

# **Hearing Examiner**

## **Agenda**

**June 15, 2015**

**OAK HARBOR HEARING  
EXAMINER June 15, 2015  
10:00 A.M.**

**Oak Harbor City Council Chambers  
865 SE Barrington Drive  
Oak Harbor, WA 98277**

## **AGENDA**

- 1. Call to Order**
- 2. Verizon Wireless Conditional Use – CUP-15-02**  
The Hearing Examiner will consider a conditional use permit submitted by Verizon Wireless proposing to construct a telecommunications facility by adding 12 panel antennas to an existing 294 foot guy tower. Verizon also proposes six outdoor equipment cabinets mounted on a concrete pad and one generator mounted on a concrete pad all located within a proposed 15 foot X 30 foot fenced leased area. This location is currently an existing location for cell tower equipment. The property is zoned R1, Single Family Residential. The proposed telecommunication tower is permitted as a conditional use in this district. Project Location: 200 SW Roeder Drive.
- 3. Adjourn**

# **Staff Report**

## **Verizon Wireless 200 SW Roeder Dr**

### **Conditional Use**

**CUP 15-02**

**VERIZON WIRELESS TELECOMMUNICATION FACILITY –  
SW ROEDER DRIVE  
Case No. CUP-15-02  
Staff Report to Hearing Examiner**

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**APPLICATION:**

The applicant proposes to add 12 panel antennas to an existing 294-foot tower located on property at 200 SW Roeder Drive. Also proposed as part of the application is a series of six outdoor cabinets housing equipment related to the antennae on a concrete pad within a proposed 15 by 30 foot fenced enclosure.

**PRELIMINARY INFORMATION:**

**Applicant:** Glotel, Inc. 15375 SE 30<sup>th</sup> Place, Suite 160, Bellevue, Washington 98007

**Property Owner:** Tele-Vue Systems, Inc., 1 Comcast Center, 32<sup>nd</sup> Floor, Philadelphia PA 19103

**Address of proposal:** 200 SW Roeder Drive., Oak Harbor, WA 98277

**Parcel Number:** R13334-012-0880

**Comprehensive Plan Designation:** Low Density Residential

**Zoning Designation:** R-1, Single Family Residential

**Application Presented for Action:**

Conditional Use Application (CUP-15-02) - Review Process III

**Attachments:**

- Exhibit 1 Conditional Use Application and Applicant Narrative
- Exhibit 2 Vicinity and Aerial Map
- Exhibit 3 Zoning Map
- Exhibit 4 Public Noticing Documents

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**BACKGROUND:**

The site currently includes a 294-foot guywire-supported tower developed originally as a television antenna. Since the construction of the tower, several cellular phone antennae have been mounted to the structure and it continues to be a viable location for co-location for new wireless antenna. Several structures on the property house various support facilities.

This application is considered to be an expansion of an existing Conditional Use. The specific Conditional Use Permit for the tower structure (CUP #03-003) allows for certain

minor modifications, including the addition of small antennae, along with other maintenance and minor changes. However, this application includes more than just additional antennae – it also proposes equipment cabinets to be constructed in a separate ground enclosure. Based on that additional impact, staff has interpreted the Code to require a new Conditional Use Permit for this application.

The site is considered to be a “Monopole II” structure, and was approved as a Conditional Use as noted above. As such, Co-location of wireless facilities are permitted as noted in OHMC 19.29.060(5). The approval of this Conditional Use Permit will simply allow the applicant to construct equipment cabinets and a secure enclosure for such cabinets as shown in the attached application materials.

### ***Conditional Use Permit Application***

The subject parcel is currently zoned R-1, Single Family Residential. According to OHMC 19.29.060, “(3) Monopole II facilities are not permitted in residential (PRE, R-1, R-2, R-3 and R-4), residential office (RO), neighborhood commercial (C-1) or central business district (CBD) zones, except when expressly provided for in this chapter.” As noted above, the tower structure previously received Conditional Use approval in 2003.

#### **19.29.070 Additional Permit Criteria for Monopole I and Monopole II**

In addition to the permit criteria specified in Chapters [19.48](#) and [19.67](#) OHMC, the following specific criteria shall be met before a site plan review or conditional use permit can be granted:

(1) Antennas may not extend more than 15 feet above their supporting structure, monopole, building or other structure.

(2) Site location and development shall preserve the pre-existing character of the surrounding buildings and land uses and the zone district to the extent consistent with the function of the communications equipment. Wireless communications towers shall be integrated through location and design to blend in with the existing characteristics of the site to the extent practical. Existing on-site vegetation shall be preserved or improved, and disturbance of the existing topography shall be minimized, unless such disturbance would result in less visual impact of the site to the surrounding area.

(3) Accessory equipment facilities used to house wireless communications equipment should be located within buildings or placed underground when possible. When they cannot be located in buildings, equipment shelters or cabinets shall be screened and landscaped in conformance with Chapter [19.46](#) OHMC.

(4) No equipment shall be operated so as to produce noise in levels above 45 dB as measured from the nearest property line on which the attached wireless communications facility is located.

(5) In any proceeding regarding the issuance of site plan review or a conditional use permit under the terms of this chapter, federal law prohibits consideration of environmental effects of radio frequency emissions to the extent that the proposed facilities comply with the Federal Communications Commission regulations concerning such emission.

(6) Towers, antennas or other objects that penetrate the 100:1 angle slope criteria established in Federal Aviation Regulation (FAR) Part 44 (Sections 77.13(a)(1) and

77.13(a)(2)(I), respectively) shall be reviewed for compatibility with airport operations. No tower, antenna or other object shall constitute a hazard to air navigation, interfere with the safe operation of aircraft or deny the existing operational capability of Ault Field. (Ord. 1555 § 12, 2009).

Following OHMC 18.20.250(2)(b), the review of applications for conditional uses are Review Process III actions. Such actions are subject to an open record public hearing before the Oak Harbor Hearing Examiner, followed by a final decision by the Examiner.

**PROJECT DESCRIPTION**

The proposed project consists of the installation of 12 new cellular phone antennas on an existing tower at the 114-foot level. Equipment cabinets are proposed to be installed in a 15 by 30 foot fenced enclosure near the base of the tower.

**SITE GEOGRAPHY**

The subject property is an approximately 2.14 acre parcel located southwest of the intersection of SW Loerland Drive and SW Heller Street. The parcel slopes gradually from east to west and is one of the highest points in the immediate vicinity. Currently, the tower, several telecommunication dishes and associated equipment cabinets and buildings occupy the site.

	<b>Existing Land Use</b>	<b>Zoning</b>
<b>North:</b>	Residential	R-1, Single Family Residential
<b>South:</b>	Residential	R-1, Single Family Residential
<b>East:</b>	Residential	R-1, Single Family Residential
<b>West:</b>	Residential	R-1, Single Family Residential

**SEPA**

A Determination of Nonsignificance was issued on May 21, 2015.

**LEGAL NOTICE:**

A Notice of Application and Notice of Public Hearing was advertised on May 1, 2015, both in the Whidbey News Times. Notice to neighboring property owners within a 300-foot radius of the property were mailed on May 1, 2015 and a notice was posted on the subject property on May 1, 2015.

The public hearing to consider CUP-15-02 is scheduled for June 8, 2015 at 10:00 a.m.

**PUBLIC COMMENTS:**

The City has received no public comments as of the date of this staff report.

**CONDITIONAL USE REVIEW**

The Oak Harbor Municipal Code 19.67 Conditional Uses, states that a conditional use permit shall be granted if certain criteria are met. The following is an analysis of the conditional use criteria:

**1. All special conditions for the particular use are met.**

As noted above, special criteria are set forth for wireless sites that require a conditional use. Those criteria will be set as conditions of approval for the final project permit.

**2. It does not have a significant, adverse environmental impact resulting in excessive noise, light and glare or soil erosion on adjacent property.**

Limited impacts are expected from this proposed development. Noise may be emitted from a generator proposed for the site. This noise is regulated by OHMC 19.29.070(4) which places a limit of 45 dB and OHMC 6.56.

**3. It is provided with adequate parking.**

Due to the nature of the project, permanent parking is not required, but there may be times that space is needed to accommodate maintenance or other related vehicles. The construction of the new equipment cabinets and enclosure should not pose an adverse effect on existing parking availability.

**4. It is served with adequate public streets, public utilities and facilities.**

Public streets, utilities and facilities are available at the property. No undue impact is anticipated.

**5. It otherwise meets the purpose of the district in which it is to be placed.**

The existing pole is approved under a Conditional Use and this expansion does not contradict the purpose of the Zone District or the CUP.

**6. It meets the goals and policies of the Oak Harbor Comprehensive Plan.**

*Utilities Element – Goal 4: Minimize aesthetic and environmental degradation from utility operation, installation, replacement, repair and maintenance.* The location of the equipment cabinets behind a natural barrier of trees and landscaping and the co-location of antennae on an existing tower will minimize negative visual impacts.

*Land Use – Goal 14: To strengthen and enlarge the commercial economic base of the community by promoting the development of facilities that provided a competitive and stimulating business environment.* This proposed cellular facility will help strengthen cellular service in the community, assisting commercial businesses and residents alike in communication with local and out-of-area contacts.

**RECOMMENDED ACTION:**

Staff recommends that the Hearing Examiner conduct the public hearing and approve CUP-14-02 subject to the following conditions:

1. The project shall be in general conformance with the narrative and application materials submitted by the applicant as attached in Exhibit 1 and abide by conditions and requirements set forth within this report.
2. The project shall be in conformance with all applicable sections of the Oak Harbor Municipal Code, including but not limited to, Chapters 19.28.050 and 19.29.
3. That the site meets or exceeds all criteria and evaluations within the attached Noise Evaluation Report and Non-Ionizing Electromagnetic Radiation Report.
4. Limited expansions or modifications to the facility can be requested through a Type II administrative review process.
5. Applicant shall apply for and receive any required building permits before commencement of construction activity.
6. The conditional use shall not be transferable to a subsequent user unless specifically authorized by the hearing examiner who finds it appropriate and a permit authorizing the transferability is on record with the Island County auditor.
7. The conditional use permit must be acted on within one year of the date of granting. Otherwise the conditional use permit shall expire and be null and void.
8. The conditional use permit applies only to the property for which the application is made.

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# **EXHIBIT 1**

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*Conditional Use Application  
and  
Applicant Narrative*



**CITY OF OAK HARBOR**  
*Development Services Department*

RECEIVED

**Application Form**

MAR 12 2015

**Project Name:** VZW WA-1 Swantown

CITY OF OAK HARBOR  
DEVELOPMENT SERVICES DEPARTMENT

**Type(s) of Application:** Conditional Use Permit

**Description of Proposal:** Verizon Wireless is proposing to construct a telecommunications facility by adding (12) panel antennas to an existing 294' guy tower. Verizon also proposes (6) outdoor equipment cabinets mounted on a concrete pad and (1) generator mounted on a concrete pad all located within a proposed 15' X 30' fenced lease area.

<b>APPLICANT NAME/CONTACT PERSON</b> (or legal representative): Carly Nations (Glotel, Inc on behalf of Verizon Wireless)	<b>Address:</b> 15375 SE 30th Place, Suite 160 Bellevue, WA 98007
<b>E-mail Address:</b> cnations@glotelinc.com	<b>Phone and Fax:</b> (425) 326-6050
<b>PROPERTY OWNER NAME</b> (list multiple owners on a separate sheet): Tele-View Systems, Inc	<b>Address:</b> 1 Comcast Center, 32nd Floor Philadelphia, PA 19103
<b>E-mail Address:</b>	<b>Phone and Fax:</b> (508) 440-5780, ext 241 (Mikala Mann)
<b>ENGINEER/SURVEYOR:</b> Ryan McDaniel (Glotel, Inc)	<b>Address:</b> 15375 SE 30th Place, Suite 160 Bellevue, WA 98007
<b>E-mail Address:</b>	<b>Phone and Fax:</b>
<b>PROJECT SITE INFORMATION</b> (address/location): 200 SW Roeder Drive Oak Harbor, WA 98277	<b>Comp. Plan Designation:</b> Low Density Residential
<b>Zoning:</b> R-1 (Single Family Residential)	<b>Parcel Number(s):</b> R13334-012-0880
<b>Legal Description</b> (attach separate sheet): refer to site plan for legal description	<b>Acreage of Original Parcel(s):</b> 2.14 acres
<b>Section/Township/Range:</b> Section 34 - Township 33N - Range 1E	<b>Total Square Footage of Proposed Building or Number of Units:</b> 450 square feet

**AUTHORIZATION:**  
The undersigned hereby certifies that this application has been made with the consent of the lawful property owner(s) and that all information submitted with this application is complete and correct. False statements, errors, and/or omissions may be sufficient cause for denial of the request.

I declare under penalty of the perjury laws that the information I have provided on this form/application is true, correct and complete.

*Carly Nations*  
**Authorized Signature**

*3/10/15*  
**Date**

**LETTER OF AUTHORIZATION**

**To: City of Oak Harbor Planning Department  
865 SE Barrington Drive, Oak Harbor, WA 98277**

**From: IWG Tower Assets I, LLC**

IWG Tower Assets I, LLC, formerly known as CTI Tower Assets I, LLC ("Owner"), as owner of the telecommunications tower site located at APN# 656711/R13334-012-0880 located at 200 SW Roeder Drive, Oak Harbor, WA 98277 ("Site"), does hereby authorize and appoint as its agent Carly Nations of Glotel, Inc., for purposes of preparing, filing and processing land use/zoning applications and appearing at any public proceeding in the matter of the application of Verizon Wireless for a new wireless telecommunications facility at the Site. I/We understand that the application may be denied, modified or approved with conditions and such conditions and/or modifications must be complied with prior to building permit issuance.

**Proposal Address/Location: 200 SW Roeder Drive, Oak Harbor, WA 98277**

**Assessor's Parcel Number(s): 656711/R13334-012-0880**

**Owner Contact Information: 1199 N. Fairfax Street, Suite 700, Alexandria, VA 22314**

*David E. Weisman, President & CEO*

**Printed Name of Owner or Representative**

**Signed:**



**Signature of Owner or Representative**

**Dated:** *April 23, 2015*

**Phone/Email:** 703-535-3009

RECIEVED  
APR 24 2015  
CITY OF OAK HARBOR  
DEVELOPMENT SERVICES DEPARTMENT

### EXHIBIT 3

#### CONDITIONAL USE PERMIT APPLICATION FOR A WIRELESS COMMUNICATIONS FACILITY

Submitted to the City of Oak Harbor  
March 10, 2015

RECIEVED

MAR 12 2015

CITY OF OAK HARBOR  
DEVELOPMENT SERVICES DEPARTMENT

#### 1. GENERAL INFORMATION

**Applicant:** Verizon Wireless  
3245 158<sup>th</sup> Ave SE, MS231  
Bellevue, WA 98008

**Site Name:** VZW WA-1 Swantown

**Representative:** Glotel, Inc.  
Carly Nations, Land Use Planner  
15375 SE 30<sup>th</sup> Place, Suite 160  
Bellevue, WA 98007  
Email: cnations@glotelinc.com  
Phone: (425) 326-6050

**Owner Information:** Tele-Vue Systems, Inc.  
1 Comcast Center, 32<sup>nd</sup> Floor  
Philadelphia, PA 19103  
(508) 440-5780, ext. 241 – Mikala Mann

**Project Address:** 200 SW Roeder Drive  
Oak Harbor, WA 98277

**Map & Tax Lot:** R13334-012-0880

**Legal Description:** Please see Exhibit 6 - Legal Description

**Comp. Plan Classification:** Low Density Residential

**Zoning District:** R-1 (single-family residential)

Carly Nations, Glotel Inc., is submitting this application on behalf of the applicant, Verizon Wireless; and the underlying property owner, Tele-Vue Systems, Inc.

## **2. PROPOSAL**

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The applicant proposes a new wireless telecommunications facility at 200 SW Roeder Drive, Oak Harbor, WA (the "Property"). The Property is zoned R-1 (Single Family Residential) and is currently developed as a wireless communications facility.

The proposal by Verizon Wireless consists of adding twelve (12) panel antennas to an existing 294' guy tower, as well as installing six (6) outdoor equipment cabinets mounted on an 8' X 20' concrete pad and one (1) back-up generator mounted on a 4' X 10' concrete pad all located within a proposed 15' X 30' fenced lease area. See *Exhibit 4 – Site Plans*. Access to the tower and equipment will be from SW Roeder Drive via an existing gravel drive. See Sheet A-1 of *Exhibit 4 – Site Plans*. The planned service coverage improvement will occur for properties and road coverage within the area bounded by Wieldraayer Road to the North, West Pioneer Way to the East, SW 16<sup>th</sup> Ave to the South, and Fairway Lane to the West.

The compound area will be surrounded by a 6' tall chain link fence, which will contain the proposed six (6) equipment cabinets and one (1) generator, as well as a proposed utility rack. The site is surrounded by trees, which effectively screens proposed ground equipment from view. Please see *Exhibit 9– Photo Simulations*.

This is a co-location proposal that will have limited visual impact on the existing guy tower. It is the least invasive design for the desired coverage objective, and the proposed tip height of the new antennas is the minimum necessary to meet the coverage needs. Please see *Exhibit 14 – Radiofrequency Justification Letter and Propagation Maps*.

Although this proposal is for a co-location on an existing tower with limited changes to the visual appearance, a Conditional Use Permit is required because of the proposal for equipment cabinets within a new fenced lease area. Please refer to *Exhibit 7 – Email Correspondence*.

## **3. APPLICATION SUBMITTAL REQUIREMENTS**

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Verizon's proposal complies with all six criteria for conditional use approval, as well as the applicable chapters of the City of Oak Harbor Municipal Code (OHMC) and the Oak Harbor Comprehensive Plan. These requirements are addressed in the order laid out below.

### **19.08 Definitions**

- 19.08.985 Wireless communication facility, macro.**
- 19.08.990 Wireless communications facility, micro.**
- 19.08.995 Wireless communications facility, mini.**
- 19.08.1000 Wireless communications facility, monopole.**

### **Chapter 19.29 Wireless Communication Facilities**

- 19.29.010 Purpose**
- 19.29.030 Development standards for mini facilities.**
- 19.29.050 Development standards for monopole I.**
- 19.29.060 Development standards for monopole II.**
- 19.29.070 Additional permit criteria for monopole I and monopole II.**

**19.29.080. Exemption.**  
**19.29.090 Obsolescence.**

**19.67 Conditional Uses**

**19.67.030 Criteria.**  
**19.67.040 General conditions.**

**Oak Harbor Comprehensive Plan**

***Goals and Policies - Urban Design Element, Goal 11***

## **19.08 DEFINITIONS**

### ***19.08.985 Wireless communication facility, macro.***

**"Macro wireless communications facility"** means an attached wireless communications facility which consists of antennas equal to or less than 15 feet in height or a parabolic antenna up to one meter (39.37 inches) in diameter and with an area not more than 75 square feet in the aggregate as viewed from any one point.

*Response:* The proposed panel antennas are 75" X 12.1" X 7". The proposed antennas are under fifteen in height at just over six (6) feet and are not more than 75 square feet in aggregate when viewed from any point. However, the proposed panel antennas are also under ten feet in height and less than 50 square feet in area, which qualifies them as the smaller mini facility. Please refer to Sheet A-6 of *Exhibit 4 – Site Plans* for antenna dimensions and specifications.

### ***19.08.990 Wireless communications facility, micro.***

**"Micro wireless communications facility"** means an attached wireless communications facility which consists of antennas equal to or less than four feet in height (except Omni-directional antennas which may be up to six feet in height) and with an area of not more than 580 square inches in the aggregate (e.g., one-foot diameter parabola or two-foot by one-and-one-half-foot panel) as viewed from any one point. The permitted antenna height includes the wireless communications facility support structure.

*Response:* The proposal is not a micro facility. The proposed panel antennas are 75" in height, which makes them bigger than a micro facility, which need to be less than four feet.

### ***19.08.995 Wireless communications facility, mini.***

**"Mini wireless communications facility"** means an attached wireless communications facility which consists of antennas equal to or less than 10 feet in height or a parabolic antenna up to one meter (39.37 inches) in diameter and with an area not more than 50 square feet in the aggregate as viewed from any one point.

*Response:* The twelve (12) panel antennas that will be added to the existing wireless guy tower meet the dimensions to be considered a mini wireless communications facility at less than 10 feet in height and 50 square feet in area. Please refer to Sheet A-6 of *Exhibit 4 – Site Plans* for antenna dimensions and specifications.

### ***19.08.1000 Wireless communications facility, monopole.***

**"Monopole wireless communications facility"** means a wireless communications facility which consists of a wireless communications support structure, erected to support wireless communications antennas and connecting appurtenances.

*Response:* The proposal is for a co-location of twelve (12) antennas on an existing 294' guy tower. Please refer to *Exhibit 4 – Site Plans*.

## **Chapter 19.29 – Wireless Communication Facilities**

**19.29.010 Purpose.** In addition to the general purposes of the comprehensive plan and this title, this chapter is included in order to provide for a wide range of locations and options for wireless communications providers while minimizing the unsightly characteristics associated with wireless communications facilities and to encourage creative approaches in locating wireless communication facilities which will blend with the surroundings of such facilities.

*Response:* Verizon Wireless is proposing to co-locate twelve (12) panel antennas on an existing 294' guy tower. Although this site is located in the R-1 zone, it is an existing wireless communication facility surrounded by trees. The top of the proposed Verizon Wireless antennas are at 114', and there will be no increase in height to the existing tower. The equipment cabinets and generator will be located in a 15' X 30' fenced lease area next to the other carrier's compound. The proposed equipment will be screened from view by existing trees surrounding the facility. Please see *Exhibit 9– Photo Simulations*.

**19.29.020 Development standards for micro-facilities.**

*Response:* This is not applicable, as the proposal is not a micro facility.

**19.29.030 Development standards for mini facilities.**

**(1) Mini facilities are permitted in all zones except single-family residential (PRE, R-1 and R-2) zones**

*Response:* This proposal includes the co-location of twelve (12) panel antennas, which are mini facilities, on an existing 294' guy tower. Although this proposal is located in the R-1 zone, it is an existing wireless communication facility. Moreover, there will be no increase in height to the existing structure and limited changes to the visual appearance of the facility. Please refer to *Exhibit 4 – Site Plans* for more details.

**(2) The mini facility may be located on buildings and structures; provided, that the immediate interior wall or ceiling adjacent to the facility is not a designated residential space.**

*Response:* The proposed panel antennas will be mounted on an existing guy tower, which is not a designated residential space.

**(3) The mini facility shall be exempt from design review if the antenna and related components are the same color as the existing building, pole or support structure on which it is proposed to be located.**

*Response:* The proposed antennas will blend with the existing antennas and tower. Please refer to *Exhibit 9 – Photo Simulations*.

**(4) The shelter or cabinet used to house radio electronic equipment shall be contained wholly within a building or structure, or otherwise appropriately concealed, camouflaged or located underground.**

*Response:* The proposed equipment cabinets will be mounted on an 8' X 20' concrete pad and located within a fenced lease area. The proposed fence is a 6' high chain link fence, which will match the existing chain link fence that encloses the other carrier's equipment. The wireless communication facility is on a parcel surrounded by trees, which will effectively block the equipment cabinets from view of the neighboring properties. Please refer to *Exhibit 4 – Site Plans* and *Exhibit 9– Photo Simulations*.

**(5) Mini facilities shall comply with the height limitation specified for all zones except as follows: Omni-directional antennas may exceed the height limitation by 10 feet or, in the case of nonconforming structures, the antennas may extend 10 feet above the existing structure. Panel antennas may exceed the height limitation if affixed to the side of an existing nonconforming building and they blend in architecturally with the building. Placement of an antenna on a nonconforming structure shall not be considered to be an expansion of the nonconforming structure.**

*Response:* The proposed antennas will be co-located on an existing 294' guy tower in the R-1 zone. The top of the proposed antennas will be at 114', and there will be no increase in height to the existing tower.

**19.29.050 Development standards for monopole I.**

*Response:* This is not applicable as the proposal is an existing 294' guy tower. Therefore it does not qualify as a monopole I facility.

**19.29.060 Development standards for monopole II.**

**(1) Monopole II facilities are only permitted in the industrial (I) zone; provided the wireless communications support structure shall be designed to accommodate two or more wireless communications facilities.**

*Response:* The proposed co-location is in the R-1 zone of the City of Oak Harbor. However, Section (5) of this chapter states that co-location of wireless communications facilities on an existing support structure are permitted.

**(2) Monopole II facilities are permitted in highway service commercial (C-4), planned business park (PBP), planned industrial park (PIP), and public facilities (PF) zones with a conditional use permit.**

*Response:* This is not applicable as the proposal is a co-location on an existing wireless tower in the R-1 zone.

**(3) Monopole II facilities are not permitted in residential (PRE, R-1, R-2, R-3 and R-4), residential office (RO), neighborhood commercial (C-1) or central business district (CBD) zones, except when expressly provided for in this chapter.**

*Response:* Although this proposal for a wireless communication facility is in the R-1 zone, it is a proposal for the co-location of twelve (12) panel antennas on an existing guy tower. There will be no increase in height to the existing tower and limited change to its visual appearance. There are no other suitable structures that will satisfy Verizon's coverage objectives and provide seamless service for customers. See *Exhibit 14 – Radiofrequency Justification Letter and Propagation Maps.*

**(4) Monopole II facilities which exceed 60 feet in height or are located within 300 feet of a residential zone shall require a conditional use permit.**

*Response:* This is not applicable as the proposal is for co-location on an existing guy tower.

**(5) Co-location of wireless communications facilities on an existing support structure shall be permitted.**

*Response:* Verizon Wireless is proposing to co-locate twelve (12) antennas on existing guy tower. Please refer to *Exhibit 9– Photo Simulations.*

**(6) Macro facilities are the largest permitted wireless communications facilities allowed on a monopole II facility. Antennas which extend above the monopole II wireless communications support structure shall not be calculated as part of the height of the wireless communications support structure. For example, the maximum height for a monopole II facility shall be 150 feet and the maximum height of antennas which may be installed on the support structure could be 15 feet, making the maximum permitted height of the support structure and antennas 165 feet (150 feet plus 15 feet).**

*Response:* The proposed panel antennas are mini facilities, which are smaller than the largest allowed macro facilities. The top of the proposed antennas will be at 114', and there is no proposed height increase to the existing tower.

**(7) The shelter or cabinet used to house radio electronics equipment and the associated cabling connecting the equipment shelter or cabinet to the monopole I facilities shall be concealed, camouflaged or placed underground. Monopole I facilities shall be subject to review by the planning commission using the procedures and review criteria specified in Chapter 19.48 OHMC and this chapter.**

*Response:* This is an existing guy tower, and the proposed equipment will be supporting the proposed Verizon Wireless antennas that will be co-located on the tower. The proposed equipment cabinets will be surrounded by a 6' high chain link fence. The wireless facility is surrounded by trees that block the existing and proposed ground equipment from view by neighboring residential properties. See *Exhibit 9– Photo Simulations*.

**(8) Monopole II facilities shall be landscaped in conformance with Chapter 19.46 OHMC.**

*Response:* The tower already exists, and the proposed antennas will be co-located on the existing facility. The proposed ground equipment will be located next to the existing compound and surrounded by trees, which will block the ground equipment from view of neighboring properties. The proposed equipment cabinets and generator will be placed within a 15' X 30' lease area surrounded by a 6' high chain link fence.

**(9) Monopole II facilities adjacent to a single-family zone shall be set back a distance equal to the height of the wireless communications support structure from the nearest single-family lot line.**

*Response:* This site is an existing wireless communication facility. As stated in number (5) of this section, co-location of antennas on an existing support structure is permitted. The existing guy tower has met the setbacks required at the time of its construction.

**(10) Monopole II facilities shall be separated from each other by a distance equal or greater than 1,320 feet.**

*Response:* This site is an existing wireless communication facility. As stated in number (5) of this section, co-location of antennas on an existing support structure is permitted. The existing guy tower has met the separation requirements at the time of its construction.

**19.29.070 Additional permit criteria for monopole I and monopole II.**

**In addition to the permit criteria specified in Chapters 19.48 and 19.67 OHMC, the following specific criteria shall be met before a site plan review or conditional use permit can be granted:**

**(1) Antennas may not extend more than 15 feet above their supporting structure, monopole, building or other structure.**

*Response:* The top of proposed twelve (12) panel antennas will be at 114' on the existing 294' guy tower. Therefore, the proposed antennas will not extend above the supporting structure to which they are attached. Refer to *Exhibit 9– Photo Simulations*.

- (2) Site location and development shall preserve the pre-existing character of the surrounding buildings and land uses and the zone district to the extent consistent with the function of the communications equipment. Wireless communications towers shall be integrated through location and design to blend in with the existing characteristics of the site to the extent practical. Existing on-site vegetation shall be preserved or improved, and disturbance of the existing topography shall be minimized, unless such disturbance would result in less visual impact of the site to the surrounding area.**

*Response:* The existing wireless communications facility is located in the R-1 zone of the City of Oak Harbor. The top of the proposed panel antennas will be at 114', and there is no increase in height proposed to the existing guy tower. The proposed antennas are similar to the already existing antennas, and the existing vegetation surrounding the site will not be disturbed. The proposed equipment cabinets will be surrounded by a 6' chain link fence, which will match the existing chain link fence surrounding the other carrier's equipment. The entire wireless communication facility is surrounded by trees, which effectively screen the ground equipment from the view of neighboring properties. See *Exhibit 9– Photo Simulations*. The proposed equipment cabinets will do little to impact the existing topography of the site. Please refer to *Exhibit 4 – Site Plans*.

- (3) Accessory equipment facilities used to house wireless communications equipment should be located within buildings or placed underground when possible. When they cannot be located in buildings, equipment shelters or cabinets shall be screened and landscaped in conformance with Chapter 19.46 OHMC.**

*Response:* The proposed equipment cabinets and generator will be mounted on concrete pads and surrounded by 6' chain link fence. The fencing will match the existing chain link fence surrounding the other carrier's equipment. The existing tower, existing equipment, and proposed equipment are located on a parcel surrounded by trees. These trees effectively block the ground equipment from view of surrounding properties. See *Exhibit 9– Photo Simulations*.

- (4) No equipment shall be operated so as to produce noise in levels above 45 dB as measured from the nearest property line on which the attached wireless communications facility is located.**

*Response:* The proposed equipment cabinets and generator will comply with the noise requirements of the WAC. The generator will be tested annually during daytime hours, and it would only be operated during nighttime hours in case of power failure as an emergency. Please refer to *Exhibit 11 – Noise Report* for the level of noise produced by the proposed equipment and generator for the nearest property.

- (5) In any proceeding regarding the issuance of site plan review or a conditional use permit under the terms of this chapter, federal law prohibits consideration of environmental effects of radio frequency emissions to the extent that the proposed facilities comply with the Federal Communications Commission regulations concerning such emission.**

*Response:* Please refer to *Exhibit 12 - A Non-Ionizing Electromagnetic Radiation Report (NIER) report*, which shows that the Verizon proposal complies with current FCC and municipal guidelines for human exposure.

**(6) Towers, antennas or other objects that penetrate the 100:1 angle slope criteria established in Federal Aviation Regulation (FAR) Part 44 (Sections 77.13(a)(1) and 77.13(a)(2)(I), respectively) shall be reviewed for compatibility with airport operations. No tower, antenna or other object shall constitute a hazard to air navigation, interfere with the safe operation of aircraft or deny the existing operational capability of Ault Field.**

*Response:* The top of the proposed antennas will be at 114' on the 294' guy tower. The existing tower will have met the FAA regulations before approval of its construction was granted. The Verizon Wireless proposal will not increase the height of the existing tower and will not impact its compliance with FAA regulations.

**19.29.080. Exemption.**

**The following are exempt from the requirement of a conditional use permit, and shall be considered a permitted use in all zones where wireless and attached wireless communications facilities are permitted: Minor modifications of existing wireless communications facilities and attached wireless communications facilities, whether emergency or routine, so long as there is little or no change in the visual appearance. Minor modifications are those modifications, including the addition of antennas, to conforming wireless and attached wireless communications facilities that meet the performance standards set forth in this chapter.**

*Response:* The Verizon Wireless proposal is considered a minor modification to an existing wireless communication facility. The proposed antenna will do little to change the appearance of the existing tower and will not increase the height of the tower. However, per conversations with Ray Lindenburg (*Exhibit 7 – Email Correspondence*), the proposal for equipment cabinets mounted on an 8' X 20' concrete pad within a new 15' X 30' fenced lease area will require conditional use approval.

**19.29.090 Obsolescence.**

**A wireless communications facility or attached wireless communications facility shall be removed by the facility owner within six months of the date it ceases to be operational or if the facility falls into disrepair.**

*Response:* Verizon Wireless understands that any wireless communication facility that ceases operation or falls into disrepair shall be removed within six months.

**19.67 Conditional Uses**

**19.67.030 Criteria.**

**No conditional use shall be granted unless it meets the following criteria:**

- 1. All special conditions for the particular use are met;**

*Response:* The proposed project is consistent with the Conditional Use criteria and special conditions of the City of Oak Harbor Municipal Code as it applies to wireless communications facilities. The facility will not be detrimental to the surrounding area as it is a passive, unmanned use, which will provide improved beneficial wireless communications service to the area. Please refer to *Exhibit 9 – Radiofrequency Justification Letter and Propagation Maps*.

**2. It does not have a significant, adverse environmental impact resulting in excessive noise, light, and glare or soil erosion on adjacent property.**

*Response:* No lighting is proposed for this wireless communication facility installation. The noise levels produced by the equipment will be within the allowable parameters, as shown in **Exhibit 11 – Noise Report**. This proposal is a co-location that will have limited impact on the visual appearance of the existing tower, and the existing trees surrounding the site will screen the ground equipment from the view of neighboring properties. Please refer to **Exhibit 9– Photo Simulations**. The equipment cabinets and generator will be mounted on an 8’ X 20’ and 4’ X 10’ concrete pad respectively and will do little to impact the topography or soil of the site or surrounding properties. Please refer to **Exhibit 8 – SEPA Checklist** for more information on the environmental impact on the proposal.

**3. It is provided with adequate parking (list the parking requirement for the proposed as per the OHMC Sec 19.44.100 and also the number of parking spaces provided on the site. Refer to OHMC Sec 19.20.320 (10) for uses in the CBD District).**

**19.44.100 Minimum parking space standards**

Use	Required Parking
Residential, single-family	Two per dwelling
Residential, duplex	Two per dwelling
Residential, multiple	One and one-half per dwelling unit
Three or more bedroom dwelling unit	Two per three or more bedroom dwelling unit. In addition, multifamily projects with eight or more units shall provide one visitor parking space for each eight units.
Banks	One per 400 square feet of gross floor area, plus employee parking
Bed and breakfast inns and rooms	Two for primary resident or on-site manager plus one for each guest room
Bowling alleys	Four per alley, plus employee parking
Churches, auditoriums and similar enclosed places of assembly	One per four seats and/or one per 30 square feet of assembly space without fixed seats
Skilled nursing facilities	One per five beds, plus owner and employee parking
College	One space per 200 square feet of classroom space

Use	Required Parking
Assisted living facilities	Minimum of 0.8 spaces per unit, with a maximum of one and one-half spaces per unit
Food and beverage places with sales and consumption on premises	One per three seats, plus one space for every two employees on the largest shift
Furniture, appliance, hardware, clothing and shoe stores, personal service stores such as beauty parlors, barbershops and physical fitness centers	One per 600 square feet gross floor area, plus employee parking
Gasoline stations	15 spaces, including pump and service area
Hospital	One per two beds, excluding bassinets
Hotels, motor hotels	One per sleeping room, plus owner and employee parking
Libraries and museums	One per 200 square feet gross floor area, plus employee parking
Manufacturing uses, research testing and processing, assembling, all industries	One per each two employees on maximum shift and not less than one per each 800 square feet gross floor area
Mortuaries	One per 100 square feet of gross floor area used for assembly or one per five seats, plus employee parking
Motels	One per unit, plus owner and employee parking
Motor vehicle, machinery, plumbing, heating, ventilating, building supplies stores and services	One per 1,000 square feet floor area, plus employee parking
Offices, medical and dental (including optometrists)	One per 200 gross square feet of floor area, plus employee parking
Offices not providing customer services	One per each employee
Offices of opticians, chiropractors and others licensed by the state of Washington to practice the healing arts	One per 400 square feet of gross floor area, plus employee parking

Use	Required Parking
Offices, business and professional (other than medical and dental) with on-site customer service	One per 400 square feet of gross floor area, plus employee parking
Rooming houses, similar uses	One per dwelling unit
Schools, elementary and junior high	One per each employee and faculty member, plus 15 visitor parking
Schools, high	One per each 10 students, plus one per each employee and faculty member, plus 15 visitor parking
Shopping centers with over 30,000 square feet of gross floor area	Four and one-half spaces per 1,000 square feet gross floor area, but not to exceed five spaces per 1,000 square feet of gross floor area
Stadiums, sport arenas and similar open assemblies	One per four seats and/or one each 30 square feet of assembly space without fixed seats
Theaters	One per four seats, plus employee parking
Warehouses, storage and wholesale business	One per each employee, plus two additional spaces
Other retail	One per 300 square feet gross floor area, plus employee parking

*Response:* The Verizon proposal is for an unmanned telecommunications facility. There will be access to the location for monthly maintenance via an existing gravel drive. The parcel has space available for these maintenance vehicles to park outside the compound. Please refer to *Exhibit 4 – Sheet A-2 – Site Plans*.

**4. It is served with adequate public streets, public utilities and facilities.**

*Response:* This Verizon Wireless proposal is accessed from SW Roeder Drive via an existing gravel drive. This access is adequate for required visits to the site for maintenance of the telecommunication facility. The proposed facility will received power via an existing transformer on the site, which will run power via underground route to the proposed Verizon wireless utility rack. Verizon Wireless is also proposing to run underground conduit to the existing utility pole for fiber and future growth. Please refer to Sheet A-2 of *Exhibit 4 – Site Plans*.

**5. It otherwise meets the purpose of the district in which it is to be placed.**

**Article II. R-1 – Single Family Residential**

**19.20.100 Purpose and intent**

The R-1 single-family residential district is intended for low-density, urban, single-family residential uses, while providing sufficient density to allow the city to effectively provide needed urban services. Manufactured home subdivisions are also allowed in this zone. The densities for this district range between a minimum of three units per gross acre and a maximum of six units per gross acre.

*Response:* Verizon Wireless is proposing to co-locate twelve (12) antennas on an existing 294' guy tower. Although this site is located in the R-1 zone, it is an existing wireless communication facility surrounded by trees. The top of the proposed Verizon Wireless antennas are at 114', and there will be no increase in height to the existing tower. Please see *Exhibit 9– Photo Simulations*. The proposed wireless communication facility will provide improved service coverage to the area bound by Wieldraayer Rd to the North, W. Pioneer Way to the East, SW 16<sup>th</sup> Ave to the South, Fairway Lane to the West. As this is an already existing tower, the Verizon Wireless proposal will not negatively impact the intended use of the R-1 zone for low-density, urban, single-family residential uses. The proposal is meant to serve the individuals living in and spending time in this area. Although a wireless communication facility is typically not a permitted use in R-1 zone, this Verizon Wireless proposal is for the co-location of twelve (12) antennas on an existing tower, which is permitted. The equipment cabinets and generator that will support the proposed antennas will be surrounded by a 6' high chain link fence, which will be further screened by the existing trees that surround the site. See *Exhibit 9– Photo Simulations*. This proposal is the least invasive design and is the only suitable structure available to provide the necessary improvement to service coverage for its customers. This facility location is necessary to avoid dropped calls and gaps in service for Verizon's customers. Please refer to *Exhibit 9 – Radiofrequency Justification Letter and Propagation Maps*.

6. It meets the goals and policies of the Oak Harbor comprehensive plan. (Ord. 1555 § 27, 2009).

*Response:* The proposed wireless communication facility meets the goals and policies of the Oak Harbor comprehensive plan. Verizon Wireless is currently upgrading its wireless services system to provide state of the art 4G LTE technology across the region. The proposed project will fill a 4G LTE gap in Oak Harbor, improving the speed and reliability of wireless service for Verizon Wireless customers. It will be beneficial to the community as it will provide seamless 4G LTE coverage to schools, police, and fire protection facilities and services in the surrounding area and the City of Oak Harbor. Please refer to *Exhibit 14 – Radiofrequency Justification Letter and Propagation Maps*.

#### **19.67.040 General conditions.**

The following conditions shall be applied to each permit:

1. The conditional use shall not be transferable to a subsequent user unless specifically authorized by the hearing examiner who finds it appropriate and a permit authorizing the transferability is on record with the Island County auditor;

*Response:* The proposed wireless communication facility will comply with the approved plans and any special conditions of approval imposed on the conditional use permit.

2. The conditional use permit must be acted on within one year of the date of granting. Otherwise the conditional use permit shall expire and be null and void;

*Response:* Noted.

**3. The conditional use permit applies only to the property for which application is made.**

*Response:* Any modification of plans submitted and approved will not violate the original intent of the plan, the conditions of approval, and will only apply to the property in which the application is made.

**Oak Harbor Comprehensive Plan**

**Land Use: R-1 Single family: R-1 Single-Family residential areas are intended for low density, urban, single-family residential uses, while providing sufficient density to allow the City to effectively provide needed urban services. Densities would range between a minimum of three (3) units per gross acre and a maximum of six (6) units per gross acre.**

*Response:* Verizon Wireless is proposing to co-locate twelve (12) antennas on an existing 294' guy tower. Although this site is located in the R-1 zone, it is an existing wireless communication facility surrounded by trees. The proposal is the least invasive wireless facility design and will blend in with the existing surroundings. The proposed project is consistent with the Conditional Use criteria of the City of Oak Harbor Municipal Code as it applies to wireless communications facilities. The facility will not be detrimental to the surrounding area as it is a passive use, will blend in to the surrounding landscape, and will provide beneficial wireless communications service to the area. There are no other structures/towers that will meet Verizon's coverage objectives and allow for seamless functioning of its technology. Please refer to *Exhibit 14 – Radiofrequency Justification Letter and Propagation Maps*.

***Goals and Policies - Urban Design Element***

**Goal 11: Design guidelines should be established that encourage wireless and satellite communication facilities to be located and designed in such a manner as to minimize their visual impact to the community.**

*Response:* Verizon Wireless is proposing to co-locate (12) antennas on an existing 294' guy tower. There will be limited impact to the visual appearance of the existing tower, and there is no proposed increase in height. The proposed equipment cabinets will be mounted on an 8' X 20' concrete pad, and the proposed generator will be mounted on a 4' X 10' concrete pad both located within a 15' X 30' lease area. This lease area will be surrounded by a 6' high chain link fence, which is screened from the view of surrounding properties by existing trees. Please refer to *Exhibit 9– Photo Simulations*.

***Policy:***

**11a Consideration should be given to establishing design guidelines that address the appearance and siting of ground and building mounted satellite facilities**

*Response:* This is not applicable as the proposal is not for ground or building mounted satellite facilities.

**11b Design guidelines should be established that require telecommunication facilities (especially monopoles) to blend into the surrounding environment.**

*Response:* Verizon Wireless is proposing to co-locate antennas on an existing guy tower. The antennas will do little to impact the visual appearance of this existing tower, as shown in *Exhibit 9 – Photo Simulations*. Also shown in *Exhibit 9*, the proposed ground equipment will be surrounded by a 6' high

chain link fence, which is screened from view of surrounding properties by the existing trees surrounding the site.

## **5. CONCLUSION**

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Verizon Wireless' proposed wireless telecommunications facility meets all requirements of City of Oak Harbor's land use ordinances. Verizon respectfully requests that the City of Oak Harbor approve Verizon's proposal as designed, subject only to the City of Oak Harbor's standard conditions of approval.

RECEIVED  
MAR 12 2015

**EXHIBIT 6**  
**LEGAL DESCRIPTION**

THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 33 NORTH, RANGE 1 EAST W.M. DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER;

THENCE NORTH 88°01'14" WEST ALONG THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, A DISTANCE OF 250.00 FEET TO THE SOUTHWEST QUARTER OF THAT CERTAIN TRACT CONVEYED TO THE CITY OF OAK HARBOR UNDER AUDITOR'S FILE NO. 151164, RECORDS OF ISLAND COUNTY, WASHINGTON, SAID POINT BEING THE TRUE POINT OF BEGINNING;

THENCE CONTINUE NORTH 88°01'14" WEST ALONG SAID SOUTH LINE, A DISTANCE OF 370 FEET; THENCE NORTH 1°58'46" EAST 180.00 FEET;

THENCE NORTH 64°56'15" EAST 193.23 FEET;

THENCE NORTH 1°58'46" EAST 20.00 FEET;

THENCE SOUTH 88°01'14" EAST 20.00 FEET;

THENCE SOUTH 1°58'46" WEST 20.00 FEET;

THENCE NORTH 88°01'14" EAST 178.31 FEET TO THE WEST LINE OF THAT CERTAIN TRACT OF LAND CONVEYED TO THE CITY OF OAK HARBOR UNDER AUDITOR'S FILE NO. 192797, RECORDS OF SAID ISLAND COUNTY; THENCE SOUTH 1°58'46" WEST ALONG SAID WEST LINE AND THE WEST LINE OF THE AFORESAID TRACT DESCRIBED UNDER AUDITOR'S FILE NO. 151164, A DISTANCE OF 280.00 FEET TO THE TRUE POINT OF BEGINNING.

(SHOWN AS LOT LABELED "TELE-VUE SYSTEMS, INC" ON BOUNDARY LINE ADJUSTMENT/OAK HARBOR SHORT PLAT NO. 8-89, APPROVED ON MAY 23, 1990, RECORDED ON JUNE 5, 1990, UNDER AUDITOR'S FILE NO. 90010462, RECORDS OF ISLAND COUNTY, WASHINGTON)

TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS AND FOR THE INSTALLATION AND MAINTENANCE OF UTILITIES OVER, ACROSS AND UNDER A 50 FOOT STRIP OF LAND AS SHOWN HEREON AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE AFORESAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, THENCE NORTH 88°01'14" WEST ALONG THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, A DISTANCE OF 620 FEET TO THE TRUE POINT OF BEGINNING;

THENCE NORTH 1°58'46" EAST 50.00 FEET;

THENCE NORTH 88°01'14" WEST TO THE EAST MARGIN OF 170 NORTHWEST STREET AS DESCRIBED UNDER AUDITOR'S FILE NO. 89006644, RECORDS OF ISLAND COUNTY, WASHINGTON;

THENCE SOUTHERLY, ALONG SAID EAST MARGIN, TO THE SAID SOUTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER; THENCE SOUTH 88°01'14" EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 166.59 FEET TO THE TRUE POINT OF BEGINNING.

SITUATE IN COUNTY OF ISLAND, STATE OF WASHINGTON

EXHIBIT 7  
Email Correspondence

Carly Nations

**From:** Ray Lindenburg <rlindenburg@oakharbor.org>  
**Sent:** Tuesday, February 03, 2015 2:52 PM  
**To:** Carly Nations  
**Subject:** RE: Building Permit fee estimate

RECIEVED

MAR 12 2015

CITY OF OAK HARBOR  
DEVELOPMENT SERVICES DEPARTMENT

Carly -

Sorry for the delay in getting back to you. I had to do a little research to determine the history at the site.

I agree with you in that there is no change to the tower itself, however, the change at the ground level is going to be the key issue here. As in the past, when Comcast requested approval to construct a building in which their equipment would be housed, a Conditional Use Permit will be required. If there is some way for your proposed equipment to be located within an existing structure, then we could forgo the CUP requirement.

I will give you a call to confirm this information.

Thanks -  
Ray

---

**From:** Carly Nations [mailto:cnations@glotelinc.com]  
**Sent:** Monday, February 02, 2015 2:01 PM  
**To:** Ray Lindenburg  
**Subject:** RE: Building Permit fee estimate

Good Afternoon Ray,

I hope this email finds you well. I just wanted to follow-up with you on the site discussed below. My colleague, Sunny Ausink, has also been in contact.

We are just trying to clear up some confusion about the need for a CUP for this site. As it is a pre-existing tower with an existing CUP, and we are not proposing any increase in height to the structure, why is it required to obtain another CUP? The site is located at 200 SW Roeder Drive (Parcel# R13334-012-0880).

Any clarification you can offer for us would be greatly appreciated. If you need any more information, please let me know.

Thank you,

Carly Nations  
Land Use  
Glotel, Inc  
15375 SE 30th Place, Suite 160  
Bellevue, WA 98007

m: (425) 326-6050  
[cnations@glotelinc.com](mailto:cnations@glotelinc.com)

**From:** David Anderson [<mailto:danderson@oakharbor.org>]  
**Sent:** Friday, January 30, 2015 2:42 PM  
**To:** Carly Nations  
**Cc:** Ray Lindenburg; Lisa Bebee  
**Subject:** RE: Building Permit fee estimate

Carly,  
I've spoken with Ray Lindenburg out associate planner, he indicated he has been contacted by someone in your form regarding this project.  
Ray has indicated a conditional use permit is required.  
Please contact Ray and he will assist you in the CUP process.

Ray Lindenburg (360) 279-4578  
[rlindenburg@oakharbor.org](mailto:rlindenburg@oakharbor.org)

*David Anderson*

Building Official  
(360) 279-4517  
[danderson@oakharbor.org](mailto:danderson@oakharbor.org)

---

**From:** Carly Nations [<mailto:cnations@glotelinc.com>]  
**Sent:** Friday, January 30, 2015 10:31 AM  
**To:** David Anderson  
**Subject:** RE: Building Permit fee estimate

Hi David,

Sorry to bother you again, but have you heard any update from the planners yet on this site?

I have attached an email between you, Cac Kamak, & Amanda Nations (also of Glotel, Inc) about this same project from 9/23/14. In it, it suggests that only a building permit would be required. I received this yesterday from a colleague, and I just wanted to share it with you to provide some more background on the site.

Also, I was using an old form and misstated the project valuation. According to our updated records, we need a BP estimate for a valuation of \$75,000.

Thank you. If you need anything else from me, please let me know. I appreciate your help.

Happy Friday,

Carly Nations  
Land Use  
Glotel, Inc  
15375 SE 30th Place, Suite 160  
Bellevue, WA 98007

m: (425) 326-6050

**From:** David Anderson [<mailto:danderson@oakharbor.org>]  
**Sent:** Thursday, January 29, 2015 11:32 AM  
**To:** Carly Nations  
**Cc:** Lisa Bebee  
**Subject:** RE: Building Permit fee estimate

Carly,  
I am waiting for the planners to determine if a CUP is required.  
The CUP process must be completed prior to the issuance of a building permit.

Any submittals for building permit prior to the CUP will be sent back.

As soon as I hear from the planners I'll let you know.

*David Anderson*

Building Official  
(360) 279-4517  
[danderson@oakharbor.org](mailto:danderson@oakharbor.org)

---

**From:** Lisa Bebee  
**Sent:** Thursday, January 29, 2015 11:19 AM  
**To:** David Anderson  
**Subject:** FW: Building Permit fee estimate

Thank you-  
Lisa Bebee  
Permit Coordinator  
Development Services Department  
[www.oakharbor.org](http://www.oakharbor.org)  
(360) 279-4510  
fax (360) 279-4519

---

**From:** Carly Nations [<mailto:cnations@glotelinc.com>]  
**Sent:** Thursday, January 29, 2015 11:08 AM  
**To:** Lisa Bebee  
**Subject:** RE: Building Permit fee estimate

Hi Lisa,

I am still waiting for a response from David Anderson on whether we might need a modification to the CUP.

In the meantime, would you be able to provide me with the building permit submittal fees for the proposal? It takes a while for our checks to get ordered and to the office, so I was hoping to put in a

request as soon as possible so I will have the check ready once we get an answer and are ready to submit.

As I mentioned before, the project valuation is \$300,00, and Verizon is proposing to add (12) panel antennas to an existing wireless guy tower at 200 SW Roeder Drive.

Any help you could provide would be greatly appreciated.

Thanks,

Carly Nations  
Land Use  
Glotel, Inc  
15375 SE 30th Place, Suite 160  
Bellevue, WA 98007

m: (425) 326-6050  
[cnations@glotelinc.com](mailto:cnations@glotelinc.com)

**From:** David Anderson [<mailto:danderson@oakharbor.org>]  
**Sent:** Thursday, January 29, 2015 8:51 AM  
**To:** Carly Nations  
**Cc:** Lisa Bebee  
**Subject:** RE: Building Permit fee estimate

Carly,  
Please identify the scope of work. This tower has a conditional use permit associated with it.  
Your proposed addition of the 12 panel antennas may require the CU permit to be modified.  
This will depend on whether or not you are adding equipment to the site, such as concrete slabs, equipment structures, additional guy wires etc.

Regardless of the CU permit process a building permit is required.

*David Anderson*

Building Official  
(360) 279-4517  
[danderson@oakharbor.org](mailto:danderson@oakharbor.org)

---

**From:** Lisa Bebee  
**Sent:** Thursday, January 29, 2015 8:14 AM  
**To:** David Anderson; Cac Kamak  
**Subject:** FW: Building Permit fee estimate

Please see the email below.

Thank you-  
Lisa Bebee  
Permit Coordinator

Development Services Department  
[www.oakharbor.org](http://www.oakharbor.org)  
(360) 279-1510  
fax (360) 279-1519

---

**From:** Carly Nations [<mailto:cnations@glotelinc.com>]  
**Sent:** Wednesday, January 28, 2015 8:48 AM  
**To:** Lisa Bebee  
**Subject:** Building Permit fee estimate

Good Morning Lisa,

I am working on behalf of Verizon Wireless on a site located at 200 SW Roeder Drive (Parcel# R13334-012-0880). Verizon is proposing to add (12) panel antennas to an existing wireless guy tower with no increase in height to the tower.

I was hoping that you could provide me with the Building Permit fee estimate for this proposal with a project valuation of \$300,000.

Also, does this proposal only require a Building Permit? Or will a land use review be required as well?

Thank you! Hope you are having a great start to your day,

Carly Nations  
*Land Use*  
Glotel, Inc  
15375 SE 30th Place, Suite 160  
Bellevue, WA 98007

m: (425) 326-6050  
[cnations@glotelinc.com](mailto:cnations@glotelinc.com)



# NON-IONIZING ELECTROMAGNETIC RADIATION REPORT



RECIEVED  
MAR 12 2015  
CITY OF OAK HARBOR  
DEVELOPMENT SERVICES DEPARTMENT

Prepared For: **Verizon Wireless**  
3245 158th Avenue SE, MS 231  
Bellevue, WA 98008

Project Owner: **Verizon**  
Project Name: **Swantown**  
Project Number: **None**  
Project Address: **200 SW Roeder Drive**  
**Oak Harbor, WA 98277**  
Site Coordinates: **48.2972**  
**-122.6766**

Prepared By: **Glotel.**

Ryan McDaniel, P.E.  
December 23, 2014



EXPIRES 1 / 9 /

## PROJECT SUMMARY

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### PROJECT DESCRIPTION:

Verizon proposes the following: Install (6) outdoor equipment cabinets and (1) generator mounted on a concrete pad, within a proposed fenced area.

### PROJECT SCOPE:

The scope of this report is to determine, using the recommended prediction methods outlined in the Federal Communications Commission OET Bulletin 65 Edition 97-01, if the radio facility in question will be in compliance with all appropriate Federal regulations in regards to Radio Frequency (RF) Exposure.

### SUMMARY RESULTS:

Based on our review of the proposed RF configuration and applying worst-case scenario, we have determined the proposed site will comply with current FCC and municipal guidelines for human exposure to non-ionizing electromagnetic radiation for the Uncontrolled Condition / General Population and for the Controlled / Occupational Condition.

Total Calculated Maximum Power Density (mW/cm <sup>2</sup> )			Results
Uncontrolled / General Population	MPE Limits (mW/cm <sup>2</sup> )	0.5	PASS
	MPE Limits (mW/cm <sup>2</sup> )	9.80%	
Controlled / Occupational	MPE Limits (mW/cm <sup>2</sup> )	2.3	PASS
	MPE Limits (mW/cm <sup>2</sup> )	1.96%	

See the Conclusions Section and calculations in Appendix A which verify these results.

### CONTENTS:

Report .....	1 - 4
Appendix A (Calculations) .....	A
Appendix B (Referenced Documents) .....	B

## 1 Reference Documents

The following data was used to figure the RF exposure for the site.

Data	Document	Author
Limits for MPE	Table 1 OET Bulletin 65 Appendix A	FCC
Equipment Frequency Range	Equipment Specification Sheet	Manufacturer
Site Information	Construction Drawings	Glotel

Notes: No other antennas were found in the area which would contribute to the MPE for the same sector as the Verizon antennas. See calculations in Appendix A for a catalog of all antennas considered for this report.

## 2 New and Existing Equipment Contributing to total MPE

The existing panel antennas are mounted at a height such that the bottom of the antennas is 69 feet above ground level. There are (3) proposed sectors with (4) panel antennas each. Only (1) sector will contribute to the overall MPE for any area near the tower.

### Sector Alpha, Beta, or Gamma

Elevation	Equipment	ERP (Watts)	Owner
110.0	Panel Antenna	4,000	Verizon
110.0	Panel Antenna	4,000	Verizon
110.0	Panel Antenna	4,000	Verizon
110.0	Panel Antenna	4,000	Verizon
145.0	Panel Antenna	3,500	Other
145.0	Panel Antenna	3,500	Other
145.0	Panel Antenna	3,500	Other
184.0	Panel Antenna	3,500	Other
184.0	Panel Antenna	3,500	Other
247.0	Panel Antenna	3,500	Other
247.0	Panel Antenna	3,500	Other
124.0	Panel Antenna	3,500	Other
158.0	Omni Antenna	5,000	Other
	Omni Antenna	5,000	Other

Notes: Due to the amount of antennas, only the critical sector is shown above.

The ERP of the proposed and existing antennas is unknown. The panel antennas are conservatively estimated at 3,500 watts and the omni antenna at 5,000 watts.

The actual RF emissions from each antenna will be less than the value shown above.

### 3 Analysis

Section 2 of OET Bulletin 65 states that "for a truly worst-case prediction of power density at or near the surface, such as at ground-level or on a rooftop, 100% reflection of incoming radiation can be assumed, resulting in a potential doubling of predicted field strength and a four-fold increase in (far field equivalent) power density". Therefore, the following equation (6) is used:

$$S = \text{EIRP} / \pi R^2$$

Where: S = power density (mW/cm<sup>2</sup>)  
EIRP = equivalent isotropically radiated power  
R = distance to the center of the radiation antenna (cm)

### 4 Conclusion

#### Uncontrolled / General Population

According to the information available at the time of this report, the worst-case RF emissions of the proposed antennas, existing antennas, and antennas located nearby will be in compliance with the requirements of the current FCC and municipal guidelines for human exposure to non-ionizing electromagnetic radiation.

#### Controlled / Occupational

According to the information available at the time of this report, the worst-case RF emissions of the proposed antennas, existing antennas, and antennas located nearby will be in compliance with the requirements of the current FCC and municipal guidelines for human exposure to non-ionizing electromagnetic radiation.

## 5 Environmental Evaluation

An environmental evaluation is required if the PCS broadband facility is less than 10m (32.81ft) AGL and has a total power of all channels in any given sector greater than 2,000 W ERP as referenced in "Table 2 Transmitters, Facilities, and Operations Subject to Routine Environmental Evaluation" in Appendix A of Bulletin 65. As the proposed antennas lowest point above ground level is above the minimum elevation, **an environmental evaluation is not required.**

## 6 Disclaimers

1. This report is meant to show the level of conformance for the site with the codes and guidelines adopted by the agency with jurisdiction over the site. No other assessment is implied.
2. This report is prepared with the information furnished to Glotel by our client. If the conditions of the site change or if new information becomes available, the results of this report are not valid. Glotel should be notified so that the report can be updated and resubmitted.
3. Glotel is not responsible for the conclusions, opinions and recommendations made by others based on the information contained herein.

**A Appendix – MPE Calculations**

	Controlled / Occupational	Uncontrolled / Gen. Population
Min. Antenna Frequency (MHz)	700	700
Max. Power Density (mW/cm	2.3	0.5

**Uncontrolled Calculations**  
(Worst Case Sector)

**Sector Alpha, Beta, or Gamma**

Radial Center AGL (ft)	Eff. Height (ft)	Horiz. Dist. (ft)	Total Dist. (ft)	Total Dist. (cm)	ERP (watts)	ERP (dBm)	Eff. ERP (dBm)	Eff. EIRP (dBm)	Eff. EIRP (mW)	Power Density, S (mW/cm <sup>2</sup> )
110.0	104.0	0	104	3,170	4,000	66.02	46.02	48.18	65,775	0.00208
110.0	104.0	0	104	3,170	4,000	66.02	46.02	48.18	65,775	0.00208
110.0	104.0	0	104	3,170	4,000	66.02	46.02	48.18	65,775	0.00208
110.0	104.0	0	104	3,170	4,000	66.02	46.02	48.18	65,775	0.00208
145.0	139.0	0	139	4,237	3,500	65.44	45.44	47.60	57,553	0.00102
145.0	139.0	0	139	4,237	3,500	65.44	45.44	47.60	57,553	0.00102
145.0	139.0	0	139	4,237	3,500	65.44	45.44	47.60	57,553	0.00102
184.0	178.0	0	178	5,425	3,500	65.44	45.44	47.60	57,553	0.00062
184.0	178.0	0	178	5,425	3,500	65.44	45.44	47.60	57,553	0.00062
247.0	241.0	0	241	7,346	3,500	65.44	45.44	47.60	57,553	0.00034
247.0	241.0	0	241	7,346	3,500	65.44	45.44	47.60	57,553	0.00034
124.0	118.0	0	118	3,597	5,000	66.99	56.99	59.15	822,186	0.02023
158.0	152.0	0	152	4,633	5,000	66.99	56.99	59.15	822,186	0.01219

One sector will contribute to the MPE for any area near the tower.

The ERP of the proposed antennas is unknown and conservatively estimated at 3,500 watts.

Total Power Density = 0.0457  
Percentage of Uncontrolled Maximum Power Density = 9.8%

**Assumptions:**

1. a 20db loss of emissions to reach a location below the antenna results in EIRP/100
2. Effective Antenna ERP conservatively assumes a 20 dB vertical radiation loss for panel antennas
3. Effective Height assumes an approximate head level of 6 ft.

**Notes:**

1. ERP (dBm) = 10 \* log10[ERP (watts)] + 30
2. EIRP (dBm) = 1.64 \* ERP (dBm)
3. EIRP (mW) = 10^[EIRP (dBm)/10]

**A Appendix – MPE Calculations**

	Controlled / Occupational	Uncontrolled / Gen. Population
Min. Antenna Frequency (MHz)	700	700
Max. Power Density (mW/cm)	2.3	0.5

**Controlled Calculations**

(Worst Case Sector)

(Occupational Exposure at antenna installation level relative to active panel antennas)

**Sector Alpha, Beta, or Gamma**

Radial Center AGL (ft)	Eff. Height (ft)	Horiz. Dist. (ft)	Total Dist. (ft)	Total Dist. (cm)	ERP (watts)	ERP (dBm)	Eff. ERP (dBm)	Eff. EIRP (dBm)	Eff. EIRP (mW)	Power Density, S (mW/cm <sup>2</sup> )
110.0	104.0	0	104	3,170	4,000	66.02	46.02	48.18	65,775	0.00208
110.0	104.0	0	104	3,170	4,000	66.02	46.02	48.18	65,775	0.00208
110.0	104.0	0	104	3,170	4,000	66.02	46.02	48.18	65,775	0.00208
110.0	104.0	0	104	3,170	4,000	66.02	46.02	48.18	65,775	0.00208
145.0	139.0	0	139	4,237	3,500	65.44	45.44	47.60	57,553	0.00102
145.0	139.0	0	139	4,237	3,500	65.44	45.44	47.60	57,553	0.00102
145.0	139.0	0	139	4,237	3,500	65.44	45.44	47.60	57,553	0.00102
184.0	178.0	0	178	5,425	3,500	65.44	45.44	47.60	57,553	0.00062
184.0	178.0	0	178	5,425	3,500	65.44	45.44	47.60	57,553	0.00062
247.0	241.0	0	241	7,346	3,500	65.44	45.44	47.60	57,553	0.00034
247.0	241.0	0	241	7,346	3,500	65.44	45.44	47.60	57,553	0.00034
124.0	118.0	0	118	3,597	5,000	66.99	56.99	59.15	822,186	0.02023
158.0	152.0	0	152	4,633	5,000	66.99	56.99	59.15	822,186	0.01219

One sector will contribute to the MPE for any area near the tower.

The ERP of the proposed antennas is unknown and conservatively estimated at 3,500 watts.

Total Power Density = 0.0457  
 Percentage of Uncontrolled Maximum Power Density = 2.0%

Assumptions:

- a 0 dB loss is assumed for effective height of 0 to 6 feet  
 a 10 dB loss is assumed for effective height of 6 to 12 feet  
 a 20db loss of emissions to reach a location below the antenna results in EIRP/100
- Effective Antenna ERP conservatively assumes a 20 dB vertical radiation loss for panel antennas
- Effective Height assumes an approximate head level of 6 ft.

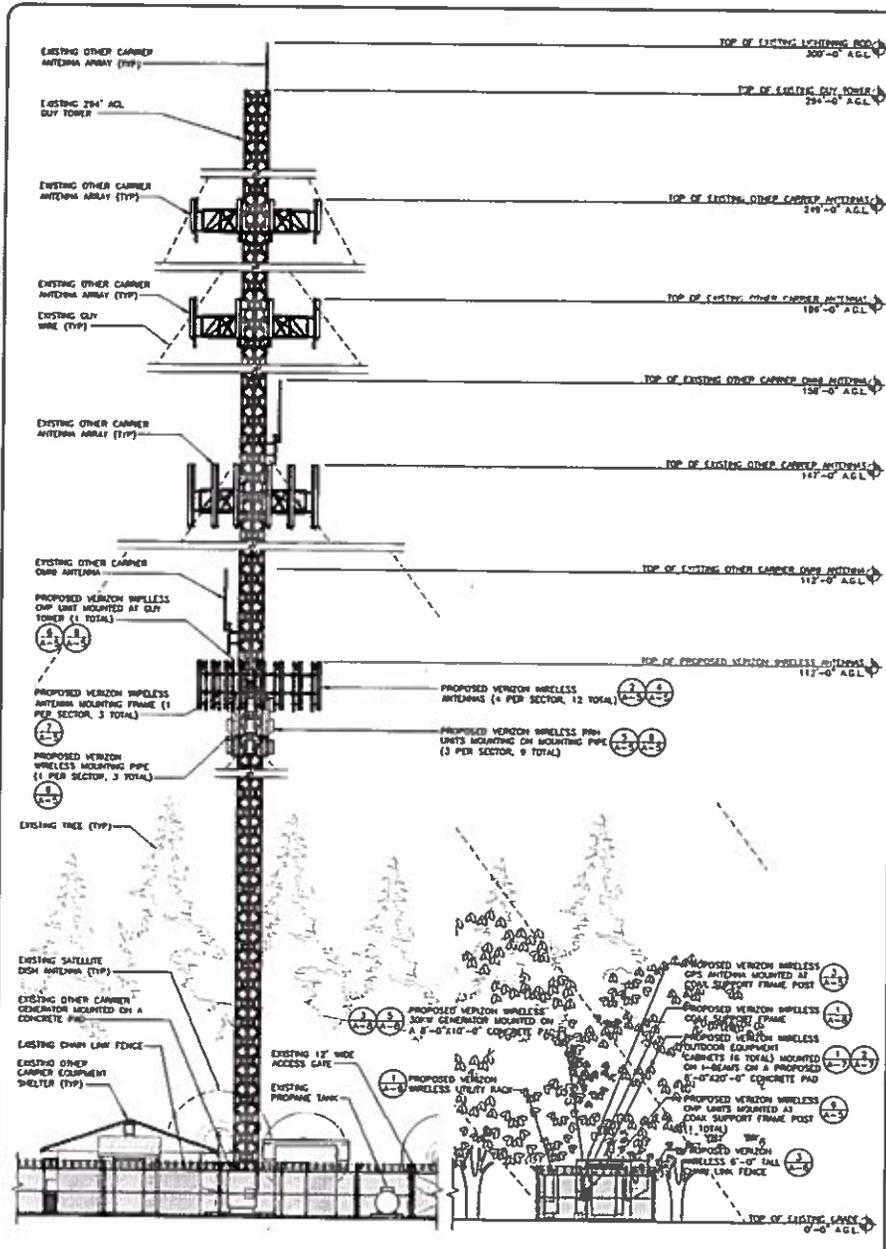
Notes:

- ERP (dBm) = 10 \* log10[ERP (watts)] + 30
- EIRP (dBm) = 1.64 \* ERP (dBm)
- EIRP (mW) = 10<sup>[EIRP (dBm)/10]</sup>

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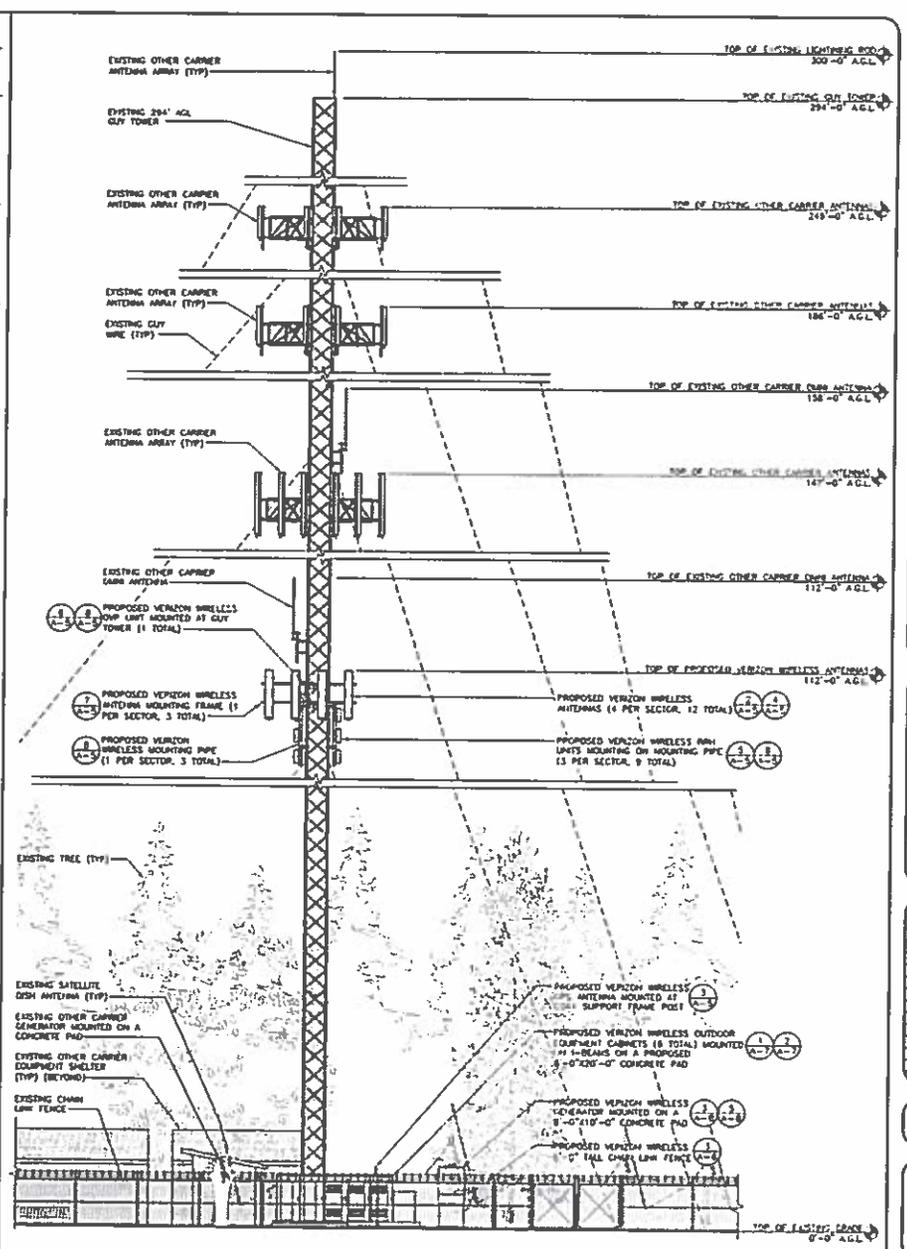
**B Appendix – Supplemental Information**

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.



24"x36" SCALE: 1/8" = 1'-0"  
 11"x17" SCALE: 1/16" = 1'-0"

PROPOSED NORTH ELEVATION |



24"x36" SCALE: 1/8" = 1'-0"  
 11"x17" SCALE: 1/16" = 1'-0"

PROPOSED WEST ELEVATION |



SWANTOW

240 SW BOLDER DRIVE  
 OAK HARBOR, WA 98271  
 ISLAND COUNTY

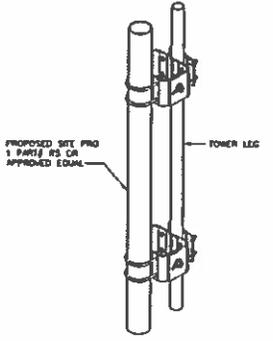
REVISIONS			
REV.	DATE	BY	DESCRIPTION

TITLE:  
 PROPOSED NORTH &  
 WEST ELEVATIONS

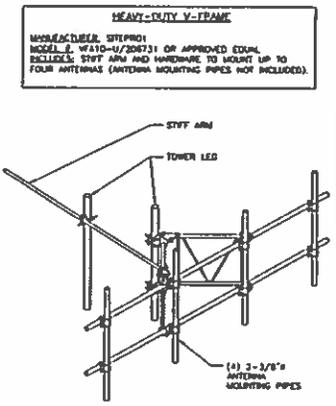
SHEET  
**A-4**

GLATEL PROJECT # \_\_\_\_\_ REV. \_\_\_\_\_

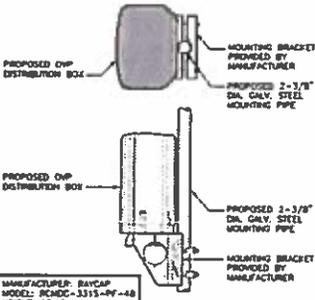
THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY TO VERIZON WIRELESS SERVICES. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.



**RRH & OVP MOUNTING ATTACHMENT**  
24" X 36" SCALE: N.T.S. 11-2117 SCALE: N.T.S.



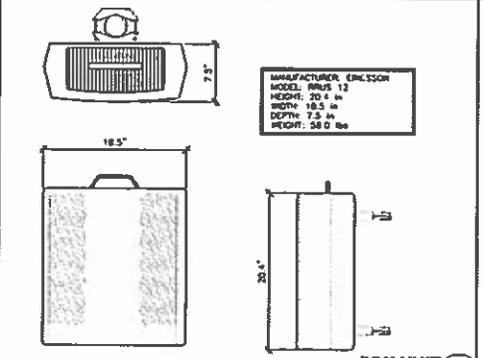
**HEAVY-DUTY Y-FRAME**  
24" X 36" SCALE: N.T.S. 11-2117 SCALE: N.T.S.



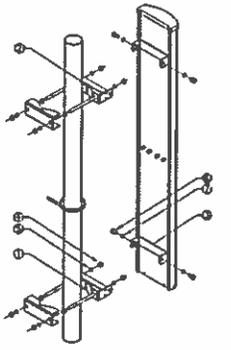
**OVP DISTRIBUTION BOX**  
24" X 36" SCALE: 1" = 1'-0" 11-2117 SCALE: 1" = 1'-0"

ANTENNA CONFIGURATION AND CABLE SCHEDULE										
SECTOR	QUANTITY	AZIMUTH	TECHNOLOGY	TIP HEIGHT	ANTENNA SIZE	MECH. TILT	NUMBER OF COAX	COAX #	COAX LENGTH	DUPLEXED
A	1	300°	700	112'-0"	75.0"	0°	2	1-5/8"	220'	NO
	1	300°	4MS	112'-0"	75.0"	0°	1	HYBRID	--	NO
	1	300°	PCS	112'-0"	75.0"	0°	1	HYBRID	--	NO
B	1	60°	700	112'-0"	75.0"	0°	2	1-5/8"	220'	NO
	1	60°	4MS	112'-0"	75.0"	0°	1	--	--	NO
	1	60°	PCS	112'-0"	75.0"	0°	1	--	--	NO
C	1	180°	700	112'-0"	75.0"	0°	2	1-5/8"	220'	NO
	1	180°	4MS	112'-0"	75.0"	0°	1	--	--	NO
	1	180°	PCS	112'-0"	75.0"	0°	1	--	--	NO

NOTES:  
1. COAX LENGTH TO BE VERIFIED PRIOR TO ORDERING AND CUTTING ANY COAX CABLES.  
2. VERIFICATION THAT EXISTING MONOPOLE AND MOUNTING CAN SUPPORT PROPOSED LOADING TO BE COMPLETED BY OTHERS.



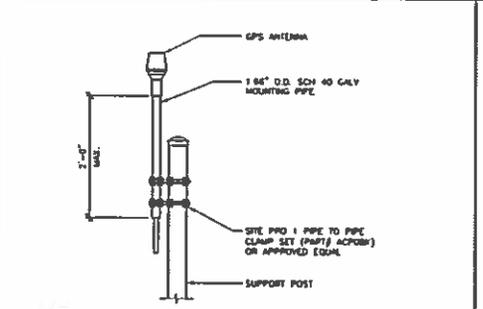
**RRH UNIT**  
24" X 36" SCALE: N.T.S. 11-2117 SCALE: N.T.S.



**ANTENNA ATTACHMENT**  
24" X 36" SCALE: N.T.S. 11-2117 SCALE: N.T.S.

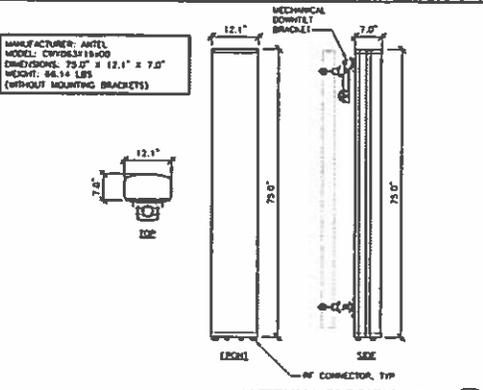
- NOTES:  
1. INSERT SCISSOR BRACKETS BETWEEN THE UPPER ANTENNA MOUNTING BRACKET AND THE UPPER POLE ADAPTER BRACKET. SECURE USING 1/2" INCH HARDWARE PROVIDED.  
2. TO SET THE DEGREE OF DOWNTILT, ALIGN THE DESIGN HOLE ON THE SCISSOR BRACKETS AND SECURE USING 5/16" INCH HARDWARE PROVIDED.  
3. THE NUMBER OF CONNECTORS WILL VARY BASED ON ANTENNA TYPE.

PARTS	QTY	DESCRIPTION
(A)	1	ADAPTER POLE LOWER
(B)	1	BRACKET DOWNLINK POLE
(C)	1	BRACKET DOWNLINK ANTENNA
(D)	4	1/2" x 1" HEX HEAD BOLT
(E)	4	1/2" SPACER WASHERS
(F)	2	5/16" x 1" HEX HEAD BOLT
(G)	2	5/16" SPACER WASHERS

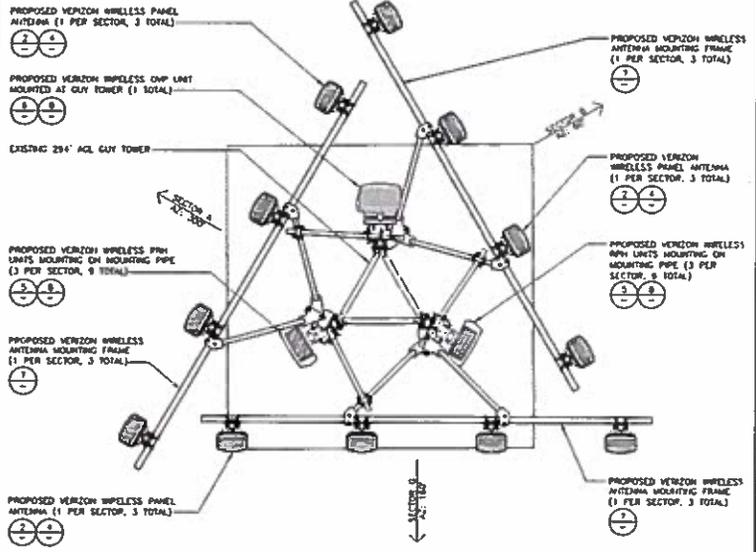


**GPS ATTACHMENT**  
24" X 36" SCALE: N.T.S. 11-2117 SCALE: N.T.S.

- NOTES:  
1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY OBSTACLES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.  
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.



**ANTENNA SPECIFICATION**  
24" X 36" SCALE: N.T.S. 11-2117 SCALE: N.T.S.



**ANTENNA PLAN**  
24" X 36" SCALE: 1/2" = 1'-0" 11-2117 SCALE: 1/4" = 1'-0"



SWANTOW

300 SW BUCKNER DRIVE  
GAK (LAWRENCE, WA 98777)  
ISLAND COUNTY  
4

REVISIONS		
REV	DATE	DESCRIPTION
A	09/04/14	ISSUED FOR PERMITS REVIEW

TITLE: SWANTOW SITES

SHEET

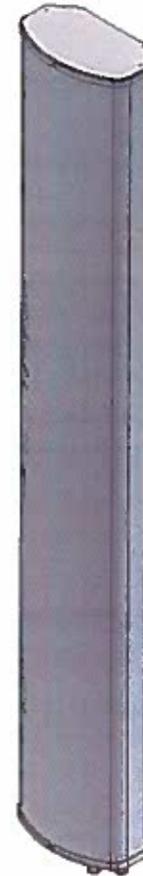
A-5

GLTTEL PRJ004776

## CWX063X19x00

XX-Pol | Dual Band VET Panel | 65° | 15.2 / 17.3 dBi

Ordering Options		Model Number			
Manual Electrical Tilt		CWX063X19M00			
Remote Electrical Tilt AISG v1.1		CWX063X19R00			
Remote Electrical Tilt AISG v2.0 / 3GPP		CWX063X19G00			
Electrical Characteristics		696-960 MHz		1710-2170 MHz	
Frequency bands (MHz)		696-806	806-960	1710-1880	1850-1990 1900-2170
Polarization		±45°		±45°	
Horizontal beamwidth		70°	65°	70°	67° 66°
Vertical beamwidth		11°	9.5°	7°	6.5° 6°
Gain		14.3 dBi	15.2 dBi	16.4 dBi	17.0 dBi 17.3 dBi
Electrical downtilt		0-12°		0-10°	
Impedance		50Ω		50Ω	
VSWR		< 1.5:1		< 1.5:1	
Upper sidelobe suppression		< -17 dB typical		< -17 dB typical	
Front-to-back ratio		> 30 dB		> 27 dB	
In-band isolation		> 25 dB		> 30 dB	
Isolation between ports		> 30 dB		> 30 dB	
Input power		2 x 500 W		2 x 250 W	
IM3 (2x20W carriers)		< -153 dBc		< -153 dBc	
Lightning protection		Direct Ground			
Operating temperature		-40° to +60° C (-40° to +140° F)			
Connector(s)		4 Ports / 7/16 DIN / Female / Bottom			
Mechanical Characteristics					
Dimensions Length x Width x Depth		1906 x 307.3 x 177.2 mm		75.0 x 12.1 x 7.0 in	
Weight without mounting brackets: MET		15.0 kg		33.0 lbs	
Weight without mounting brackets: RET		15.3 kg		33.7 lbs	
Survival wind speed		241 km/hr		150 mph	
Wind loads (160 km/hr or 100 mph)		Front: 707 N; Side: 419 N		Front: 159 lbf; Side: 94 lbf	
Remote Electrical Downtilt Control					
Remote Electrical Tilt (RET) Control		The remote control of the electrical tilt is managed by a module (MDCU) totally inserted at the bottom of the antenna. One single module controls individually the tilt of each band (no need of daisy chain cables between the bands). This module does not add any additional length at the bottom of the antenna. For RET control, the transparent caps must be in place and locked. The tilt angle indicators always remains visible and the antenna still has manual tilt control (manual override).			
RET Module Part Number (one per antenna)		MDCU-A0000 for AISG v1.1 protocol (one unit included in CWX063X19R00)			
		MDCU-G0000 for 3GPP/AISG v2.0 protocol (one unit included in CWX063X19G00)			
Important Installation Instructions		<b>In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.</b>			
Mounting Options		Part Number	Fits Pipe Diameter		Weight
3-Point Mounting Bracket Kit		MKS09P02	50-115 mm	2.0-4.5 in	4.1 kg 9 lbs
3-Point Mounting & Downtilt Bracket Kit		MKS09T02	50-115 mm	2.0-4.5 in	6.4 kg 14 lbs
Tri-Sector UNICELL Options					
For use inside UNICELL modules		UNX-20-xx			

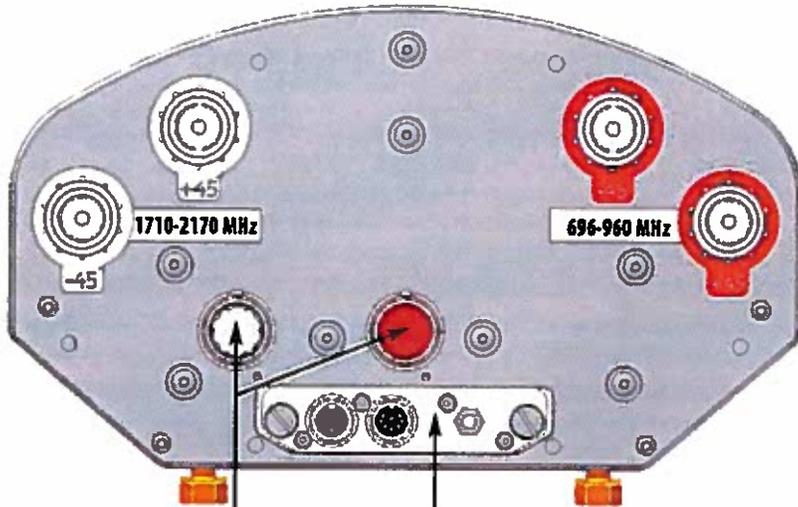


Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

CWX063X19x00

XX-Pol | Dual Band VET Panel | 65° | 15.2 / 17.3 dBi

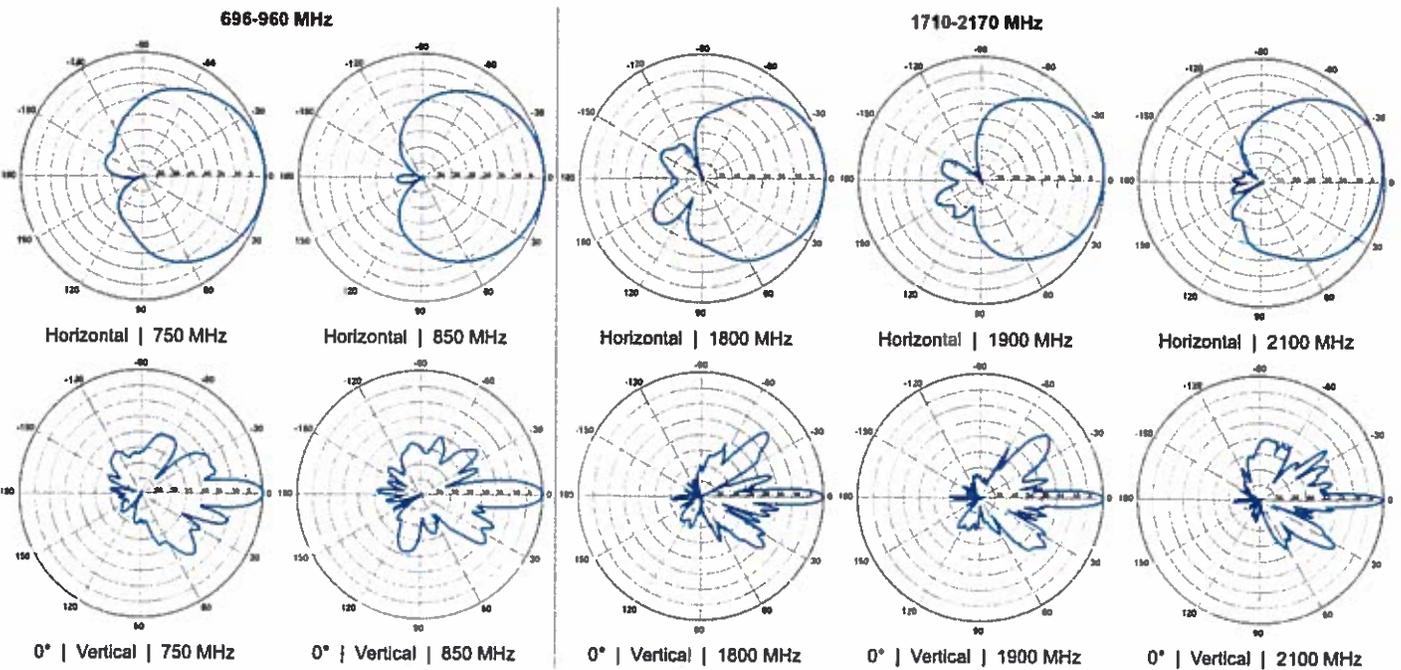
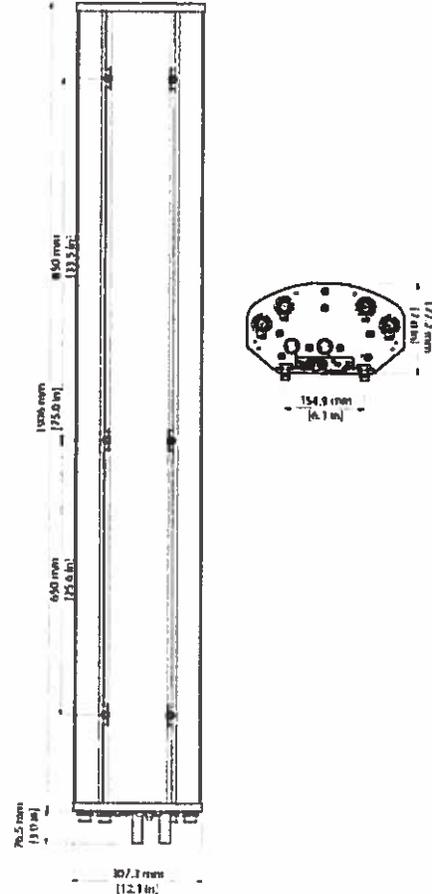
Bottom View



Location of the MDCU for RET Control

Tilt indicators covered by transparent caps. Manual adjustment is accessed by removing the caps. Knob colors are the same as the connectors.

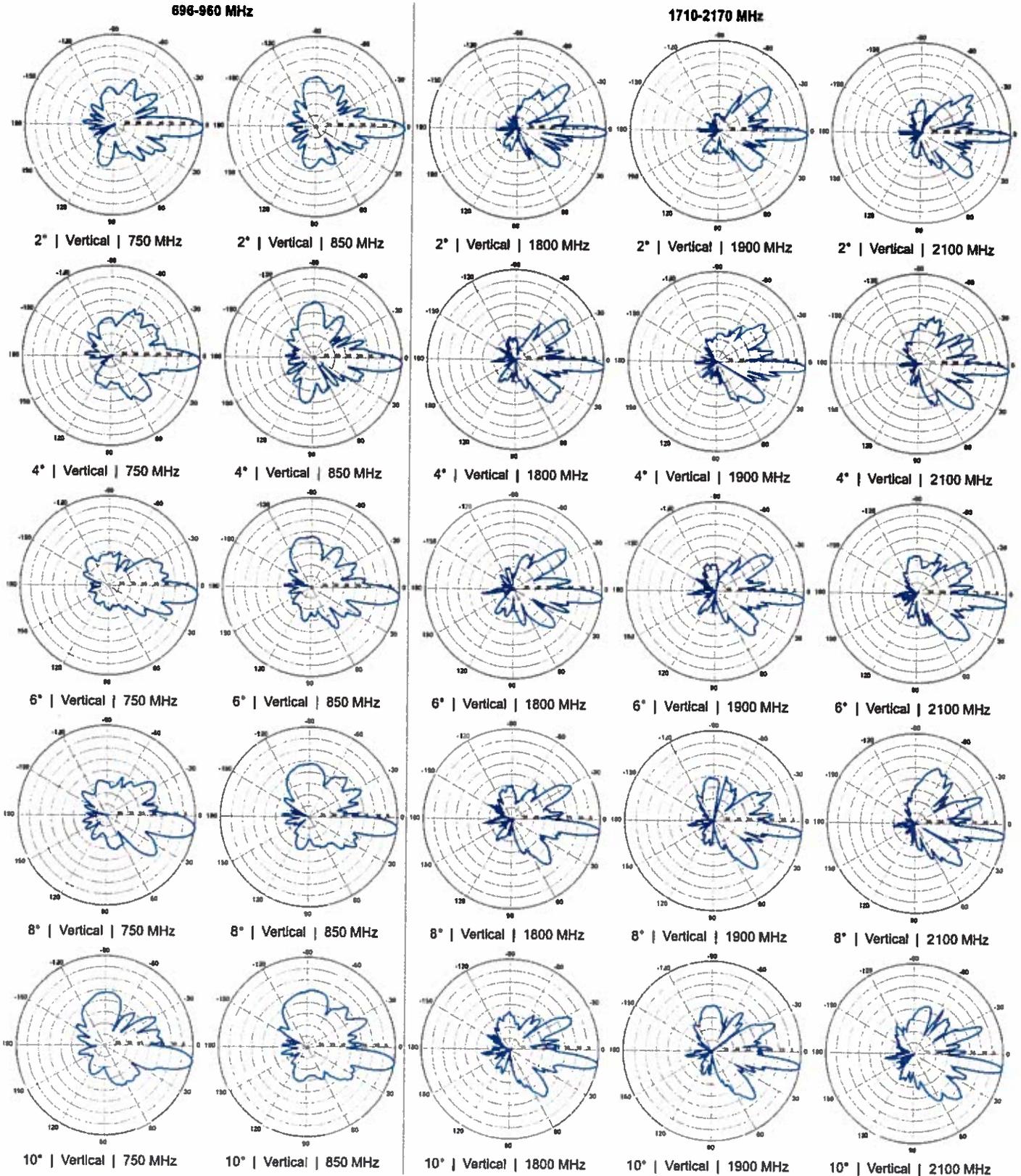
**!** In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.



Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

CWX063X19x00

XX-Pol | Dual Band VET Panel | 65° | 15.2 / 17.3 dBi

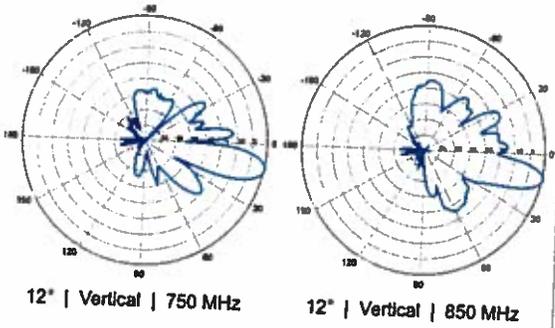


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# CWX063X19x00

XX-Pol | Dual Band VET Panel | 65° | 15.2 / 17.3 dBi

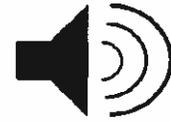
696-960 MHz



Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.



# NOISE EVALUATION REPORT



RECIEVED  
12-12-2015  
CITY OF OAK HARBOR  
DEVELOPMENT SERVICES DEPARTMENT

Prepared For: **Verizon Wireless**  
**3245 158th Avenue SE, MS 231**  
**Bellevue, WA 98008**

Project Owner: **Verizon**

Project Name: **Swantown**

Project Number: **None**

Project Address: **200 SW Roeder Drive**  
**Oak Harbor, WA 98277**

Site Coordinates: **48.2972**  
**-122.6766**

Prepared By:

**Glotel.**

Ryan McDaniel, P.E.  
November 25, 2014



EXPIRES 2015-01-31

**PROJECT SUMMARY**

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**PROJECT DESCRIPTION:**

Verizon proposes to install the following equipment on an unmanned telecommunications site which contribute to environmental noise: Install (6) outdoor equipment cabinets and (1) generator mounted on a concrete pad, within a proposed fenced area.

**PROJECT SCOPE:**

The maximum permissible noise level for this site are described by Washington Administrative Code. The scope of this report is to determine, using the recommended prediction methods outlined in the ANSI/AHRI Standard 275, if the equipment installation in question will be in compliance with all appropriate State and Local regulations in regards to noise levels. See Appendix B for a copy of the referenced regulation.

**SUMMARY RESULTS:**

For a 24 hour Installation, the maximum sustained noise allowed by Washington Administrative Code is 57 dBa for adjacent Commercial properties during daytime hours and 47 dBa for adjacent Commercial properties during nighttime hours.

The Combined A-Weighted Sound Pressure Level for this installation is 46 dBA during daytime hours and 37 during nighttime hours.

**RESULT: THIS SITE PASSES**

Based on our review of the proposed equipment installation, we have determined the proposed site will comply with for maximum permissible noise levels given equipment listed in this report. Please reference Section 4 for comments regarding the calculations. See Appendix A for the Calculations and Appendix B for cited codes and regulations.

**CONTENTS:**

Report .....	1 - 3
Appendix A (Calculations) .....	A
Appendix B (Referenced Documents) .....	B

## 1 Reference Documents

The following data was used to figure the noise level for the site.

Data	Document	Author
Sound Power Calculation	ANSI/AHRI Standard 275	AHRI
Sound Power	Equipment Specification Sheet	Manufacturer
Equipment Installed	Revised 100% Zoning Drawings	Glotel
SPL Limits	Washington Administrative Code	State of Washington

## 2 Site Equipment Contributing to Environmental Noise

Current Status	Equipment	Noise Level (dB)	Owner
Proposed	50 kW Generator	81	Verizon
Proposed	Equipment Cabinet	65	Verizon
Proposed	Equipment Cabinet	65	Verizon
Proposed	Equipment Cabinet	65	Verizon
Proposed	Equipment Cabinet	65	Verizon
Proposed	Equipment Cabinet	65	Verizon
Proposed	Equipment Cabinet	65	Verizon

The function and noise level of the existing equipment is unknown. So it is conservatively estimated at 65 dB.

## 3 Adjacent Properties

Parcel Number	Land Use Designation / Zoning	Distance from Source (ft)	Direction
656711	Commercial	owner	
651752	Residential	120	North
642497	Residential	79	South
40574	Commercial	275	East
651823	Residential	85	West

CityIQ Map

Distances are from equipment most near adjacent property line

---

## 4 Analysis

Section 4 of the of AHRI Standard 275 provides the methodology for estimating the A-Weighted Sound Pressure Level (A-WSPL) at a given location resulting from outdoor unitary equipment. The result includes factors for location, barrier, shielding, sound path, and distance where applicable. These factors modify the base noise level to arrive at an A-WSPL.

The basic procedure for estimating A-WSPL(s) at a given point of interest consists of summing the A-WSPL Rating of the equipment with the Equipment Location Factor and then subtracting the Barrier Shielding Factor and the Sound Path Factor, and the Distance Factor. The resultant is the A-WSPL.

## 5 Conclusion

To the best of our knowledge and belief, the worst-case noise levels of the proposed equipment will be in satisfactory compliance with the requirements of the current state and local guidelines. This site requires no special mitigation for Noise Abatement.

## 6 Disclaimers

1. This report is meant to show the level of conformance for the site with the codes and guidelines adopted by the agency with jurisdiction over the site. No other assessment is implied.
2. This report is prepared with the information furnished to Glotel by our client. If the conditions of the site change or if new information becomes available, the results of this report are not valid. Glotel should be notified so that the report can be updated and resubmitted.
3. Glotel is not responsible for the conclusions, opinions and recommendations made by others based on the information contained herein.

## A Appendix – Sound Pressure Level Calculations

### A-Weighted Sound Pressure Levels

(With Generator)

#### Worst Case Lot

Lot Number	Land Use Designation / Zoning	Distance from Source (ft)	Direction
642497	Residential	79	South

The lot closest to the installation is examined for compliance.

Table of Pressure Levels and resulting A-WSPL for the Worst Case Lot

Equipment	Noise Level (dB)	Location Factor (dB) <sup>1</sup>	Barrier Factor (dB) <sup>2</sup>	Path Factor (dB) <sup>3</sup>	Distance Factor (dB) <sup>4</sup>	A-WSPL (dBA) <sup>5</sup>	10 <sup>(L<sub>piA</sub>/10)</sup>
50 kW Generator	81	0	0	0	36	45	34,416
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864

Combined A-WSPL,  $L_{pCA}^6 = 46$

The generator has a noise rating of 56.5 dBA at 23 feet. The level used in this report is 81 dBA to adjust for the calculations which set to use noise levels at zero feet.

The generators will be tested annually during daytime hours. The generator would only operate during nighttime hours in the case of power failure as an emergency. The W-SPL above shows typical daytime noise levels with generator noise. Only one generator would be tested at any given time. AT&T is responsible for the noise generated by their generator, so only the AT&T generator is included.

#### AHRI 275 References:

- <sup>1</sup> Section 4.1.1
- <sup>2</sup> Section 4.1.2
- <sup>3</sup> Section 4.1.3
- <sup>4</sup> Section 4.1.4 Equation 2
- <sup>5</sup> Section 4.2
- <sup>6</sup> Section 4.3.1 Equation 3

## A Appendix – Sound Pressure Level Calculations

### A-Weighted Sound Pressure Levels

(Without Generator)

#### Worst Case Lot

Lot Number	Land Use Designation / Zoning	Distance from Source (ft)	Direction
642497	Residential	79	West

The lot closest to the installation is examined for compliance.

Table of Pressure Levels and resulting A-WSPL for the Worst Case Lot

Equipment	Noise Level (dB)	Location Factor (dB) <sup>1</sup>	Barrier Factor (dB) <sup>2</sup>	Path Factor (dB) <sup>3</sup>	Distance Factor (dB) <sup>4</sup>	A-WSPL (dBA) <sup>5</sup>	10 <sup>(L<sub>piA</sub>/10)</sup>
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864
Equipment Cabinet	65	0	0	0	36	29	864

Combined A-WSPL,  $L_{pcA}^6 = 37$

The generator will be tested annually during daytime hours. The generator would only operate during nighttime hours in the case of power failure as an emergency. The W-SPL above shows typical nighttime noise levels without generator noise.

EXEMPTIONS FOR MAXIMUM PERMISSIBLE NOISE GIVEN IN WAC 173-60-050:  
173-60-050-3f Sounds created by emergency equipment and emergency work necessary in the interests of law enforcement or of the health, safety or welfare of the community.

Wireless communications are considered essential for the safety and welfare of the community in the event of an emergency. A power outage is likely created by, or creates an emergency which require wireless communications to stay online. The generator only operates during the rare occurrence of a power outage and is exempt from the noise restriction under the code section above.

#### AHRI 275 References:

- <sup>1</sup> Section 4.1.1
- <sup>2</sup> Section 4.1.2
- <sup>3</sup> Section 4.1.3
- <sup>4</sup> Section 4.1.4 Equation 2
- <sup>5</sup> Section 4.2
- <sup>6</sup> Section 4.3.1 Equation 3

## B Appendix – Supplemental Information

### Governing Codes and Regulations

#### 1 WAC 173-60-040 Maximum permissible environmental noise levels

(1) No person shall cause or permit noise to intrude into the property of another person which noise exceeds the maximum permissible noise levels set forth below in this section.

(2)(a) The noise limitations established are as set forth in the following table after any applicable adjustments provided for herein are applied.

EDNA of Noise Source	EDNA of Receiving Property		
	Class A	Class B	Class C
Class A	55 dBA	57 dBA	60 dBA
Class B	57 dBA	60 dBA	65 dBA
Class C	60 dBA	65 dBA	70 dBA

Class A = Residential

Class B = Commercial

Class C = Industrial

(b) Between the hours of 10:00 p.m. and 7:00 a.m. the noise limitations of the foregoing table shall be reduced by 10 dBA for receiving property within Class A EDNAs.

(c) At any hour of the day or night the applicable noise limitations in (a) and (b) above may be exceeded for any receiving property by no more than:

- (i) 5 dBA for a total of 15 minutes in any one-hour period; or
- (ii) 10 dBA for a total of 5 minutes in any one-hour period; or
- (iii) 15 dBA for a total of 1.5 minutes in any one-hour period.

### Code and Regulation Summary:

For a 24 hour Installation, the maximum sustained noise allowed by Washington Administrative Code is 57 dBA for adjacent Commercial properties during daytime hours and 47 dBA for adjacent Commercial properties during nighttime hours.





**4024HF285 Genset**  
**AIRBORNE NOISE ANALYSIS**  
**50 / 1800**

Onsite Energy  
 VER-S50D-CQE-TANK-100-7  
 Data No.: S090  
 Date: 10/12/2011

**Genset Surface And Exhaust Noise Analysis - 1/3-Octave**

ENGINE TYPE:	<b>4024HF285</b>	ENGINE NO.:	4024L016925
GENERATOR:	<b>361 / 1613</b>	TYPE:	60 Hz
POWER / SPEED:	<b>50 / 1800</b>	TEST CELL:	LB T1
ORDER / PROJECT NO.:	<b>302089-1-1</b>	DATE MEASURED:	9/11/2009
TEST LOAD:	50 kW / 100%	TANK:	210 GALLON
INTAKE AIR OPENING:	Paper filters with housing	ENCLOSURE:	CQE
MEASURING DISTANCE:	7 meters		
MEASURING SURFACE DIMENSION:	29.4 dB		
NO. OF MEASURING POINTS:	6		
SOUND PROPAGATION:	Free-field		
MEASUREMENT STANDARD:	ISO 8528		
TOLERANCE:	+5 dB for single 1/3 octave band, +2 dB(A) for total A-weighted level.		

Energy mean sound pressure levels of the airborne noise that is emitted by the generator-set surface and exhaust. For project purposes only.

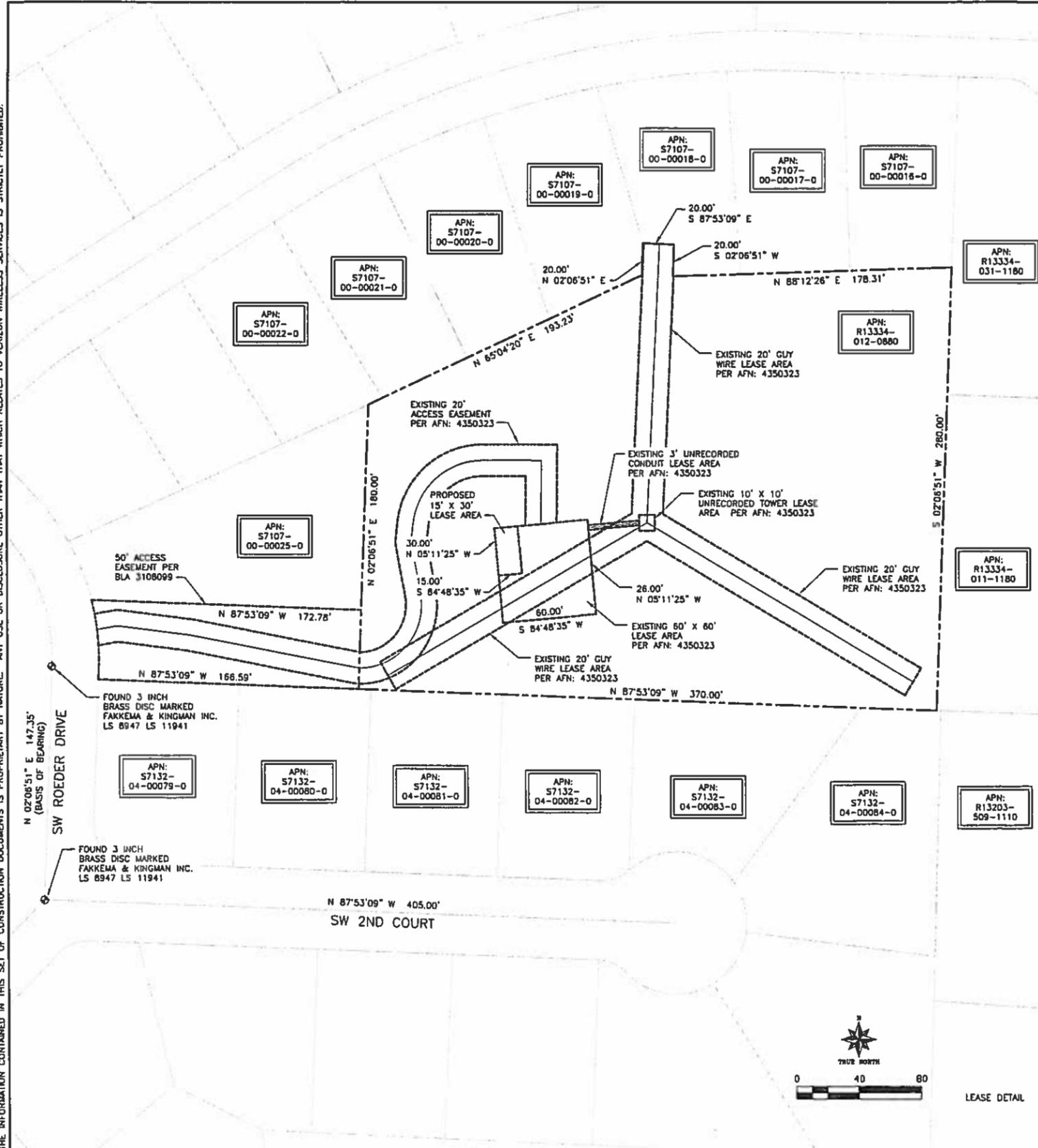
Energy mean free-field level                      Average Level at 7 meters:      56.5 dB(A)

Level per Position [dB(A)]						Average [dB(A)]
1	2	3	4	5	6	
55.8	56.4	56.3	57.7	56.7	56.0	56.5

f [Hz]	Level per Frequency per Position [dB(A)]					
	1	2	3	4	5	6
25	-1.4	0.2	0.9	-3.2	1.1	-0.8
31.5	7.7	13.8	17.0	4.8	17.0	13.9
40	1.0	14.5	10.4	9.2	9.1	13.1
50	17.7	18.6	23.2	33.5	36.4	22.9
63	47.5	42.7	46.4	56.5	58.8	45.1
80	28.1	29.6	32.7	35.7	31.8	30.9
100	44.5	42.2	44.5	42.3	38.0	40.7
125	46.5	52.6	51.3	60.0	53.4	49.3
160	45.1	48.6	44.4	47.2	42.4	50.3
200	49.5	51.3	46.0	47.8	48.1	53.1
250	48.7	48.1	49.3	45.7	47.5	48.5
315	50.9	50.6	49.8	52.5	50.5	49.4
400	48.2	47.8	50.0	49.3	50.6	50.2
500	46.0	48.1	48.1	47.5	48.4	45.4
630	46.1	46.4	46.9	48.4	46.0	46.4
800	47.0	47.6	46.4	47.3	46.1	45.7
1k	44.4	45.4	45.0	46.2	45.1	43.6
1.25k	44.0	44.8	43.6	45.1	44.9	44.5
1.6k	43.9	44.3	44.6	45.9	45.2	44.2
2k	43.5	43.8	43.9	45.7	44.5	43.0
2.5k	43.2	43.8	44.1	45.8	44.9	43.9
3.15k	43.4	43.8	44.1	46.1	45.1	43.9
4k	40.7	41.0	41.3	43.2	41.9	40.9
5k	41.3	41.2	41.4	42.9	42.2	41.2
6.3k	40.9	41.2	41.1	42.1	41.8	40.6
8k	40.5	40.7	40.6	41.7	41.0	40.1
10k	37.4	37.5	37.6	38.8	38.1	36.9



# A PORTION OF THE SW1/4 OF SEC 34 TWP33N, R1E, W.M.



### SERVIENT PARCEL DESCRIPTION:

THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 33 NORTH, RANGE 1 EAST W.M., DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER:  
 THENCE NORTH 88°01'14" WEST ALONG THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, A DISTANCE OF 250.00 FEET TO THE SOUTHWEST CORNER OF THAT CERTAIN TRACT CONVEYED TO THE CITY OF OAK HARBOR UNDER AUDITOR'S FILE NO. 151184, RECORDS OF ISLAND COUNTY, WASHINGTON, SAID POINT BEING THE TRUE POINT OF BEGINNING;  
 THENCE CONTINUE NORTH 88°01'14" WEST ALONG SAID SOUTH LINE, A DISTANCE OF 370.00 FEET; THENCE NORTH 1°58'46" EAST 180.00 FEET; THENCE NORTH 84°56'15" EAST 193.23 FEET; THENCE NORTH 1°58'46" EAST 20.00 FEET; THENCE SOUTH 88°01'14" EAST 20.00 FEET; THENCE SOUTH 1°58'46" WEST 20.00 FEET; THENCE NORTH 88°04'21" EAST 178.31 FEET TO THE WEST LINE OF THAT CERTAIN TRACT OF LAND CONVEYED TO THE CITY OF OAK HARBOR UNDER AUDITOR'S FILE NO. 192797, RECORDS OF SAID ISLAND COUNTY; THENCE SOUTH 1°58'46" WEST ALONG SAID WEST LINE AND THE WEST LINE OF THE AFORESAID TRACT DESCRIBED UNDER AUDITOR'S FILE NO. 151184, A DISTANCE OF 280.00 FEET TO THE TRUE POINT OF BEGINNING.

(SHOWN AS LOT LABELED "TELE-VUE SYSTEMS, INC." ON BOUNDARY LINE ADJUSTMENT/OAK HARBOR SHORT PLAT NO. 8-89, APPROVED ON MAY 23, 1990, RECORDED ON JUNE 5, 1990, UNDER AUDITOR'S FILE NO. 80010482, RECORDS OF ISLAND COUNTY, WASHINGTON)

TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS AND FOR THE INSTALLATION AND MAINTENANCE OF UTILITIES OVER, ACROSS AND UNDER A 50 FOOT STRIP OF LAND AS SHOWN HEREON AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE AFORESAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER; THENCE NORTH 88°01'14" WEST ALONG THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, A DISTANCE OF 620 FEET TO THE TRUE POINT OF BEGINNING;  
 THENCE NORTH 1°58'46" EAST 50.00 FEET;  
 THENCE NORTH 88°01'14" WEST TO THE EAST MARGIN OF 170 NORTHWEST STREET AS DESCRIBED UNDER AUDITOR'S FILE NO. 8906844, RECORDS OF ISLAND COUNTY, WASHINGTON;  
 THENCE SOUTHERLY, ALONG SAID EAST MARGIN, TO THE SAID SOUTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER; THENCE SOUTH 88°01'14" EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 166.59 FEET TO THE TRUE POINT OF BEGINNING.

SITUATE IN COUNTY OF ISLAND, STATE OF WASHINGTON.

NOTE: THIS SURVEY REFLECTS THE ANGULAR RELATIONSHIPS OF THE LEGAL DESCRIPTION. THE BEARINGS HAVE BEEN ROTATED BASED ON GPS OBSERVATION.

### LEASE AREA DESCRIPTION:

A LEASE EASEMENT FOR TELECOMMUNICATION EQUIPMENT LOCATED IN THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 33 NORTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, ISLAND COUNTY, WASHINGTON DESCRIBED AS FOLLOWS:  
 BEGINNING AT THE NORTHWEST CORNER OF AN EXISTING LEASE AREA DESCRIBED IN MEMORANDUM OF TOWER GROUND LEASE AGREEMENT, AUDITORS FILE NUMBER 4350323;  
 THENCE EASTERLY ALONG THE NORTH MARGIN OF SAID LEASE AREA, A DISTANCE OF 15.00 FEET;  
 THENCE SOUTHERLY PARALLEL WITH THE WEST MARGIN OF SAID LEASE AREA, A DISTANCE OF 30.00 FEET;  
 THENCE WESTERLY PARALLEL WITH THE NORTH MARGIN OF SAID LEASE AREA, A DISTANCE OF 15.00 FEET;  
 THENCE NORTHERLY ALONG THE WEST MARGIN OF SAID LEASE AREA, A DISTANCE OF 30.00 FEET TO THE POINT OF BEGINNING.

### PROJECT INFORMATION:

SITE NAME: SWANTOWN  
 SITE ADDRESS: 200 SW ROEDER DRIVE, OAK HARBOR, WA 98277  
 OWNER'S NAME: TELE-VUE SYSTEMS, INC.  
 OWNER'S ADDRESS: 200 SW ROEDER DRIVE, OAK HARBOR, WA 98277  
 PARCEL NUMBER(S): R13334-012-0880  
 PARCEL AREA: 93025.76 SQ. FT. 2.14 ACRES

PROJECT LEASE AREA: 450 SQ. FT.  
 ANTENNA COORDINATES: 48°17'49.9" N (48.297199° N)  
 122°40'35.8" W (122.676616° W)  
 GROUND ELEVATION: 243' CENTER OF EXISTING TOWER  
 ORIGINAL BENCHMARK: GP15020-40 WSDOT BRASS DISK CEMENTED INTO A DRILL HOLE AND SET LEVEL WITH THE CONCRETE SURFACE. NOTE: THIS STATION SIGHTS GP15020-41  
 SITE BENCHMARK: SOUTHWEST CORNER OF CONCRETE PAD UNDER TOWER

BASIS OF BEARINGS: N 02°06'51" E ALONG THE CENTERLINE OF SW ROEDER DRIVE BETWEEN THE INTERSECTION OF SW ROEDER DRIVE AND SW 2ND COURT AND A POINT OF CURVATURE ON SW ROEDER DRIVE

REFERENCE SURVEY: 1. PLAT OF HIGHLANDS WEST DIV. 4, RECORDED IN VOLUME 13 OF PLATS, PAGE 88, RECORDS OF ISLAND COUNTY, WASHINGTON  
 2. PLAT OF HEATHERWOOD HEIGHTS DIV. 1, RECORDED IN VOLUME 13 OF PLATS, PAGE 71-72, RECORDS OF ISLAND COUNTY, WASHINGTON

### VICINITY MAP



### LEGEND:

- |     |                          |     |                          |
|-----|--------------------------|-----|--------------------------|
| --- | SUBJECT BOUNDARY LINE    | --- | FIRE HYDRANT             |
| --- | SECTIONAL BREAKDOWN LINE | --- | GATE VALVE               |
| --- | OVERHEAD POWER LINE      | --- | WATER METER              |
| --- | CHAIN LINK FENCE         | --- | FIRE STAND PIPE          |
| ⊠   | TRANSFORMER              | ⊠   | CATCH BASIN              |
| ⊠   | LIGHT STANDARD           | ⊠   | IRRIGATION CONTROL VALVE |
| ⊠   | POWER VAULT              | ⊠   | FOUND MONUMENT           |
| ⊠   | POWER METER              | ⊠   | TOWER                    |
| ⊠   | UTILITY POLE             | ⊠   | SANITARY SEWER MANHOLE   |
| ⊠   | HOSE BIB                 | ⊠   | UTILITY BOX              |
| ⊠   | WATER BLOWOFF            | ⊠   | SEPTIC MANHOLE           |
| ⊠   | TELEPHONE VAULT          | ⊠   | STORM DRAIN MAN HOLE     |
| ⊠   | WATER VALVE              | ⊠   | STREET LIGHT             |
| ⊠   | ELECTRICAL JUNCTION BOX  | ⊠   | TRAFFIC LIGHT            |
| ⊠   | TELEPHONE-RISER          | ⊠   | WATER MANHOLE            |
| ⊠   | GAS VALVE                | ⊠   | SANITARY SEWER CLEANOUT  |
| ⊠   | STOP LIGHT CONTROL BOX   |     |                          |
| ⊠   | 556.00 HEIGHT INDICATOR  |     |                          |
| ⊠   | POWER MAN HOLE           |     |                          |
| ⊠   | GAS METER                |     |                          |

### TREE LEGEND:

- |     |                |    |            |
|-----|----------------|----|------------|
| 12M | DECIDUOUS TREE | C  | CEDAR      |
| 12F | EVERGREEN TREE | CL | CLUSTER    |
|     |                | CT | COTTONWOOD |
|     |                | CF | CONIFER    |
|     |                | CY | CHERRY     |
|     |                | D  | DECIDUOUS  |
|     |                | F  | FIR        |
|     |                | FR | FRUIT      |
|     |                | H  | HEMLOCK    |
|     |                | HD | HOLLY      |
|     |                | J  | JUNIPER    |
|     |                | LL | LAUREL     |
|     |                | M  | MAPLE      |
|     |                | MA | MADRONIA   |
|     |                | O  | OAK        |
|     |                | P  | PINE       |
|     |                | S  | SPRUCE     |
|     |                | W  | WILLOW     |

### BOUNDARY DISCLAIMER:

THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY. SUBJECT PROPERTY LINES ARE DEPICTED USING FIELD FOUND EVIDENCE AND RECORD INFORMATION.

### SURVEYOR'S NOTES:

- TITLE REPORT ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, GUARANTEE NUMBER 5003353-0001124E, DATED JUNE 20, 2014.
- LATITUDE AND LONGITUDE TAKEN AT CENTER OF PROPOSED ANTENNA STRUCTURE.
- MAGNETIC DECLINATION OF 16°25'48" EAST FOR THE PROJECT LATITUDE & LONGITUDE AS DETERMINED FROM THE NATIONAL GEODETIC SURVEY WEBSITE FOR JULY 2014 AND IS CHANGING BY 00°11'24" WEST PER YEAR.
- THE LATITUDE & LONGITUDE AS SHOWN ON THIS PLAT ARE ACCURATE TO WITHIN ± 15 FEET.
- THE SITE ELEVATIONS ARE ACCURATE TO WITHIN ± 3 FEET.

### UTILITY NOTES:

THE LOCATION OF THE EXISTING UTILITY FACILITIES HAS NOT BEEN RESEARCHED. SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OF THE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT THE "ONE-CALL SERVICE" AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION, REMOVAL, RELOCATION AND/OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF BURIED OBJECTS WHICH ARE NOT SHOWN ON THE MAP.



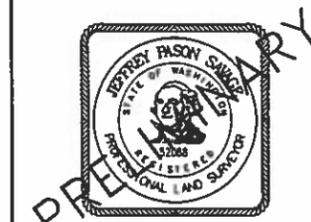
SWANTOWN

RECEIVED

MAR 12 2015

CITY OF OAK HARBOR  
 Development Services Department

200 SW ROEDER DRIVE  
 OAK HARBOR, WA 98277  
 ISLAND COUNTY



REVISIONS			
REV.	DATE	DESCRIPTION	BY
A	07/21/14	INITIAL DRAWING	EBR
B	12/09/14	REDLINES/LEASE AREA DESCRIPTION	EBR
C	01/20/15	REDLINES, ADD CONC PAD	JPS

TITLE  
 EXISTING SITE SURVEY

SHEET  
**LS-1**

GLOTEL PROJECT #: J4925

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.

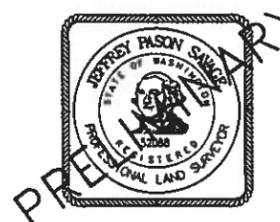
A PORTION OF THE SW1/4  
OF SEC 34 TWP33N, R1E, W.M.



SWANTOWN

RECEIVED  
MAR 12 2015  
CITY OF OAK HARBOR  
DEVELOPMENT SERVICES DEPARTMENT

200 SW ROEDER DRIVE  
OAK HARBOR, WA 98277  
ISLAND COUNTY



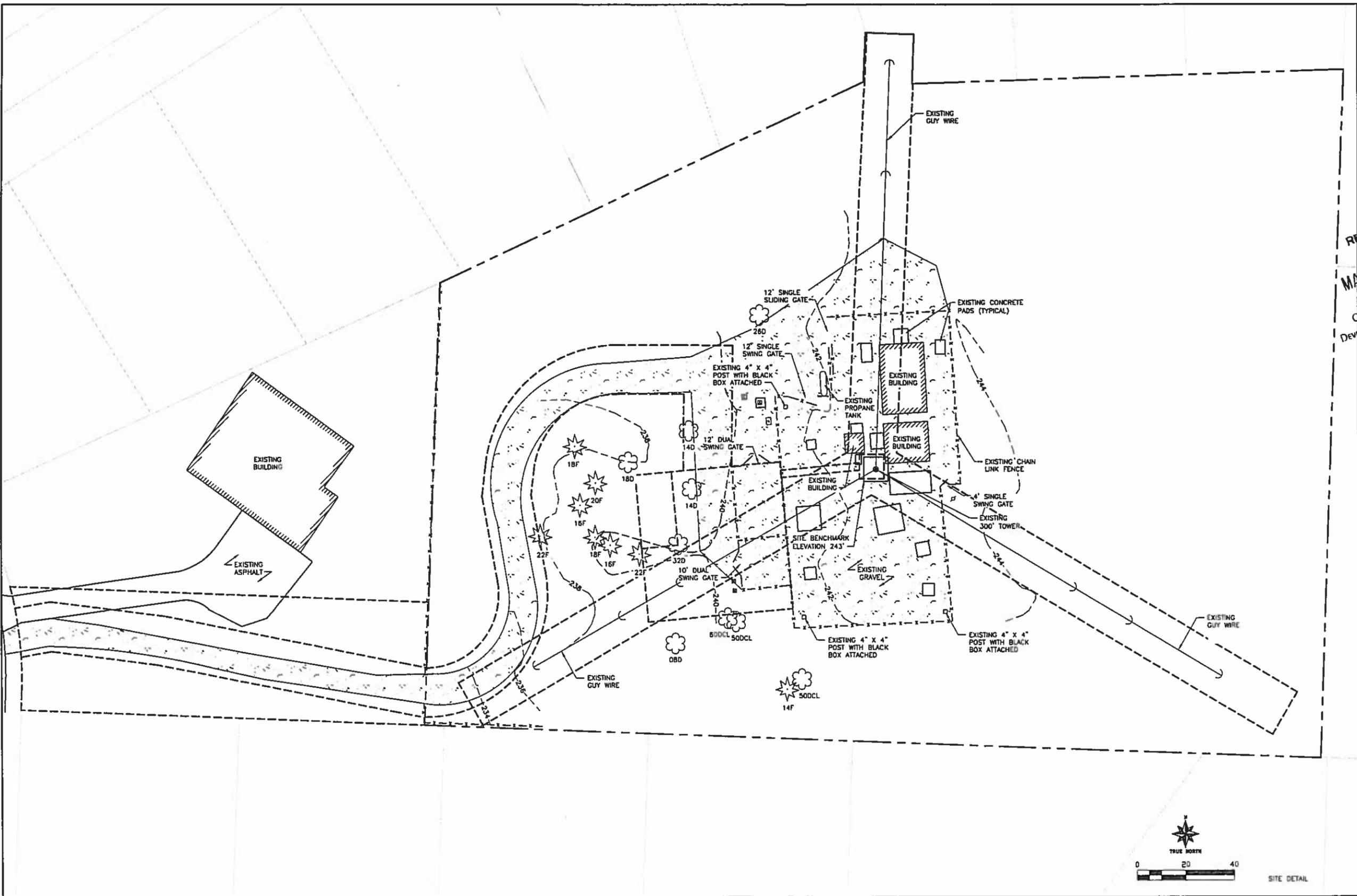
REVISIONS			
REV.	DATE	DESCRIPTION	BY
A	07/21/14	INITIAL DRAWING	EDR
B	12/09/14	REDLINES/LEASE AREA DESCRIPTION	EDR
C	01/09/15	REDLINES, ADD CONC PAD	JPS

TITLE  
EXISTING SITE SURVEY

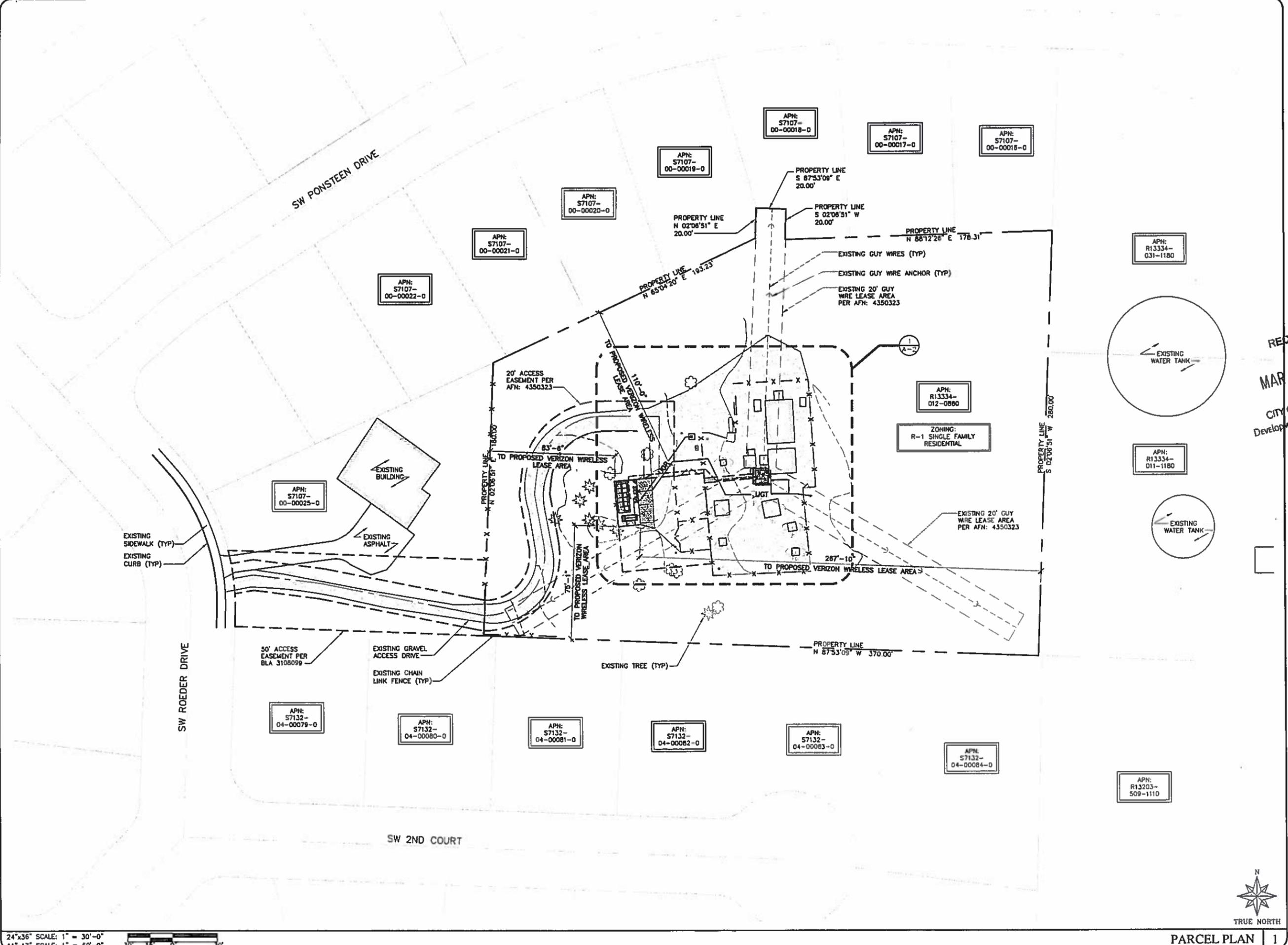
SHEET  
**LS-2**

GLotel PROJECT #: J4925

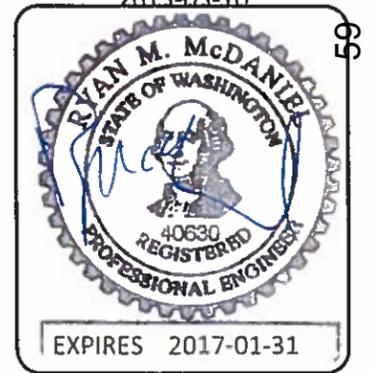
THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.



THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.



**SWANTOWN**  
 RECEIVED  
 MAR 12 2015  
 CITY OF OAK HARBOR  
 DEVELOPMENT SERVICES DEPARTMENT  
 200 SW ROEDER DRIVE  
 OAK HARBOR, WA 98277  
 ISLAND COUNTY



REVISIONS			
REV.	DATE	DESCRIPTION	BY
A	08/05/14	ISSUED FOR 90% 2D REVIEW	RJD
0	03/09/15	ISSUED FOR 100% 2D REVIEW	RJD

TITLE  
 PARCEL PLAN

SHEET  
**A-1**

GLotel PROJECT #: 14925

24"x36" SCALE: 1" = 30'-0"  
 11"x17" SCALE: 1" = 60'-0"

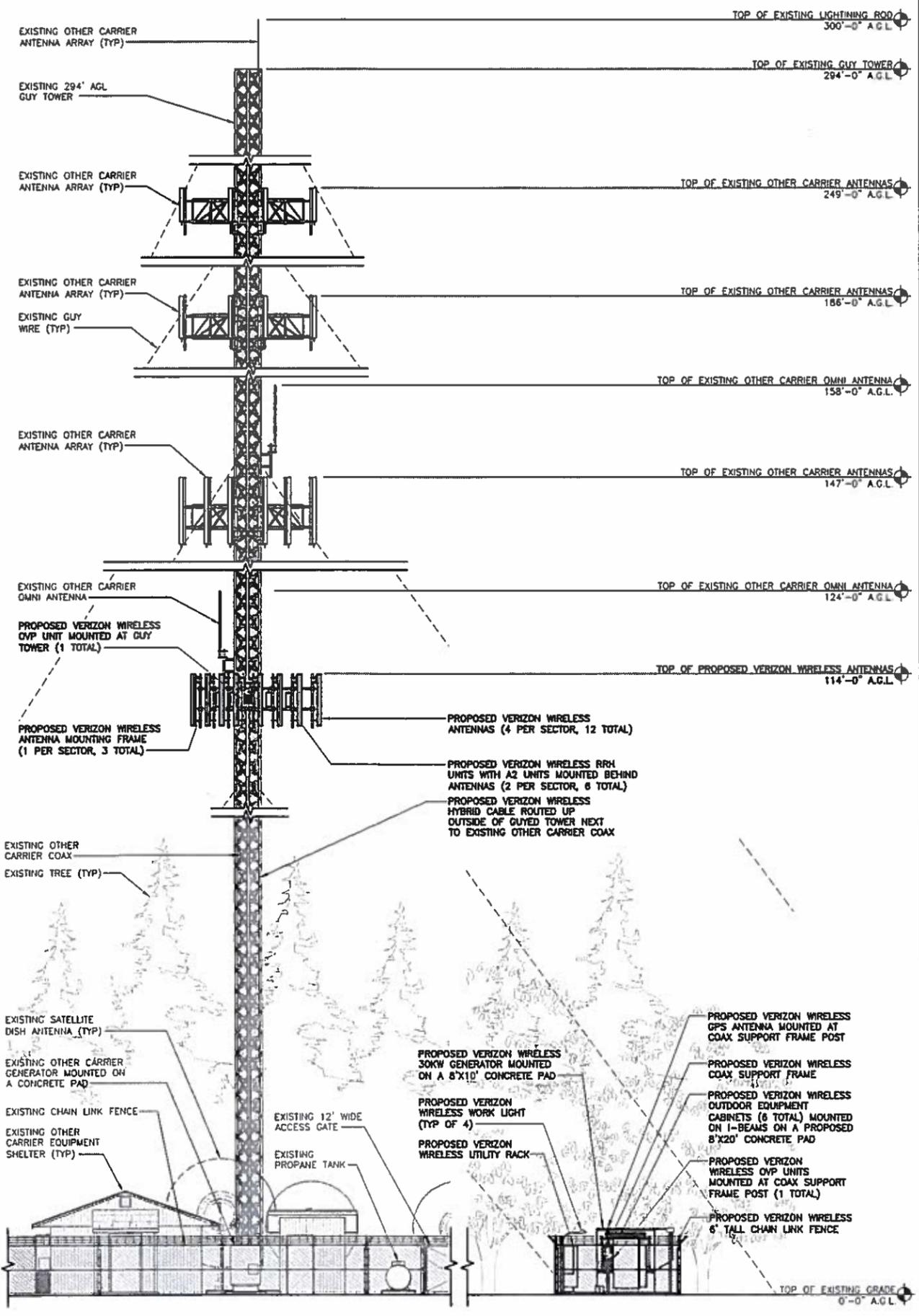
PARCEL PLAN 1



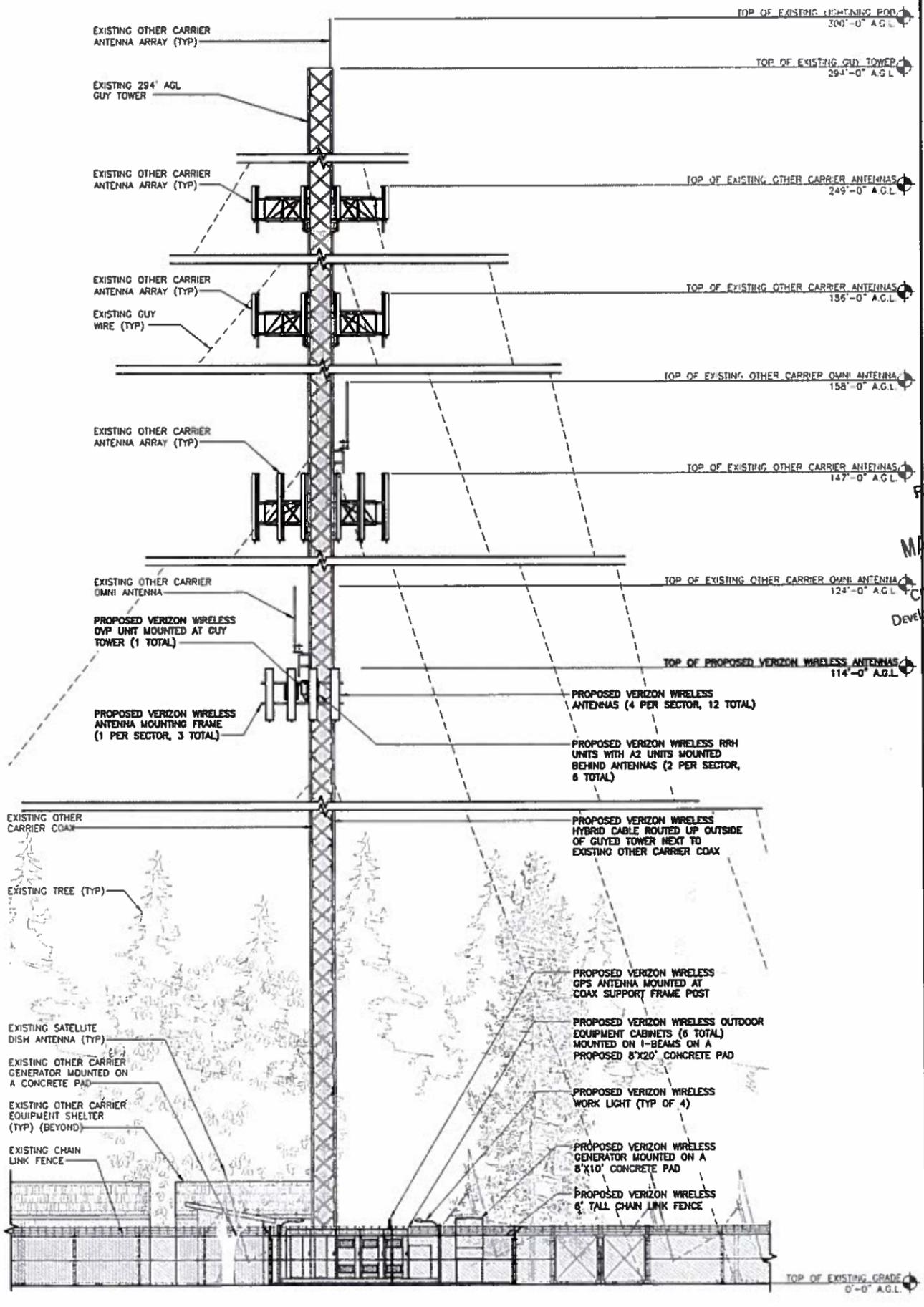




THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.



PROPOSED NORTH ELEVATION 1



PROPOSED WEST ELEVATION 1



RECEIVED  
 MAR 12 2015  
 CITY OF OAK HARBOR  
 200 SW ROBERT DRIVE  
 OAK HARBOR, WA 98277  
 ISLAND COUNTY



REVISIONS			
REV	DATE	DESCRIPTION	BY
A	08/25/14	ISSUED FOR 90% 2D REVIEW	PLD
D	03/09/15	ISSUED FOR 100% 2D REVIEW	PLD

TITLE  
 PROPOSED WEST & NORTH ELEVATIONS

SHEET  
**A-4**

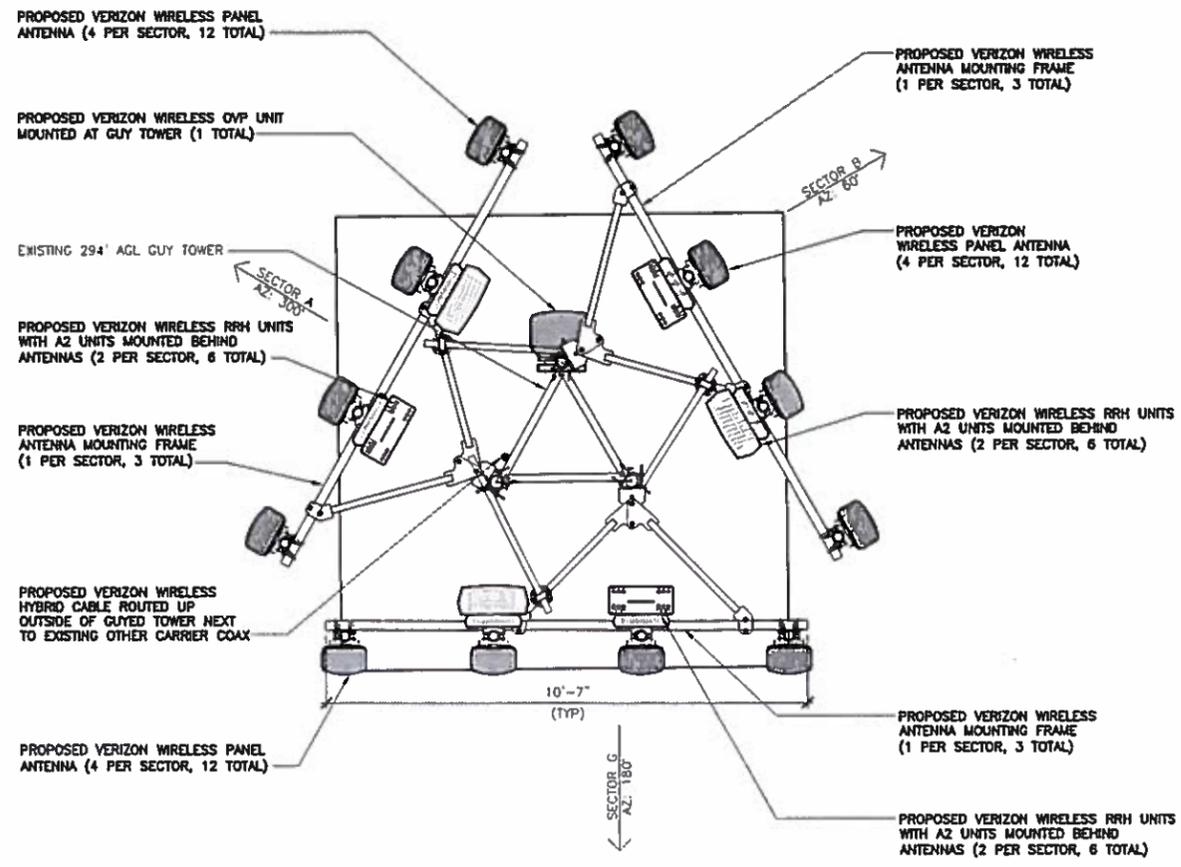
GLOTEL PROJECT #: 14925

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.

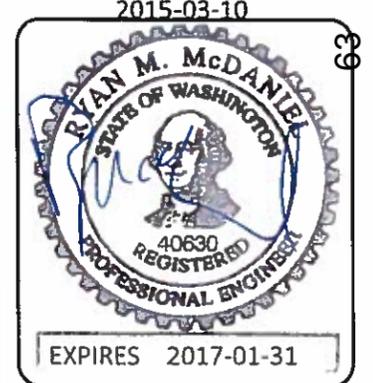


ANTENNA CONFIGURATION AND CABLE SCHEDULE										
SECTOR	QUANTITY	AZIMUTH	TECHNOLOGY	TIP HEIGHT	ANTENNA SIZE	MECH. TILT	NUMBER OF COAX	COAX #	COAX LENGTH	DIPLEXED
A	1	300°	700	114'A-60"	75.0"	0°	-	-	-	NO
	1	300°	AWS	114'A-60"	75.0"	0°	1	HYBRID	220'	NO
	1	300°	PCS	114'A-60"	75.0"	0°	1	HYBRID	220'	NO
	1	300°	850	114'A-60"	75.0"	0°	-	-	-	NO
B	1	60°	700	114'A-60"	75.0"	0°	-	-	-	NO
	1	60°	AWS	114'A-60"	75.0"	0°	1	HYBRID	220'	NO
	1	60°	PCS	114'A-60"	75.0"	0°	1	HYBRID	220'	NO
	1	60°	850	114'A-60"	75.0"	0°	A-6	A-6	-	NO
G	1	180°	700	114'A-60"	75.0"	0°	-	-	-	NO
	1	180°	AWS	114'A-60"	75.0"	0°	1	HYBRID	220'	NO
	1	180°	PCS	114'A-60"	75.0"	0°	1	HYBRID	220'	NO
	1	180°	850	114'A-60"	75.0"	0°	-	-	-	NO

NOTES:  
 1. COAX LENGTH TO BE VERIFIED PRIOR TO ORDERING AND CUTTING ANY COAX CABLES.  
 2. VERIFICATION THAT EXISTING GUY TOWER AND MOUNTING CAN SUPPORT PROPOSED LOADING TO BE COMPLETED BY OTHERS.



RECEIVED  
**SWANTOWN**  
 MAR 12 2015  
 CITY OF OAK HARBOR  
 DEVELOPMENT SERVICES DEPARTMENT  
 300 SW ROEDER DRIVE  
 OAK HARBOR, WA 98277  
 ISLAND COUNTY



REVISIONS			
REV.	DATE	DESCRIPTION	BY
A	02/25/14	ISSUED FOR 90% 2D REVIEW	RLD
O	01/09/15	ISSUED FOR 100% 2D REVIEW	RLD

TITLE  
 ANTENNA PLAN & DETAILS

SHEET  
**A-5**



24"x36" SCALE: 1/2" = 1'-0"  
 11"x17" SCALE: 1/4" = 1'-0"



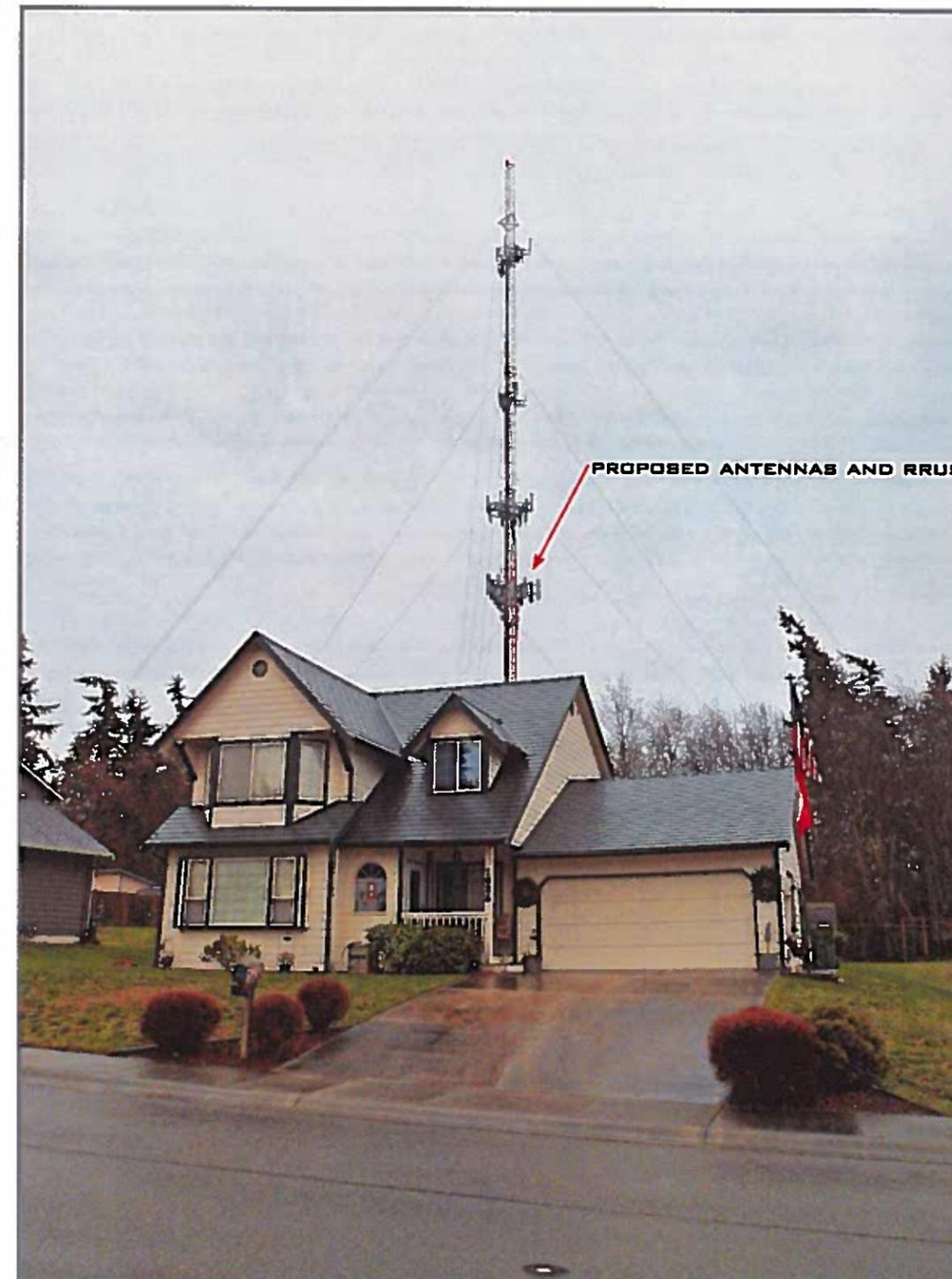
LOCATION

©2014 Google Maps



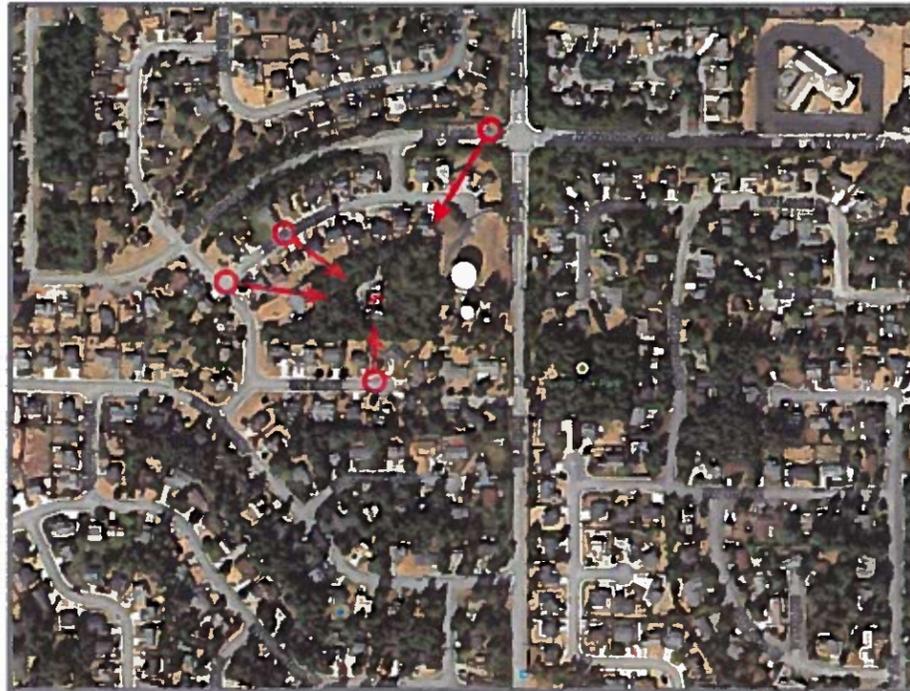
EXISTING

LOOKING SOUTHEAST FROM SW PONSTEEN DRIVE



PROPOSED

LOOKING SOUTHEAST FROM SW PONSTEEN DRIVE

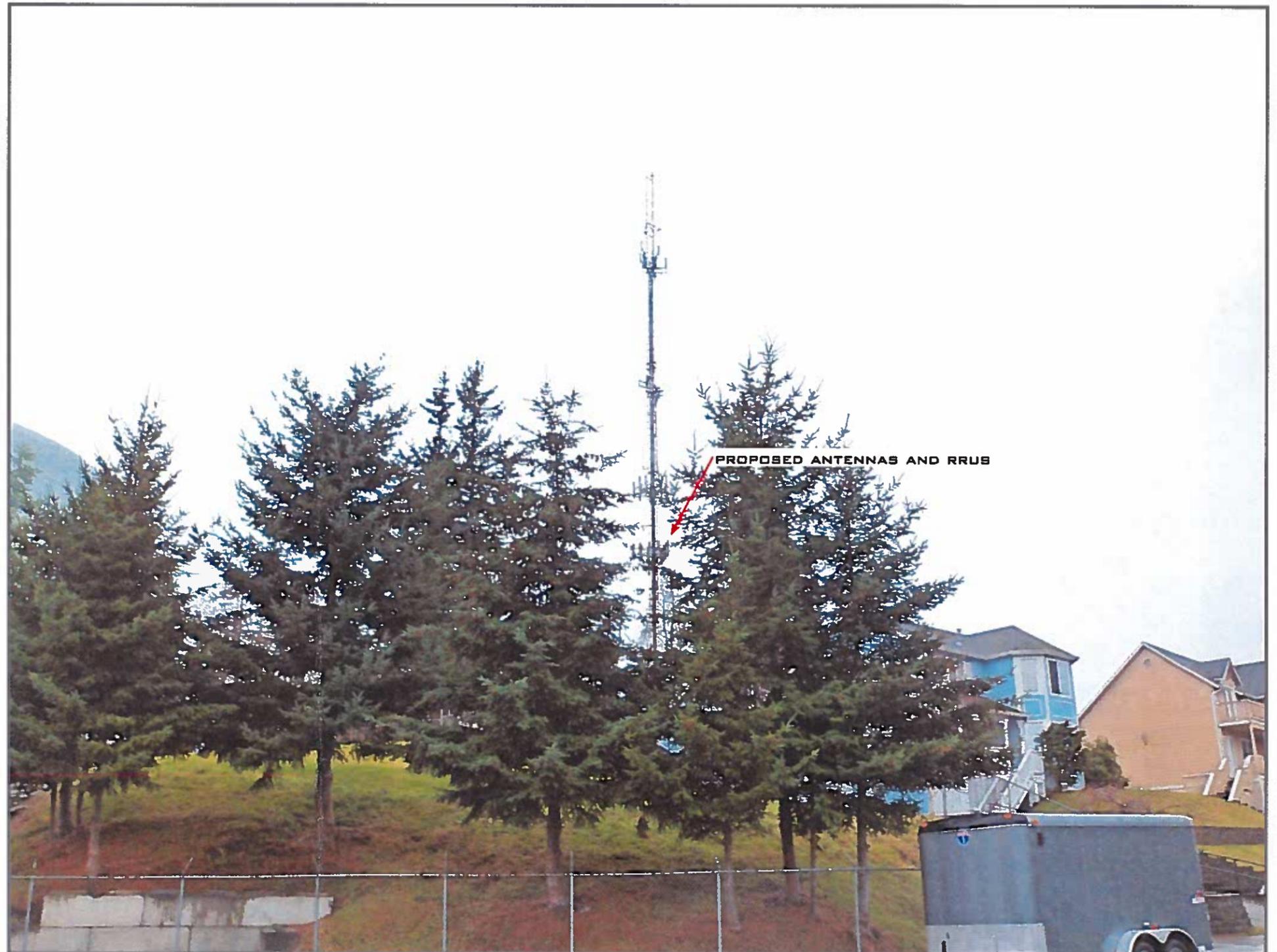


LOCATION

©2014 Google Maps



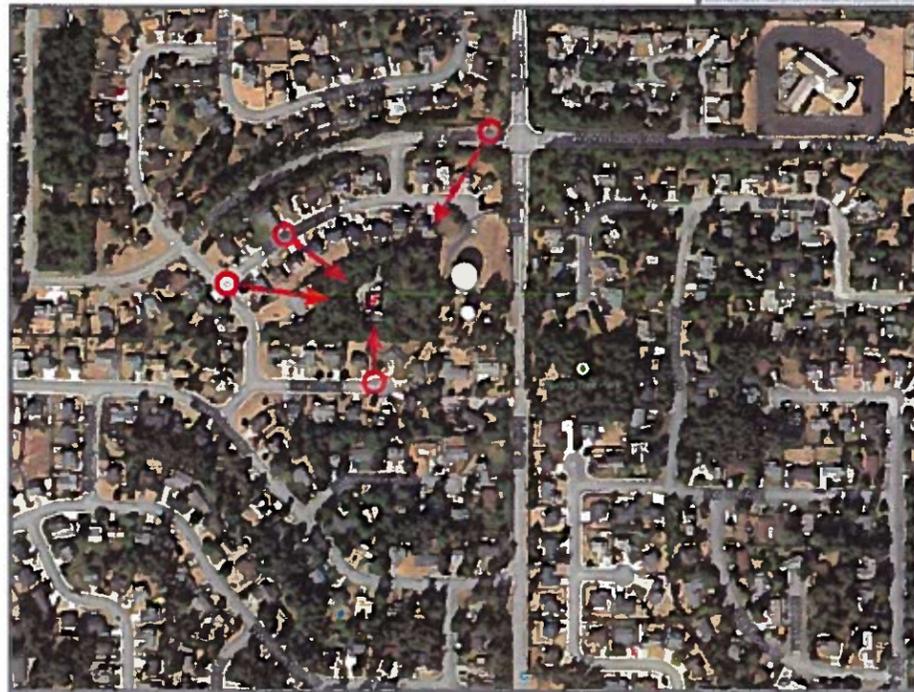
EXISTING



PROPOSED ANTENNAS AND RRUS

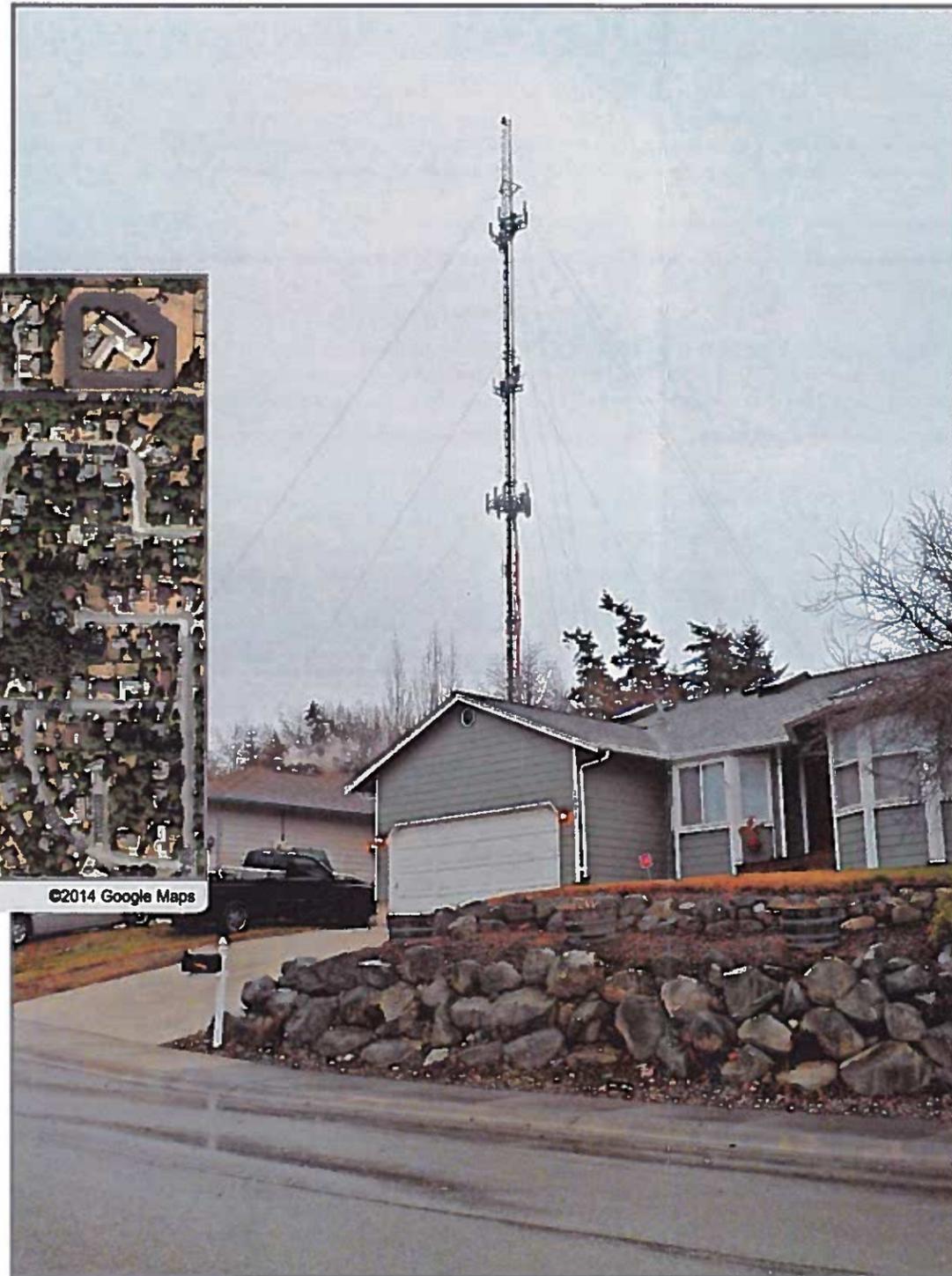
PROPOSED

LOOKING SOUTHWEST FROM SW PONSTEEN DRIVE

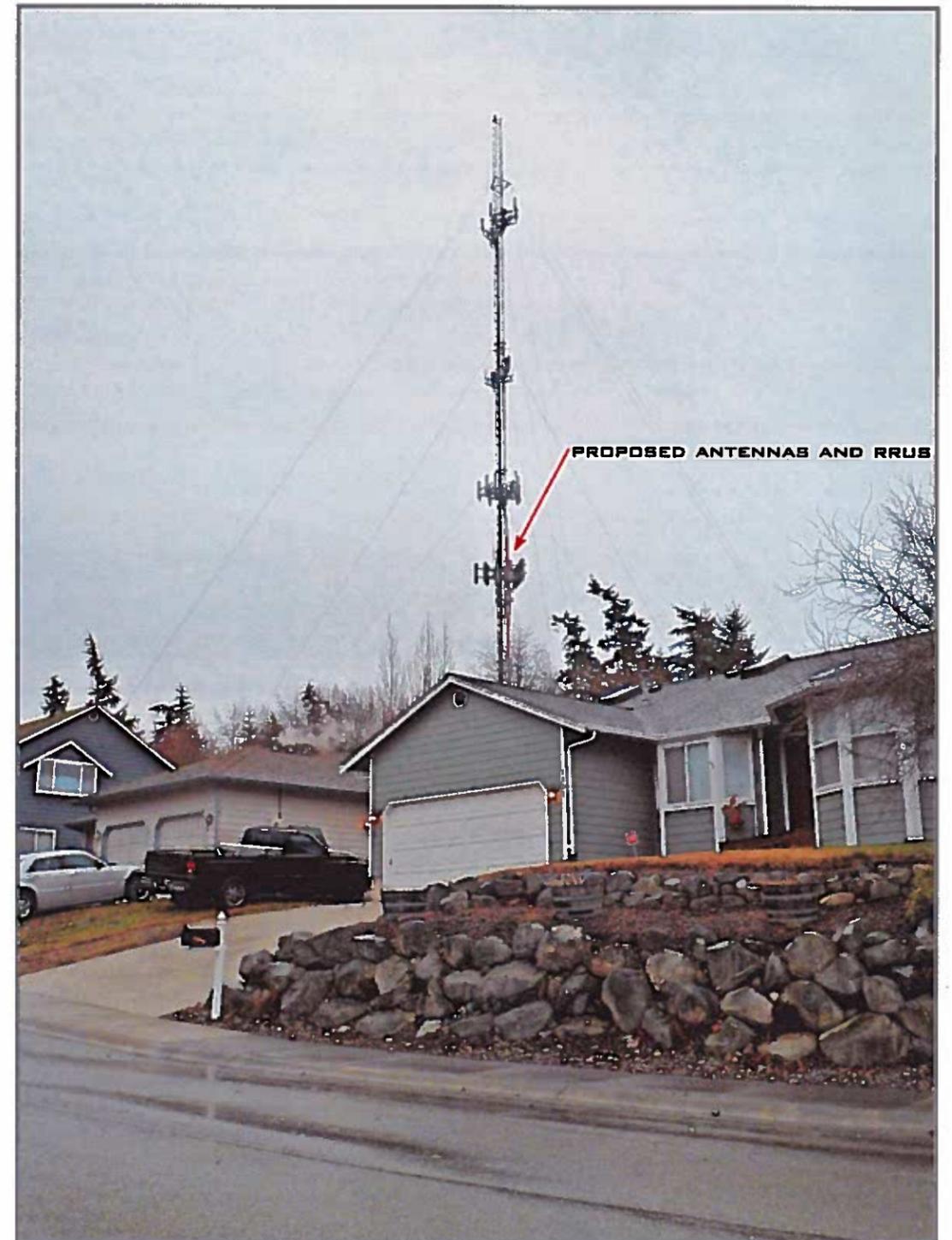


LOCATION

©2014 Google Maps

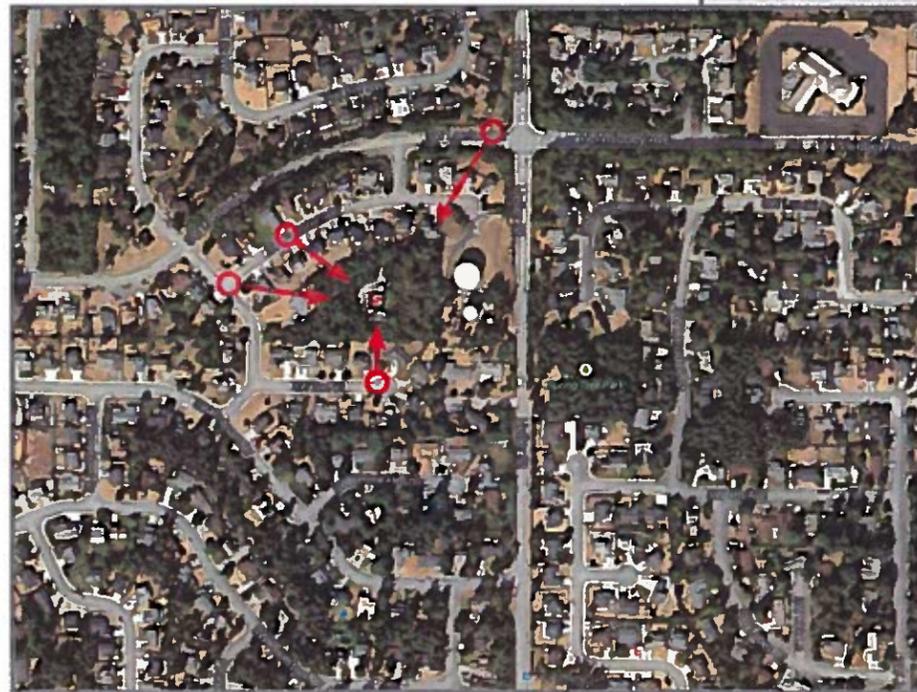


EXISTING



PROPOSED

LOOKING EAST FROM SW PONSTEEN DRIVE

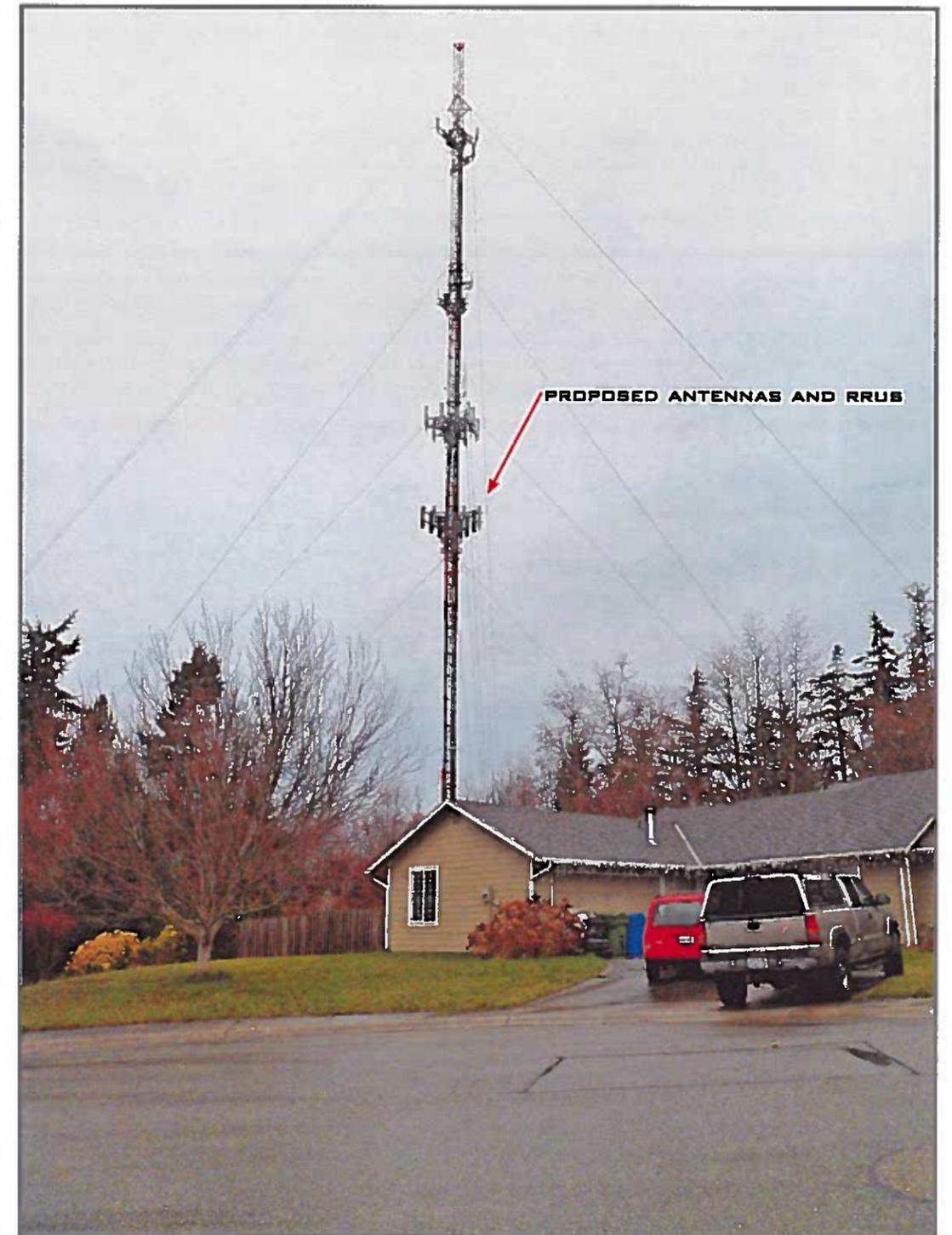


LOCATION

©2014 Google Maps



EXISTING



PROPOSED

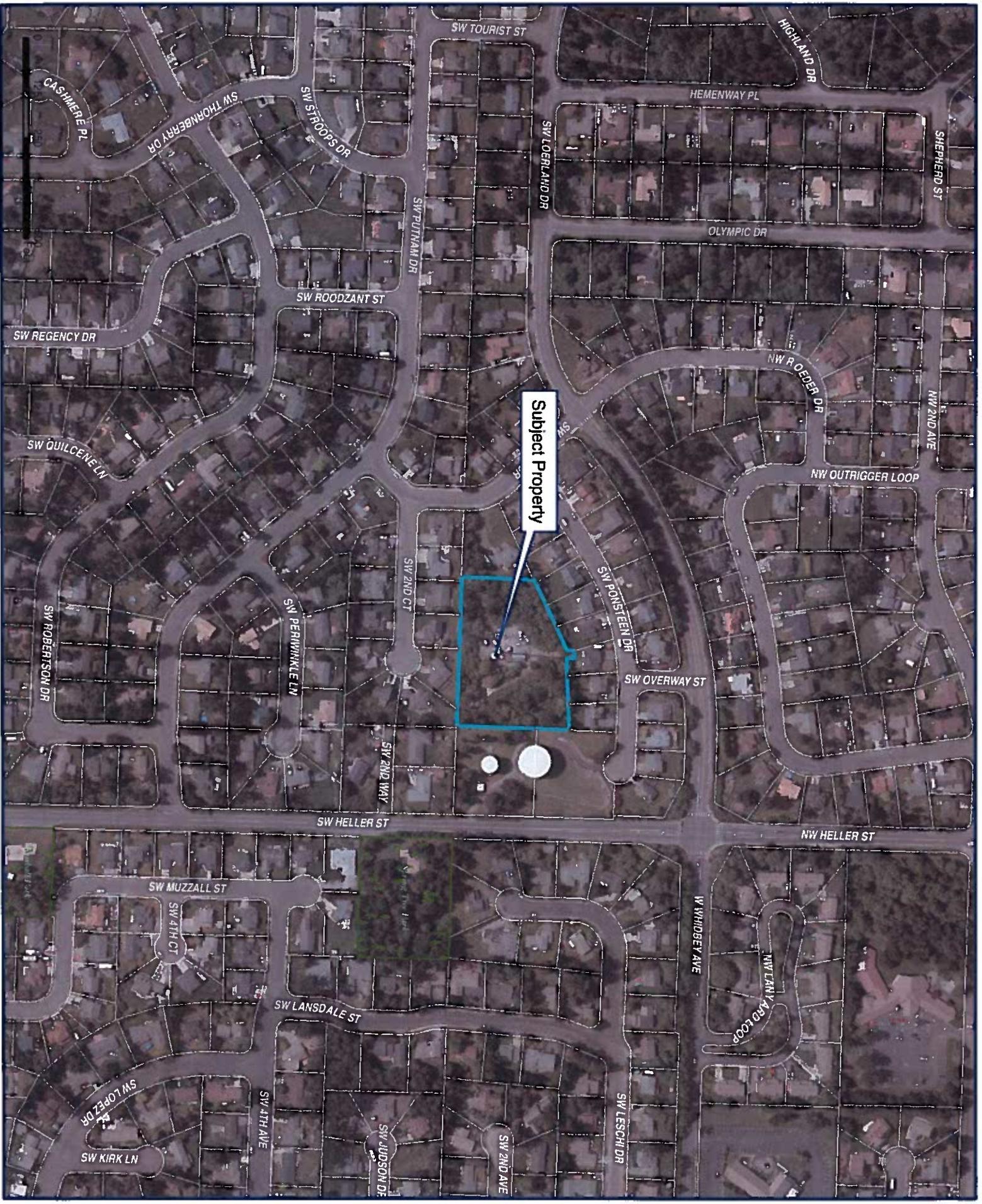
LOOKING NORTH FROM SW 2ND COURT

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# EXHIBIT 2

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*Vicinity and Aerial Map*



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# EXHIBIT 3

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## *Zoning Map*



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# EXHIBIT 4

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*Public Noticing Documents*

**CERTIFICATION OF POSTING  
PUBLIC HEARING NOTICES**

Oak Harbor Hearing Examiner  
865 SE Barrington Drive  
Oak Harbor, Washington 98277

I, Katherine Gifford, certify under penalty of perjury under the laws of the State of Washington, that the following is true and correct:

On the 19<sup>TH</sup> day of May, 2015 I provided written notice to the Whidbey News Times Legals (legals@soundpublishing.com); and

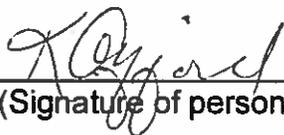
On the 20th day of May, 2015, I did post 3 notices (a copy of which is attached hereto and by reference made a part hereof) at the following locations:

1&2)           Oak Harbor City Hall  
                  865 SE Barrington Drive  
                  Oak Harbor, WA 98277

3)               Library  
                  1000 East Regatta Drive  
                  Oak Harbor, WA 98277

advertising a public hearing for CUP 15-02 before the Oak Harbor Hearing Examiner on June 8, 2015

Executed this 20th day of May, 2015, in Oak Harbor, Washington.

  
\_\_\_\_\_  
(Signature of person posting)

**NOTICE OF PUBLIC HEARING BEFORE  
HEARING EXAMINER**

**HE #06-08-15**

Notice is hereby given that a public hearing will be held before the City of Oak Harbor Hearing Examiner in the Council Chambers at City Hall on June 8, 2015 at 10:00 a.m., or as soon thereafter as possible following any preceding items, to consider the following items:

**Verizon Wireless Conditional Use – CUP-15-02**

The Hearing Examiner will consider a conditional use permit submitted by Verizon Wireless proposing to construct a telecommunications facility by adding 12 panel antennas to an existing 294 foot guy tower. Verizon also proposes six outdoor equipment cabinets mounted on a concrete pad and one generator mounted on a concrete pad all located within a proposed 15 foot X 30 foot fenced leased area. This location is currently an existing location for cell tower equipment. The property is zoned R1, Single Family Residential and the proposed telecommunication tower is permitted as a conditional use in this district. Project Location: 200 SW Roeder Drive (R13334-012-0880)

Anyone wishing to comment on the above items or provide other relevant information may do so in writing or appear in person before the Hearing Examiner at the time and place of said public hearing. After obtaining public input and considering the matter, the Hearing Examiner may approve or deny the proposed application. As part of the approval, conditions or limitations may be imposed.

For additional information, you may contact the City Department of Development Services in City Hall or call (360) 279-4512.

Katherine D. Gifford  
Recording Secretary

Published: Whidbey News Times  
May 23, 2015

**CERTIFICATION OF MAILING  
NOTICE TO ADJACENT PROPERTY OWNERS**

I, Katherine D. Gifford, certify under penalty of perjury under the laws of the State of Washington, that the following is true and correct:

That on the 20th day of May, 2015, I deposited in the U.S. mail, postage prepaid, a copy of the Notice of Public Hearing before the Oak Harbor Hearing Examiner for CUP 15-02 (a copy of which is attached hereto and by reference made a part hereof) to the following property owners:

(see attached)

Executed this 20th day of May, 2015, in Oak Harbor, Washington.

  
\_\_\_\_\_  
(Signature of person mailing)

~~Nathan P. Hepworth~~ 5.7.15  
returned  
~~3 Danforth Road, Apt # 7~~  
~~Nashua, NH 03060-5659~~

Efren E Epilepsia  
546 SW Fairhaven Drive  
Oak Harbor, WA 98277-2297

Pride Davis  
1442 SW Ponsteen Drive  
Oak Harbor, WA 98277

~~Michael Ruth~~ 5.7.15 returned  
~~6031 Cow Canyon Road~~  
~~Fallon, NV 89406~~

City of Oak Harbor  
865 SE Barrington Drive  
Oak Harbor, WA 98277-3280

City of Oak Harbor  
865 SE Barrington Drive  
Oak Harbor, WA 98277-3280

Nicole A Kuykendall  
1475 SW Ponsteen Drive  
Oak Harbor, WA 98277

Brandon R. Edge  
1617 Dey Cove Drive  
Virginia Beach, VA 23454

Marsha D Whiting  
1521 SW Ponsteen Drive  
Oak Harbor, WA 98277-5819

Robert W Lockhart  
1549 SW Ponsteen Drive  
Oak Harbor, WA 98277-5819

Maricris McGinnis  
1583 SW Ponsteen Drive  
Oak Harbor, WA 98277

Richard W Phillips  
1625 SW Ponsteen Drive  
Oak Harbor, WA 98277-5820

Brett A. Stevenson  
1211 12th Street NW, #1  
Washington, DC 20005

Antonio A. Mangohig Jr.  
4 Balise Lane  
Foothill Ranch, CA 92610-  
2333

Tanya D. Seal  
1601 SW Putnam Drive  
Oak Harbor, WA 98277-5828

Evi Jensen  
198 SW Roeder Drive  
Oak Harbor, WA 98277-720

Melissa Stewart  
1586 SW 2nd Ct  
Oak Harbor, WA 98277

Lori D. Rhodenbaugh  
1522 SW Ponsteen Drive  
Oak Harbor, WA 98277-5819

Frank O. & Cecilia V. Mariner  
1550 SW Ponsteen Drive  
Oak Harbor, WA 98277-5819

Elizabeth A. Tennal JTWROS  
1584 SW Ponsteen Drive  
Oak Harbor, WA 98277

Teresa A. Kelsey  
1624 SW Ponsteen Drive  
Oak Harbor, WA 98277-5820

Donald & Barbara McCracken  
1640 SW Ponsteen Drive  
Oak Harbor, WA 98277-5820

Augusto G. Reyes  
1664 SW Ponsteen Drive  
Oak Harbor, WA 98277-5820

Georgette L. Keliikupakako  
1680 SW Ponsteen Drive  
Oak Harbor, WA 98277-5820

Cristi L. Messersmith  
195 SW Roeder Drive  
Oak Harbor, WA 98277-7209

Samantha J. Poteete  
CMR 480 BOX 2476  
APO, AE 09128-0025

William R. McCumber  
1571 SW 2nd CT  
Oak Harbor, WA 98277-2280

Tracey L. Crouch  
316 Pioneer Way  
Oak Harbor, WA 98277-5716

Suny M. Troha  
1651 SW Ulysses Street  
Oak Harbor, WA 98277

Barbara D. Olson  
PO Box 575  
Oak Harbor, WA 98277-057

Anna M. Vandelac  
5260 Bucharest Place  
Dulles, VA 20189

Cheryl A. Louder  
1525 SW 2nd CT  
Oak Harbor, WA 98277-2280

Rufina R. Hollis  
1505 SW 2nd CT  
Oak Harbor, WA 98277-2280

Nichole J. Davis  
8604 Country Road 15  
Rolette, ND 58366-9048

Kelly J. Greogory  
1564 SW Periwinkle Lane  
Oak Harbor, WA 98277-5839

Thomas E. Hawkins  
1451 SW 2nd Way  
Oak Harbor, WA 98277-5837

Lisa A.E. Curtin  
13845 Hawksnest Bay Drive  
Corpus Christi, TX 78418-6335

Richard E. Roberts  
287 SW Roeder Drive  
Oak Harbor, WA 98277

Douglas J. Jerome  
1346 SW Leschi Drive  
Oak Harbor, WA 98277-5838

~~Gail Penn, 50% Int JTWR0S –  
5.18.15 removed  
1364 SW Leschi Drive  
Oak Harbor, WA 98277~~

Stacy Martinez  
1386 SW Leschi Drive  
Oak Harbor, WA 98277-5838

City of Oak Harbor  
865 SE Barrington Drive  
Oak Harbor, WA 98277-3280

Edward E. Quist JTWR0S  
1534 SW Periwinkle Lane  
Oak Harbor, WA 98277-5839

Rene V. & Amelia C. Abadesco  
2133 SW Vista Park Drive  
Oak Harbor, WA 98277

~~Angelique M. O'Connell 5.7.15  
returned  
2214 D Osprey Street  
Oak Harbor, WA 98277~~

Linda Earnhart  
1426 SW 2nd Way  
Oak Harbor, WA 98277-8023

Lynda J. Alli  
1328 SW Leschi Drive  
Oak Harbor, WA 98277

Holly Ray  
245 SW Roeder Drive  
Oak Harbor, WA 98277-7210

Jason Loy  
1560 SW 2nd Court  
Oak Harbor, WA 98277

Amanda B. Suto  
1546 SW 2nd CT  
Oak Harbor, WA 98277

Danilo P. & Emma C. Delacruz  
1534 SW 2nd Court  
Oak Harbor, WA 98277-2280

Dawn L. Brown  
1405 Blackberry Lane  
Oak Harbor, WA 98277

Cary H. Anderson  
1504 SW 2nd Court  
Oak Harbor, WA 98277

Angelique M O'Connell  
1482 SW 2<sup>nd</sup> Ave  
Oak Harbor, WA 98277

Michael Ruth  
c/o Whidbey Residential  
Rentals  
285 NE Midway Blvd #2  
Oak Harbor, WA 98277



May 20, 2015

**NOTICE TO ADJACENT PROPERTY OWNERS OF PUBLIC HEARING  
OAK HARBOR HEARING EXAMINER**

Notice is hereby given that a public hearing will be held before the City of Oak Harbor Hearing Examiner in the Council Chambers at City Hall, 865 SE Barrington Drive, on June 8, 2015 at 10:00 a.m., or as soon thereafter as possible following any preceding items, to consider the following item:

**Verizon Wireless Conditional Use – CUP-15-02**

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For additional information, you may contact the City Department of Development Services in City Hall or call (360) 279-4512.

All meetings of the Hearing Examiner are open to the public.