Avenue, Tualatin, OR 97062**; to Tenant at: Attn.: Land Management 10 Presidential Way, Woburn, MA 01801, with copy to: Attn.: Legal Dept., 116 Huntington Avenue, Boston, MA 02116. Any of the Parties, by thirty (30) days prior written notice to the others in the manner provided herein, may designate one or more different notice addresses from those set forth above. Refusal to accept delivery of any notice or the inability to deliver any notice because of a changed address for which no notice was given as required herein, shall be deemed to be receipt of any such notice.

10. **Counterparts**. This Amendment may be executed in several counterparts, each of which when so executed and delivered, shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument, even though all Parties are not signatories to the original or the same counterpart. Furthermore, the Parties may execute and deliver this Amendment by electronic means such as .pdf or similar format. Each of the Parties agrees that the delivery of the Amendment by electronic means will have the same force and effect as delivery of original signatures and that each of the Parties may use such electronic signatures as evidence of the execution and delivery of the Amendment by all Parties to the same extent as an original signature.

11. **Governing Law**. Notwithstanding anything to the contrary contained in the Lease and in this Amendment, the Lease and this Amendment shall be governed by and construed in all respects in accordance with the laws of the State or Commonwealth in which the Leased Premises is situated, without regard to the conflicts of laws provisions of such State or Commonwealth.

12. **Waiver**. Notwithstanding anything to the contrary contained herein, in no event shall Landlord or Tenant be liable to the other for, and Landlord and Tenant hereby waive, to the fullest extent permitted under applicable law, the right to recover incidental, consequential (including, without limitation, lost profits, loss of use or loss of business opportunity), punitive, exemplary and similar damages.

13. **Tenant's Securitization Rights; Estoppel**. Landlord hereby consents to the granting by Tenant of one or more leasehold mortgages, collateral assignments, liens, and/or other security interests (collectively, a "***Security Interest***") in Tenant's interest in this Lease, as amended, and all of Tenant's property and fixtures attached to and lying within the Leased Premises and further consents to the exercise by Tenant's mortgagee ("***Tenant's Mortgagee***") of its rights to exercise its remedies, including without limitation foreclosure, with respect to any such Security Interest. Landlord shall recognize the holder of any such Security Interest of which Landlord is given prior written notice (any such holder, a "***Holder***") as "Tenant" hereunder in the event a Holder succeeds to the interest of Tenant hereunder by the exercise of such remedies. Landlord further agrees to execute a written estoppel certificate within thirty (30) days of written request of the same by Tenant or Holder.

14. **Taxes**. The Parties hereby agree that Section 8 of the Lease is deleted in its entirety. During the term of the Lease, Landlord shall pay when due all real property, personal property, and other taxes, fees and assessments attributable to the Parent Parcel, including the Leased Premises. Tenant hereby agrees to reimburse Landlord for any personal property taxes in addition to any increase in real property taxes levied against the Parent Parcel, to the extent both are directly attributable to Tenant's improvements on

the Leased Premises (but not, however, taxes or other assessments attributable to periods prior to the Effective Date), provided, however, that Landlord must furnish written documentation (the substance and form of which shall be reasonably satisfactory to Tenant) of such personal property taxes or real property tax increase to Tenant along with proof of payment of same by Landlord. Anything to the contrary notwithstanding, Tenant shall not be obligated to reimburse Landlord for any applicable taxes unless Landlord requests such reimbursement within one (1) year after the date such taxes became due. Landlord shall submit requests for reimbursement in writing to: *American Tower Corporation, Attn: Landlord Relations, 10 Presidential Way, Woburn, MA 01801* unless otherwise directed by Tenant from time to time. Subject to the requirements set forth in this Section, Tenant shall make such reimbursement payment within forty-five (45) days of receipt of a written reimbursement request from Landlord. Tenant shall pay applicable personal property taxes directly to the local taxing authority to the extent such taxes are billed and sent directly by the taxing authority to Tenant. If Landlord fails to pay when due any taxes affecting the Parent Parcel as required herein, Tenant shall have the right, but not the obligation, to pay such taxes on Landlord's behalf and: (i) deduct the full amount of any such taxes paid by Tenant on Landlord's behalf from any future payments required to be made by Tenant to Landlord hereunder; (ii) demand reimbursement from Landlord, which reimbursement payment Landlord shall make within thirty (30) days of such demand by Tenant; and/or (iii) collect from Landlord any such tax payments made by Tenant on Landlord's behalf by any lawful means.

[*SIGNATURES COMMENCE ON FOLLOWING PAGE*]

LANDLORD:

City of Tualatin, Oregon
an Oregon municipal corporation

Signature: _____
Print Name: _____
Title: _____
Date: _____

[*SIGNATURES CONTINUE ON FOLLOWING PAGE*]

TENANT:

Tower Asset Sub, Inc.
a Delaware corporation

Signature: _____
Print Name: _____
Title: _____
Date: _____

EXHIBIT A

This Exhibit A may be replaced at Tenant's option as described below.

PARENT PARCEL

Tenant shall have the right to replace this description with a description obtained from Landlord's deed (or deeds) that include the land area encompassed by the Lease and Tenant's improvements thereon.

The Parent Parcel consists of the entire legal taxable lot owned by Landlord as described in a deed (or deeds) to Landlord of which the Leased Premises is a part thereof with such Parent Parcel being described below.

EXHIBIT A (Continued)
LEASED PREMISES

Tenant shall have the right to replace this description with a description obtained from the Lease or from a description obtained from an as-built survey conducted by Tenant.

The Leased Premises consists of that portion of the Parent Parcel as defined in the Lease which shall include access and utilities easements The square footage of the Leased Premises shall be the greater of: (i) the land area conveyed to Tenant in the Lease; (ii) Tenant's (and Tenant's customers) existing improvements on the Parent Parcel; or (iii) the legal description or depiction below (if any).

A TRACT OF LAND IN THE NORTHEAST QUARTER OF SECTION 22, TOWNSHIP 2 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, CITY OF TUALATIN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF LOT 11, "GLENMORAG PARK"; THENCE ALONG THE EAST LINE OF SAID LOT 11, S01°23'18"W, A DISTANCE OF 60.00 FEET; THENCE LEAVING SAID EAST LINE, N88°05'14"W, A DISTANCE OF 60.00 FEET; THENCE N01°23'18"E, A DISTANCE OF 60.00 TO THE NORTH LINE OF SAID LOT 11; THENCE ALONG THE NORTH LINE OF SAID LOT 11, S88°05'14"E, A DISTANCE OF 60.00 FEET TO THE POINT OF BEGINNING.

EXHIBIT A (Continued)
ACCESS AND UTILITIES

The access and utility easements include all easements of record as well that portion of the Parent Parcel currently utilized by Tenant (and Tenant's customers) for ingress, egress and utility purposes from the Leased Premises to and from a public right of way including but not limited to:

TOGETHER WITH A 20 FOOT ACCESS AND UTILITY EASEMENT OVER, ACROSS OR THROUGH THE EAST PORTION OF LOTS 11, 12 AND 13, "GLENMORAG PARK", SITUATED IN THE NORTHEAST QUARTER OF SECTION 22, TOWNSHIP 2 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, CITY OF TUALATIN, WASHINGTON COUNTY, OREGON, THE CENTERLINE OF SAID EASEMENT IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING S01°23'18"W, A DISTANCE OF 60.00 FEET AND N88°05'14"W, A DISTANCE OF 47.09 FEET FROM THE NORTHEAST CORNER OF SAID LOT 11; THENCE S11°04'34"W, A DISTANCE OF 186.33 FEET; THENCE S30°43'39"W, A DISTANCE OF 161.21 FEET; THENCE S06°27'58"W, A DISTANCE OF 162.15 FEET; THENCE S08°36'31"W, A DISTANCE OF 120.65 FEET; THENCE S11°24'13"E, A DISTANCE OF 19.50 FEET TO THE NORTH RIGHT OF WAY LINE OF S.W. HERMAN ROAD (40 FEET WIDE).

EXHIBIT B

FORM OF MEMORANDUM OF LEASE

Prepared by and Return to:
American Tower
10 Presidential Way
Woburn, MA 01801
Attn: Land Management/Sean Chen, Esq.
ATC Site No: 308345
ATC Site Name: King City OR 1
Assessor's Parcel No(s): R0530189

MEMORANDUM OF LEASE

This Memorandum of Lease (the "***Memorandum***") is entered into on the _____ day of _____, 201___ by and between **City of Tualatin, Oregon, an Oregon municipal corporation** ("***Landlord***") and **Tower Asset Sub, Inc., a Delaware corporation** ("***Tenant***").

NOTICE is hereby given of the Lease (as defined and described below) for the purpose of recording and giving notice of the existence of said Lease. To the extent that notice of such Lease has previously been recorded, then this Memorandum shall constitute an amendment of any such prior recorded notice(s).

1. **Parent Parcel and Lease**. Landlord is the owner of certain real property being described in **Exhibit A** attached hereto and by this reference made a part hereof (the "***Parent Parcel***"). Landlord (or its predecessor-in-interest) and Tenant (or its predecessor-in-interest) entered into that certain **Communications Site Lease Agreement** dated **March 13, 2000** (as the same may have been amended from time to time, collectively, the "***Lease***"), pursuant to which the Tenant leases a portion of the Parent Parcel and is the beneficiary ofcertain easements for access and public utilities all as more particularly described in the Lease (such portion of the Parent Parcel so leased along with such portion of the Parent Parcel so affected, collectively, the "***Leased Premises***"), which Leased Premises is also described on **Exhibit A**.

2. **Expiration Date**. Subject to the terms, provisions, and conditions of the Lease, and assuming the exercise by Tenant of all renewal options contained in the Lease, the final expiration date of the Lease would be **March 31, 2040**. Notwithstanding the foregoing, in no event shall Tenant be required to exercise any option to renew the term of the Lease.

3. **Leased Premises Description**. Tenant shall have the right, exercisable by Tenant at any time during the original or renewal terms of the Lease, to cause an as-built survey of the Leased Premises to be prepared and, thereafter, to replace, in whole or in part, the description(s) of the Leased Premises set forth on **Exhibit A** with a legal description or legal descriptions based upon such as-built survey. Upon Tenant's request, Landlord shall execute and deliver any documents reasonably necessary to effectuate such replacement, including, without limitation, amendments to this Memorandum and to the Lease.

4. **Right of First Refusal**. There is a right of first refusal in the Lease.

5. **Effect/Miscellaneous**. This Memorandum is not a complete summary of the terms, provisions and conditions contained in the Lease. In the event of a conflict between this Memorandum and the Lease, the Lease shall control. Landlord hereby grants the right to Tenant to complete and execute on behalf of Landlord any government or transfer tax forms necessary for the recording of this Memorandum. This right shall terminate upon recording of this Memorandum.

6. **Notices**. All notices must be in writing and shall be valid upon receipt when delivered by hand, by nationally recognized courier service, or by First Class United States Mail, certified, return receipt requested to the addresses set forth herein: to Landlord at: **City of Tualatin, Oregon, 18880 SW Martinazzi Avenue, Tualatin, OR 97062**; to Tenant at: Attn.: Land Management 10 Presidential Way, Woburn, MA 01801, with copy to: Attn.: Legal Dept., 116 Huntington Avenue, Boston, MA 02116. Any of the parties hereto, by thirty (30) days prior written notice to the other in the manner provided herein, may designate one or more different notice addresses from those set forth above. Refusal to accept delivery of any notice or the inability to deliver any notice because of a changed address for which no notice was given as required herein, shall be deemed to be receipt of any such notice.

7. **Counterparts**. This Memorandum may be executed in multiple counterparts, each of which when so executed and delivered, shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument.

8. **Governing Law**. This Memorandum shall be governed by and construed in all respects in accordance with the laws of the State or Commonwealth in which the Leased Premises is situated, without regard to the conflicts of laws provisions of such State or Commonwealth.

[*SIGNATURES COMMENCE ON FOLLOWING PAGE*]

IN WITNESS WHEREOF, Landlord and Tenant have each executed this Memorandum as of the day and year set forth below.

LANDLORD

City of Tualatin, Oregon
an Oregon municipal corporation,

Signature: _____
Print Name: _____
Title: _____
Date: _____

2 WITNESSES

Signature: _____
Print Name: _____

Signature: _____
Print Name: _____

WITNESS AND ACKNOWLEDGEMENT

State of _____

County of _____

On this ____ day of _____, 201___, before me, the undersigned Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence, to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument, the person(s) or the entity upon which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

_____
Notary Public
Print Name: _____
My commission expires: _____

[SEAL]

[SIGNATURES CONTINUE ON FOLLOWING PAGE]

TENANT

Tower Asset Sub, Inc.
a Delaware corporation

Signature: _____
Print Name: _____
Title: _____
Date: _____

WITNESS

Signature: _____
Print Name: _____

Signature: _____
Print Name: _____

WITNESS AND ACKNOWLEDGEMENT

Commonwealth of Massachusetts

County of Middlesex

On this ____ day of _____, 201___, before me, _____ the undersigned Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence, to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument, the person(s) or the entity upon which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

_____
Notary Public
Print Name: _____
My commission expires: _____ [SEAL]

EXHIBIT A

This Exhibit A may be replaced at Tenant's option as described below.

PARENT PARCEL

Tenant shall have the right to replace this description with a description obtained from Landlord's deed (or deeds) that include the land area encompassed by the Lease and Tenant's improvements thereon.

The Parent Parcel consists of the entire legal taxable lot owned by Landlord as described in a deed (or deeds) to Landlord of which the Leased Premises is a part thereof with such Parent Parcel being described below.

EXHIBIT A (Continued)
LEASED PREMISES

Tenant shall have the right to replace this description with a description obtained from the Lease or from a description obtained from an as-built survey conducted by Tenant.

The Leased Premises consists of that portion of the Parent Parcel as defined in the Lease which shall include access and utilities easements The square footage of the Leased Premises shall be the greater of: (i) the land area conveyed to Tenant in the Lease; (ii) Tenant's (and Tenant's customers) existing improvements on the Parent Parcel; or (iii) the legal description or depiction below (if any).

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BEGINNING AT THE NORTHEAST CORNER OF LOT 11, "GLENMORAG PARK"; THENCE ALONG THE EAST LINE OF SAID LOT 11, S01°23'18"W, A DISTANCE OF 60.00 FEET; THENCE LEAVING SAID EAST LINE, N88°05'14"W, A DISTANCE OF 60.00 FEET; THENCE N01°23'18"E, A DISTANCE OF 60.00 TO THE NORTH LINE OF SAID LOT 11; THENCE ALONG THE NORTH LINE OF SAID LOT 11, S88°05'14"E, A DISTANCE OF 60.00 FEET TO THE POINT OF BEGINNING.

EXHIBIT A (Continued)
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The access and utility easements include all easements of record as well that portion of the Parent Parcel currently utilized by Tenant (and Tenant's customers) for ingress, egress and utility purposes from the Leased Premises to and from a public right of way including but not limited to:

TOGETHER WITH A 20 FOOT ACCESS AND UTILITY EASEMENT OVER, ACROSS OR THROUGH THE EAST PORTION OF LOTS 11, 12 AND 13, "GLENMORAG PARK", SITUATED IN THE NORTHEAST QUARTER OF SECTION 22, TOWNSHIP 2 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, CITY OF TUALATIN, WASHINGTON COUNTY, OREGON, THE CENTERLINE OF SAID EASEMENT IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING S01°23'18"W, A DISTANCE OF 60.00 FEET AND N88°05'14"W, A DISTANCE OF 47.09 FEET FROM THE NORTHEAST CORNER OF SAID LOT 11; THENCE S11°04'34"W, A DISTANCE OF 186.33 FEET; THENCE S30°43'39"W, A DISTANCE OF 161.21 FEET; THENCE S06°27'58"W, A DISTANCE OF 162.15 FEET; THENCE S08°36'31"W, A DISTANCE OF 120.65 FEET; THENCE S11°24'13"E, A DISTANCE OF 19.50 FEET TO THE NORTH RIGHT OF WAY LINE OF S.W. HERMAN ROAD (40 FEET WIDE).

STAFF REPORT
CITY OF TUALATIN

TO: Tualatin Planning Commissioners

FROM: Charles Benson, Associate Planner

DATE: 11/16/2017

SUBJECT: Consideration of a Variance to the Wireless Communication Facility (WCF) Separation Requirement for the POR Durham project in the Light Manufacturing (ML) Planning District at 10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 000800) (VAR-17-0001) (RESO TDC 609-17).

ISSUE BEFORE TPC:

The issue before the Tualatin Planning Commission (TPC) is consideration of a Variance request for a Wireless Communication Facility (WCF), POR Durham, to locate at 10290 SW Tualatin Road within 1,500 feet of an existing WCF. A separate Architectural Review decision will review the construction of a new 100-foot-tall monopole with antennas mounted at the top and opportunities for ancillary ground equipment. The existing WCF is located at 10699 SW Herman Road approximately 750 feet southwest of the proposed WCF location (see Attachment A).

RECOMMENDATION:

Staff recommends that the Tualatin Planning Commission (TPC) consider the staff report and supporting attachments and grant a variance based on the analysis and findings of the variance criteria.

EXECUTIVE SUMMARY:

Acom Consulting, Inc. proposes to construct a new unmanned wireless communication facility (WCF) on behalf of Lendlease (US) Telecom Holdings LLC - c/o PI Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. on the southwest corner of 10290 SW Tualatin Road. The proposed WCF would include a new 100-foot monopole support tower with antennas mounted at the top and opportunities for ancillary ground equipment including equipment cabinets, natural gas generator, cabling and ice bridge will be located below in a new 25' x 48' secure fenced lease area surrounding the tower. It is anticipated that the proposed WCF will generate approximately 1-2 visits per month from a site technician.

The proposed WCF would be located on an approximately 3.6-acre parcel (Washington County Tax Lot 2S1 23B 000800), the southern of two lots that comprise the entire Tote 'N Stow property. The Tote 'N Stow provides a range of covered and open storage services for recreational vehicles and the proposed WCF would be located on a paved area in the southwest corner of the project site and would not affect existing storage operations. The subject lot and neighboring properties on all sides are located in the City of Tualatin's Light

Manufacturing (ML) Planning District, which generally extends northward to SW Tualatin Road, eastward to SW 100th Court, southward to SW Herman Road, and westward to SW 108th Avenue.

A pre-application conference for this project was held on March 23, 2017. A neighborhood/developer meeting—as required by Tualatin Development Code (TDC) 31.063—was held on May 10, 2017, commencing at 5:30 PM at the Juanita Pohl Center, 8513 SW Tualatin Road, Tualatin, OR 97062. Meeting attendees included members from the project team, one representative from the City of Tualatin, and 14 members from the community.

As the proposed WCF would be located within 1,500 feet of an existing WCF at 10699 SW Herman Road, the proposed WCF requires a variance by the Tualatin Planning Commission (TPC) from the provisions of Tualatin Development Code (TDC) 73.470(9), which requires a 1,500-foot separation between WCFs (see Attachment B, Variance Application).

As stated in TDC Section 33.025(1): "(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b)." The applicant has chosen to demonstrate compliance with TDC Section 33.025(1)(a)(i) through (iii), and staff have reviewed the application materials included pertinent excerpts in Attachment C, Analysis & Findings, a summary of which is included below.

To grant the requested variance, the TPC must find the applicant has demonstrated compliance with the following:

TDC 33.025(1)(a): Coverage and Capacity

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not denied. The needed capacity or coverage shall be documented with a Radio Frequency report.

The applicant states that the potential sites outside of the 1,500-foot radius from the existing WCF at 10699 SW Herman Road were eliminated from consideration due to the lack of adequacy of service improvements from these locations and their close proximity to residential areas where these facilities are not permitted or where visual impacts may occur. The applicant also noted that the existing WCF at 10699 SW Herman Road was not a suitable location due to interference from trees surrounding this site (which would affect coverage) and the applicant provided a RF Engineer Interference Letter in addition to the required RF report.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider.

The applicant states that modifications to the existing WCF at 10699 SW Herman Road required to host the proposed antennas would result in greater impacts than those of constructing an entirely new monopole structure at the proposed Tote 'N Stow site, namely increasing the height of the 146-foot-tall existing WCF (which required a variance to permit its construction in 2000) or the topping or removal of trees that were preserved as a condition of that variance (VAR-99-02). The maximum permitted height of WCFs in the Light Manufacturing (ML) Planning

District is 100 feet and the proposed WCF would not require a height variance.

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Staff has confirmed via study area reconnaissance that no such structures exist in the immediate area, noting that maximum structure height in ML Planning Districts (outside of flagpoles and WCFs) is 50 feet.

Staff finds that VAR-17-0001 meets the criteria of TDC 33.025(1)(a).

Staff received one public comment letter voicing concerns about this proposal prior to the scheduled public hearing for this application, which is included as Attachment E.

OUTCOMES OF DECISION:

Approval of VAR-17-0001 and Resolution TDC 609-17 would result in the following:

- Allows the applicant to locate a Wireless Communication Facility (WCF) at 10290 SW Tualatin Road; and
- Allows staff to review an Architectural Review (AR) for the proposed WCF project with an appropriate location.

Denial of VAR-17-0001 would result in the following:

- Prohibits the applicant from locating a WCF at 10290 SW Tualatin Road.

ALTERNATIVES TO RECOMMENDATION:

The Tualatin Planning Commission (TPC) has three options:

1. Approve the proposed variance (VAR-17-0001);
2. Deny the proposed variance with findings that state which criteria in Tualatin Development Code (TDC) 33.025(1) the applicant fails to meet; or
3. Continue the discussion of the proposed variance and return to the matter at a later date.

FINANCIAL IMPLICATIONS:

The Fiscal Year 2017/18 budget allocated revenue to process current planning applications, and the applicant submitted payment per the City of Tualatin Fee Schedule to process the application.

Attachments: Attachment A - Vicinity Map
Attachment B - Variance Application
Attachment C - Analysis & Findings
Attachment D - Powerpoint Presentation
Attachment E - Public Comments

POR DURHAM WIRELESS COMMUNICATION FACILITY

VARIANCE APPLICATION

ATTACHMENT A: VICINITY MAP

City of Tualatin
www.tualatinoregon.gov

APPLICATION FOR VARIANCE

Information			
Name: Reid Stewart		Title: Consultant/Agent	
Company Name: Acom Consulting, Inc.			
Current address: 4015 SW Battaglia Avenue			
City: Gresham	State: OR	ZIP Code: 97080	
Phone: 503.720.6526	Fax: N/A	Email: reid.stewart@acomconsultinginc.com	

Applicant			
Name: Brandon Olsen		Company Name: Lendlease (US) Telecom Holdings LLC c/o PI Tower Development LLC	
Address: 909 Lake Carolyn Parkway			
City: Irving	State: TX	ZIP Code: 75039	
Phone: 503.951.7515	Fax: N/A	Email: brandon.olsen@pitowers.com	
Applicant's Signature: See attached LOA		Date:	

Property Owner			
Name: TOTE-N-STOW INC. - Joana Freedman			
Address: 10290 SW Tualatin Road			
City: Tualatin	State: OR	ZIP Code: 97062	
Phone: 503.692.3930	Fax: N/A	Email:	
Property Owner's Signature: See attached LOA		Date	
(Note: Letter of authorization is required if not signed by owner)			

Architect			
Name: Rick Matteson			
Address: 5200 SW Meadows Road, Suite 150			
City: Lake Oswego	State: OR	ZIP Code: 97035	
Phone: 425.209.6723	Fax: N/A	Email: rick.matteson@acomconsultinginc.com	

Landscape Architect			
Name: N/A			
Address:			
City:	State:	ZIP Code:	
Phone:	Fax: N/A	Email:	

Engineer			
Name: TBD			
Address:			
City:	State:	ZIP Code:	
Phone:	Fax: N/A	Email:	

Project			
Project Title: POR Durham			
Address: 10290 SW Tualatin Road			
City: Tualatin	State: OR	ZIP Code: 97062	
Brief Project Description: New 100' monopole associated with new wireless communications facility			
Proposed Use: Wireless communications facility			

Value of Improvements:
$130,000

AS THE PERSON RESPONSIBLE FOR THIS APPLICATION, I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION ABOVE, ON THE FACT SHEET, AND THE SURROUNDING PERTY OWNER MAILING LIST IS CORRECT. I AGREE TO COMPLY WITH ALL APPLICABLE CITY AND COUNTY ORDINANCES AND STATE LAWS REGARDING BUILDING CONSTRUCTION AND LAND USE.	
Applicant's Signature:	Date:

Office Use		
Case No:	Date Received:	Received by:
Fee: Complete Review:	Receipt No:	
Application Complete as of:	ARB hearing date (if applicable):	
Posting Verification:	6 copies of drawings (folded)	
1 reproducible 8 ½" X 11" vicinity map	1 reproducible 8 ½" X 11" site, grading, LS, Public Facilities plan	
Neighborhood/Developer meeting materials		

Revised: 6/12/14

APPLICATION FOR
VARIANCE

UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY AT:

10290 SW Tualatin Road
Tualatin, OR 97062

Prepared By

Date
October 03, 2017

Project Name
POR Durham

Applicant:	Lendlease (US) Telecom Holdings LLC c/o PI Tower Development LLC 909 Lake Carolyn Parkway Irving, TX 75039
Co-Applicant:	Verizon Wireless (VAW), LLC dba, Verizon Wireless 5430 NE 122nd Avenue Portland, OR 97230
Representative:	Acom Consulting, Inc. Reid Stewart 5200 SW Meadows Road, Suite 150 Lake Oswego, OR 97035
Property Owner:	Tote 'N Stow, Inc. 10290 SW Tualatin Road Tualatin, OR 97062

Project Information:

Site Address:	10290 SW Tualatin Road, Tualatin, OR 97062
Parcel:	2S123B000800
Parcel Area:	3.63 acres
Zone Designation:	ML (Light Manufacturing Planning District)
Existing Use:	Storage Facility
Project Area:	1,200 square foot lease area (25' x 48' fenced equipment area)

Chapter 33: Variances

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.

(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not

denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Response: Verizon Wireless, the co-applicant, has done extensive research looking at opportunities in the area to collocate on existing towers or buildings, as that is always a preferred option when available. If an existing tower or structure is not available at the specified height or not attainable because of space constraints or unreliable structural design, then Verizon Wireless will propose a new tower. In this instance, there is one existing tower, the ATC tower, which is located outside of the search area designated as usable by Verizon Wireless' RF department, but within the 1,500-foot radius of the proposed facility. This tower is not viable as a solution to meet their coverage and capacity objectives due to the existing trees that would cause interference. There are no other existing towers available to collocate on within the area of interest thus a new tower is being proposed, which will in turn be available for other providers to collocate on in the future.

In order to meet the Verizon's coverage and capacity objectives, it is necessary to site a tower within the search ring provided by Verizon's RF department as shown below. Moving outside this search ring is technically not practicable and has adverse effects on providing the needed coverage and capacity objectives the tower is intended to provide, which include nearby high-traffic residential areas to the North. Siting outside the search ring can also create interference with other nearby network sites where coverage may overlap.

The Applicant is requesting a variance to the 1,500-foot tower separation requirement. There is an existing 146-foot ATC monopole support structure outside of the search ring, approximately 750 feet to the SW of the proposed support tower, located at 10699 SW Herman Road. Per the tower owner, there is currently available space on the tower at the 100-foot level, however this is not high enough to avoid interference from multiple trees surrounding the tower and still meet coverage and capacity objectives to the North, as detailed in the attached RF Usage and Facility Justification Report and RF Engineer Interference Letter.

Locating the tower within the search ring and outside the 1,500-foot radius of the nearby existing ATC tower is also not a desirable alternative as it would mean locating in another part of the ML zone without existing screening or in the RML or RMH zone, where a conditional use permit would be required and where it would be very visible to nearby residential areas.

In addition, T-Mobile has also indicated that they intend on co-locating on the proposed WCF, if approved, as the existing ATC tower to the SW will not meet their coverage and capacity requirements either as noted in the attached Letter from T-Mobile RF.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and,

Response: The only existing monopole tower located within 1,500 feet of the proposed location cannot be modified as it is not designed to be extended to the necessary height required to avoid interference from the tall trees currently surrounding the tower. The existing tower would need to be removed and replaced with a new tower at least 20-30 feet taller to avoid interference unless the trees were to be removed or reduced in height to approximately the 100-foot level or lower.

Topping the trees would create undesirable visual impacts to nearby residential areas, whereas the proposed location is well screened to nearby residential areas to the North and does not require the removal or trimming of any existing trees. The topped trees would also create a negative visual impact on their own, as over a third of the height would need to be removed to avoid interference.

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps below.

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Response: Application has demonstrated compliance with Section 33.025(1)(a) above, however proposed location also meets this requirement and includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity.

(2) The City may grant a variance to the maximum allowable height for a WCF if the applicant demonstrates:

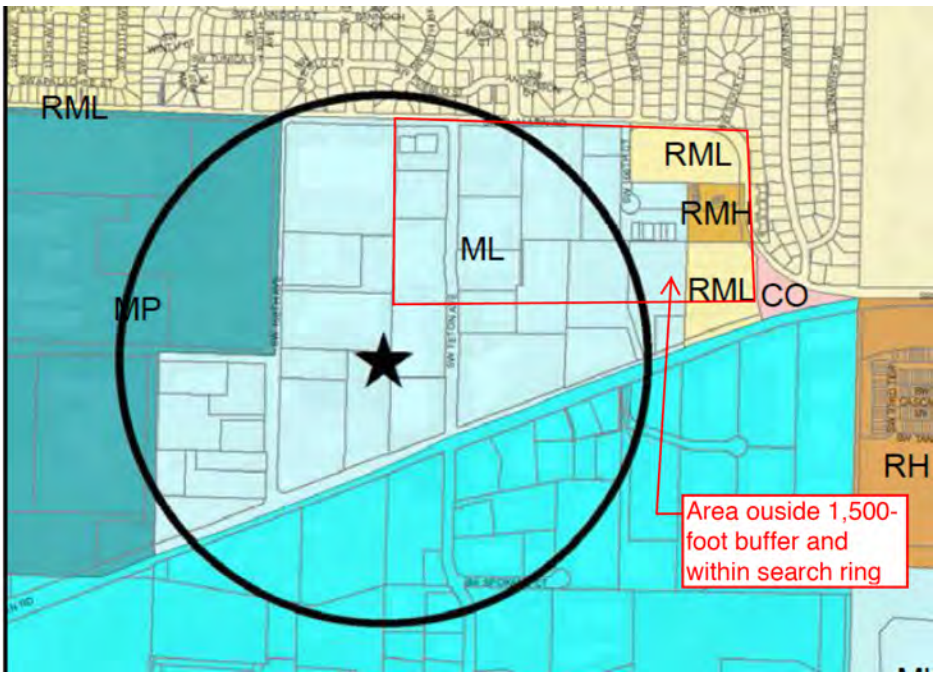
(a) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide at a height that meets the TDC requirements. The needed capacity or coverage shall be documented with a Radio Frequency report; and,

(b) The collocation report, required as part of the Architectural Review submittal, shall document that existing WCFs, or a WCF for which an application has been filed and not denied, cannot be modified to provide the capacity or coverage the tower is intended to provide.

Response: Not applicable – Applicant is not requesting a variance to the maximum allowable height for the proposed WCF.

VERIZON SEARCH RING

EXISTING TOWER 1,500' RADIUS WITH VERIZON SEARCH RING OVERLAP



½ MILE RADIUS OF PROPOSED TOWER

RF Usage and Facility Justification

Durham

Prepared by Verizon Wireless Walid Nasr

Jun 14, 2017

verizon

Introduction:

There are two main drivers that prompt the need for a new cell site. One is coverage and the other is capacity.

Coverage is the need to expand wireless service into an area that either has no service or bad service. The request for service often comes from customers or emergency personnel. Expansion of service could mean improving the signal levels in a large apartment complex or new residential community. It could also mean providing new service along a newly built highway.

Capacity is the need for more wireless resources. Cell sites have a limited amount of resources to handle voice calls, data connections, and data volume. When these limits are reached, user experience quickly degrades. This could mean customers may no longer be able to make/receive calls nor be able to browse the internet. It could also mean that webpages will be very slow to download.

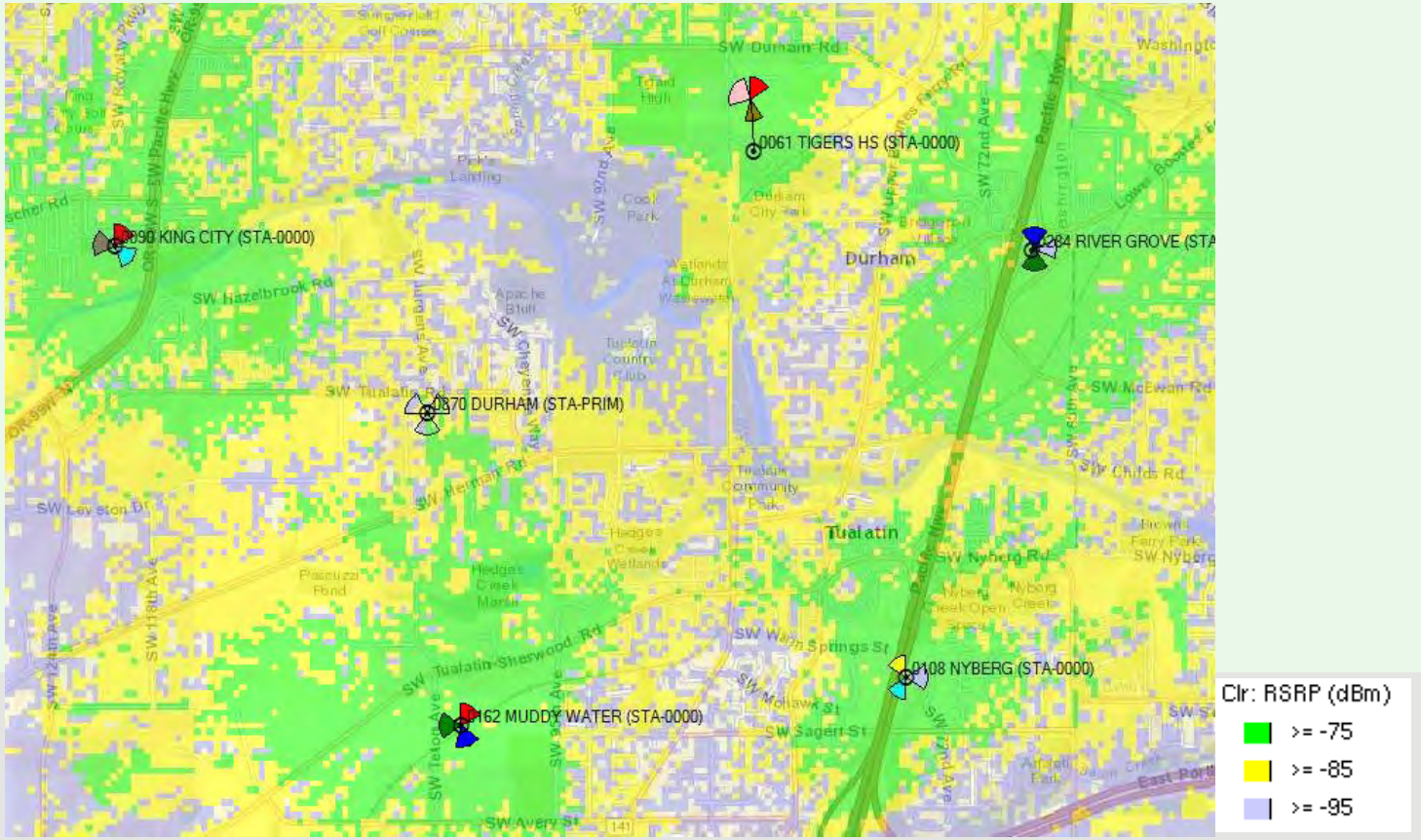
verizon

Capacity is the amount of resources a cell site has to handle customer demand. We utilize sophisticated programs that use current usage trends to forecast future capacity needs. Since it takes an average of (1-3) years to complete a cell site project, we have to start the acquisition process several years in advance to ensure the new cell site is in place before the existing cell site hits capacity limits.

Location, Location, Location. A good capacity cell site needs to be in the center of the user population which ensures even traffic distribution around the cell. A typical cell site is configured in a pie shape, with each slice (aka. sector) holding 33% of the resources. Optimal performance is achieve when traffic is evenly distributed across the 3 sectors.

Coverage Area of Existing Site

The proposed Durham site is a capacity site. This site will offload the existing sites King City, Muddy Water, TigerHS.

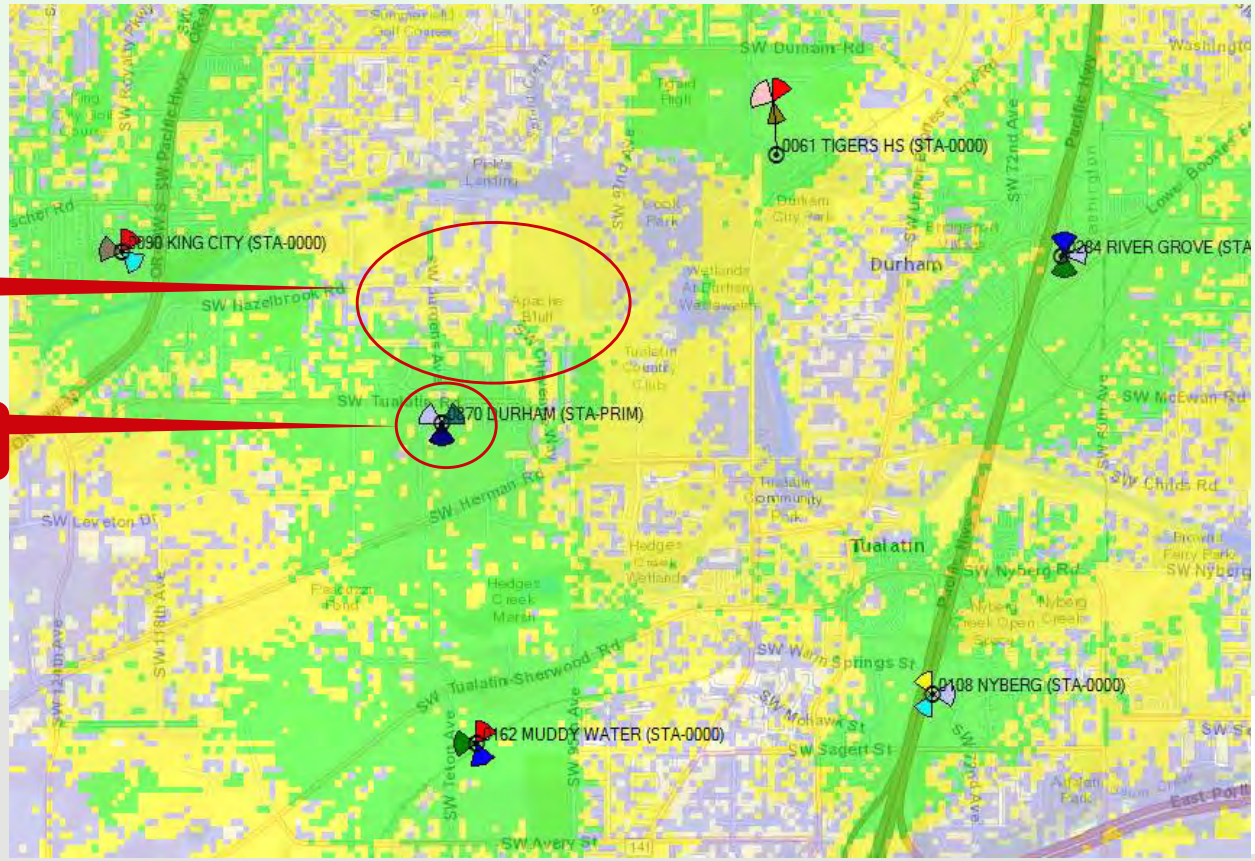


Coverage Area Offloaded by New Site

The proposed Durham site is a capacity site. This site will offload the existing sites King City, Muddy Water, TigerHS.

Residential area

Durham

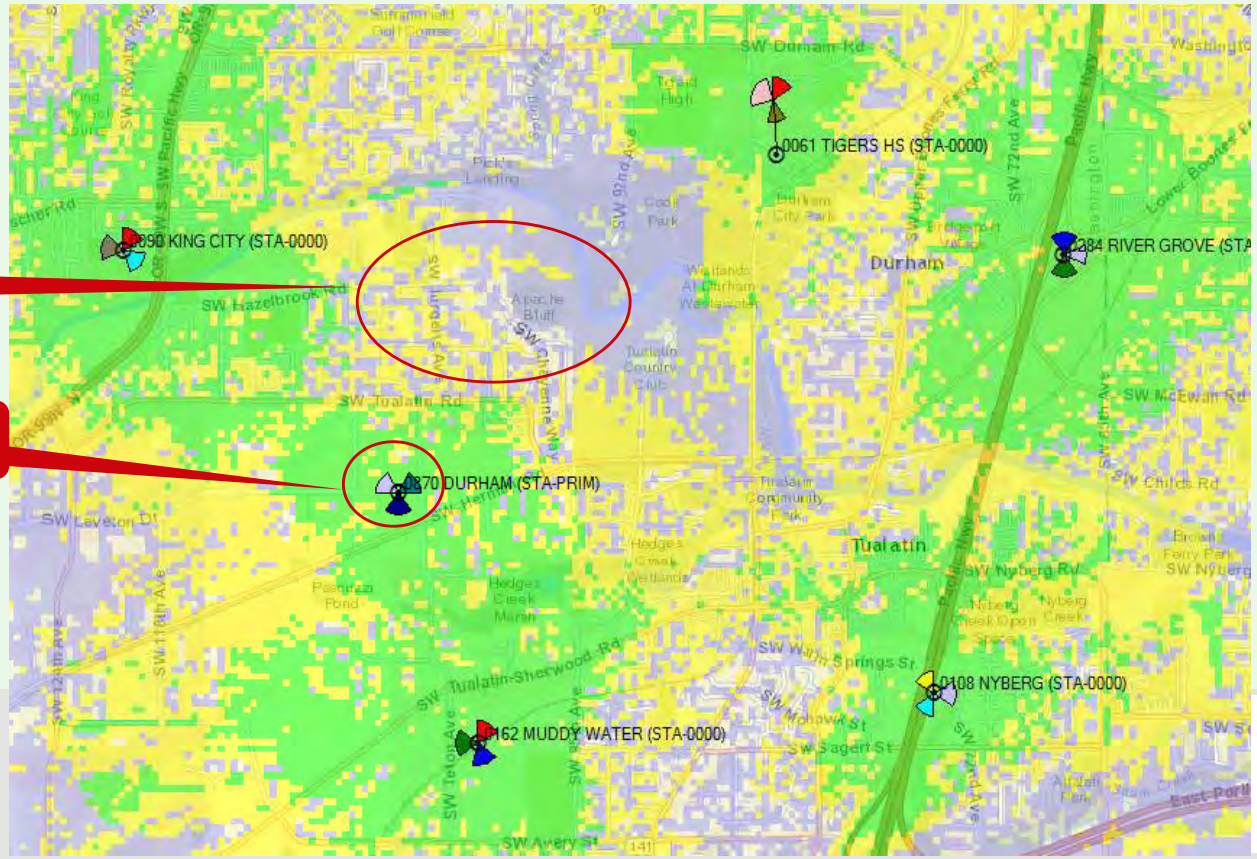


Coverage Area Offloaded by New Site at New Proposed Location

The proposed Durham site is a capacity site. This site will offload the existing sites King City, Muddy Water, TigerHS.

Residential area

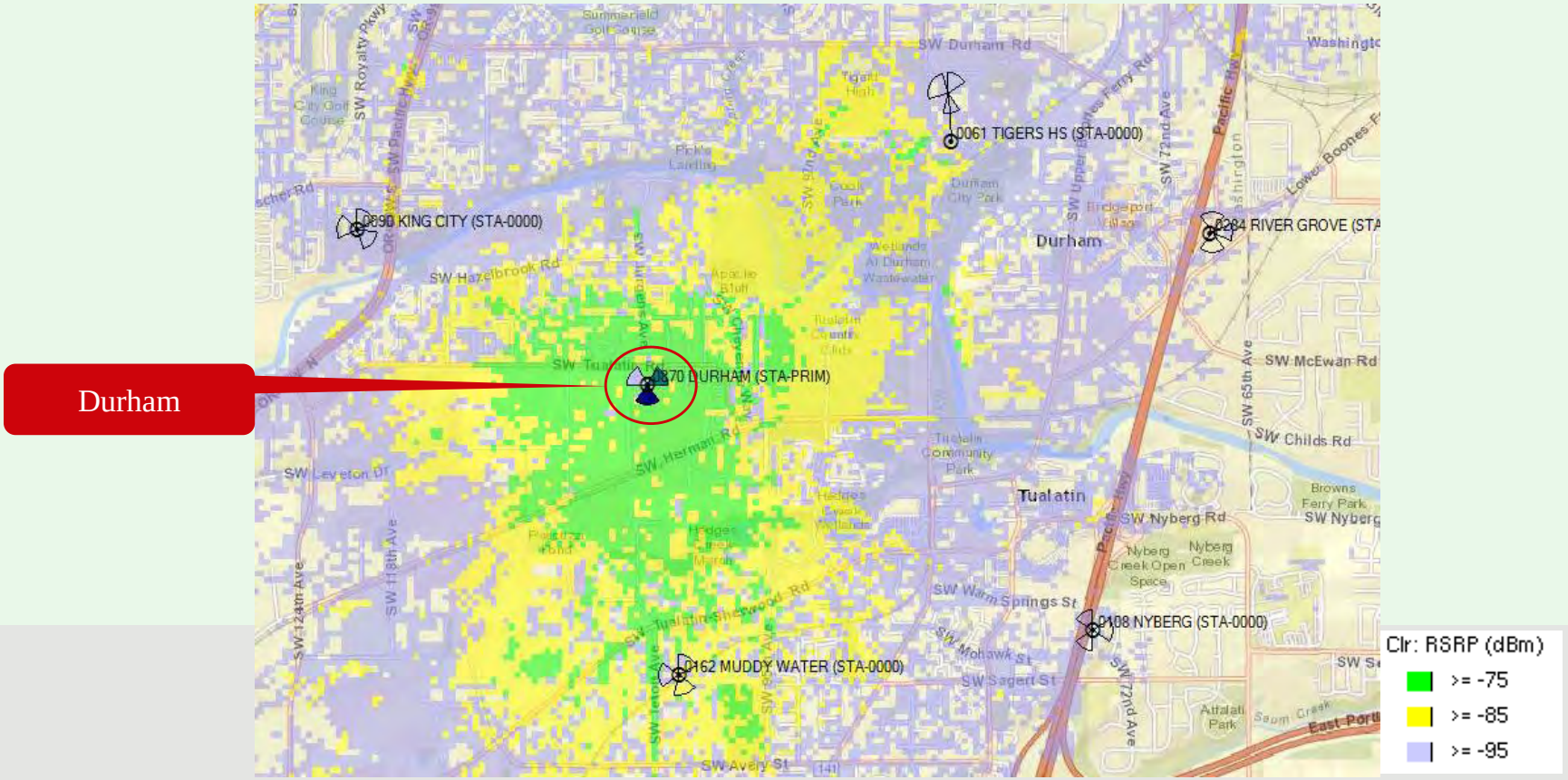
Durham



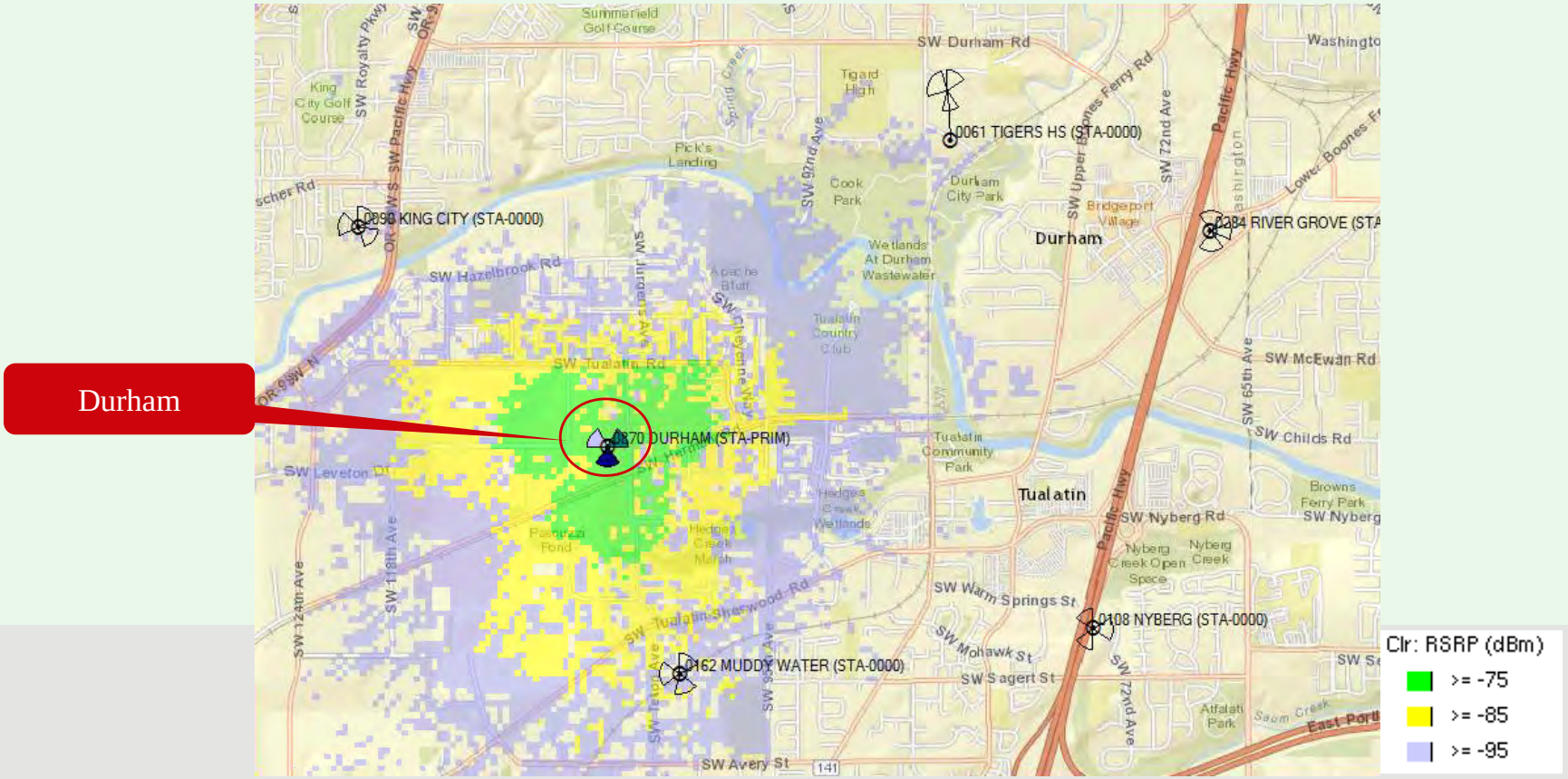
Marginal coverage in residential area due to surrounding trees at existing ATC tower

verizon

Coverage with Durham Site



Coverage with Durham Site at New Proposed Location



Need Case for: Durham

Summary: The existing sites King City, Muddy Water, TigerHS cannot carry the data traffic that exists in the area it serves.

Detail below:

- Exact data about sites is proprietary and cannot be disclosed due to competitive reasons.

- The existing cell sites King City, Muddy Water, TigerHS are forecasted to reach capacity in the near future.

- The new cell site Durham will provide additional resources to existing sites. It will take some users off of existing sites, which will alleviate the capacity constraint.

- This will improve customer experience (faster webpage downloads and fewer drop calls).

- Without the new site Durham, existing sites in area will reach capacity which will negatively impact customer's ability to make/receive calls and browse the internet.

verizon

Andrew H. Thatcher
Environmental Health Physics

July 13, 2017

To:
Acom Consulting, Inc.
5200 SW Meadows Rd
Suite 150
Lake Oswego, OR 97035

Acom consulting has requested that I review the existing antenna site at 10699 SW Herman Road, Tualatin OR, and evaluate the interference potential due to the existing tree canopy as shown in Figure 1. In performing this evaluation I'll review the basics of wireless transmission, what cellular technology can compensate for and what results in a deficient site. Included in the review is Verizon's propagation models[1] for both their proposed Durham site and the existing ATC tower.

In a perfect world for wireless transmission, an un-attenuated radio signal would be sent by the antenna and received by the user without any interference. This is rarely the case as buildings, hills and trees all combine to make the signals propagate along multiple pathways. The three primary components of signal propagation paths are reflection, diffraction and scattering. Reflection occurs from large smooth surfaces such as roadways or buildings. Diffraction occurs when a large object is in the direct line of sight path, such as a hill or building. Scattering occurs when the radio waves contact objects similar or smaller than the wavelength of the frequency of interest. For wireless transmission that can be from 700 MHz (~17" wavelength) to 2100 MHz (~6" wavelength). Scattering would be the dominant interaction with trees while all sources of interference serve to attenuate the signal to some degree with each interaction.

So the presence of trees creates scattering which causes signal distortion in addition to signal attenuation. The transmitted signals received by the end user (a person's cell phone) will consist not only of the original (un-attenuated) signal but also several secondary signals traveling on different paths. These multi-path signals, since they are a result of scattering (since we're concerned with the effects of trees), travel a longer signal path and therefore arrive at an end user (cell phone) later than the original un-attenuated signal. These late signal arrivals become interference and can result in distortion of the original signal. This type of distortion is frequency dependent with greater distortion occurring at higher frequencies. Multi-path signals are a common occurrence in our environment but such multi-path signals are due to stationary objects such as homes, rooftops, and even trees at a distance. Such distortions can readily be corrected due to the use of a RAKE[2] receiver in the phone. However, for a tree canopy in a near field environment such as in Figure 1 the obstruction is not constant but in fact continuously

[1] Propagation modeling provided by W. Nasr, Verizon RF Engineer, 7/5/2017.
[2] Briefly, RAKE receivers are used in the receiver phones of Code Division Multiple Access (CDMA) systems. The receiver collects and treats each time shifted version of the original signal as an independent signal and then combines them into a single signal provided the delay is not too long.

522 NORTH E ST • TACOMA, WA • 98403
PHONE: 253.617.1449 • THATCHER.DREW@COMCAST.NET

changing. The result is scattered signals that may be stronger than direct signal due to signal attenuation since the tree canopy density is not uniform and the signals going through the tree will be attenuated differently. Further, the motion of the trees with wind presents a continuously changing foliage density that results in selective signal fading with time. For the tree canopy shown in Figure 1, the near field environment could easily result in signal attenuation of 10 dB to as much as 20 dB. Combine this attenuation with the constantly changing signal fading environment and the result in a constantly changing delay (due to wind) that the RAKE receiver would have difficulty separating as noise. Reviewing Figure 1 again and one can see that the antennas are near the tops of the trees so the tree movement would include swaying of the trees in addition to individual branch movements.

Figure 2 is the predicted propagation to the residential location of interest from the existing antenna located within the trees. Figure 3 shows the same residential area with the antenna located in the proposed location. Both figures are provided to support the previous qualitative analysis. The figures show that the Reference Signal Received Power (RSRP) is at least 10 dBm lower for each location. Note that this analysis does not consider the effect of wind.

Trees at a distance from the antennas may present acceptable interference as the overall impact could be managed. For antennas placed well beneath the tree canopy in a near field environment affecting all three radiating sectors, it would be difficult to envision a wireless network that could compensate for these factors, the presence of wind, and remain effective in terms of capacity for the site and successful integration with the surrounding wireless sites. The attenuation and scattering of the signal through the trees would result in a lower transmitted power level that could not be improved by increasing the power as that would only serve to also increase the power of the multipath signals. In short, such a setup in the trees would present a problem regardless of the transmitted power level.

To summarize, the existing ATC tower is not a suitable antenna site without substantial modification based on the information provided in this report.

Figure 1: Photo of existing tower surrounded by a dense tree canopy in a near field environment

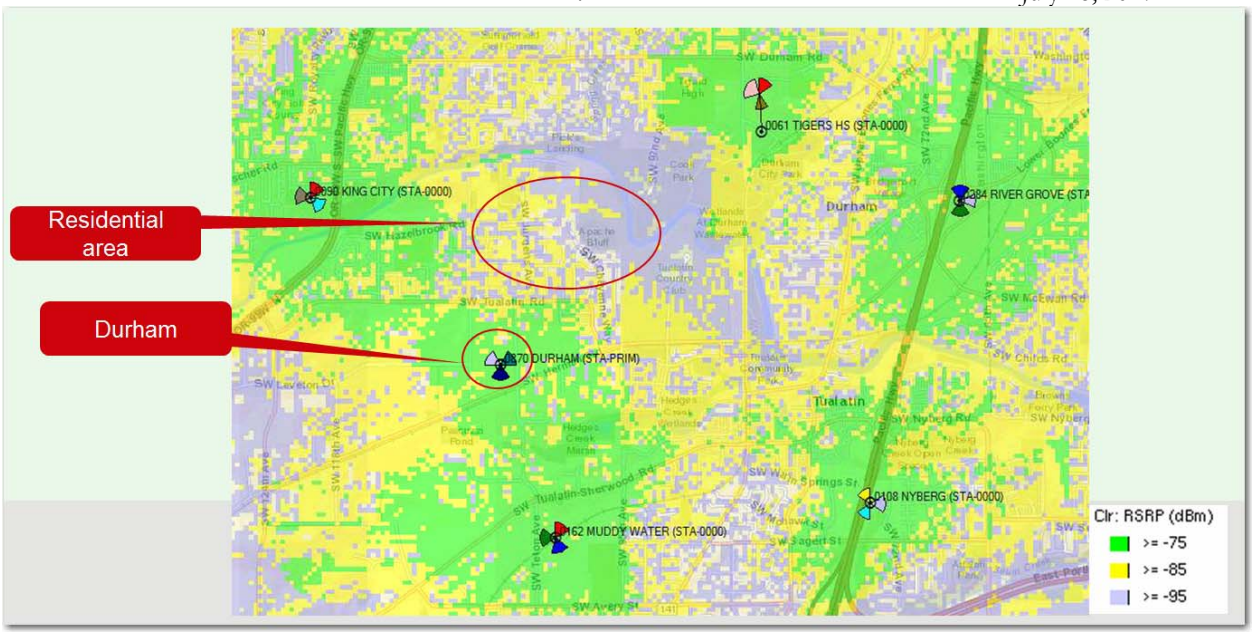


Figure 2: Predicted propagation model showing the residential area of interest from the existing antenna.

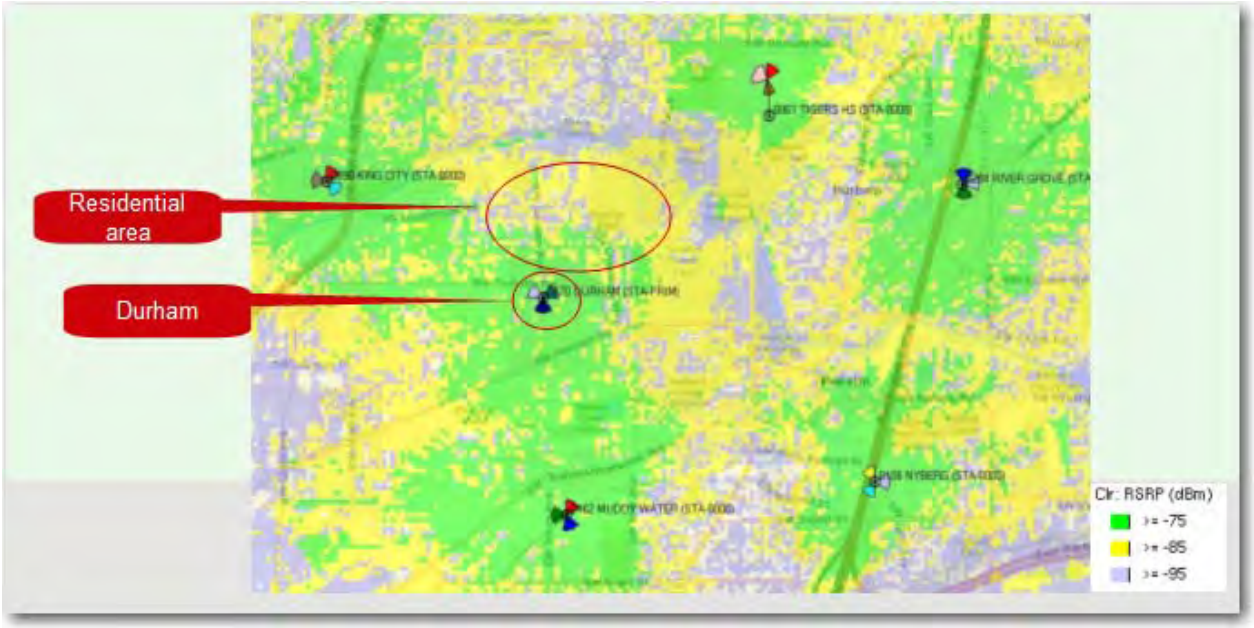


Figure 3: Predicted propagation model showing the RSRP for the residential area of interest with the proposed antenna location.

Qualifications

I am a member of the IEEE, the Institute of Electrical and Electronics Engineers as well as a member of the Health Physics Society. I am a board certified health physicist with a masters in health physics from the Georgia Institute of Technology. I have over 29 years of experience in the evaluation of both ionizing and non ionizing radiation sources. I am a consultant to the ACGIH Threshold Limit Values for Physical Agents Committee as well as a non ionizing subject matter editor for the Health Physics Journal.

Regards,

Andrew H. Thatcher, MSHP, CHP

T-Mobile

September 12, 2017

RE: PI Tower Development Project OR-Tualatin-Durham / 10290 SW Tualatin Road

To Whom It May Concern:

T-Mobile West LLC has been seeking to address a significant gap in network coverage in and around the subject vicinity. After assessing the viability of the existing infrastructure in the area, we have identified the proposed PI Tower Development wireless telecommunications facility to be located at 10290 SW Tualatin Rd in Tualatin, Oregon, as the only candidate that will address and eliminate this network gap in coverage. As a result, once the site is completed, T-Mobile intends to proceed with entering into a lease agreement with PI Tower Development and ultimately install equipment on site.

Best regards,

Julio Brown
Sr. RF Engineer
T-Mobile West LLC
Portland, Oregon

T-Mobile USA, Inc.
Fax (503) 736-5014
1600 NE Irving St., Suite 510
Portland, OR 97232

POR DURHAM WIRELESS COMMUNICATION FACILITY (WCF)

VARIANCE APPLICATION (VAR-17-0001)

ATTACHMENT C: ANALYSIS AND FINDINGS

The issue before the Tualatin Planning Commission (TPC) is consideration of a Variance (VAR) request for Wireless Communication Facility (WCF) separation that would allow the construction of a new 100-foot-tall monopole with antennas mounted at the top and opportunities for ancillary ground equipment within 1,500 feet of an existing WCF located at 10699 SW Herman Road approximately 800 feet southwest of the proposed WCF location. The proposed WCF would be located at 10290 SW Tualatin Road (Tax Map/Lot: 2S1 23B 000800) on a property owned by Tote 'N Stow and operates as a storage facility for recreational vehicles.

In order to grant the proposed variance, the request must meet the approval criteria of Tualatin Development Code (TDC) Section 33.025(1). The applicant prepared a narrative that addresses the criteria, which is included within the application materials (Attachment B), and staff has reviewed this and other application materials and included pertinent excerpts below.

The following materials and descriptions are based largely on the applicant's narrative; staff has made some minor edits. Staff comments, findings, and conditions of approval are in Italic font.

Section 33.025 – Criteria for Granting a Variance for a Wireless Communication Facility.

No variance to the separation or height requirements for wireless communication facilities shall be granted by the Planning Commission unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities shall be limited to this section, and shall not include the standard variance criteria of Section 33.020, Conditions for Granting a Variance that is not for a Sign or a Wireless Communication Facility.

(1) The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below.

(a) coverage and capacity.

(i) It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility or from the proposed location of a wireless communication facility for which an application has been filed and not denied. The needed capacity or coverage shall be documented with a Radio Frequency report;

Applicant Response: Verizon Wireless, the co-applicant, has done extensive research looking at opportunities in the area to collocate on existing towers or buildings, as that is always a preferred option when available. If an existing tower or structure is not available at the specified height or not attainable because of space constraints or unreliable structural design, then Verizon Wireless will propose a new tower. In this instance, there is one existing tower, the ATC tower, which is located outside of the search area designated as usable by Verizon Wireless' RF department, but within the 1,500-foot radius of the

proposed facility. This tower is not viable as a solution to meet their coverage and capacity objectives due to the existing trees that would cause interference. There are no other existing towers available to collocate on within the area of interest thus a new tower is being proposed, which will in turn be available for other providers to collocate on in the future.

In order to meet the Verizon's coverage and capacity objectives, it is necessary to site a tower within the search ring provided by Verizon's RF department as shown below. Moving outside this search ring is technically not practicable and has adverse effects on providing the needed coverage and capacity objectives the tower is intended to provide, which include nearby high-traffic residential areas to the North. Siting outside the search ring can also create interference with other nearby network sites where coverage may overlap.

The Applicant is requesting a variance to the 1,500-foot tower separation requirement. There is an existing 146-foot ATC monopole support structure outside of the search ring, approximately 750 feet to the SW of the proposed support tower, located at 10699 SW Herman Road. Per the tower owner, there is currently available space on the tower at the 100-foot level, however this is not high enough to avoid interference from multiple trees surrounding the tower and still meet coverage and capacity objectives to the North, as detailed in the attached RF Usage and Facility Justification Report and RF Engineer Interference Letter.

Locating the tower within the search ring and outside the 1,500-foot radius of the nearby existing ATC tower is also not a desirable alternative as it would mean locating in another part of the ML zone without existing screening or in the RML or RMH zone, where a conditional use permit would be required and where it would be very visible to nearby residential areas. In addition, T-Mobile has also indicated that they intend on co-locating on the proposed WCF, if approved, as the existing ATC tower to the SW will not meet their coverage and capacity requirements either as noted in the attached Letter from T-Mobile RF.

Staff notes that the search ring is defined by the service provider based on their coverage and capacity objectives. As highlighted in the "RF Usage and Facility Justification" report, the proposed WCF is intended to improve service to the residential areas immediately adjacent to and on both sides of the Tualatin River (see Figures C-1 and C-2). Areas within the search ring but outside of the 1,500-foot radius of the existing WCF at 10699 SW Herman Road are either within or closer to residential planning districts which either prohibit completely or restrict heights of WCFs (see Figure C-3).

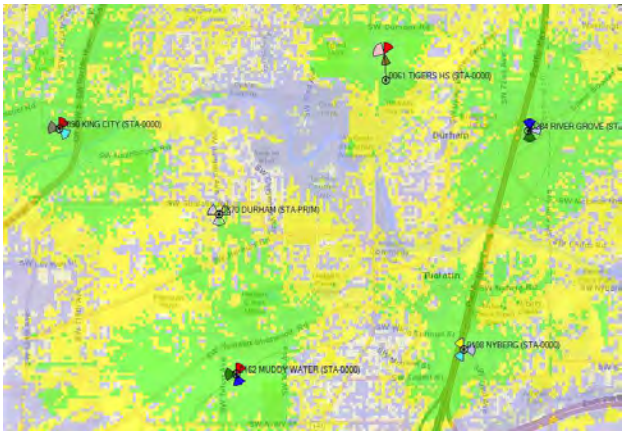


Figure C-1: Existing Coverage

Figure C-2: Proposed Coverage

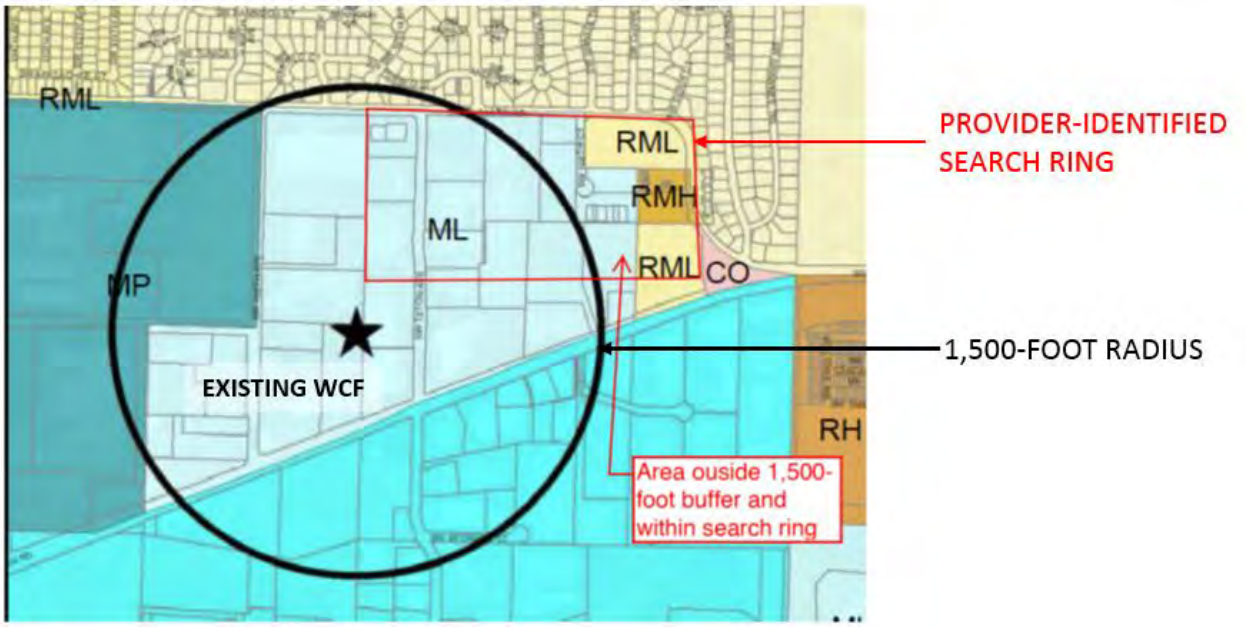


Figure C-3: Search Ring and 1,500-Foot Separate Overlap Map

Staff finds that this criteria is met.

(ii) The collocation report, required as part of the Architectural Review submittal, shall document that the existing WCFs within 1500 feet of the proposed WCF, or a WCF within 1500 feet of the proposed WCF for which application has been filed and not denied, cannot be modified to accommodate another provider; and

Applicant Response: The only existing monopole tower located within 1,500 feet of the proposed location cannot be modified as it is not designed to be extended to the necessary height required to avoid interference from the tall trees currently surrounding the tower. The existing tower would need to be removed and replaced with a new tower at least 20-30 feet taller to avoid interference unless the trees were to be removed or reduced in height to approximately the 100-foot level or lower.

Topping the trees would create undesirable visual impacts to nearby residential areas, whereas the proposed location is well screened to nearby residential areas to the North and does not require the removal or trimming of any existing trees. The topped trees would also create a negative visual impact on their own, as over a third of the height would need to be removed to avoid interference.

Based on the conditions at 10699 SW Herman Road, modifying the existing WCF to attach functioning antennas would require either an additional height variance for the existing WCF (which already received one to permit its construction in 2000) or a forced height reduction in the trees adjacent to the existing monopole. In the analysis and findings for the variance (VAR-99-02) that allowed the construction of the existing 146-foot-tall WCF, it was noted that one of the reasons for the granting of that variance was to preserve the grove of approximately 50 tall conifers at heights of 100 to 120 feet (the construction of the existing WCF resulted in the removal of 6 trees). VAR-99-02 included the following:

> *"The City as the landowner desires to retain the large conifer trees on the subject portion of the Operations Center property and requires that development such as the proposed communications facility disturb as few conifer trees on the site as possible. The applicant states that wireless RF*

signals must travel in an unobstructed path from the facility to the user. Because the tower and antennae are proposed to be located in the grove of 100'-120' tall conifers and the City as the property owner does not wish to have the obstructing trees removed, the antennae must be at a height greater than the height of the neighboring trees (with consideration of the future growth of the trees)."

As such, barring a reversal in the City's preference to not remove trees on its Operations Center site, the options for locating a new WCF in this area include either further increasing the height of the existing 146-foot-tall WCF (the maximum allowed WCF height in the Light Manufacturing [ML] Planning District is 100 feet) or constructing a new structure. The applicant is making the case that a new 100-foot-tall structure would result in less impacts than extending the height of the existing WCF at 10699 SW Herman Road.

Staff finds that this criteria is met.

(iii) There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

Applicant Response: No available buildings, light or utility poles, or water towers with adequate height to meet coverage objectives are located in the geographical search ring necessary to provide coverage. See Search Ring and ½ mile radius maps.

Staff notes that—through field visits—the applicant is correct in their assertion that there are no other structures of suitable height to attach antennas that would provide approximate coverage as the proposed WCF, also noting the maximum structure height (outside of flagpoles and WCFs) of 50 feet in the Light Manufacturing (ML) Planning District.

Staff finds that this criteria is met.

(b) site characteristics. The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

Applicant Response: Application has demonstrated compliance with Section 33.025(1)(a) above, however proposed location also meets this requirement and includes tall, dense evergreens trees that will screen at least 50% of the proposed monopole from adjacent residential areas. The proposed support tower is sited in the least intrusive location possible to cover the gap in coverage and capacity.

Staff notes that the applicant has chosen to demonstrate compliance with TDC Sections 33.025(1)(a)(i) through (iii) above; therefore, a compliance determination with TDC Section 33.025(1)(b) is not required and the standards in this section do not apply.

SUMMARY OF ANALYSIS AND FINDINGS

Based on the application materials and the analysis and findings presented above, staff finds that VAR-17-0001 meets all criteria of TDC 32.025(1)(a), "Criteria for Granting a Variance for a Wireless Communication Facility."

VAR-17-0001
POR DURHAM
WIRELESS COMMUNICATION FACILITY (WCF)

PURPOSE OF HEARING

- Consideration of a variance to allow a new wireless communication facility (WCF) within 1,500-feet of an existing WCF

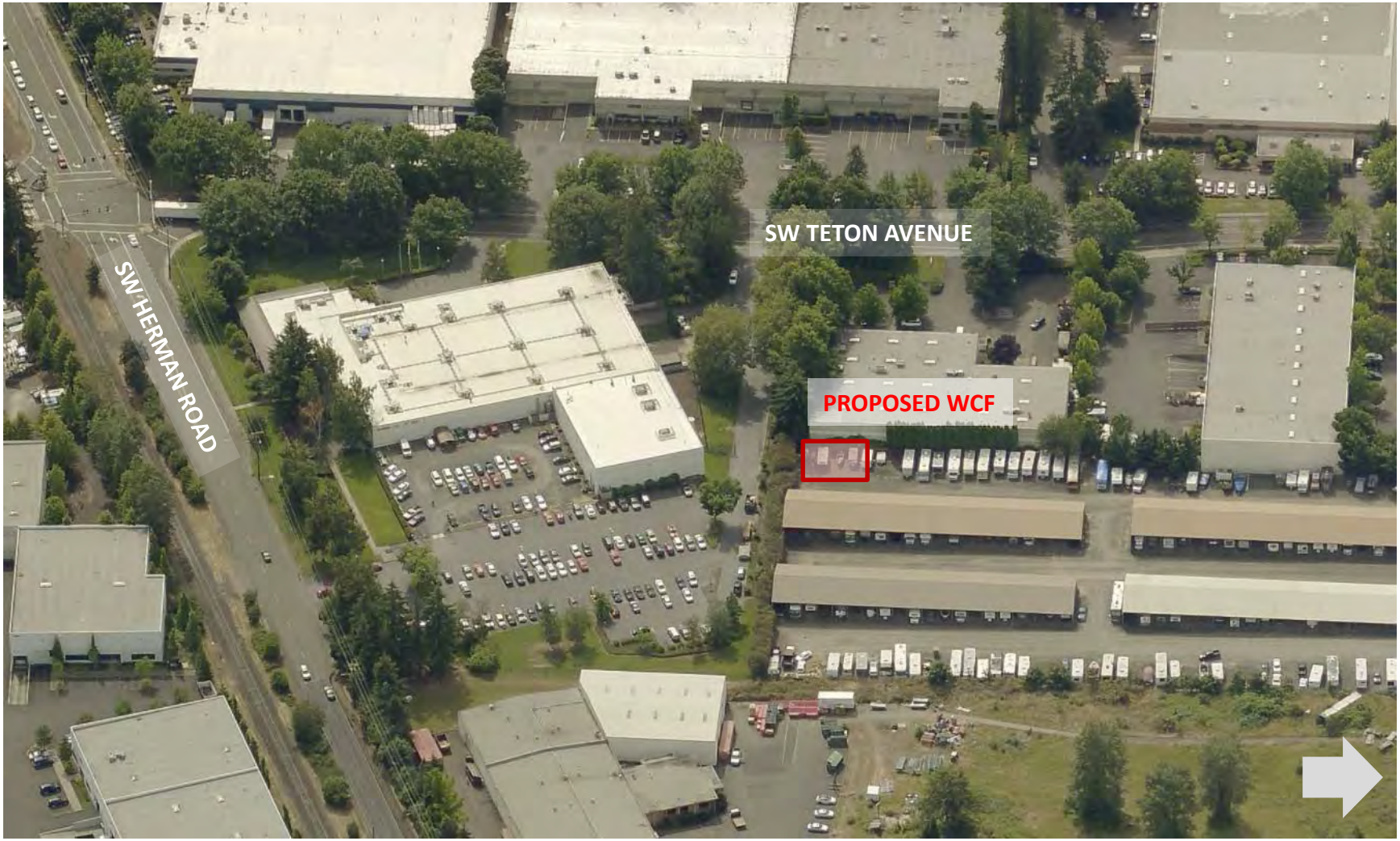
- Planning Commission must find that applicant demonstrates compliance with Tualatin Development Code (TDC) 33.025(1)(a) or 33.025(1)(b)

HEARING AGENDA

- Staff Presentation
- Applicant Presentation
- Public Comment
- Commission Deliberation and Decision

VAR-17-0001
POR DURHAM WCF

TUALATIN PLANNING COMMISSION
NOVEMBER 16, 2017



VAR-17-0001
POR DURHAM WCF

TUALATIN PLANNING COMMISSION
NOVEMBER 16, 2017

APPLICANT PROPOSAL

- Applicant proposes to locate a monopole/WCF on the Tote ‘N Stow property at 10290 SW Tualatin Road within 1,500 feet of an existing WCF

VARIANCE APPROVAL CRITERIA

TDC 33.025(1)(a)

The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below:

(a) Coverage and capacity; or

(b) Site characteristics.

VARIANCE APPROVAL CRITERIA

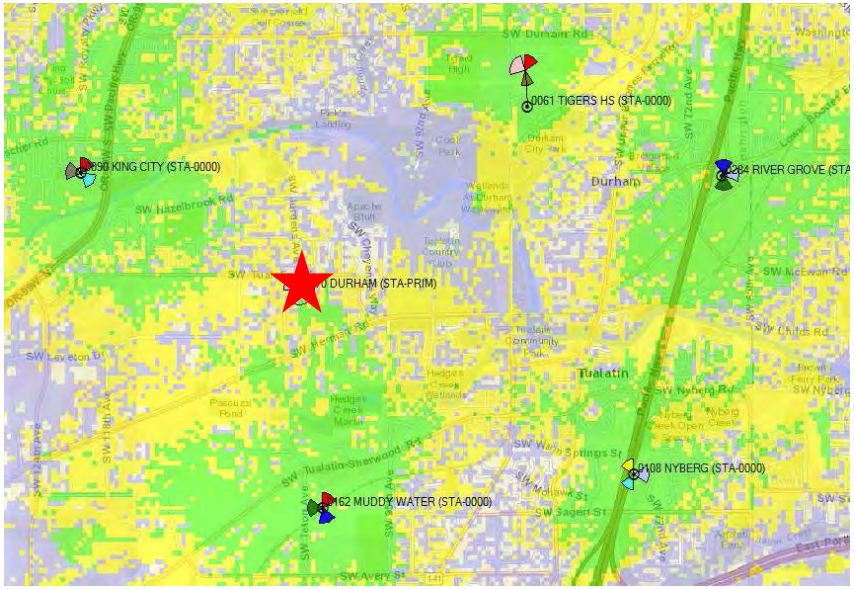
TDC 33.025(1)(a)(i)

It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide and locate the proposed tower on available sites more than 1,500 feet from an existing wireless communication facility.

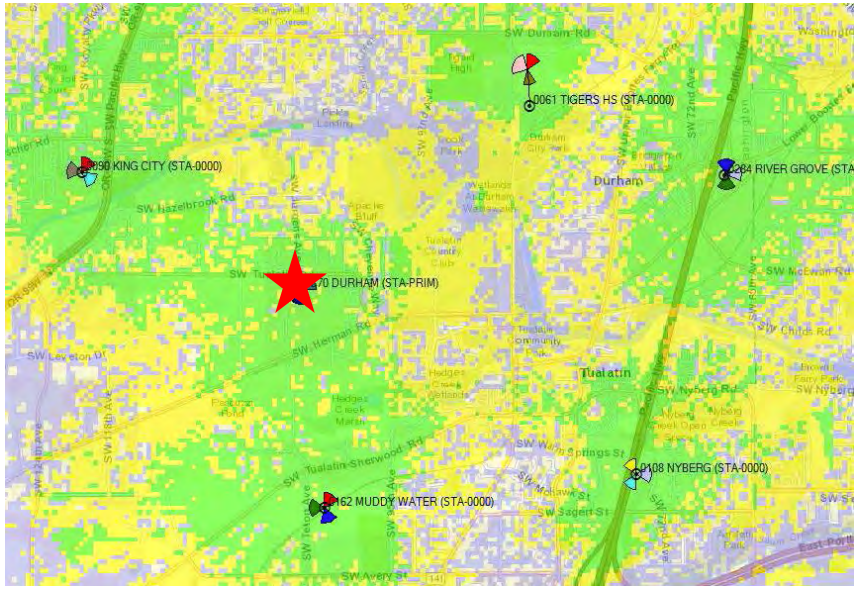
- *Staff finds this criterion is met.*

VARIANCE APPROVAL CRITERIA

TDC 33.025(1)(a)(i)



Existing Coverage



Proposed Coverage

VARIANCE APPROVAL CRITERIA

TDC 33.025(1)(a)(ii)

The collocation report shall document that the existing WCFs within 1,500 feet of the proposed WCF cannot be modified to accommodate another provider.

- *Staff finds this criterion is met.*

VARIANCE APPROVAL CRITERIA

TDC 33.025(1)(a)(ii)

Existing 146-foot-tall WCF at 10699 SW Herman Road

VARIANCE APPROVAL CRITERIA

TDC 33.025(1)(a)(iii)

There are no available buildings, light or utility poles, or water towers on which antennas may be located and still provide the approximate coverage the tower is intended to provide.

- *Staff finds this criterion is met.*

NEXT STEPS (IF APPROVED)

- Architectural Review (AR) of the physical elements of the proposed WCF

PLANNING COMMISSION OPTIONS

1. Approve VAR-17-0001 as drafted;
2. Deny VAR-17-0001 and cite which criteria applicant fails to meet; or
3. Continue discussion to a later date.


QUESTIONS
DISCUSSION
RECOMMENDATIONS

From:	Jason Rogers
To:	Charles Benson
Subject:	AR17-0010 POR Durham
Date:	Thursday, November 02, 2017 1:59:37 PM

Charles –

In response to the notice from the City of Tualatin, I wanted to send my comments as a property owner. Myself and another homeowner from my neighborhood plan to attend the meeting that is planned for 11/16/17 at the Juanita Pohl Center. In the event that something may eliminate attendance between now and 11/16/17, I'm sending so these are part of the record and discussion:

In reviewing the original notice dated 4/17/17 I became concerned about not only the facility but also the monopole. My first concern relates to the facility and equipment that has been described. More specifically the concern is for any increased commercial and truck / vehicle traffic at and around a largely residential area with a predominance of children. The second concern relates to the 100' monopole. As mentioned, this is a largely residential and low-rise industrial area so my concern as a property owner is any negative effect on property values with the construction of the tower which could become an eye-sore. Many of the marketing documents on the project have described the location consideration to include the aesthetic component and that the first priority would be a location that can be shielded by existing trees. Considering the aforementioned demographic of the area I find it hard to visualize where, around the Tote-N-Stow property one could "hide" what equates to a 9+ story building. Finally the last document I received outlined this as a Verizon project. I am not nor do I anticipate being a Verizon customer so if this facility or pole have any negative, aesthetic result (as I understand it) I would see no benefit.

Regards,

Jason Rogers
Agency Principal - AOA West Insurance, Inc.
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(503) 245-2049 fax
www.aoawest.com

November 29, 2017

VIA EMAIL

Planning Commission
City of Tualatin
Attn: Aquilla Hurd-Ravich
18880 SW Martinazzi Avenue
Tualatin, OR 97062
ahurd-ravich@tualatin.gov

Re: Variance for Wireless Communications Facility - 10290 SW Tualatin Rd.
Application No. VAR-17-0001
Applicant's Closing Argument

Dear Commissioners:

As you know, this firm represents the applicant for the above-referenced matter, Lendlease (US) Telecom Holdings, LLC, c/o PI Tower Development, LLC, Verizon Wireless and the property owner (the "Applicant"). Pursuant to ORS 197.763(6)(e), this letter constitutes the Applicant's final written argument. Since our November 22, 2017 letter already addresses many of the legal issues, this final written argument will focus on responding to American Tower Corporation's ("ATC") November 22, 2017 submission.

A. The ATC Tower is only approved for 130 feet and will require a new variance to extend it to 146 feet or more.

A critical component of ATC's argument is that ATC's existing tower (the "ATC Tower") has been approved up to 146 feet and it can extend the height of the 130-foot ATC Tower an additional 16 feet without any additional land use approvals. ATC's assertion is directly contrary to the express language in the City Council's variance approval for the ATC Tower (VAR-99-02).

The City Council approved the variance for the ATC Tower pursuant to Resolution No. 3672-50, dated January 24, 2000, and attached findings which clearly limited the height of the tower to 130 feet. *See* Staff Report, dated December 7, 2017, Attachment A, Exhibit A, p.19-20. The title for Resolution No. 3672-50 provides: "A RESOLUTION GRANTING A VARIANCE (VAR-99-02) TO ALLOW A 130' HIGH WIRELESS TELECOMMUNICATION TOWER WITH 16' ANTENNA * * *." Staff Report, Attachment A, Exhibit A, p.19. The Resolution further notes that the City Council was considering "the application of Nextel Communications and the City of Tualatin, for a variance from TDC 60.090(4) to allow a 130' high structure and 16' antenna * * *."

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Staff Report, Attachment A, Exhibit A, p.19. The City Council findings supporting the Resolution mirror this language, specifically referring to the variance application as a request for "a 130 foot wireless communications monopole tower with up to 16 ft. of antenna * * * ." Staff Report, Attachment A, Exhibit A, p.11.

Based on this express language in the City Council's Resolution and findings for the variance approval for the ATC Tower (VAR-99-02), there is no question that the approval was limited to a 130-foot tower. That is why the ATC Tower is currently 130 feet, as opposed to a 146-foot tower. Since the City has only approved a variance for a 130-foot tower, ATC will be required to obtain a new variance in order to extend the ATC Tower to 146 feet.

B. ATC will be required to obtain a new variance in order to remove the screening trees surrounding the ATC Tower.

As we explained in our November 22 letter, the City Council relied heavily on the screening effect of the surrounding trees to justify the variance when it approved it in 2000. In fact, the City Council specifically relied on these screening trees as one of the primary bases for determining compliance with approval criteria 1, 3 and 4. Staff Report, Attachment A, Exhibit A, p.13-15. For example, the City Council concluded that "[t]all trees such as the subject property will obscure the tower and visually mitigate the tower and antennae for persons viewing it from off site and from the residential areas to the north" and "[t]he location and siting of the proposed Nextel tower will minimize the visual impact of the facility by blending in with the trees and the tower's surroundings and meets Objectives 1 and 3." Staff Report, Attachment A, Exhibit A, p.13 & 15.

Since the variance approval specifically relied on these trees for screening and mitigating the visual impacts, ATC cannot remove these trees without obtaining a new variance or modification to the prior variance approval. Doing so would undermine one of the key justifications for the variance approval.

If the City were to conclude otherwise, it would establish a dangerous precedent for the City. Any applicant that proposed a tower on a site with screening trees and relied on those trees to justify the approval would be allowed to subsequently remove those same screening trees without any additional review. The City should not establish a new precedent that essentially allows an applicant to unilaterally change the very same site conditions that the City and neighbors relied on in reviewing and approving the original tower request.

C. ATC failed to establish that a new variance is feasible.

As noted above, ATC will be required to obtain a new variance whether it is proposing to increase the height of the tower and/or remove the trees. Since ATC will be required to obtain a new variance approval, at a minimum it was required to demonstrate that it is feasible to obtain such an approval. However, ATC failed to submit any analysis, evidence or information to demonstrate that a new variance is feasible.

In our November 22 submittal, the Applicant demonstrated why it is not feasible for ATC to obtain a new variance for a variety of reasons. ATC will need the City's consent to even request an increase in the height of the ATC Tower, which it failed to address. It is unlikely that the City will approve a height variance to substantially increase the height of an existing tower that already

significantly exceeds the height limits by 30 feet or 30%, or a proposal to remove virtually all of the screening trees the City relied on in its original approval. Nor can ATC satisfy Tualatin Development Code ("TDC") 33.025(2) because there is a pending application for a new tower that can accommodate the wireless communications facility without exceeding the 100-foot height limit.

Since ATC failed to address why it believes it is feasible to obtain a new variance and the Applicant demonstrated that it is not feasible, the only conclusion the Commission can reach is that it is not feasible. Absent some evidence or argument that a new variance approval is at least feasible, there is no evidentiary or legal basis for concluding that the ATC Tower can be modified to accommodate the new wireless communication facilities.

D. ATC failed to establish that a tree removal permit is feasible.

ATC was also required to demonstrate that it is feasible to obtain a tree removal permit. Similar to the variance issue, ATC failed to submit any analysis, evidence or information to demonstrate that it is feasible to obtain a tree permit to remove the screening trees.

In our November 22 submittal, the Applicant demonstrated why it is not feasible for ATC to obtain a tree removal permit for a variety of reasons. Since some of the screening trees are on the City's property and others are on the adjacent property to the north/northeast of the ATC Tower, ATC will be required to get the consent of both the City and the adjacent property owner to remove these trees. ATC has not even broached this request with these parties, let alone demonstrated that they will likely agree to it. Nor could ATC satisfy the tree removal permit criteria. In order to justify the removal of the trees, ATC must demonstrate that the trees are diseased, a hazard or must be removed to construct improvements that have already been approved. TDC 34.230(1). Clearly these trees are not diseased or a hazard, and ATC has not applied for, or obtained, any of these approvals.

Since ATC failed to address why it believes it is feasible to obtain a tree removal permit and the Applicant demonstrated that it is not feasible, the only conclusion the Commission can reach is that it is not feasible. Absent some evidence or argument that a tree removal permit is at least feasible, there is no evidentiary or legal basis for concluding that the ATC Tower can be modified to accommodate the new wireless communication facilities.

E. ATC failed to establish that the City will extend the lease beyond 2020.

As we noted in our November 22 letter, ATC acknowledged that the current lease for the ATC Tower expires in March 31, 2020 and the City has not agreed to an extension or new lease. Given how much time it will take to obtain the approvals to either increase the height of the ATC Tower or clear the screening trees, do the actual work to increase the height or clear the trees, and obtain approval for the proposed wireless communications facilities, neither Verizon nor T-Mobile will site their wireless communication facilities on this tower for such a short duration. Therefore, the ATC Tower is not a viable option unless and until ATC reaches an actual agreement with the City to extend or renew the lease.

ATC's November 22 submission makes it clear that the City has not agreed to extend or renew the lease. ATC submitted an unsigned draft of a proposed lease amendment, which it acknowledge is "subject to further changes by the parties." Letter from Alan Sorem, dated November 22, 2017, p.3.

ATC provided zero information about the status of its discussions with the City or whether the City even supports the concept of an extension or renewal of the lease. In other words, ATC's sole evidence is that ATC drafted a lease amendment. The mere drafting of a lease amendment is not sufficient evidence to demonstrate that it is feasible or likely that the City will extend or renew the lease.

F. The City code does not require the Applicant to consider an existing tower that would require additional permits or approvals, or at least those that have not yet been filed.

In our November 22 submittal, the Applicant provided a detailed analysis of the City code explaining why neither TDC 73.470(9), which contains the 1,500-foot separation requirement, nor the variance criteria for tower separation in TDC 33.025(1), require an applicant to consider an existing tower that must obtain additional permits and approvals in order to accommodate the wireless communications facility. Neither the tower separation nor variance criteria require the Applicant to consider existing towers that would require additional permits or approvals to accommodate the wireless communications facility. To the extent the Applicant is required to consider existing towers that would require additional permits or approvals, it is only required to consider those for which the permit application has already been filed. Since ATC had not filed an application for the tree removal permit or variance by the time the Applicant filed this variance application, the ATC Tower cannot be used as a basis for denying the variance application in this case.

ATC, on the other hand, provided no analysis or interpretation of the applicable code sections to support its position. ATC simply assumes that if there is an existing tower within 1,500 feet that can theoretically be modified to accommodate the wireless communication facility, regardless of whether it would require multiple consents and land use approvals, or how likely it would be to obtain those approvals, it automatically precludes a variance for a new tower. As we explained in our November 22 letter, that position is inconsistent with the express language in TDC 73.470(9) and TDC 33.025(1).

There is also a practical problem with ATC's interpretation. Even if ATC could demonstrate that it can theoretically modify the ATC Tower in order to accommodate Verizon and T-Mobile's wireless communication facilities, ATC is not obligated to pursue those approvals and has absolutely no time constraints. ATC can take as much time as it wants to commence the actions necessary to modify the ATC Tower and neither Verizon nor T-Mobile can force the issue. Even if ATC started the process immediately, it will still take a considerable amount of time to negotiate a new lease with the City, obtain the City and adjacent property owner's consent to remove the trees, obtain a new variance approval and tree removal permit, and do the construction work necessary to remove the trees and increase the height of the tower. Meanwhile, Verizon and T-Mobile have existing coverage and capacity gaps that need to be addressed immediately and they will be completely beholden to ATC's schedule. TDC 73.470(9) and TDC 33.025(1) were not intended to give existing tower operators such broad authority to force carriers to wait months or years until the operator can obtain the necessary approvals to modify the existing tower.

G. The Applicant demonstrated that Verizon cannot achieve its coverage and capacity objectives even if the ATC Tower is increased in height or the screening trees are removed.

As part of our November 22 submission, the Applicant demonstrated that the ATC Tower cannot be modified in a way that satisfies Verizon's coverage and capacity objectives for this site, in particular the residential area north of SW Tualatin Rd which is the primary area of concern for this new facility. The Applicant submitted a RF Usage and Facility Justification analysis, dated November 20, 2017, prepared by a Verizon RF engineer, which concludes that Verizon's coverage and capacity objectives cannot be satisfied even if the ATC Tower is increased in height or the screening trees are removed.

ATC submitted its own RF analysis, but this evidence is not as reliable. ATC has not spoken with Verizon about the coverage and capacity objectives for this site, does not have access to all of the same network data and other proprietary information as Verizon's RF engineers do and it cannot speak for Verizon. In fact, ATC acknowledged that it cannot explain the distinction between the green and yellow areas on the RF coverage maps or the impacts on Verizon customers in the area because that information is "proprietary". Letter from Alan Sorem, dated November 22, 2017, p.1-2. Verizon's new RF Usage and Facility Justification analysis represents Verizon's position on this matter and it clearly states that the ATC Tower, even if modified, will not work. Verizon's RF analysis is the evidence the Commission must rely upon since it is the most relevant and reliable evidence on this issue.

H. ATC failed to address the need to accommodate both Verizon and T-Mobile wireless communication facilities.

ATC claims that the Commission's question about whether or not T-Mobile is interested in siting a wireless communication facility on either the proposed tower or the ATC Tower is "beyond the scope of the criteria," but that is not true. Both Verizon and T-Mobile are interested in siting a wireless communication facility on the Applicant's proposed tower, as evident by the November 21, 2017 email from a T-Mobile representative we included in our November 22 submission. Therefore, the ATC Tower must be able to accommodate both Verizon and T-Mobile to demonstrate that it can be modified to address the wireless needs of the proposed tower.

ATC completely failed to account for the need to modify the ATC tower to accommodate two new carriers. The evidence in the record demonstrates that there is a Sprint antenna at the top of the ATC Tower (antenna tip of approximately 131 feet) and each additional antenna from another carrier will require at least 10-feet of separation. Therefore, a 146-foot tower will not be sufficient to accommodate both carriers since both Verizon and T-Mobile will require at least an additional 10 feet of separation. ATC did not address if it can, and how it would, extend the ATC Tower to 160 feet. Without any evidence that the ATC Tower can accommodate both Verizon and T-Mobile, ATC cannot demonstrate that it can be modified to accommodate these additional carriers.

I. The Commission should not rely heavily on the new staff report because it does not take into account the parties' November 22 submissions or this final written argument.

Since the procedures established at the Commission's November 16 hearing required the parties to submit new evidence by the November 22 deadline, with the exception of the Applicant's final written argument which it is entitled to under ORS 197.763(6)(e), the City staff submitted a new staff report on November 22. Although the new staff report is dated December 7, 2017, it was submitted on November 22 and did not take into account the parties November 22 submission or this final written argument.

It is important for the Commission to understand the timing of this new staff report since staff modified its recommendation to a denial. While staff may have changed its recommendation based on the information ATC presented at the November 16 hearing, it did not consider the November 22 submissions or this final written argument. Therefore, the new staff recommendation is not based on any of the evidence and argument presented since the November 16 hearing.

The Commission must base its decision on all of the evidence and arguments in the record, including the Applicant's November 22 submission and this final written argument. Since ATC raised its issues for the first time at the November 16 hearing, and the Applicant was not prepared to address them in detail at that time, the Applicant's post-hearing evidence and arguments are far more thorough and relevant. The Applicant's November 22 submission and final written argument clearly demonstrate that the ATC Tower is not a viable alternative for multiple reasons and therefore compliance with the variance criteria.

J. The Applicant demonstrated compliance with TDC 33.025(1)(b).

TDC 33.025(1) provides two alternatives for a variance approval. TDC 33.025(1) provides that "The City may grant a variance from the provisions of TDC 73.470(9) which requires a 1500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below." So the variance application must be approved if the Applicant demonstrates compliance with either (a) or (b). Although ATC has focused exclusively on subsection (a), the Applicant also argued that it complies with subsection (b).

TDC 33.025(1)(b) allows for a variance to the separation requirements if: "The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District." This criteria does not require the Applicant to demonstrate that the ATC Tower is not a viable option. As noted on page 4 of the variance application narrative, the Applicant demonstrated that the proposed site has tall, dense evergreen trees that will screen at least 50% of the proposed monopole from residential districts. ATC does not dispute this claim. Therefore, the application can be approved based on compliance with TDC 33.025(1)(b).

Conclusion

As explained in the application material, the November 22 submission and this final written argument, the Applicant demonstrated compliance with the variance criteria and therefore the variance application should be approved. There is no dispute that the ATC Tower cannot accommodate the proposed wireless communications facilities and TDC 73.470(9) and TDC 33.025 do not require the Applicant to delay this project until ATC can determine if it will be able to get the necessary tree removal, variance and property owner approval to modify the ATC Tower. Moreover, the permit requirements and evidence indicate that it is unlikely that ATC will be able to obtain these approvals. And even if ATC was able to increase the height of the ATC Tower or remove the screening trees, it still would not satisfy Verizon's coverage and capacity objectives for this site. For all of these reasons, the Commission should reject ATC's arguments and approve the application.

Very truly yours,

HATHAWAY LARSON LLP

E. Michael Connors

E. Michael Connors
EMC/mo
cc: ACOM Consulting Inc.
Lendlease

HATHAWAY LARSON

Koback · Connors · Heth

December 7, 2017

VIA HAND DELIVERY

Planning Commission
City of Tualatin
18880 SW Martinazzi Avenue
Tualatin, OR 97062

Re: Variance for Wireless Communications Facility - 10290 SW Tualatin Rd.
Application No. VAR-17-0001
Applicant's Request for Continuance

Dear Commissioners:

As you know, this firm represents the Applicant for the above-referenced matter, Lendlease (US) Telecom Holdings, LLC, c/o PI Tower Development, LLC, Verizon Wireless and the property owner (the "Applicant"). The Applicant is requesting that the Planning Commission continue the December 7, 2017 public hearing to enable the Applicant to provide additional information regarding compliance with TDC 33.025(1)(b).

Based on our communications with City staff, it is our understanding that the hearing can be continued to January 18, 2018. If the Planning Commission grants our request to continue the hearing until January 18, 2018, the Applicant hereby grants an extension of the 120-day deadline under ORS 227.178 and the 150-day FCC Shot Clock deadline to April 13, 2018.

We appreciate the Planning Commission's consideration of our request.

Very truly yours,

HATHAWAY LARSON LLP

E. Michael Connors

EMC/pl
cc: ACOM Consulting Inc.
Lendlease

E. Michael Connors
1331 NW Lovejoy Street, Suite 950
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January 18, 2018

VIA ELECTRONIC MAIL: ahurd-ravich@tualatin.gov
Original to follow via hand delivery

City of Tualatin Planning Commission
Attn: Aquilla Hurd-Ravich
18880 SW Martinazzi Ave
Tualatin, OR 97062-7092

RE: PI Tower Development Project OR-Tualatin-Durham/ 10290 SW Tualatin Road
(Tax Map/Lot: 2S1 23B 000800) (VAR-17-0001)
Our File No: 00000-28543

Dear Ms. Hurd-Ravich and Honorable Planning Commissioners:

As you are aware, I represent American Tower Corporation, a Delaware corporation, and Tower Asset Sub, Inc., a Delaware corporation (herein collectively "***ATC***"), which owns a wireless communications facility located at 10318 SW Herman Road, Tualatin, Oregon (the "***ATC Tower***"). I am writing regarding ATC's opposition to the proposed wireless communication facility on behalf of Lendlease (US) Telecom Holdings LLC - c/o PI Tower Development LLC, Verizon Wireless, and the property owner, Tote 'N Stow, Inc. (herein collectively "***Applicant***") on the southwest corner of 10290 SW Tualatin Road, Tualatin, Oregon (herein the "***Subject Property***").

I have previously submitted testimony explaining that Applicant cannot meet its burden of proof regarding TDC 33.025(1)(a) because modifications to either the ATC Tower or the surrounding trees can be made that will allow ATC to provide service to additional carriers. Staff's revised staff report continues to support ATC's opposition to Applicant's arguments under TDC 33.025(1)(a). However, Applicant has submitted additional arguments and evidence regarding TDC 33.025(1)(b) and staff now supports the variance request and concludes that Applicant met its burden of proof. ATC strongly disagrees with Staff's interpretation of TDC 33.025(1)(b) and findings of fact.

I. The Subject Property does not contain "tall, dense evergreen trees."

TDC 33.025(1)(b) requires the applicant to prove that the "proposed monopole location includes tall, dense evergreen trees." This is a foundational requirement. Failure to show that the Subject Property contains such "tall, dense evergreen trees" prohibits a granting of variance under the second variance test. This is a very specific requirement and the text is unambiguous. Staff's report and Applicant's proposal ignore the fact that the Subject Property fails to have this inherent characteristic.

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Applicant's evidence fails to meet the requirement for "tall, dense evergreen trees" in TDC 33.025(1)(b) on every account. Applicant does not include any photos of "tall, dense evergreen trees" on the Subject Property *because no such tall, dense evergreen trees exist*. The only photo of the Subject Property provided in the supplemental staff report and submitted by Applicant shows a single line of trees bordering the southern boundary of the Subject Property and a portion of the western boundary of the Subject Property. *See* Applicant Photo Simulation 1 of 6, Exhibit B to Applicant's Analysis and Findings dated January 18, 2018. The attached photo from Google Maps provides evidence that the few trees located on the Subject Property are sparsely located and deciduous in nature. The record contains a perfect example of property containing the type of trees that can qualify as "tall, dense evergreen trees," which is the ATC Tower property. As Applicant made clear in its prior arguments, the ATC Tower is surrounded by tall, dense evergreens as provided by the TDC and approved by the City of Tualatin. *See* Revised Staff Report, pg. 66, 80-86. Unlike the ATC Tower property, there is nothing inherent to the Subject Property – no tall, dense evergreen trees – that will provide year-round natural screening from the nearby RL and RML districts. There is no ambiguity in the text and no evidence provided by Applicant suggesting otherwise. Thus, the Planning Commission must deny the variance request.

II. Screening caused by evergreen trees located offsite cannot be used to satisfy the criterion.

Applicant submitted only five photo simulations. Photo Simulation No. 1 was taken north of the intersection of SW Pueblo Street and SW Jurgens Ave. Applicant points to three tall evergreen trees located along the SW Tualatin Rd right-of-way as evidence of satisfactory screening. The criterion clearly requires the evidence of evergreen screening to be those trees located on the Subject Property. Taking a photo behind an off-site tree to guarantee an image of screening is gross distortion of the text, purpose, and policy behind variance criteria. Were this to be allowed as satisfactory evidence, the Planning Commission could never deny an application where even one tree existed in the abutting residential neighborhood to hide behind. Photo Simulation No. 1 is not evidence, and Applicant and staff are incorrect to suggest it can substantiate approval.

III. Photo simulations from the ML district are not substantial evidence.

Photo Simulation No. 2 is from the SW 100th Court turnaround. This photo was taken from the ML district. The criterion clearly requires evidence that the proposed tower is screened from the surrounding RL and RML districts. This evidence is of no value in determining whether Applicant has met its burden of proof. The inclusion by Applicant of this photo as evidence demonstrates an ignorance, willful or unintentional, of the text, purpose, and policy of the variance criteria. Moreover, the photo shows the tower unscreened from any evergreen trees. Rather, it is clearly visible notwithstanding the previously mentioned deciduous trees in the area. The low angle of the photo, which suggests that the tower is screened by the hedge (which is roughly the height of a low-profile van) suggests the simulations lack professional credibility. Photo Simulation No. 2 is not evidence, and it should be disregarded except as evidence as to the questionable credibility of the simulations themselves.

IV. Screening provided by buildings does not satisfy the criterion.

Applicant's final three photo simulations were all taken behind buildings. Even if the tower was screened by buildings, such a fact is not the type of evidence needed to satisfy the criteria. As explained

above, Applicant needed to prove that onsite, tall, and dense evergreen trees screen at least fifty-percent of the proposed tower, like they do for the existing ATC Tower. Applicant's simulations are irrelevant and are clearly "cherry-picked" photos. If an applicant were able to satisfy a variance criterion by taking photo simulations from behind a building, no variance request would ever be denied. Clearly, individuals who are inside those buildings, including the multi-family buildings shown in Photo Simulation No. 3 and the residence shown in Photo Simulation No. 5, can see the tower. If anything, these simulations are evidence that Applicant cannot satisfy the criteria. The Planning Commission must reject the invitation to "water-down" TDC 33.025(1)(b) so that it is effectively meaningless. An approval of Applicant's variance request is a misinterpretation TDC 33.025(1)(b).

V. Applicant's assertion that a balloon test was conducted is not supported by the evidence in the record.

Even if Applicant was able to prove that its request does not require a misinterpretation of TDC 33.025(1)(b), Applicant's evidence is not credible. Applicant's representatives assert a balloon test occurred to ensure the simulations were done correctly. However, Applicant failed to include any photos of the balloon test. It is customary to offer photographic evidence that the balloon test in fact occurred. There is no affidavit or testimony by the person who conducted such test, and no affidavit testifying to the parameters of such a test. Applicant's assertion as to an issue of fact without corroborating evidence is further evidence of a lack of credibility. Applicant must provide evidence that the balloon test occurred, it was floated at the correct height, and that it is not visible from surrounding multi-story residential buildings.

VI. Applicant's proposed interpretation is inconsistent with the text, context, purpose and policy of the variance chapter and inconsistent with general variance laws.

As explained above in detail, the text of TDC 33.025(1)(b) is unambiguous, and it requires showing that onsite tall, dense evergreen trees screen fifty percent or more of the proposed pole. Applicant's requested interpretation is as follows: offsite trees and offsite buildings that screen the proposed tower can substantiate the variance under TDC 33.025(1)(b). In addition to being inconsistent with the unambiguous text, such an interpretation is inconsistent with the context, purpose, and policy of the variance chapter and inconsistent with general variance laws.

Variances are generally subject to the review criteria under TDC 33.020; however, variances for towers are subject to the criteria under TDC 33.025. While ATC acknowledges TDC 33.020 is not the mandatory approval criteria, it is relevant context. TDC 33.020(1) requires the applicant to prove a hardship exists and that it "is created by exceptional or extraordinary conditions applying to the property that do not apply generally to other properties in the same planning district or vicinity and the conditions are a result of lot size or shape, topography, or other physical circumstances applying to the property over which the applicant or owner has no control." These elements, while stated slightly differently and with greater specificity, are also present in TDC 33.025. The requirement for a hardship reflected in the obligation for Applicant to prove that an existing tower cannot technically provide the needed coverage and cannot be modified to accommodate another provider under TDC 33.025(1)(a). Similarly, the requirement for "extraordinary circumstances applying to the property" is reflected in the requirement under 33.025(1)(b) that onsite "tall, dense evergreen trees" screen the proposed tower. Applicant's request essentially removes any factor that would differentiate this proposal and this

property from any other future variance case or other property. Essentially, the Planning Commission's approval would be precedent that the "criteria" means nothing. Put differently, what is to stop the application for a third tower on the neighboring property? A fourth tower next to that?

Variances are supposed to be difficult. They allow a proposal that is in violation of the code's development standards. They should not be granted with ease or based on evidence that is inconsistent with the text, context, purpose, and policy of the code. For these reasons, ATC respectfully requests Planning Commission to deny the requested variance.

Thank you for your time and attention.

Sincerely,

ALAN M. SOREM
asorem@sglaw.com
Voice Message #303

AMS:jsm
Enclosures
cc: Client

VAR-17-0001
POR DURHAM
WIRELESS COMMUNICATION FACILITY (WCF)

PURPOSE OF HEARING

- Appealed Planning Commission approval of a Variance application

- Council consideration of a variance to allow a new wireless communication facility (WCF) within 1,500-feet of an existing WCF

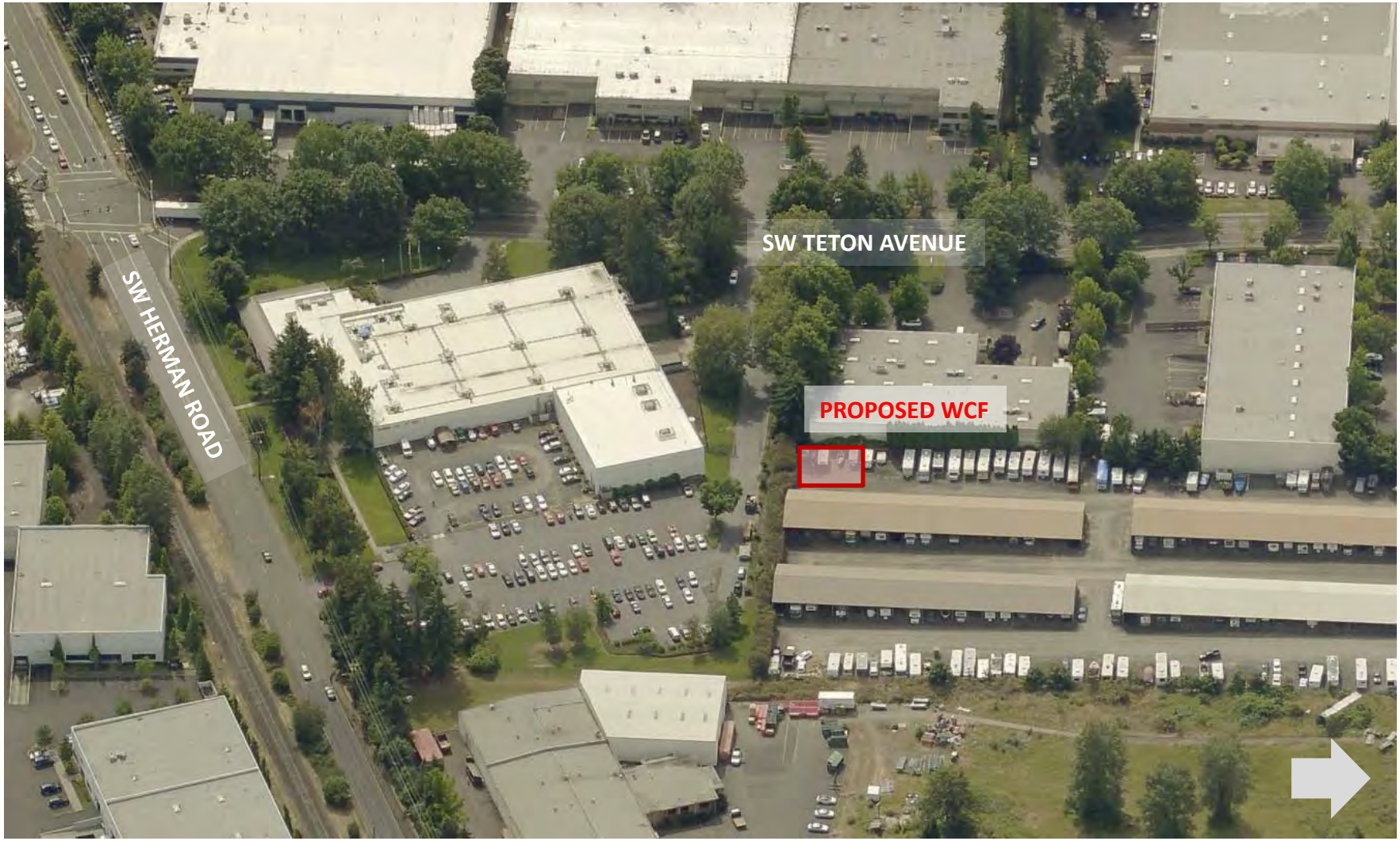
- Council must find that applicant demonstrates compliance with Tualatin Development Code (TDC) 33.025(1)(a) or 33.025(1)(b)

HEARING AGENDA

- Staff Presentation
- Appellant and Applicant Presentation
- Public Comment
- Deliberation and Decision

VAR-17-0001
POR DURHAM WCF

City Council
April 9, 2018



VAR-17-0001
POR DURHAM WCF

City Council
April 9, 2018

APPLICANT PROPOSAL

- Applicant proposes to locate a monopole/WCF on the Tote ‘N Stow property at 10290 SW Tualatin Road within 1,500 feet of an existing WCF

VARIANCE APPROVAL CRITERIA

TDC 33.025(1)

The City may grant a variance from the provisions of TDC 73.470(9), which requires a 1,500-foot separation between WCFs, providing the applicant demonstrates compliance with (a) or (b) below:

(a) Coverage and capacity; OR

(b) Site characteristics.

VARIANCE APPROVAL CRITERIA

TDC 33.025(1)(b) Site Characteristics

The proposed monopole location includes tall, dense evergreen trees that will screen at least 50% of the proposed monopole from the RL District or from a small lot subdivision in the RML District.

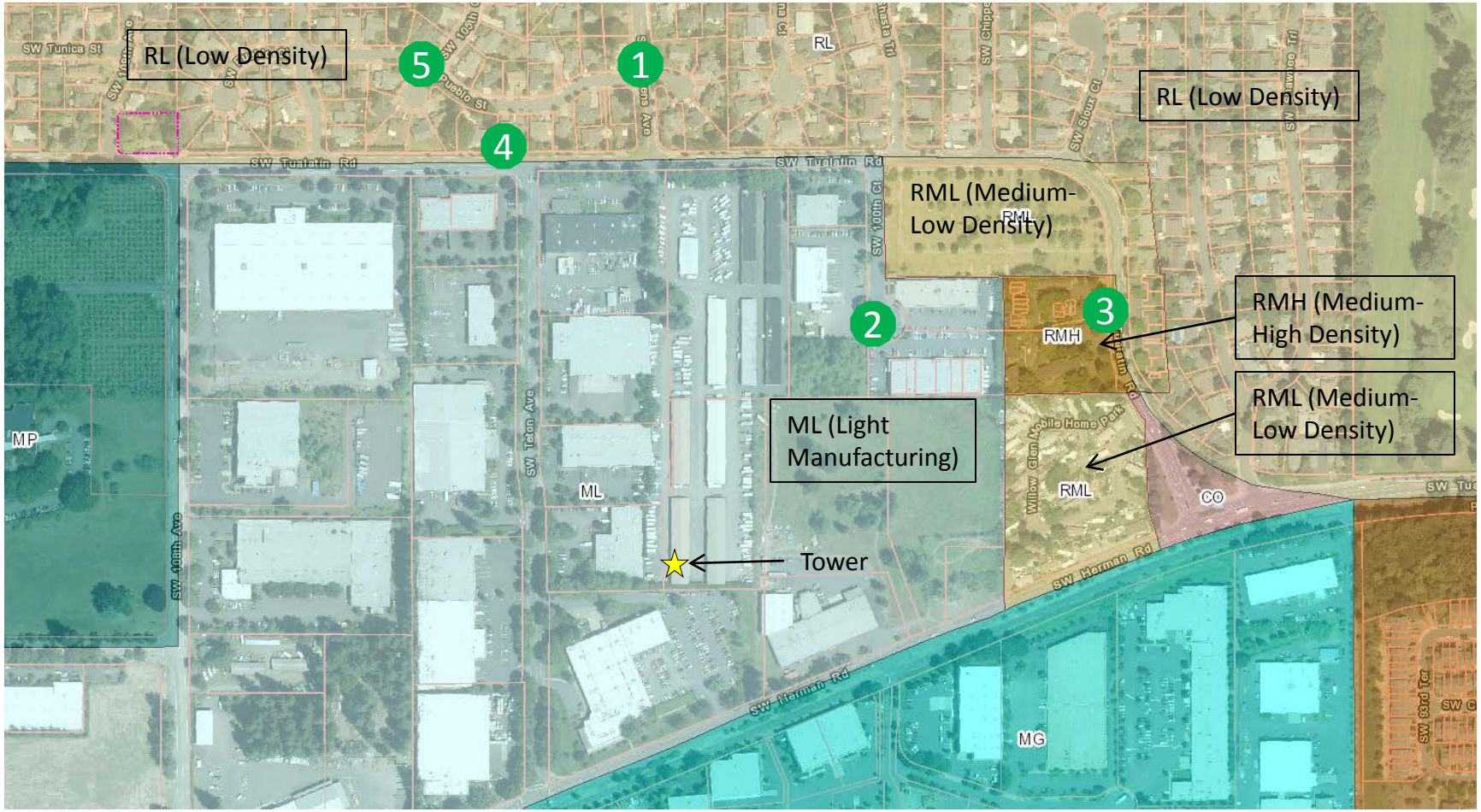
- *Staff finds this criterion is met.*

VARIANCE APPROVAL CRITERIA

VAR-17-0001
POR DURHAM WCF

City Council
April 9, 2018

VARIANCE APPROVAL CRITERIA



VAR-17-0001
POR DURHAM WCF

City Council
April 9, 2018

VARIANCE APPROVAL CRITERIA

VARIANCE APPROVAL CRITERIA

CURRENT

VIEW #2 LOOKING SOUTHWEST
ON SW 100TH COURT

PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the

TIM BRADLEY IMAGING

VARIANCE APPROVAL CRITERIA

CURRENT

VIEW #3 LOOKING SOUTHWEST
ON SW TUALATIN ROAD

PROPOSED

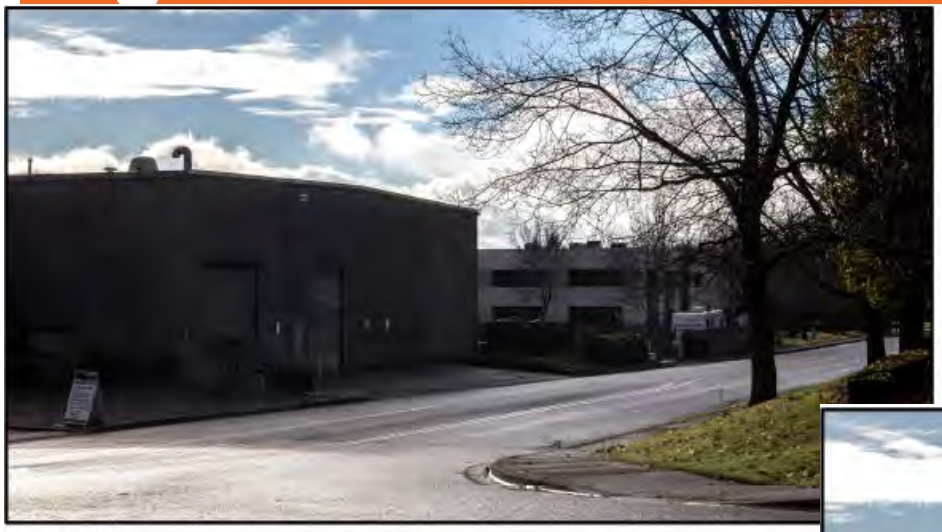
Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the

TIM BRADLEY IMAGING

VAR-17-0001
POR DURHAM WCF

City Council
April 9, 2018

VARIANCE APPROVAL CRITERIA



CURRENT

VIEW #4 LOOKING SOUTHEAST
ON SW TUALATIN RD. AT SW TETON AVE.

PROPOSED

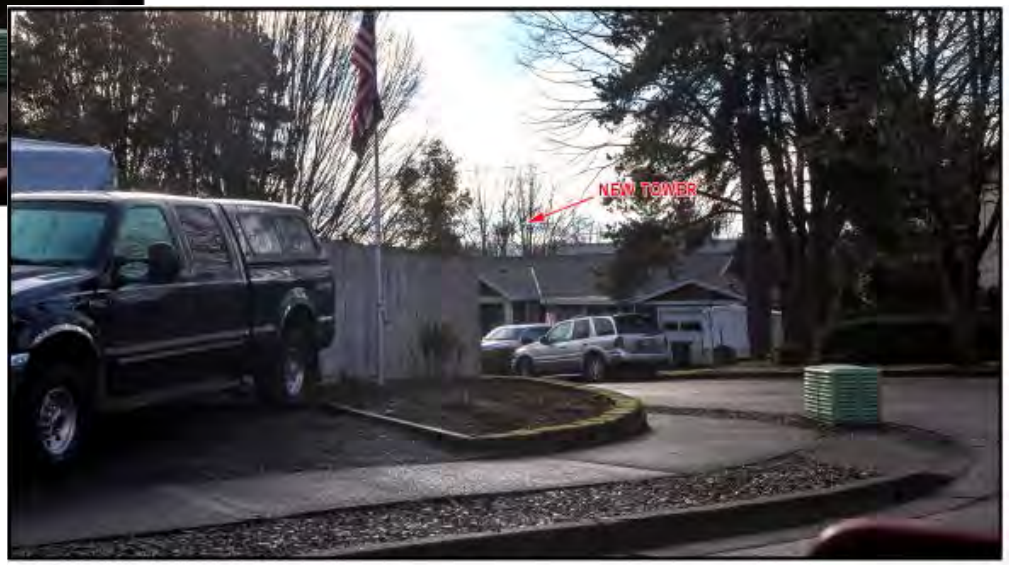
Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the

TIM BRADLEY IMAGING

VARIANCE APPROVAL CRITERIA

CURRENT

VIEW #5 LOOKING SOUTHEAST
ON SW 105TH COURT & SW PUEBLO ST.



PROPOSED

Visual impact will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the

TIM BRADLEY IMAGING

Summary of review

Summary

- Based on the photo simulations (views 1 & 5) the applicant has demonstrated that 50% of the monopole will be screened by tall dense evergreen trees from the RL (Residential Low Density) Planning District

NEXT STEPS (IF APPROVED)

- Architectural Review (AR) of the physical elements of the proposed WCF

City Council OPTIONS

1. Approve VAR-17-0001 as drafted; or
2. Deny VAR-17-0001 and cite which criteria applicant fails to meet.


QUESTIONS
DISCUSSION
RECOMMENDATIONS

From: Jason Rogers
To: Aquilla Hurd-Ravich
Subject: appeal 4/9/18
Date: Monday, March 26, 2018 10:52:52 AM

Aquilla –

I received the notice of appeal on the above referenced date. I will be unable to attend that evening so I will outline my concerns below. I'm fine with these being shared and discussed in my absence. Thank you.

As a property owner of a home in this neighborhood, my primary concern is with the location of a new 100' monopole. In attending a previous meeting, reading materials provided, I have seen nothing which outlines the exact, proposed location of the new pole and its possible visual effect on the neighboring homes. If the new pole would be located closer to Tualatin Rd (in lieu of the existing pole which is closer to Herman Rd.) I can see this having a negative impact on the surrounding neighborhoods. As you move closer to Tualatin Rd (from Herman Rd and Tote N Stow storage facility) this area is largely residential with a few office buildings and low-rise industrial structures. With a lack of large trees for shielding a pole of this size (equivalent to a 9+ story building), if the pole will be located closer to Tualatin Rd, I find it hard to visualize just how this structure could be "hidden". As a Tualatin property owner in this area I am opposed to adding a pole in this area which may have a visual and economic impact on my property. It's been explained that the new pole would be a Verizon project which means that myself and other land owners in these neighborhoods (who are not Verizon customers) could be negatively impacted by something that provides no benefit. To me this would simply be a bad business decision and negatively impact many Tualatin property owners.

Thank you,

Jason Rogers
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