

Statement of Compliance for Proposed Wireless Facility

Verizon Wireless Site ID: OR1 City Park

Submitted to the City of Astoria

July 20, 2015

I. General Information

Applicant: Verizon Wireless (VAW), LLC dba, Verizon Wireless
5430 NE 122nd Avenue
Portland, OR 97317

Representative: Lexcom Development
Sharon Gretch
31649 Sexton Road
Philomath, OR 97370
(541) 515-8263

Project Information:

Property Owner: City of Astoria
Site Address: 1530 Shively Park Road, Astoria
Parcel: 809170001200
Parcel Area: 12.4 acres
Zone Designation: Institutional
Existing Use: Park

Attachments List

00. Land Use Application signed by Applicant
 - a. Wireless Communication Facility Application
 - b. Variance Application – General (for height)
 - c. New Construction (Adjacent to Historic Property)
01. Statement of Compliance Narrative
02. Deed
03. FCC License
04. Non-Ionizing Electromagnetic Report (NIER)
05. Architectural Drawings
06. Propagation Maps
07. Location map of all sites
08. Photo Simulations
09. FAA / ODA Determinations
10. State Historic Preservation Office Determination

II. Project Overview

Lexcom Development is submitting an application on behalf of Verizon Wireless (VAW), LLC, dba Verizon Wireless and the property owner, City of Astoria. The site proposed herein is designed to improve the voice and data capacity for its customers living in the City of Astoria along and south of Lexington Avenue area and will be one of two towers designed to replace the existing tower located near the Column of Astoria.

The applicant proposes to construct a 150-foot tall monopole with up to a total of twelve panel antennas (eight initial, four future) and future microwave antennas. Ancillary ground equipment inclusive of radio equipment cabinets, generator and utility frame¹ will be located within a landscaped, 40' x 28' lease area. The site will be accessed via Shively Park Road. Further, the site has been designed for at least two additional carriers to minimize the proliferation of towers within the City.

The location of the proposed site maximizes coverage while minimizing visual impacts by utilizing existing topography and natural screening². The proposed antenna height, with an overall antenna tip height of 150-feet, is the minimum height necessary to provide the required coverage relative to nearby complementary wireless facilities.

This site can meet the City of Astoria's criteria for siting of new wireless telecommunication facilities, including height, setbacks and design as will be demonstrated herein. As shown throughout this application, Verizon's proposal is the least intrusive means of meeting coverage objectives. Verizon Wireless respectfully requests that the City of Astoria approve the facility as proposed herein.

III. Site Selection & Design

Verizon seeks to improve a significant coverage and capacity deficiency in its 3G and 4G LTE coverage in the City of Astoria. Wireless service is a critical today, with many people relying on their wireless devices for everything from information gathering to financial transactions to primary home phone service. The proposed location was chosen by Verizon Wireless to improve the quality of voice and data service as well as 911 services, for its customers living in the City of Astoria along and south of Lexington Ave. The site will also provide service to a large rural area southeast of the City³.

Verizon constructs wireless communication facilities at carefully selected locations. The need for service in this particular geographic area was determined by market demand, coverage requirements for a specific geographic area, and the need to provide continuous coverage from one site to another. Once the need for additional coverage or capacity was established, Verizon's RF engineers performed a study to determine the approximate site location and antenna height required to provide service in the desired coverage area. Using a computer modeling program that accounts for the terrain within the service area and other variables, such as proposed antenna height, available radio frequencies and wireless equipment characteristics, the engineers identified a "search ring," wherein a site could be located to fill the coverage gap. The engineers took the following objectives into consideration when

¹ See, *Architectural Drawings*, enclosed as Attachment 5.

² See, *Photo simulations*, enclosed as Attachment 8.

³ See, *RF Propagation Maps for site "OR1 City Park", Exhibits 1 through 5*, enclosed as Attachment 6.

identifying the search ring:

1. Coverage. The antenna site must be located in an area where the radio frequency broadcasts will provide adequate coverage within the significant gap in coverage. The RF engineer must take into consideration the coverage objectives for the site as well as the terrain in and around the area to be covered. Since radio frequency broadcasts travel in a straight line and diminish as they travel further away from the antennas, it is generally best to place an antenna site near the center of the desired coverage area. However, in certain cases, the search ring may be located away from the center of the desired coverage area due to the existing coverage, the surrounding terrain, or other features which might affect the radio frequency broadcasts like buildings or sources of electrical interference.
2. Capacity. Capacity refers to the technological limitation of a wireless communication facility to provide communication. Mobile phones and wireless devices transmit to and receive radio frequency signal from antennae at wireless communication facilities. Antennae are capable of transmitting and receiving a finite amount of signal – the capacity. When capacity is reached, busy signals on phone result and data transmission is lost. Monitoring of each wireless facility is continuous and the data collected analyzed for planning to prevent overloading. Projections based on the data allow Verizon to plan, design, permit, and construct new facilities or modify existing wireless communication facility before reaching capacity.
3. Clutter. Verizon’s antennas must “clear the clutter” in the area. The radio frequencies used in Verizon’s systems are adversely affected by trees, buildings, and other natural and man-made obstacles. Radio frequencies do not penetrate mountains, hills, rocks or metal, and radio frequencies are diminished by trees, brick and wood walls, and other structures. Therefore, antennas must be installed above or close to the “clutter” in order to provide high quality communications services in the desired coverage areas. In addition, if the local code requires us to accommodate additional carriers on the structure, the structure must be even higher in order to allow the other carriers’ antennas to clear the clutter as well.
4. Call Handoff. The antenna site must be located in an area where the radio broadcasts from this site will allow seamless call handoff with adjacent sites. “Call handoff” is a feature of a wireless communications system which allows an ongoing telephone conversation to continue uninterrupted as the user travels from the coverage area of one antenna site into the coverage area of an adjacent antenna site. This requires coverage overlap for a sufficient distance and/or period of time to support the mechanism of the handoff.
5. Quality of Service. Users of wireless communications services want to use their services where they live, work, commute and play, including when they are indoors. Verizon’s coverage objectives include the ability to provide indoor coverage in areas where there are residences, businesses and indoor recreational facilities.
6. Radio Frequencies used by System. The designs of telecommunications systems will vary greatly based upon the radio frequencies that are used by the carrier. If the carrier uses radio frequencies that are in the 850 MHz to 950 MHz range, the radio signals will travel further and will penetrate buildings better than the radio frequencies in the 1900 MHz band. Thus, Verizon needs more antennas in a given area to support technologies that use the 1900 MHz band.
7. Land Use Classifications. Verizon’s ability to construct a cell site on any particular property is affected by Oregon state law and Astoria city code.

Terrain data within the service area is entered into a modeling program along with a series of variables, such as proposed antenna height, available radio frequencies and wireless equipment characteristics. Using this information, Verizon's RF engineers identified an area of optimum location for and height of a new wireless communication facility antenna to maximize the coverage objective. When this technical analysis was completed, a search area map and a description of other requirements were provided to Verizon's site development specialists.

When designing an existing or new area for coverage or capacity, Verizon Wireless will first attempt to utilize an existing tower or structure for collocation at the desired antenna height. If an existing tower or structure is not available or not attainable because of space constraints or unreliable structural design, Verizon Wireless will propose a new tower. In this instance, our real estate group with the help of outside consultants did several searches and concluded there is no existing cell towers nearby for collocation, to meet the OR1 City Park objectives.

The following sites listed below represent the Verizon priority siting and alternate candidates reviewed within the search area. The analysis of site viability is included under, 'Summary'.

Verizon Priority Siting	Type of Property	Description	Summary
1)	Existing Structures	<i>Collocation on existing WCF towers</i>	There are no existing WCF towers within this desired search area on which to collocate.
		<i>Upgrade to existing WCF towers</i>	None available in the search area to upgrade.
		<i>Existing alternative tall structures (i.e., water tanks, Stadium Lighting, etc.)</i>	No alternate tall structures were identified within the search ring on which to locate.
		<i>Rooftop Installation Opportunities</i>	No tall buildings are located within the search ring. The concrete building identified as Reservoir 2 was reviewed, but deemed too low to meet coverage needs. See attached email from Arden Yundt, Verizon RF Engineering PNW Region.

2)	Utility Structures (i.e., power poles, high tension power lines, etc.)	Existing utility poles	Existing poles in the area are 20-35 feet. These poles are structurally insufficient to support the required antenna installation and are unable to achieve the required height to reach coverage/capacity objectives.
3)	New Facility	Two Opportunities	<p>(1) <i>Fred Lindstrom Memorial Park:</i> Areas within the park were reviewed, however deemed to be too low of an elevation to meet coverage objectives and hand-off to adjacent sites.</p> <p>(2) <i>Shively Park:</i> Site proposed herein; Alternate locations within the park were reviewed, however, the location herein was chosen as primary as it afforded the best natural camouflage and met all coverage/capacity objectives and can effectively hand-off to adjacent sites.</p>

Table 1 - Priority Site Analysis

Coverage plots are attached herein under Attachment 6 and labeled as Exhibits 1 through 6.

- Exhibit 1 shows current coverage, inclusive of the site near the Astoria Column titled 'Astoria HD' and existing sites, OR1 Gearhart and OR1 Warrenton.
- Exhibit 2, shows coverage following the removal of the 'Astoria HD' site, depicting the area as it would exist without any coverage. The dotted circle in Exhibit 2 depicts area of RF coverage and capacity gap that the site herein is proposed to fill.
- Exhibit 3&4 shows coverage/ RF signal emitting from the site proposed herein. With the antenna at 150-feet, nearly the entire coverage objective area will be covered by high to moderate RF signal strength, as depicted by the purple and blue portions of the map. Therefore Exhibit 3&4 meets our design objective for this site and clearly shows the proposed location improving, and in many cases adding signal strength to this large rural area.
- Exhibits 5 depicts how the proposed site will be integrated into our network system for that area. Therefore our antenna with a tip height of 150 feet (AGL) will fulfill the capacity objective for the proposed site as depicted in Exhibit 5 & 6. The proposed site ensures, RF

signal overlaps with adjacent sites to allow continuity of call(s) or “handoff.” Therefore a 150’ (AGL) antenna centerline is required at the OR1 City Park site location as shown to provide service for its customers living in the City of Astoria along and south of Lexington Avenue and to a large rural area southeast of the city.

Enhanced 911 (E911) Requirements

In addition to providing improved service to Verizon customers, the proposed antenna location is needed to meet Federal Communications Commission (FCC) requirements for Enhanced 911 (E911) service. The wireless E911 program is divided into two phases. Phase I requires wireless carriers, upon request from a local Public Safety Answering Point (PSAP), to report the telephone number of a wireless 911 caller and the location of the antenna that received the call. Phase II of the E911 program requires wireless carriers to provide far more precise location information, within 50 to 100 meters in most cases.

The FCC established a four-year schedule for Phase II. It began on October 1, 2001 with a target completion date of December 31, 2005. Provision of E911 service in accordance with FCC requirements is a major component of the demand for additional cell sites. In addition to providing greater signal strength for in-building coverage that will provide better service to residential customers in the area, the proposed WCF will provide more precise triangulation for providing E911 service as required by the FCC. This will allow a person who is using E911 because of an emergency to be found more quickly because their location will be more easily determined as this and other antenna sites are added to the wireless network.

Verizon engineers have carefully designed this site to maximize quality of service to our customers, which can best be accomplished at a height of 150-feet (antenna tip height). This location was also selected because of its position relative to existing and proposed sites, providing favorable site geometry for federally mandated E911 location accuracy requirements and efficient frequency reuse. Good site geometry is needed to achieve accurate location of mobile users through triangulation with existing and proposed sites.

IV. Applicable Law

Federal, state and local laws will apply to this application.

Federal law, primarily found in the Telecommunications Act, acknowledges a local jurisdictions zoning authority over proposed wireless facilities but limits the exercise of that authority in several important ways. First, a local government must approve an application for a wireless communications site if three conditions are met: (1) there is a significant gap in coverage; (2) the carrier has shown that the manner in which it proposes to provide service in the significant gap is the least intrusive on the values that the community seeks to protect as allowed by applicable law; and (3) there are no potentially available and technologically feasible alternatives that are less intrusive on the goals that the community seeks to protect as allowed by applicable law. 47 U.S.C. Section 332(c)(7)(A) and (B)(i)(II); and *T-Mobile USA, Inc. v. City of Anacortes*, 572 P.3d 987 (9th Cir. 2009).

In addition, under the Telecommunications Act, the City of Astoria is prohibited from considering the environmental effects (including health effects) of the proposed site if the site will operate in

compliance with federal regulations. 47 U.S.C. Section 332(c)(7)(B)(iv). Therefore, this issue is preempted under federal law and any testimony or documents introduced relating to the environment or health effects of the proposed site should be disregarded in this proceeding.

Finally, the Telecommunications Act requires local jurisdictions to act upon applications for wireless communications sites within a 'reasonable' time. The FCC has issued a 'Shot Clock' rule to establish a deadline for the issuance of land use permits for wireless facilities. According to the FCC, a reasonable period of time for local government to act on wireless applications is 90-days for a co-location application and 150-days for all other applications. This time period includes all application notice and appeal periods. Therefore, under federal law, the reasonable period for the City of Astoria to review this application is 150-days unless more restrictive timelines apply.

V. Application submittal requirements: Astoria Development Code

Verizon proposal complies with the submittal requirements of the City of Astoria Development Code. These are addressed in the order laid out below.

Article 15 – Wireless Communication Service Facilities

Article 11 –Conditional Use

Article 12 – Variances

Article 15 – Wireless Communication Service Facilities

15.035. PERMITTED LOCATIONS OF WIRELESS COMMUNICATION SERVICE FACILITIES.

A. Zones: Wireless Communication Service Facilities, including antenna, antenna arrays, and antenna support structures are permitted with administrative or conditional use review in the zones as provided below:

1. Permitted Zones: Wireless Communication Service Facilities are permitted in the following zones through the Administrative or Conditional Use process in accordance with Astoria Development Code Article 9:

f. IN (Institutional)

B. Preferred Location, Siting, and Designs in Priority Order.

2. Conditional Use Review.

a. Location on New Antenna Support Structure

Response: The proposed use is for new antenna support structure in an IN zone which is permitted use subject to a Conditional Use Review.

15.045. COLLOCATION AND USE OF ALTERNATIVE ANTENNA SUPPORT STRUCTURES FOR WIRELESS COMMUNICATION SERVICE FACILITIES.

B. Collocation Required: Collocation or use of alternative antenna support structure shall be required unless demonstrated to be infeasible to the satisfaction of the Community Development Director or the Astoria Planning Commission. If an applicant proposes to construct a new antenna support structure, evidence shall be submitted by the applicant to demonstrate the following:

1. That no existing antenna support structures or alternative antenna support

structures are located within the geographic area which meet the service provider's engineering requirements to provide service; OR

- 2. That existing antenna support structures and alternative antenna support structures are not of sufficient height to meet the service provider's engineering requirements to provide service;*
- 3. That existing support structures and alternative antenna support structures do not have sufficient structural strength to support the service provider's engineering requirements to provide service; OR*
- 4. That an applicant's proposed antennas or antenna arrays would cause detrimental electromagnetic interference, or NIER field interference with nearby antennas or antenna arrays, or vice-versa; OR*
- 5. That there are other limiting factors, such as inadequate space for an equipment shelter, that render existing antenna support structures or alternative antenna support structures unsuitable.*

Response: Verizon consultants worked closely with the City of Astoria and Parks Department staff to identify a viable location that would minimize the visual impact to the surrounding area and minimize any impact on the flora/fauna within the park. See Table I, under III. Site Selection & Design, above for detailed analysis on alternative sites reviewed.

When designing an existing or new area for coverage or capacity, Verizon Wireless will first attempt to utilize an existing tower or structure for collocation at the desired antenna height. If an existing tower or structure is not available or not attainable because of space constraints or unreliable structural design, only then will Verizon Wireless propose a new tower. The consultants did several searches and concluded there are no existing cell towers or viable alternative structures such as water tanks, tall power poles or similar structures nearby for collocation that would meet the OR1 City Park objectives. The nearest existing vertical structure is roughly a ½ mile away and is the tower located at the Astoria Column.

15.060. APPLICATION SUBMITTAL REQUIREMENTS.

A. All applications for permits for the placement and construction of Wireless Communication Service Facilities shall be accompanied by the following:

- 1. A complete description of the proposed WCSF including use of concealment technology, height, location, siting, and design, and description of services the applicant intends to provide from the facility.*
- 2. Proof of ownership of the land upon which the WCSF is proposed; or evidence of an appropriate easement, lease, rental agreement, or land use application signed by the applicant and signed by the underlying property owner.*
- 3. Copy of the carrier's current FCC license for the proposed coverage area.*
- 4. Evidence demonstrating compliance with non-ionizing electromagnetic radiation (NIER) emissions standards as set forth by the FCC particularly with respect to any habitable areas within the structure on which the antennas are co-locating or in structures adjacent to or across a public right-of-way from the antennas.*

5. *An accurate and scaled site plan, scaled elevation views, and other supporting drawings, illustrating the location and dimensions of the proposed WCSF, including but not limited to: antenna support structure, alternative antenna support structure, antenna array, antennas, equipment enclosures, and any and all other devices and attachments.*
6. *Readily discernible map of the proposed area of coverage.*
7. *Location map of all sites currently operated by the carrier in a five (5) mile radius of the proposed site. Such locations shall be of sufficient detail to be added to the City's GIS data system. For each such site, the targeted area and capabilities of the sites shall be adequately described.*
8. *Visual impact analysis and demonstrations including mock-ups and/or photo simulations from at least three (3) directional perspectives.*
9. *Evidence demonstrating that the applicant has filed a request with the Federal Aviation Administration (FAA) and the Oregon Department of Aviation (ODA) to review the application, or evidence demonstrating that the applicant has complied with all FAA and ODA requirements.*
10. *Evidence demonstrating that the applicant has filed a request with the State Historic Preservation Office to review the application under Section 106 of the National Historic Preservation Act, or evidence demonstrating that the applicant has complied with all State Historic Preservation Office requirements as a result of the Section 106 consultation.*

Response: A description of the proposed facility addressing 15.060(A)(1) is located under Section 2: *Project Overview* and Section 3: *Site Design and Selection* and submittal requirements as described under 15.060(A)(2-10) are attached herein. See, *Attachments 10*.

11. *A collocation feasibility study conducted for the proposed service area of the facility being proposed. The study will describe the applicant's policy on collocation and demonstrate that collocation efforts were made and provide findings on why collocation can or cannot occur as indicated in Section 15.045.B.*

Response: See, response to Section 15.045(B) above and Table I, under III. *Site Selection & Design*, above for detailed analysis on alternative sites reviewed. There are no existing cell towers or viable alternative structures such as water tanks, tall power poles or similar structure nearby for collocation, to meet the OR1 City Park objectives. The nearest existing vertical structure is roughly a ½ mile away and is the tower located at the Astoria Column which this site, in conjunction with three other proposed sites, is designed to replace

12. *Where less preferred locations or design are proposed, a description of other alternatives considered (alternate sites, alternative heights, number of facilities, and equipment utilized) and the reasons why higher priority locations or designs were not selected.*

Response: See, response to Section 15.045(B) above and Table I, under III. *Site Selection & Design*,

above for detailed analysis on alternative sites reviewed. Verizon consultants worked closely with the City of Astoria and Parks Department staff to identify a viable location that would minimize the visual impact to the surrounding area and minimize any impact on the flora/fauna within the park. Other locations within in the park were reviewed, however, the site proposed herein offered significantly more screening of the tower with the least impact, requiring no tree removal and minimal site grading. Other locations within the park would have required additional tree removal and significant tree trimming.

15.065. STANDARDS AND REVIEW CRITERIA: All applications for Wireless Communication Service Facilities shall demonstrate compliance and conformity with the following requirements. The burden of proof is on the applicant to demonstrate such compliance and conformity. The Community Development Director may release an applicant from a requirement when it is determined that the requirement is not applicable to the request.

A. General and Operating Requirements.

1. Owner and Applicant Responsibilities. The owner and applicant of the Wireless Communication Service Facility and his or her successors and assigns at all times shall have the following responsibilities:

- a. The owner shall respond in a reasonable and timely manner to a request for information from a potential collocation applicant. In responding to such a request, the owner and potential collocation applicant shall furnish to each other all non-proprietary information necessary to enable the potential collocation applicant and the owner to determine the feasibility of collocation.
- b. The owner and potential collocation applicant shall negotiate in good faith for shared use of the owner's Wireless Communication Service Facility.

Response: It is the industry standard to allow collocation of multiple carriers on a single tower. Further, collocation is mandated under the Telecommunications Act, obligating carriers to provide, "on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements."

2. Environmental and Historic Resource Protection. All Wireless Communication Service Facilities shall be sited so as to minimize the effect on environmental and historic resources. To that end, the following measures shall be implemented for all Wireless Communication Service Facilities:

- a. The facility shall comply with all applicable local, State, and Federal regulations, including but not limited to: Columbia River Estuary Shoreland Overlay, Sensitive Bird Habitat Overlay, Astoria Historic Properties regulations, National Environmental Policy Act, National Historic Preservation Act, and Endangered Species Act;
- b. Alteration or disturbance of natural vegetation and topography shall be minimized;

Response: The site shall comply with all applicable local, State and Federal Regulations. The site proposed herein was designed in conjunction with City of Astoria staff and the Parks Department and was chosen as it preserves existing vegetation and afforded the best screening for the tower from on-site and off-site locations⁴. The site will be minimally graded and a retaining wall constructed in order to place the radio equipment cabinets at a lower elevation than the tower⁵. Alternate sites that were

⁴ See, *Photo simulations*, enclosed as Attachment 8.

⁵ See, *Grading & Drainage Plan*, enclosed as Attachment 5, page C3.

reviewed within the park would have required significantly more disturbance, requiring tree and limb removal prior to construction.

3. Noise. *No testing of back-up power generators shall occur between the hours of 6:00 PM and 7:00 AM. Emergency operation of back-up power generators is permitted at any time.*

Response: The back-up generator shall only be tested as detailed above.

4. Permits Required.

- a. *A Building Permit issued by the City is required for each Wireless Communication Service Facility. A building permit will not be issued until all land use approvals have been obtained; until any associated conditions have been met; and until all other applicable local, State, and Federal approvals have been secured and complied with, including but not limited to Astoria Development Code, Article 6 Historic Properties, and Section 106 requirements as set forth by the State Historic Preservation Office.*
- b. *No Wireless Communication Service Facility shall be constructed or operated within the City limits until all necessary City, State, and Federal approvals have been secured. Evidence of approvals shall be provided to the City.*

Response: A Building Permit request will be filed once land use has been reviewed and approvals obtained. All City State and Federal approvals have been applied for and shall be obtained prior to construction start.

5. Prohibited Structures.

- a. *Lattice and guyed wire towers and support structures and speculation ("spec") support structures are prohibited in all zones except as noted in Section 5.b.*
- b. *Lattice towers and support structures that are required for Emergency Communications Facilities and Temporary Communications Facilities operated by public officials may be located in the LR Zone (Land Reserve). Co-location by private communication providers on a lattice tower with emergency communication facilities is allowed.*

Response: Not applicable. This proposal is for a monopole.

6. Radio Frequency Standards.

- a. *The applicant shall provide evidence that the Wireless Communication Service Facility is in compliance with FCC standards and that the Wireless Communication Service Facility will not cause interference with the reception of area television, radio, or emergency communication broadcasts. If at any time, the City finds that the Wireless Communication Service Facilities interfere with such reception, the applicant shall mitigate the interference. If the applicant does not mitigate the interference to the City's satisfaction, the*

City may revoke or modify the permit.

Response: See Attachment 4, NIER report.

7. Security. *The applicant shall insure that sufficient anti-climbing measures have been incorporated into the WCSF, as needed, to reduce potential for trespass and injury.*

Response: The facility will be surrounded by a 6 foot fence for security and all climbing pegs will be removed once construction is complete.

8. Technical Expert Support. *The Community Development Director may employ on behalf of the City an independent technical expert to review any technical materials submitted including, but not limited to, those required under this Section, and in those cases where a technical demonstration of unavoidable need or unavailability of alternatives is required.*

B. Location, Siting and Design Requirements.

1. Preferred Location, Siting, and Designs in Priority Order. *See Section 15.035.B of this Code.*

Response: Per 15.035(B) Preferred Location, Siting, and Designs in Priority Order; sites that are located on an existing support structure or existing alternative support structure are given the highest priority. As is demonstrated, there are no existing structures in the area to locate a facility meet the OR1 City Park objectives. As the second priority siting, the preferred design is a camouflaged/concealed tower. This site was specifically located in such a manner to utilize the existing topography and surrounding tall trees to conceal the tower. See Attachment 08, photo simulations.

2. Adverse Impact. *WCSF shall not create a substantial adverse impact on the view from any public park, natural scenic vista, historic property (locally designated or on National Register), major scenic and view corridor, or residential area. In determining the potential substantial adverse impact of the proposed facility upon scenic, natural, historic, and cultural resources or vicinity, the following points shall be considered:*

- a. The extent to which the proposed WCSF is visible from the viewpoint(s) of the impacted resource or vicinity.*
- b. The type, number, height, and proximity of existing structures and features, and background features within the same line of sight as the proposed facility.*
- c. The amount of vegetative screening.*
- d. The distance of the proposed facility from the impacted resource or vicinity.*
- e. The presence of reasonable alternatives that allow the facility to function consistently with its purpose.*

Response: This site was specifically located in heavy tree cover and utilizes the existing topography to conceal the tower. The existing trees in the area are inclusive of approximately twenty-two (+/-) deciduous trees ranging in height from 20 – 120 feet and roughly fifteen (+/-) Douglas Fir trees ranging in height from 18 – 150 feet. Given the existing tree height and density along with the distance to the

nearest development, the visual impact from the surrounding area is significantly mitigated. No adverse impact to adjacent parcels or other resources is anticipated. Further, the lease area will be surrounded by a landscape buffer to further conceal the ground level equipment. See Attachment 08, Photo simulations.

3. Use of Concealment Technology. All Wireless Communication Service Facilities shall utilize concealment technology so as to blend in with the surrounding natural and human-made environment in such a manner so as to be either reasonably difficult for the naked eye to detect or observe, or made part of the feature enclosing it. To this end, Wireless Communication Service Facilities shall be designed so as to be camouflaged to the greatest extent possible, including but not limited to: concealment technology, use of compatible building materials and colors, vegetative, structural or topographic screening.

Response: This site was specifically located to conceal the tower by utilizing the existing topography and surrounding heavy tree cover, inclusive of tall, Douglas Fir trees and shorter, deciduous trees. The existing trees are of similar height, ranging in heights from 18-feet to 150-feet. Given the existing tree height and density along with the distance to the nearest development, the visual impact from the surrounding area is significantly mitigated. See Attachment 08, photo simulations.

4. Access Driveways and Parking. All access drives and parking areas shall be no longer or wider than necessary and be improved to comply with the requirements of the Astoria Development Code and Astoria City Code.

- a. Existing driveways shall be used for access whenever possible.*
- b. New parking areas shall, whenever feasible, be shared with subsequent Wireless Communication Service Facilities and/or other permitted uses.*

Response: No new access driveways or parking is proposed for this site.

5. Color and Materials.

- a. All buildings, poles, antenna support structures, antennas, antenna arrays, and other associated components of each Wireless Communication Facility site shall be initially coated and thereafter recoated as necessary with a non-reflective neutral color in muted tones.*
- b. The color selected shall be one that will minimize visibility of the WCSF to the greatest extent feasible. To this end, improvements which will be primarily viewed against soils, trees, or grasslands shall be coated with colors matching those landscapes, while elements which rise above the horizon shall be coated a color that matches the typical overcast sky (i.e. white, light gray, etc.) or background color at that location.*
- c. The color and coating shall be reviewed and approved by the Community Development Director or Astoria Planning Commission.*
- d. Upon a clear showing by the applicant that compliance with the requirements of this section would void a manufacturer's warranty on any specific equipment, or that natural aging of the material would provide greater*

concealment, the Community Development Director or Astoria Planning Commission may waive the requirements of this section for such specifically identified equipment.

Response: All equipment shall be of a non-reflective, earth tone color that shall blend with the natural environment and located behind a 6' tall chain link fence. The tower is a non-reflective, powder coated, grey tone. This tone tends to blend better with the varied colors as occur in nature, taking on the surrounding tones of both sky and earth.

6. Height. *In addition to the maximum structure height requirements of each Zone, Wireless Communication Service Facilities shall comply with the following height requirements:*

- a. WCSF shall comply with the height limit of the underlying zone, unless a variance to the height limit of the underlying zone is approved.*
- b. If there is not a height limit in the underlying zone, the maximum height of a ground-mounted facility, including a monopole, shall be 45'.*
- c. In reviewing Variance requests to the above described height limits, the following shall be considered:*
 - 1) The proposed structure and facility uses concealment technology; and*
 - 2) It is demonstrated that a greater height is required to provide the necessary service.*
- d. Building or other structure-mounted Wireless Communication Service Facilities shall not project more than ten (10) additional feet above the highest point on the existing building or structure and shall not project higher than the height requirements of the underlying zone, unless a variance to the height limit of the underlying zone is approved.*
- e. WCSF shall not penetrate imaginary surfaces around the Astoria Airport as defined by the Oregon Department of Aviation, unless a waiver is granted pursuant to Oregon Revised Statutes.*

Response: A variance to height is being requested for this location. The site proposed herein was submitted to the FAA and ODA for review. A determination of 'No Hazard' has been received from the FAA and the ODA does not object to construction as proposed⁶. See response to Article 12 regarding 6(c)(1) and (2), starting on page 16 herein.

7. Landscape and Screening. *All Wireless Communication Service Facility sites shall be improved with existing native vegetation, suitable landscaping and/or fencing installed to screen the facility, where necessary. To this end, all of the following requirements shall be implemented for all Wireless Communication Service Facilities which are installed on antenna support structures:*

- a. A landscape plan, meeting the requirements of Development Code Sections 3.105 to 3.120, shall be submitted as part of the application.*

⁶ See, *FAA / ODA Determinations*, enclosed as Attachment 9.

- b. Any proposed or required fenced area is to be surrounded, where feasible, by a landscaped strip of sufficient width and height to create a visual screen.
- c. Planted vegetation shall be of the evergreen variety.
- d. The landscape plan shall be subject to review and approval of the Community Development Director or Astoria Planning Commission.
- e. The fence shall be a maximum of six (6) feet in height.
- f. The fenced area is to be surrounded by evergreen shrubs (or similar type of evergreen landscaping). Required landscaping shall be located outside of the fenced area.
- g. The fence shall, where feasible, be installed and maintained around the entire perimeter of the site and surround the WCSF and the equipment shelter.
- h. If the Community Development Director determines that a fence surrounding antenna support structures located in a public right-of-way or adjacent to existing structures is not feasible, such structures may be exempted from the fencing requirements of this Section.
- i. Chain link fences shall be painted or coated with a non-reflective color.
- j. Electric, barbed wire, and concertina wire fences are prohibited.

Response: A landscape plan, meeting the requirements of Development Code Sections 3.105 to 3.120, is included herein, all fencing is of a non-reflective color and no electric, barbed wire or concertina wire is proposed⁷.

8. Lighting.

- a. A Wireless Communication Service Facility shall only be illuminated as necessary to comply with FAA or other applicable State and Federal requirements. Documentation from such State and Federal agencies describing required compliance measures is required.
- b. Exterior lighting shall not glare onto adjacent properties.
- c. Strobe lights are prohibited.

Response: FAA and ODA have been notified of the proposed development, however, determinations have yet to be received. Should aviation lighting be required, the site will comply with State or Federal requirements. The most restrictive shall apply. Proposed on-site maintenance lighting is proposed for the equipment and shall be downward tilted and on a timer. Strobe lights are not proposed.

9. Setback.

- a. Antenna support structures, excluding those utility poles and similar structures which are located within the right-of-way, and excluding equipment enclosures, shall be located no closer to a structure on the subject property, or from the property line of the subject property, than a distance equal to the total height of the

⁷ See, *Landscape Plan*, enclosed as Attachment 5, page L-1.

structure measured from finished grade, or the distance of “worst-case scenarios”, as recommended in the FCC “A Local Government Official’s Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance” Guidebook, dated June 2, 2000, whichever is greater. However, utility poles and similar structures which are located within the right-of-way, and equipment enclosures are subject to recommendations in the FCC “A Local Government Official’s Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance” Guidebook, dated June 2, 2000.

- b. All WCSF equipment enclosures shall be set back from property lines according to the requirements of the Zone.
- c. A setback requirement to a property line may be reduced, through Variance approval. A Variance to the setback requirement shall be in accordance with the requirements of Article 12, and the following additional criteria:
 - 1) It shall be demonstrated that the location of the proposed facility will take advantage of an existing natural or artificial feature to conceal the facility or minimize its visual impacts.

Response: The minimum setbacks in the IN zone are satisfied as the site is a minimum of 20’ from the front and rear property lines, 5’ from the side property line.

10. Signs. The use of any portion of a Wireless Communication Service Facility for signs other than warning or equipment information signs is prohibited. For emergency purposes, equipment information limited to the WCSF provider(s) name and contact phone number shall appear at the facility in a discreet yet visible location, either on the equipment cabinet or supporting structure.

Response: Signage for the site will comply with this standard.

11. Storage.

- a. WCSF storage facilities (i.e., vaults, equipment rooms, utilities, and equipment cabinets or enclosures) shall be constructed of non-reflective materials (exterior surfaces only) and shall be placed underground where feasible or be sited (i.e., depressed, or located behind earth berms) to minimize their profile.
- b. WCSF storage facilities shall be no taller than one story (15 feet) in height and shall be designed to look like a building or facility typically found in the surrounding area.
- c. On-premises storage of material or equipment shall not be allowed other than that which is necessary to the use, operation, and maintenance of the WCSF.

Response: No on-site storage is proposed.

Article 11 – Conditional Use

11.030 Basic Conditional Use Standards.

- A. Before a conditional use is approved, findings will be made that the use (except for housing developments) will comply with the following standards:

1. *The use is appropriate at the proposed location. Several factors which should be considered in determining whether or not the use is appropriate include: accessibility for users (such as customers and employees); availability of similar existing uses; availability of other appropriately zoned sites; and the desirability of other suitably zoned sites for the use.*
2. *An adequate site layout will be used for transportation activities. Consideration should be given to the suitability of any access points, on-site drives, parking, loading and unloading areas, refuse collection and disposal points, sidewalks, bike paths, or other transportation facilities. Suitability, in part, should be determined by the potential impact of these facilities on safety, traffic flow and control, and emergency vehicle movements.*
3. *The use will not overburden water and sewer facilities, storm drainage, fire and police protection, or other utilities.*
4. *The topography, soils, and other physical characteristics of the site are appropriate for the use. Where determined by the City Engineer, an engineering or geologic study by a qualified individual may be required prior to construction.*
5. *The use contains an appropriate amount of landscaping, buffers, setbacks, berms or other separation from adjacent uses.*

Response: The subject 12.4 acre parcel is zoned Institutional and the use proposed herein, Wireless Communication Facility, is permitted subject to a Conditional Use review. The scale of the proposed project, both the monopole and the ancillary equipment cabinets, are consistent with the scale of trees in the immediate area and the ground lease area will be fully landscaped to further minimize visual impact at ground level. The site is an unmanned, passive use requiring 1 to 2 trips per month for maintenance purposes. This monthly maintenance visit would have no impact on the existing vehicular access to and from the proposed site, or to pedestrian, bicycle and transit circulation. The facility requires only power and fiber and does not require water, sewer or surface water drainage. Further, this proposal would not produce any adverse noise, glare or noxious odors. As demonstrated herein, there are no existing structures in the vicinity that can accommodate this use and the site is well removed from any other development. The minimal footprint, 1,120 sq. feet, will have little impact on existing and projected uses on-site and will not interfere with normal park usage. The topography and physical characteristics of the site are ideal for the site as they provide natural camouflage for the facility. A core drilling was completed on site and is being evaluated to determine the type of foundation required for the site.

Article 12 – Variances

12.030. GENERAL CRITERIA.

Variances to a requirement of this Code, with respect to lot area and dimensions, setbacks, yard area, lot coverage, height of structures, vision clearance, and other quantitative requirements may be granted only if, on the basis of the application, investigation and evidence submitted by the applicant, findings are made based on the four factors listed below. Variances from off-street parking, sign requirements, and Flood Hazard Overlay Zone are not subject to General Criteria (refer to Sections 12.040, 12.050, and 12.055 as applicable).” (Amended by Ordinance 09-03, 8/3/09)

- A. *The granting authority may grant a variance from the requirements of this chapter, if on the basis*

of the application, investigation, and the evidence submitted by the applicant, all four (4) of the following expressly written findings are made:

- 1. The request is necessary to prevent unnecessary hardship; and*
- 2. Development consistent with the request will not be substantially injurious to the neighborhood in which the property is located; and*
- 3. The request is necessary to make reasonable use of the property; and*
- 4. The request is not in conflict with the Comprehensive Plan.*

B. In evaluating whether a particular request is to be granted, the granting authority shall consider the following, together with any other relevant facts or circumstances.

- 1. Relevant factors to be considered in determining whether a hardship exists include:*
 - a. Physical circumstances related to the property involved;*
 - b. Whether a reasonable use, similar to like properties, can be made of the property without the variance;*
 - c. Whether the hardship was created by the person requesting the variance;*
 - d. The economic impact upon the person requesting the variance if the request is denied.*
- 2. Relevant factors to be considered in determining whether development consistent with the request is substantially injurious to the neighborhood include:*
 - a. The physical impacts such development will have, such as visual, noise, traffic and the increased potential for drainage, erosion and landslide hazards.*
 - b. The incremental impacts occurring as a result of the proposed variance.*
- 3. A determination of whether the standards set forth in Section 12.030(A) are satisfied necessarily involves the balancing of competing and conflicting interests. The considerations listed in Section 12.030(B) (1) & (2) are not standards and are not intended to be an exclusive list of considerations. The considerations are to be used as a guide in the granting authority's deliberations.*
- 4. Prior variances allowed in the neighborhood shall not be considered by the granting authority in reaching its decision. Each request shall be considered on its own merits.*

Response: Verizon Wireless is requesting a variance to the height limitation of 45-feet for new wireless facilities. This request is necessary as, at 45-feet, the site would sit below the existing tree cover and would not meet the requirements needed to replace the site at the Astoria Column and hand-off to the adjacent sites, Warrenton, Reservoir, Astor and Stavebolt. As detailed herein, the radio frequencies used in Verizon's systems are adversely affected by trees, diminishing the signal significantly. Therefore, antennas must be installed at or above tree height in order to provide high quality communications services in the desired coverage area. The minimum height required to clear the existing tree canopy is 150-feet.

Further, the site would not impact neighboring properties as wireless facilities are a passive use, requiring no on-site sewer or water services and creating no glare, noxious odors or significant traffic. As is demonstrated herein, the site is not in conflict with the Comprehensive Plan and could support the goals of the Plan by providing quality communication services that can support residential, commercial, industrial growth and enhance emergency 911 services.

- C. *No variance may be granted which will permit a use not permitted in the applicable zone or which will increase the allowable residential density in any zone with the exception of individual lot size reduction.*

Response: This proposed use is permitted in the applicable zone and will not increase residential density.

VI. Conclusion

The Verizon proposal herein can meet all requirements of the City of Astoria Development Code (to the extent that they are not preempted by federal law). As such, it is respectfully requested that the City of Astoria approve this proposal as designed, subject only to standard conditions of approval.

Common Name: Verizon Wireless / Call Sign: KNLH685

Frequency Band (MHz): 1885-1890, 1965-1970

Expiration Date 06/26/2017

Market BTA358 - Portland, OR

Frequency Band (MHz) 1885-1890, 1965-1970

Licensee FRN 0003800307

Radio Service CW -PCS Broadband

Licensee Details Verizon Wireless (VAW) LLC
1120 Sanctuary Pkwy, #150 GASA5REG
Alpharetta, GA 300097630
Attn: Regulatory
Phone: (770) 797-1070
Fax: (770) 797-1036
Email:
LicensingCompliance@VerizonWireless.com

Contact Details Verizon Wireless
1120 Sanctuary Pkwy, #150 GASA5REG
Alpharetta, GA 300097630
Attn: Regulatory
Phone: (770) 797-1070
Fax: (770) 797-1036
Email: LicensingCompliance@VerizonWireless.com

Market Details

* Population is based on 2010 Census figures (Note: US territories are based on 2000 Census figures)

1. Spectrum (MHz): 1885.375-1886.875, 1965.375-1966.875

State/County

Oregon 4 of 36 Counties

County	Population *	Geographic Coverage (%)
1. Clatsop County	37,039	100
2. Harney County	7,422	100
3. Lincoln County	46,034	100
4. Wheeler County	1,441	100

2. Spectrum (MHz): 1885-1890, 1965-1970

State/County

Oregon 10 of 36 Counties

County	Population *	Geographic Coverage (%)
1. Clackamas County	360,960	90.2
2. Columbia County	49,351	100
3. Grant County	7,445	100
4. Hood River County	22,346	100
5. Multnomah County	735,334	100
6. Sherman County	1,765	99.77
7. Tillamook County	25,250	100
8. Wasco County	23,322	69.45
9. Washington County	529,710	100
10. Yamhill County	99,193	100

Common Name: Verizon Wireless / Call Sign: KNLH685

Frequency Band (MHz): 1885-1890, 1965-1970

Washington 3 of 39 Counties

County	Population *	Geographic Coverage (%)
1. Clark County	425,363	100
2. Klickitat County	20,318	100
3. Skamania County	11,066	100

This is not an official
authorization

BENJAMIN F. DAWSON III, PE
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STEPHEN S. LOCKWOOD, PE
DAVID J. PINION, PE
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CONSULTANT

MAURY L. HATFIELD, PE
(1942 – 2009)
PAUL W. LEONARD, PE
(1925 – 2011)

NON-IONIZING ELECTROMAGNETIC EXPOSURE
ANALYSIS
AND
ENGINEERING CERTIFICATION

PREPARED FOR

Verizon Wireless

“OR1 CITY PARK”

NEW PERSONAL WIRELESS FACILITY

1530 SHIVELY PARK ROAD

ASTORIA

CLATSOP COUNTY, OREGON

JANUARY 2015

INTRODUCTION

Hatfield & Dawson Consulting Engineers has been retained to evaluate the proposed Verizon Wireless personal wireless telecommunications facility "OR1 CITY PARK" for compliance with current Federal Communications Commission (FCC) and local guidelines regarding public exposure to radio frequency (RF) electromagnetic fields (EMFs).

BACKGROUND

Construction drawings furnished by Verizon representatives show that the proposed wireless facility will have panel antennas installed atop a new monopole tower at 1530 Shively Park Road, Astoria, in Clatsop County, Oregon 97103.

The drawings show the proposed Verizon panel antennas mounted and centered approximately 145 feet above ground level and far removed from any habitable space. Two future microwave dish antennas are shown mounted just below the panel antennas. Thus all of the Verizon antennas will be mounted well above head height for persons at the project site, on adjacent properties, or within nearby buildings.

The tower is shown without climbing appurtenances. Therefore it is unlikely that anyone other than authorized workers could approach near enough to any of the tower-mounted antennas to cause that person's RF exposure to exceed FCC limits.

All of the Verizon antennas are highly directional in the vertical plane, and they project the majority of the transmitted RF energy horizontally and well above all nearby habitable areas. It is expected that RF exposure conditions will be well below FCC and local public exposure limits at the project site and on adjacent properties, due to the contributions from all of the Verizon wireless operations at the project site.

EMISSION CHARACTERISTICS

The proposed Verizon facility may operate within the 700 MHz Upper Block "C" band, the 800 MHz Cellular "B" band, the Personal Communications Service (PCS) bands, and the Advanced Wireless Service (AWS) "B" band 2.1 GHz frequency range.

COMPLIANCE WITH FCC AND LOCAL REGULATIONS

The operation of the proposed Verizon facility will NOT create significant RF exposure conditions in any occupancy, publicly accessible area, or within any habitable area. There does not appear to be any habitable areas near the project location which is within a park.

Installation of the proposed Verizon antennas will not cause any any publicly accessible area to exceed the Federal Communications Commission's (FCC) limits for human exposure to radio frequency electromagnetic fields. Thus the proposed Verizon wireless operations at the OR1 CITY PARK project site will not have a significant environmental impact as defined by the FCC Public MPE limits.

The FCC has determined through calculations and technical analysis that personal wireless facilities, such as those operated by Verizon, are highly unlikely to cause human RF exposures in excess of FCC guideline limits. In particular, personal wireless facilities with non-building-mounted antennas greater than 10 meters (about 33 feet) above ground level are considered to have such a low impact on overall exposure conditions that they are "categorically excluded" (i.e., exempt) from the requirement for routine environmental assessment regarding RF exposure hazards. Thus according to FCC rules, the proposed Verizon personal wireless facility, with all antennas centered at well above the 33 foot level, is exempt from further RF safety environmental assessment because it is presumed to be in compliance with the FCC RF exposure rules and guidelines. The proposed facility is expected to be compliant with FCC rules regarding public RF exposure provided that direct access to the Verizon antennas is positively restricted.

COMPLIANCE WITH FCC REGULATIONS FOR RF EMISSIONS AND RF INTERFERENCE

It is expected that the RF interaction between all of the Verizon wireless operations at the project site will be low enough to preclude the likelihood of localized interference caused by the proposed Verizon Wireless facility to the reception of any other communications signals. All of the Verizon antennas are sufficiently high enough, and far enough removed from all occupancies, that they are unlikely to cause interference with nearby consumer receivers or other consumer electronic devices.

Transmission equipment for the proposed Verizon wireless facility is certified by the FCC under the equipment authorization procedures set forth in the FCC rules. This assures that the wireless facility will transmit within the desired base-station frequency bands at authorized power levels. The proposed Verizon Wireless facility will operate in accordance with all FCC rules regarding power, signal bandwidth, interference mitigation, and good RF engineering practices.

The proposed Verizon facility will comply with all FCC standards for radio frequency emissions.

COMPLIANCE WITH LOCAL REGULATIONS

Because the proposed Verizon Wireless facility is in compliance with federal rules, it is also in compliance with local regulations concerning RF emissions. The following is the complete text of 47 U.S.C. § 332(c)(7)(B)(iv):

“No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions.”

CONCLUSIONS BASED ON CALCULATIONS AND REGULATIONS

The proposed Verizon Wireless facility "OR1 CITY PARK" will be in compliance with current FCC and local rules regarding radio frequency interference and public exposure to radio frequency electromagnetic fields. This conclusion is based on information supplied by Verizon representatives, and estimates of future RF exposure conditions due to the proposed Verizon facility in specific areas with the corresponding safe exposure guidelines set forth in the FCC rules.

The FCC exposure limits are based on recommendations by federal and private entities with the appropriate expertise in human safety issues. Under the Commission's rules and guidelines, licensees are required to ensure compliance with the limits for maximum permissible exposure (MPE) established by the FCC. These limits have been developed based on guidelines provided by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the National Council on Radiation Protection and Measurements (NCRP). Both the NCRP and IEEE guidelines were developed by scientists and engineers with a great deal of experience and knowledge in the area of RF biological effects and related issues.

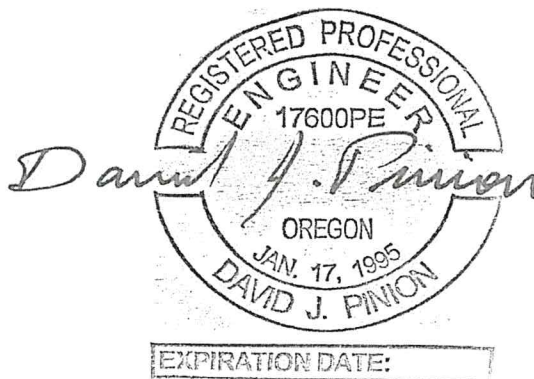
To ensure full compliance with current FCC rules regarding human exposure to radio frequency electromagnetic fields, the Verizon transmitters should be turned off whenever maintenance and repair personnel are required to work in the immediate vicinity of the Verizon antennas. This safety procedure should apply to all proposed and future wireless transmission facilities at the project site. All instances of antenna-related work require that the subject antennas be completely deactivated.

QUALIFICATIONS

I am a Senior Member of the IEEE. As a partner in the firm of Hatfield & Dawson Consulting Engineers I am registered as a Professional Engineer in the States of Oregon, Washington, California and Hawaii. I am an experienced radio engineer with over 30 years of professional engineering experience whose qualifications are a matter of record with the Federal Communications Commission, and I hold an FCC General Radiotelephone Operator License PG-12-21740.

All representations contained herein are true to the best of my knowledge.

6 January 2015



David J. Pinion, P.E.

PE Expiration Date 12/31/2016

Hatfield & Dawson Consulting Engineers

SHEET INDEX

ARCHITECTURAL
T-1 TITLE SHEET
C-1 SURVEY SHEET AND GENERAL NOTES
C-2 TEMPORARY EROSION CONTROL PLAN
C-3 TRADING AND DRAINAGE PLAN
ZD-1 OVERALL SITE PLAN
ZD-2 EXISTING SITE AND ANTENNA PLANS
ZD-3 ELEVATION PLANS
L-1 LANDSCAPE PLAN

OREGON STATE CODE COMPLIANCE
2012 IRC BASED CODE AMENDMENTS
2014 OREGON STRUCTURAL SPECIALTY CODE
2014 OREGON MECHANICAL SPECIALTY CODE
2014 OREGON FIRE CODE SPECIALTY CODE
2014 OREGON PLUMBING SPECIALTY CODE

PROJECT SUMMARY

APPLICANT:
VERIZON WIRELESS
1530 SHIVELY PARK ROAD
ASTORIA, OR 97103

APPLICANT AGENT:
LEXCOM DEVELOPMENT
10570 SE WASHINGTON ST., SUITE 211
PORTLAND, OR 97216
CONTACT: YOGI SANDSTROM
PHONE: 503-739-5501
EMAIL: YOGI.SANDSTROM@LEXCOMCORP.COM

PERMITTING AGENT:
LEXCOM DEVELOPMENT
10570 SE WASHINGTON ST., SUITE 211
PORTLAND, OR 97216
CONTACT: SHARON CRETCH
PHONE: 541-515-8263
EMAIL: SHARON.CRETCH@LEXCOMCORP.COM

IMPLEMENTATION:
VERIZON WIRELESS
1530 SHIVELY PARK ROAD
ASTORIA, OR 97103
CONTACT: JOE ANISING
PHONE: 503-408-3434

DESIGN CONSULTANT:
VERIZON WIRELESS
19401 40TH AVE., SUITE 304
LYNNWOOD, WA 98036
CONTACT: ERIC CAMP
PHONE: 425-740-6390

LEGAL DESCRIPTION:
SEE SHEET ZD-1

SITE NAME: OR1 - CITY PARK
SITE ADDRESS: 1530 SHIVELY PARK ROAD
ASTORIA, OR 97103
LAND OWNER: CITY OF ASTORIA
CONTACT: CELIA COSBY
PHONE: 503-298-2460
STRUCTURE OWNER: VERIZON WIRELESS
JURISDICTION: CITY OF ASTORIA
PARCEL NUMBER: 809170001200
810 SQ FT PROJECT AREA
ZONING: INSTITUTIONAL
OCCUPANCY: U-UNOCCUPIED

CONSTRUCTION TYPE: 11-B (TELECOMMUNICATIONS)
PROJECT DESCRIPTION: (THE SCOPE OF WORK INCLUDES) PHASE ADDITION OF (6) PANEL ANTENNAS, (4) FUTURE ANTENNA SITES, AND (2) FUTURE ANTENNA SITES ON A 150' TALL MONOPOLE WITH MICROWAVE EQUIPMENT AT ANTENNA AND GROUND LEVEL INCLUDING A GENERATOR, UTILITY FRAME, AND EQUIPMENT CABINETS.



OR1-CITY PARK
(NEW BUILD)
1530 SHIVELY PARK ROAD
ASTORIA, OR 97103

CAMP+
ASSOCIATES
19401 40TH AVE., SUITE 304
LYNNWOOD, WA 98036
PHONE: (425) 740-6390
WWW.CAMPASSOC.COM

PROJECT MANAGER: EC
PREPARED BY: MJD
APPROVED BY: EC

11/14/11 ISSUE FOR ZONING
11/14/11 ISSUE FOR ZONING
11/14/11 ISSUE FOR ZONING

SHEET NAME
TITLE SHEET

SHEET NUMBER
T-1

PROJECT NUMBER
2014062819

OR1 - CITY PARK
(NEW BUILD)
1530 SHIVELY PARK ROAD
ASTORIA, OR 97103

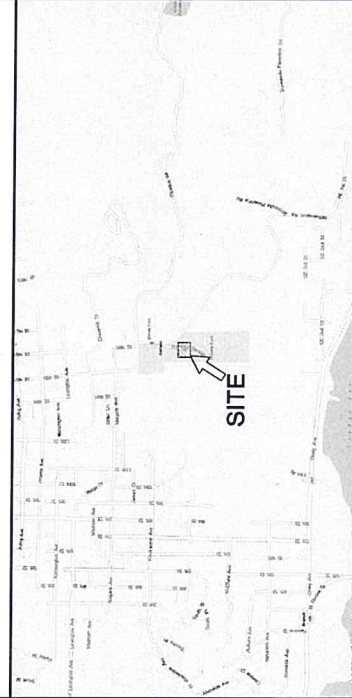
LAT: 46° 10' 38.27" N
LONG: 123° 49' 33.17" W
ELEVATION: 326.5' AMSL

CONFIDENTIAL AND PROPRIETARY
Per Ver Wireless Astoria, Oregon 97103

SIGNATURE BLOCK

TITLE	SIGNATURE	DATE
CONSTRUCTION MANAGER		
RF ENGINEER		
REAL ESTATE		
SITE ACQUISITION		
PROPERTY OWNER		
TOWER OWNER		

VICINITY MAP



DRIVING DIRECTIONS FROM VERIZON WIRELESS (6410 NE 122ND AVE, PORTLAND, OR 97230):
DEPART 122ND AVE SE, BELLEVUE, WA 98005 HEADING NORTHEAST ON NE 122ND AVE.
TURN LEFT ONTO NE AIRPORT WAY, THEN TURN RIGHT ONTO I-205 N RAMP TO SEATTLE.
EXIT 30 FOR WA-435 N TOWARD LONGVIEW/LONG BEACH/ASTORIA.
CONTINUE ONTO WA-435 N THROUGH THE CLARK BRIDGE, THEN TURN RIGHT ONTO U.S. 30 N TOWARDS CLATSkanie/ASTORIA.
MERGE ONTO U.S. 30 W, TURN LEFT ONTO 16TH ST, THEN TURN RIGHT ONTO JEROME AVE.
BEFORE FIRST LEFT ONTO 15TH ST, TAKE THEN THE 3RD LEFT ONTO NAGARA AVE, NAGARA AVE TURNS RIGHT AND
ARRIVE AT 1530 SHIVELY PARK RD, ASTORIA, OR 97103

A vicinity map showing the location of the site. The map includes a north arrow pointing upwards. A scale bar indicates a distance of 1/4 mile. The map shows a network of streets including Niagara Ave, 15th St, 16th St, 9th St, 7th St, Kluskamie Ave, and Shively Park Rd. The site is located at the intersection of Shively Park Rd and 16th St, marked with a star and labeled 'SITE'. A large rectangular area in the upper left corner is labeled 'INDUSTRIAL ZONE' and contains several smaller rectangular areas labeled 'INDUSTRIAL ZONE'.

COORDINATE DATA AT CENTER OF PROPOSED TOWER :
 NAVD 83
 LAT = 48°10'37.99" N
 LONG = 123°49'33.14" W
 NAVD 88
 ELEV = 330.3 FEET

BENCHMARK IS "P415"
 NGS GPS CONTROL STATION.
 ELEV = 24.2

THE FOLLOWING EASEMENTS FROM THE REFERENCED TITLE REPORT CONTAIN SUFFICIENT INFORMATION TO BE DEPICTED ON THE PLAN. OTHER EASEMENTS OR ENCUMBRANCES, IF ANY, MAY AFFECT THE PROPERTY, BUT LACK SUFFICIENT INFORMATION TO BE SHOWN.

NO EASEMENT OR OTHER EXCEPTIONS DISCLOSED PER PROVIDED TITLE REPORT, HOWEVER IT MAY BE POSSIBLE THAT AN EASEMENT MAY BE CREATED UPON THE VACATION OF NILE STREET ONCE IT OCCURS.

- 1) TITLE REPORT ISSUED BY TCR TITLE COMPANY, TITLE NO. 36041401594--TASIOA, DATED JULY 31, 2014.
- 2) WORK COMPLETED IN JULY, 2014.
- 3) BASIS OF BEARINGS: NORTH ZONE (TACOB) COORDINATE SYSTEM, NORTH ZONE (TACOB) UNDERGROUND UTILITIES SHOWN HEREON. IF ANY, WERE DELINEATED FROM SURFACE EVIDENCE AND/OR UTILITY COMPANY RECORDS. CRITICAL LOCATIONS SHOULD BE VERIFIED PRIOR TO DESIGN AND CONSTRUCTION.
- 4) FIELD OBSERVATION: ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL FLOODPLAIN), PANEL 237 OF 800, FIRM MAP NUMBER 41007-00337, EFFECTIVE DATE SEPTEMBER 17, 2010.
- 5) FUTURE OBSERVATION: ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL FLOODPLAIN), PANEL 237 OF 800, FIRM MAP NUMBER 41007-00337, EFFECTIVE DATE SEPTEMBER 17, 2010.

---	SUBJECT BOUNDARY LINE
---	RIGHT-OF-WAY CENTERLINE
---	RIGHT-OF-WAY LINE
---	ADJACENT BOUNDARY LINE
---	SECTIONAL BREAKDOWN LINE
---	OVERHEAD POWER LINE
---	BURIED POWER LINE
---	BURIED GAS LINE
---	OVERHEAD TELEPHONE LINE
---	BURIED TELEPHONE LINE
---	BURIED WATER LINE
---	BURIED SEWER LINE
---	BURIED SANITARY SEWER
---	BURIED STORM DRAIN
---	DITCH LINE/FLOW LINE
---	ROCK RETAINING WALL
---	CHALKING LINE
---	WOOD FENCE
---	BARBED WIRE/WIRE FENCE

DECIDUOUS TREE

AL = ALDER
DM = MAPLE
DS = DOGWOOD
MA = MADRONA
OK = OAK
CH = CHERRY

AL12 — TRUNK DIAMETER (IN)

TYPE

EVERGREEN TREE

CE = CEDAR
MA = MAPLE
HE = HEMLOCK
PI = PINE
EVG = EVERGREEN

DF18
195.2

TAX LOT NUMBER	809170001700
SITE ADDRESS	1530 SHIVELY PARK RD ASTORIA, OR 97103
SITE CONTACT	ANGELA COSBY
PHONE NUMBER	503-298-2460/503-741-1348
ZONING	INSTITUTIONAL (CITY OF ASTORIA)
TOTAL LOT AREA	12.4 AC.
PROJECT AREA	810 S.F.

- 1) RECORD OF SURVEY NO. B-13324, RECORDS OF CLATSOP COUNTY
- 2) RECORD OF SURVEY NO. B-12326, RECORDS OF CLATSOP COUNTY

BOUNDARY DISCLAIMER

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

UNDERGROUND UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY BE INCOMPLETE. STATE LAW REQUIRES THAT CONTRACTOR CONTACT THE ONE-CALL UTILITY LOCATE SERVICE AT LEAST 48 HOURS BEFORE STARTING ANY CONSTRUCTION.

ORI CITY PARK
1300 SHIVELY PARK RD
ASTORIA, OR 97103
CLATSOP COUNTY

[illegible]

02/17/14	ADD TITLE INFORMATION	LAC
----------	-----------------------	-----

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
MAY 10, 2011
JONATHAN MARLO BECKER
84870
RENEWS: 12/31/2015

SEC 17, TWP 8 N, RANG 9 W, WM

PROJECT MANAGER

C-3

SHEET NUMBER

GRADING AND DRAINAGE PLAN

SHEET NAME

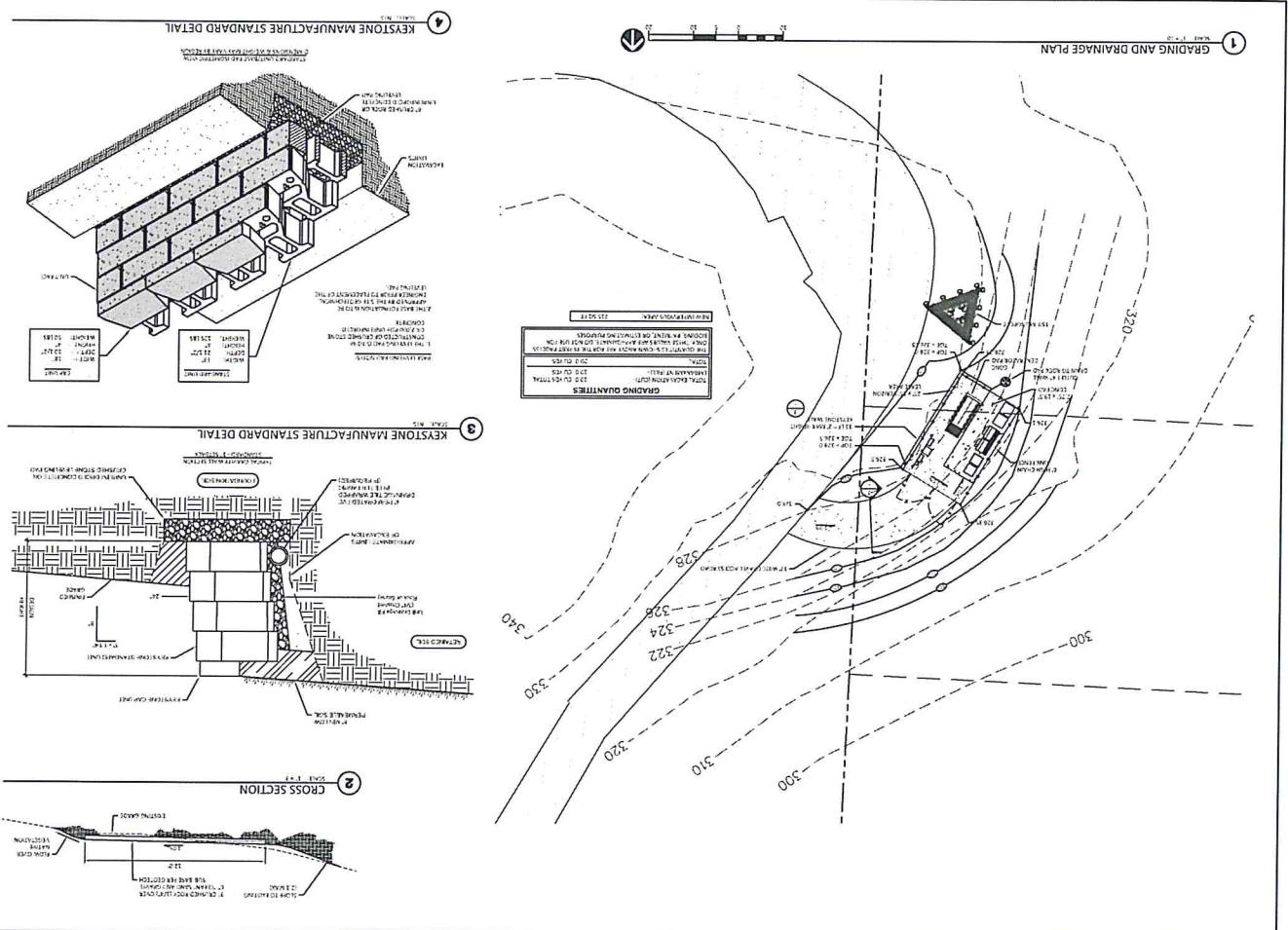
DATE	DESCRIPTION	BY	CHK
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10/20/2023	REVISION	DS	JS
11/01/2023	FINAL	DS	JS

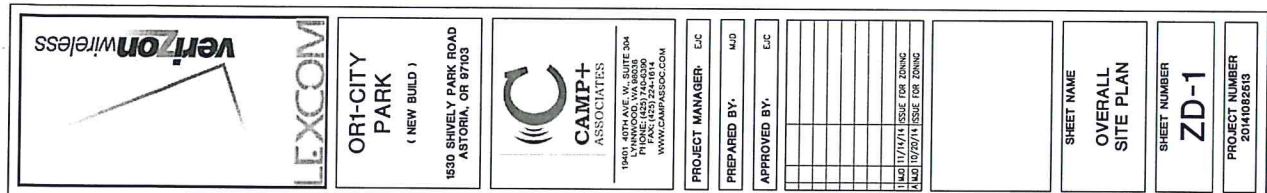
APPROVED BY

PREPARED BY

PROJECT MANAGER

1530 BREVITY PARK ROAD
ATLANTA, GA 30333
(404) 555-1234
www.ogc-engineering.com







LEXCOM

ORI-CITY
PARK
(NEW BUILD)
1830 SHIVELY PARK ROAD
ASTORIA, OR 97103



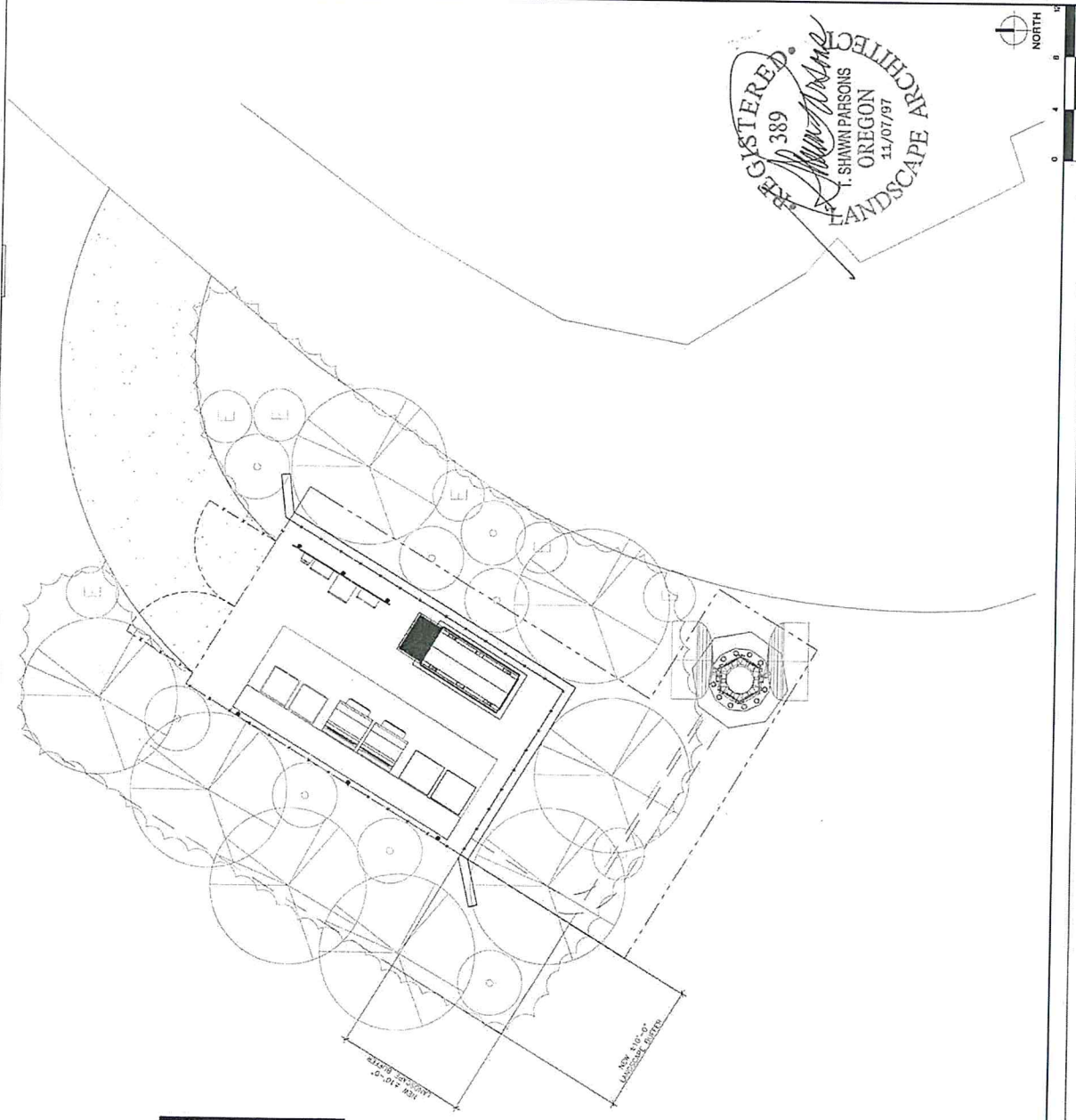
PROJECT MANAGER: CJC
PREPARED BY: MJD
APPROVED BY: LJC

NO. 11/14/11 ISSUE FOR BIDDING
NO. 12/22/11 ISSUE FOR BIDDING

SHEET NAME
LANDSCAPE PLAN

SHEET NUMBER
L-1

PROJECT NUMBER
2014082513



PLANT SCHEDULE		
SYMBOL	BOTANICAL NAME	COMMON NAME
	THUJA FILICATA FASTIGIANA	6-7' HT. BAB
	MYRICA CALIFORNICA	6-7' HT. BAB
	ERIOGONUM ALBA COMPACTUM	5' CAL. CONT.
	SALIX	15'-24' HT. BAB
	CALCEOLARIA SP.	1' CAL. CONT. PLANT AT 24' O.C.

1 ENLARGED SITE PLAN
SCALE: 1/4" = 1'-0" (22x34), 1/8" = 1'-0" (11x17)



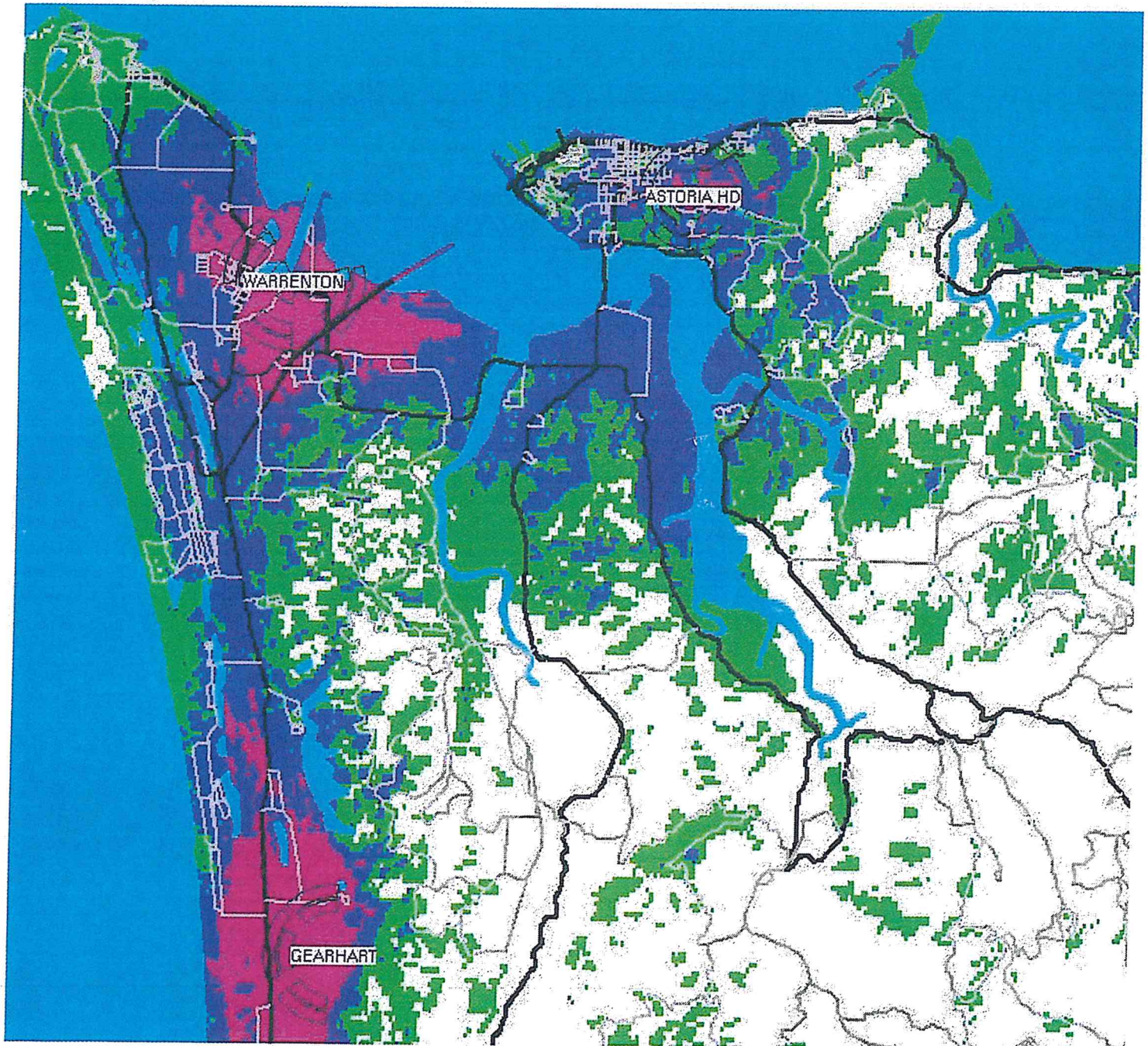
RF Propagation Maps

For Site "OR1 City Park"

Map Disclaimer

*These maps show approximately where there is wireless coverage based on our own internal data. The maps are **not** a depiction of actual service or rates availability. The mapped territory contains areas with no service. Voice clarity and reception may vary near coverage boundaries. Wireless service is subject to network and transmission limitations, including cell site unavailability, particularly in remote areas. Customer equipment, weather, topography, and other environmental considerations associated with radio technology also affect service. Additionally, service may vary significantly within buildings depending on location or building structure.*

Exhibit 1 – OR1 City Park current Coverage

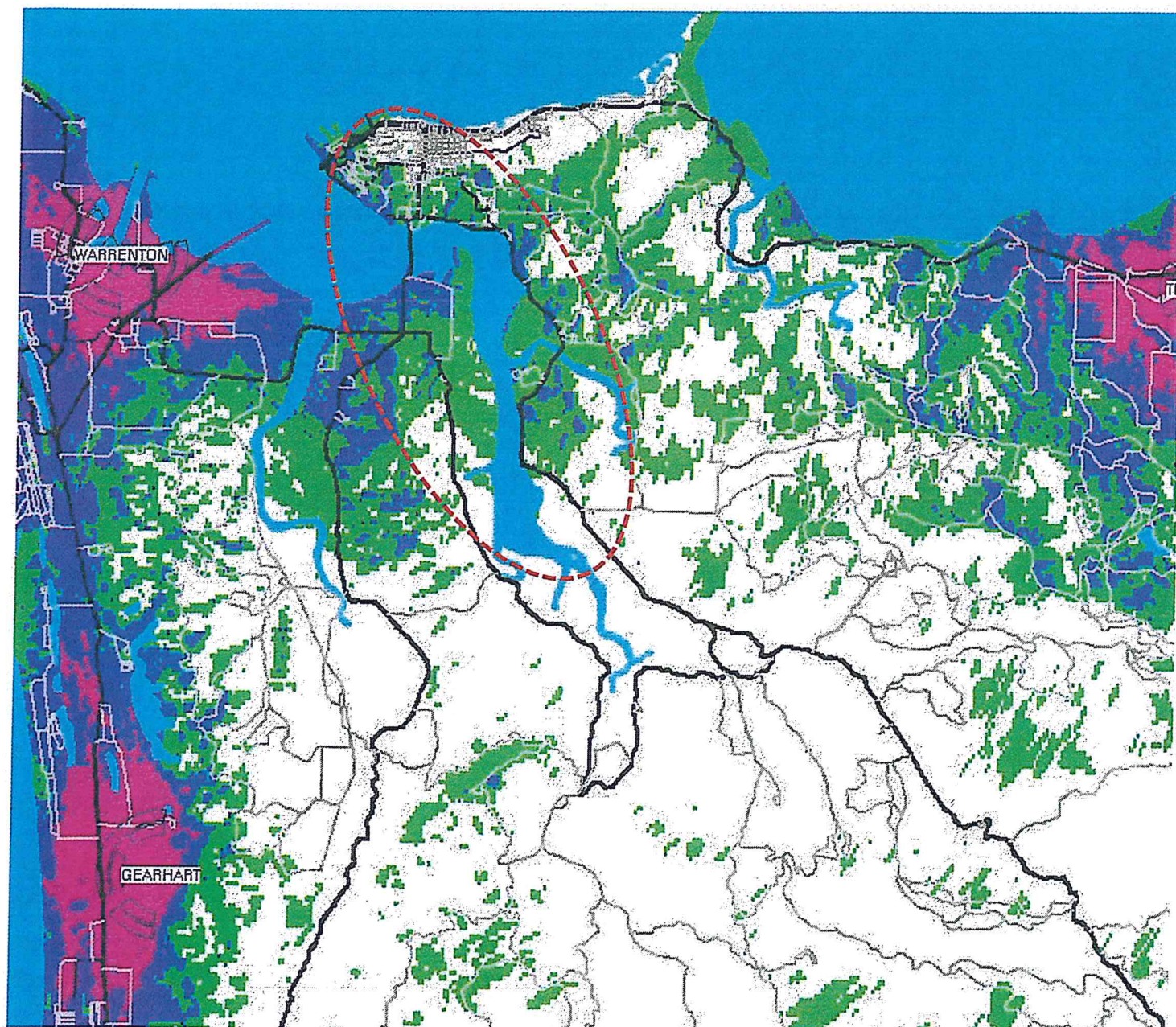


Existing Sites:

OR1 Warrenton
OR1 Astoria HD (near Astoria Column)
OR1 Gearhart

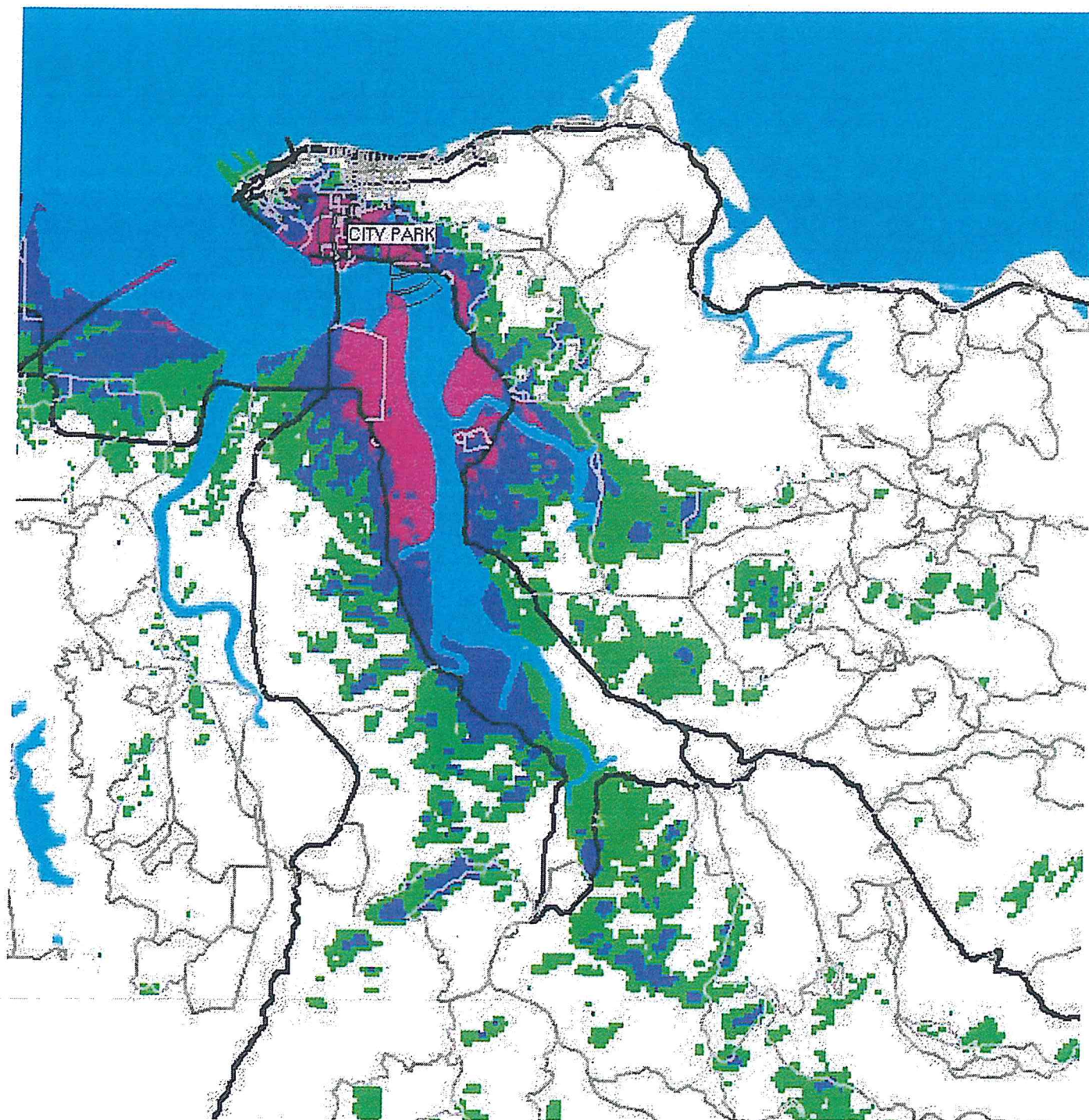
High RF Signal (≥ -80 dBm)
Moderate RF Signal (≥ -90 dBm)
Weak RF Signal (≥ -100 dBm)

*Exhibit 2 – OR1 City Park without Coverage
(Inclusive of removal of Astoria HD site near the Column)*



- High RF Signal (≥ -80 dBm)
- Moderate RF Signal (≥ -90 dBm)
- Weak RF Signal (≥ -100 dBm)

Exhibit 3 – OR1 City Park Coverage Only



- High RF Signal (≥ -80 dBm)
- Moderate RF Signal (≥ -90 dBm)
- Weak RF Signal (≥ -100 dBm)

Exhibit 4 – OR1 City Park Coverage Only
(close up view)

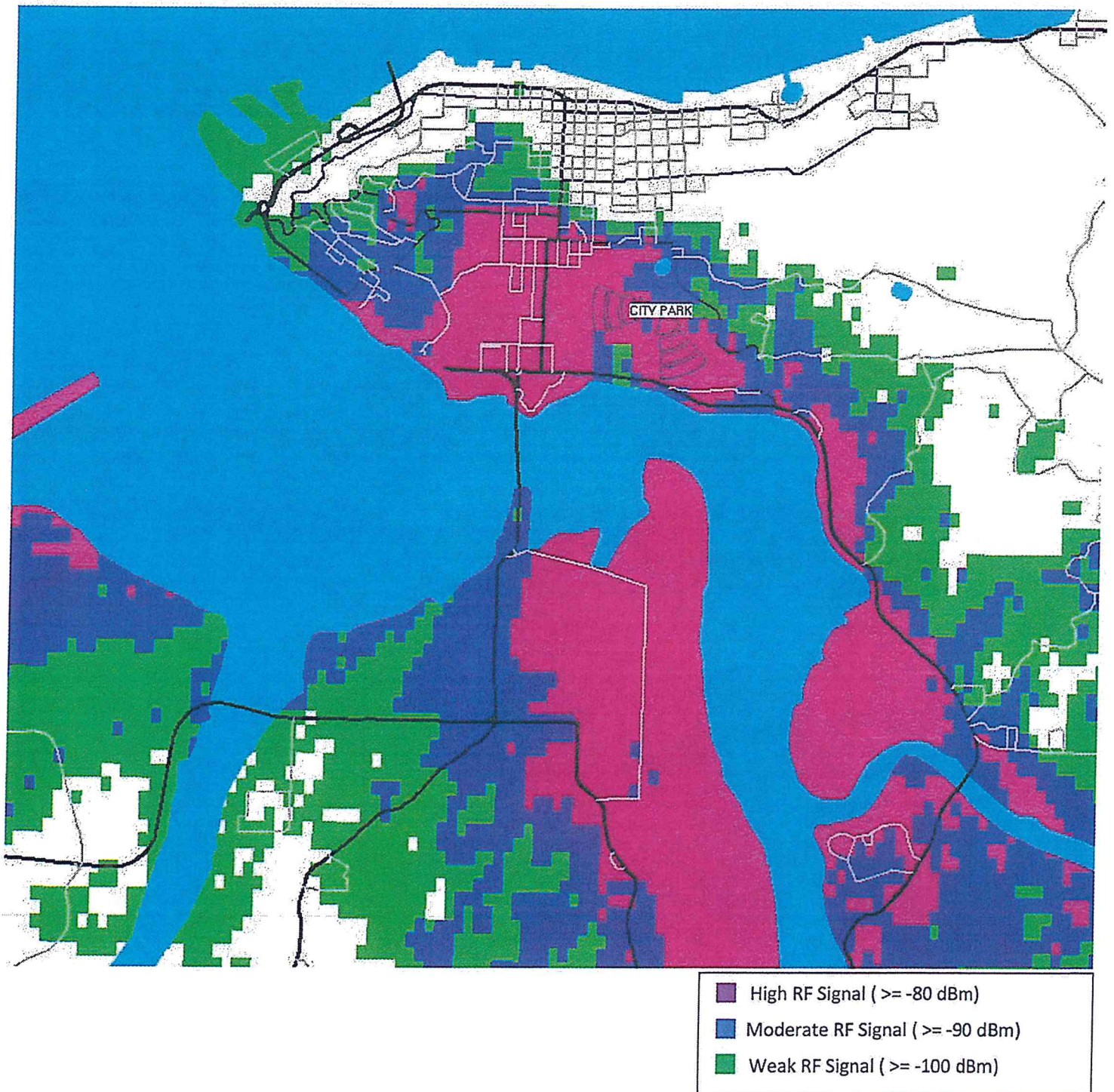
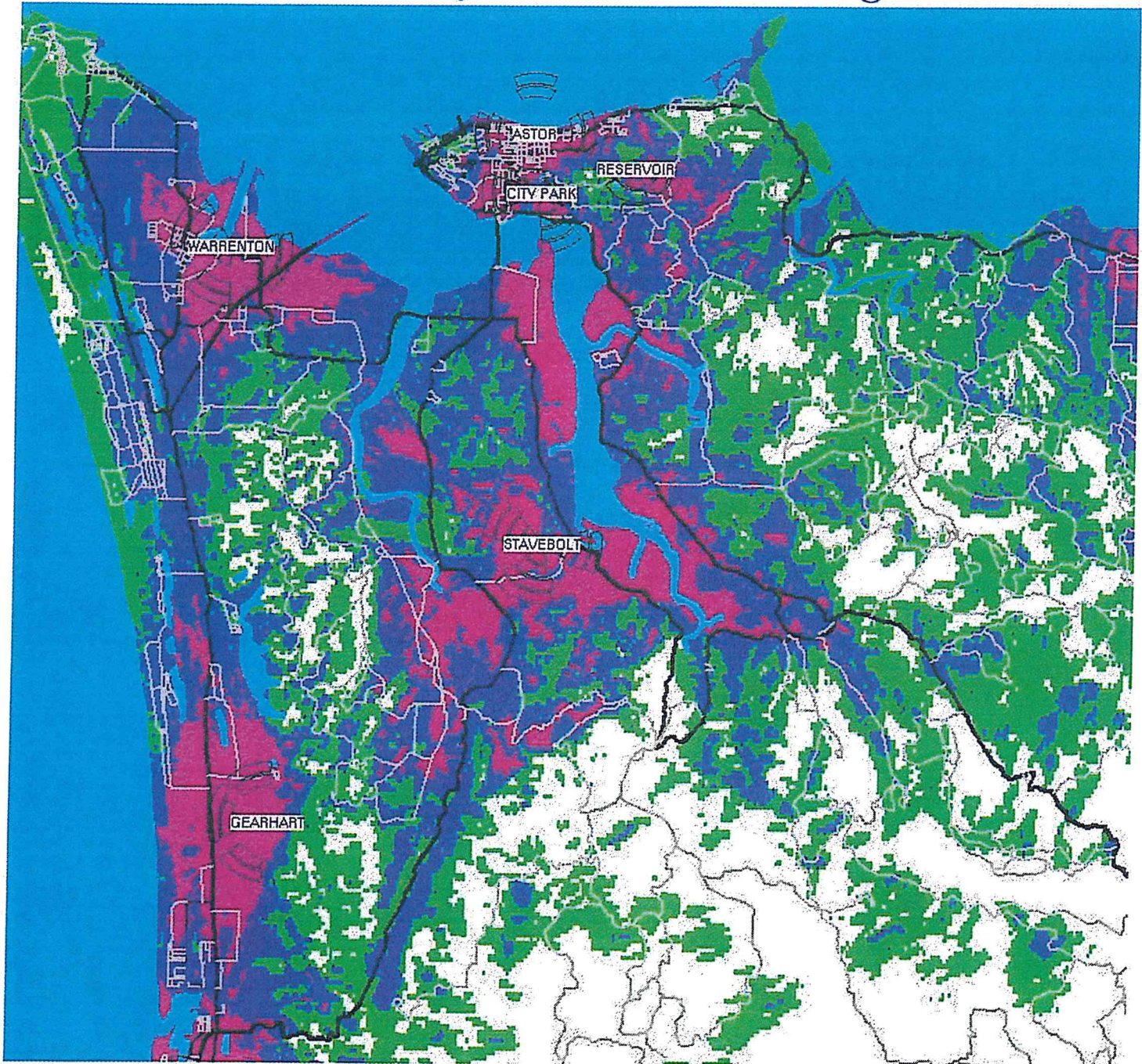


Exhibit 5 – OR1 City Park Network Integration



Existing Sites:

OR1 Warrenton
OR1 Gearhart

Proposed Sites:

OR1 City Park (Site proposed herein)
OR1 Reservoir
OR1 Astor
OR1 Stavebolt

- High RF Signal (≥ -80 dBm)
- Moderate RF Signal (≥ -90 dBm)
- Weak RF Signal (≥ -100 dBm)

Location Map

All Existing Clatsop County Sites

Owned and/or operated by Verizon Wireless.

(Propagation not shown for clarity)





OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103

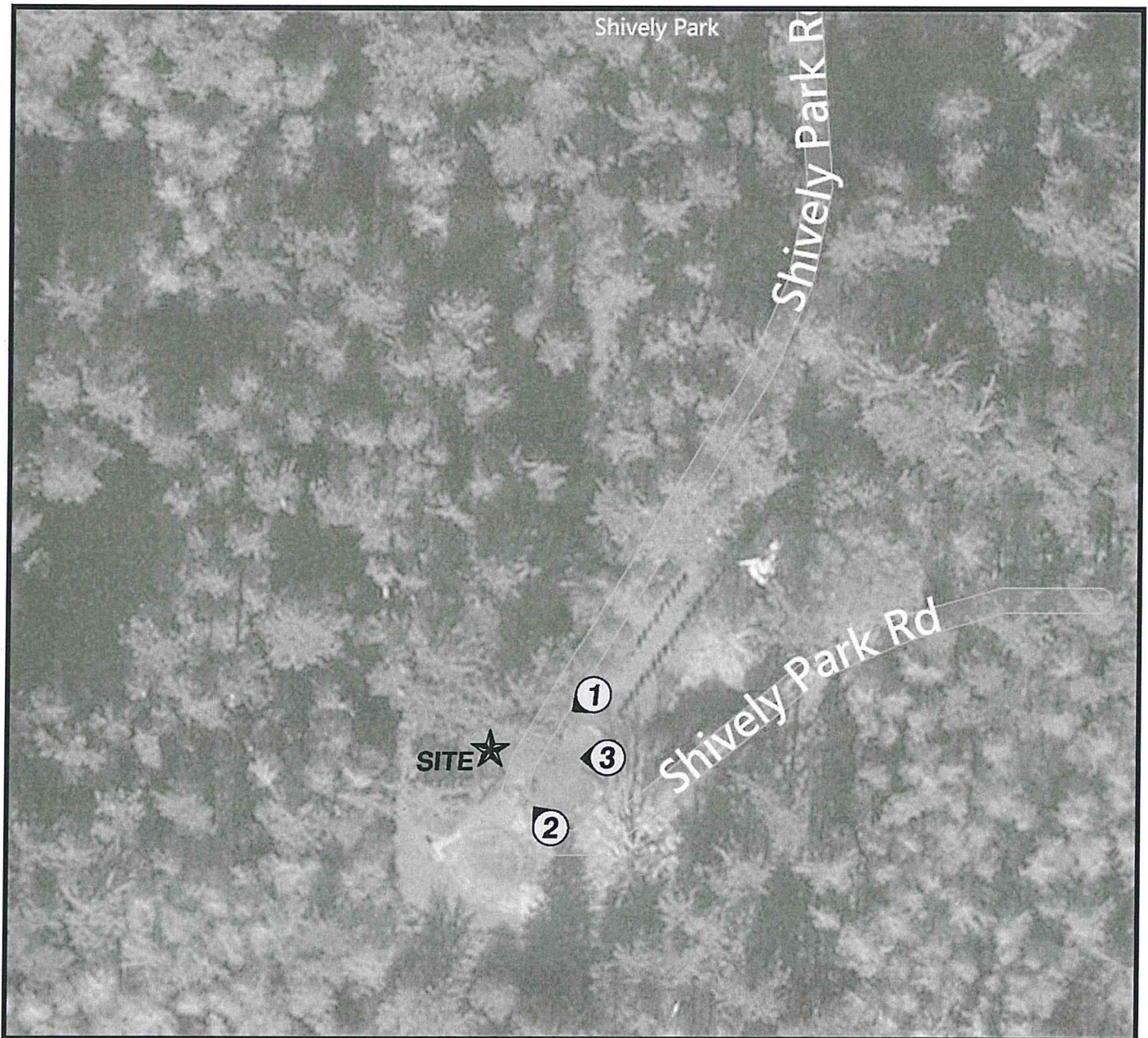


PHOTO SIM LOCATION MAP



OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103

VIEW #1 LOOKING SOUTHWEST



CURRENT



PROPOSED



OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103

VIEW #2 LOOKING NORTHWEST



CURRENT



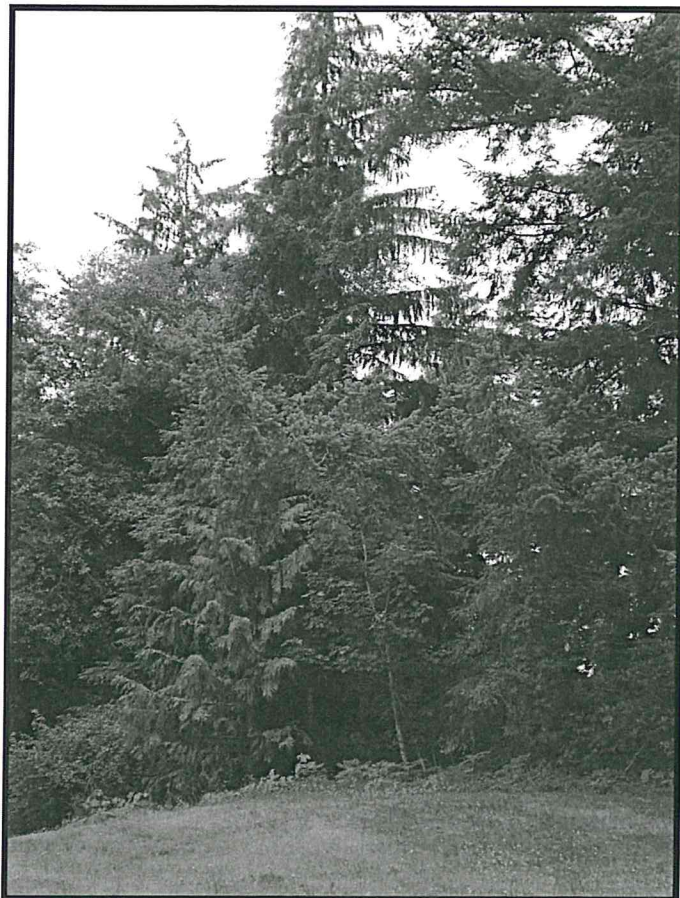
PROPOSED



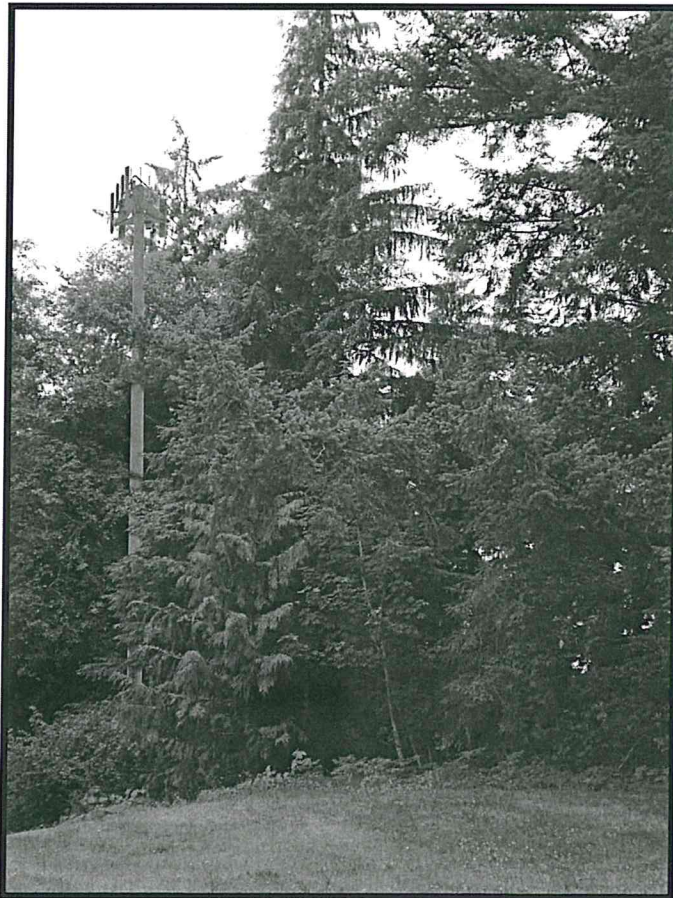
OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103

VIEW #3 LOOKING WEST



CURRENT



PROPOSED



OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103



PHOTO SIM LOCATION MAP



OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103

VIEW #1 LOOKING EAST



CURRENT - TOWER NOT SEEN



OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103

VIEW #2 LOOKING NORTHEAST



CURRENT - TOWER NOT SEEN



OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103

VIEW #3 LOOKING SOUTH



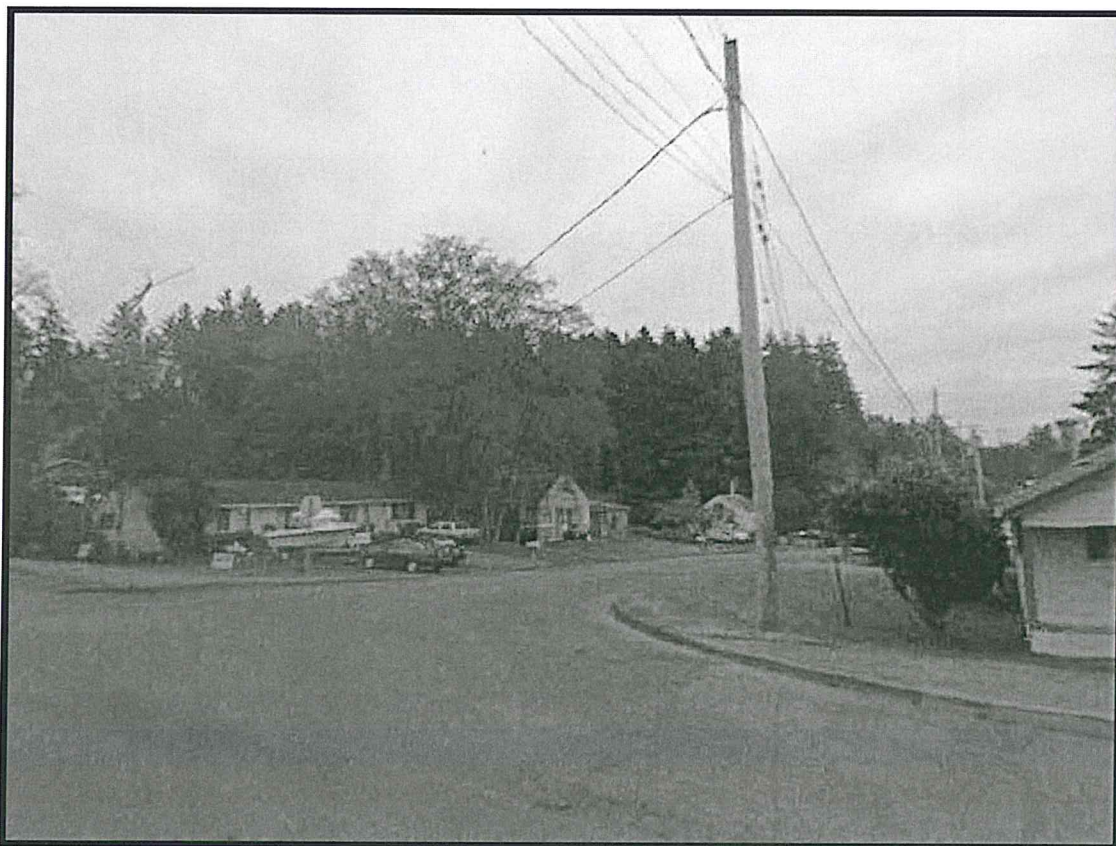
CURRENT - TOWER NOT SEEN



OR1 - CITY PARK

1530 SHIVELY PARK ROAD, ASTORIA, OR 97103

VIEW #4 LOOKING NORTHEAST



CURRENT - TOWER NOT SEEN



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANM-3227-OE

Issued Date: 01/15/2015

Jim O'Dowd
Verizon Wireless
180 Washington Valley Rd
Bedminster, NJ 07921

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower OR 1
Location:	Astoria, OR
Latitude:	46-10-55.92N NAD 83
Longitude:	123-47-57.25W
Heights:	617 feet site elevation (SE) 150 feet above ground level (AGL) 767 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/15/2016 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (310) 725-6591. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANM-3227-OE.

Signature Control No: 236479859-240207357

(DNE)

Tamera Burch
Technician

Attachment(s)
Frequency Data

cc: FCC

Frequency Data for ASN 2014-ANM-3227-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W



Oregon

John A. Kitzhaber, MD, Governor



March 4, 2015

Verizon Wireless
10570 SE Washington St.
Suite 211
Portland, OR 97216

3040 25th Street, SE
Salem, OR 97302-1125
Phone: (503) 378-4880
Toll Free: (800) 874-0102
FAX: (503) 373-1688

Subject: Oregon Department of Aviation comments regarding proposed construction of a monopole 150' in height located in Astoria, Oregon.

Aviation Reference: 2015-ODA-055-OE

The Oregon Department of Aviation (ODA) has conducted an aeronautical study of these proposed new structure(s) and has determined that notice to the FAA is required. The structure does not exceed Obstruction Standards of OAR 738-70-0100.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes to the original application will void this determination. Any future construction or alteration to the original application will require a separate notice from ODA.

This determination will expire (12) months from the date of this letter if construction has not been started.

Mitigation Recommendation:

- ☒ We do not object with conditions to the construction described in this proposal. This determination does not constitute ODA approval or disapproval of the physical development involved in the proposal. It is a determination with respect to the safe and efficient use of navigable airspace by aircraft and with respect to the safety of persons and property on the ground.
- ☐ Marking and lighting are necessary for aviation safety. We recommend it be installed and maintained in accordance with FAA Advisory Circular AC70/7460-1K Change 2
- ☐ The proposed obstruction should to be lower to a height that is no longer a hazard to the airport primary and horizontal surface FAA FAR 77
- ☐ The proposed obstruction should be relocate outside the airport primary and horizontal surface FAA FAR 77

Sincerely,

John P. Wilson Jr, Airport Operation & Tall Structure Specialist.



Oregon

John A. Kitzhaber, MD, Governor



3040 25th Street, SE
Salem, OR 97302-1125
Phone: (503) 378-4880
Toll Free: (800) 874-0102
FAX: (503) 373-1688

August 26, 2015

Sherri Williams
Administrative Assistant
City of Astoria
Community Development Department
Astoria City Hall
1095 Duane Street
Astoria, OR 97103

SUBJECT: WCF15-03 / V15-03 / NC15-03 Wireless Communication Facility

This letter is in response to City's notice of application(s) for a 150-foot wireless communication monopole, located at 1580 Shively Park Road (Map T8N-R9W Section 17 Tax Lot 1200 & Map 17CA Tax Lot 600). After a preliminary review of the proposed application the Oregon Department of Aviation has the following comments and recommendations:

- Prior to issuance of a building permit the applicant must file and receive a determination from the Oregon Department of Aviation and the FAA as required by OAR 738-070-0060 on FAA Form 7460-1 Notice of Proposed Construction or Alteration to determine if this monopole is a hazard to aviation safety. Safety mitigation measures may be required, such as markings and lighting meeting FAA design standards.

Thank you for allowing ODA to comment on this development proposal. If you have any questions or need further information please feel free to contact me at 503-378-2529 or Jeff.Caines@aviation.state.or.us or Heather Peck – Projects and Planning Manager at 503-378-3168 or Heather.Peck@aviation.state.or.us.

Sincerely,

Jeff Caines, AICP
Aviation Planner



Oregon

John A. Kitzhaber, MD, Governor

Parks and Recreation Department

State Historic Preservation Office

725 Summer St NE, Ste C

Salem, OR 97301-1266

Phone (503) 986-0690

Fax (503) 986-0793

www.oregonheritage.org

February 24, 2015

RECEIVED
FEB 27 2015

BY: _____



Mr. R. Todd Baker

Terracon Consultants

21905 64th Avenue West, Suite 100

Mount Terrace, WA 98043

RE: SHPO Case No. 15-0150

TCNS File# 0006645866, Terracon OR1 City Park Telecom Project

New Tower

1530 Shively Park Road (8N 9W 17), Astoria, Clatsop County

Dear Mr. Baker:

We have reviewed the materials submitted on the project referenced above, and we concur that the Area of Potential Effect includes six properties (including one National Register-listed Historic District) that are eligible for or listed in the National Register of Historic Places. We also concur with the finding of no adverse effect for the proposed project.

This letter refers to above-ground historic resources only. Comments pursuant to a review for archaeological resources will be sent separately.

Unless there are changes to the project, this concludes the requirement for consultation with our office under Section 106 of the National Historic Preservation Act (per 36 CFR Part 800) for above-ground historic resources. Local regulations, if any, still apply and review under local ordinances may be required. Please feel free to contact me if you have any questions, comments or need additional assistance.

Sincerely,

Jason Allen, M.A.

Historic Preservation Specialist

(503) 986-0579

jason.allen@oregon.gov

From: [Yogi Sandstrom](#)
To: [Sharon Gretch](#)
Subject: FW: Shively park
Date: Monday, July 13, 2015 10:14:25 AM

We can discuss later.

Yogi Sandstrom

LEXCOM Powered by Md7

Project Manager

m 503.739.5501

yogi.sandstrom@lexcomcorp.com

[Check out md7.com](http://md7.com)

From: Yundt, Arden
Sent: Friday, July 10, 2015 11:29 AM
To: Grant, Sarah
Cc: 'Yogi Sandstrom'
Subject: RE: Shively park

Hey guys,

In regard to new build site POR City Park, here is the reason we chose to build a tower at the southern end of the hilltop at Shively Park instead of collocating on the building at the corner of 16th St. and James St. (adjacent to Astoria Reservoir Number Two).

We are proposing to build a 150' tower on the southwestern end of the hilltop at an elevation of roughly 330 ft AMSL. This allows us to cover the southern and southwestern parts of Astoria as well as the Cooperage Slough valley with excellent line of sight and great signal strength. The crest of the hill to the north is at roughly 350 ft AMSL. Farther north is the building at the corner of 16th St. and James St. At a ground elevation of roughly 280 feet the building would need to be over 220 feet tall in order to meet the POR City Park coverage objective. Otherwise the hill blocks RF propagation to the South... shadowing southern Astoria and significantly decreasing the signal strength to the Cooperage Slough valley. Taking these details into account makes the decision between these two options very easy: the tower on the southern end of the hilltop is the only viable option.

Thank you,

Arden Yundt
RF Engineering
Pacific Northwest Region
5430 NE 122nd Ave.
Portland, OR 97230-1069



From: Grant, Sarah
Sent: Friday, July 10, 2015 10:20 AM
To: Yundt, Arden
Cc: 'Yogi Sandstrom'
Subject: FW: Shively park

Per our conversation if you could call Adam to explain the elimination of the concrete building/reservoir 2 location *within Shively Park* and why the coverage objectives are not met within that specific location within the park. Feel free to leave him a message, or put it in writing if you prefer

From: Adam Haas [<mailto:AdamHaas@convergecomm.com>]
Sent: Thursday, July 09, 2015 3:38 PM
To: Grant, Sarah
Subject: RE: Shively park

That's great. I look forward to talking tomorrow. Adam



Adam Haas
Principal
Converge Communications
10425 SW Hawthorne Lane
Portland, OR 97225
Tel: 503-206-7154
Cell: 503-997-5584
Fax: 503-297-1081
www.convergecomm.com



**CITY OF ASTORIA
COMMUNITY DEVELOPMENT
DEPARTMENT**

September 8, 2015

TO: ASTORIA PLANNING COMMISSION

FROM: ROSEMARY JOHNSON, SPECIAL PROJECTS PLANNER

SUBJECT: AMENDMENT REQUEST A15-03 - NEIGHBORHOOD GREENWAY OVERLAY

Attached is a revised draft of the proposed code amendments concerning the implementation of the Riverfront Vision Plan in the Neighborhood Greenway Overlay Area. The draft reflects the goals of the Riverfront Vision Plan, public input received to date, and direction from the Planning Commission at their September 1, 2015 work session. The following is an overview of changes made after that meeting:

- Eliminated reference to review of residential accessory structures.
- Established clear and objective design review standards for multi-family dwellings.
- Changed the design review standards for non-residential structures to guidelines to allow more flexibility.
- Included roof design and materials in the guidelines and standards.

Some sections still need some work on the exact wording for the code but those changes will be made prior to the Planning Commission public hearing on October 27, 2015.

The Planning Commission will be holding a work session on this recent draft after the September 16, 2015 meeting. If you have any questions, please contact me at rjohnson@astoria.or.us.

ORDINANCE NO. 15-_____

AN ORDINANCE AMENDING THE ASTORIA DEVELOPMENT CODE AND LAND USE AND ZONING MAP PERTAINING TO IMPLEMENTATION OF THE ASTORIA RIVERFRONT VISION PLAN IN THE NEIGHBORHOOD GREENWAY AREA

THE CITY OF ASTORIA DOES ORDAIN AS FOLLOWS:

Section 1. Section 14.130 through 14.138 pertaining to the Neighborhood Greenway Overlay Zone is added to read as follows:

“NGO: NEIGHBORHOOD GREENWAY OVERLAY ZONE

14.130. PURPOSE.

The purpose of the Neighborhood Greenway Overlay Zone is to implement the land use principles of the Astoria Riverfront Vision Plan, dated December 2009, as they pertain to the Neighborhood Greenway Plan Area. The Neighborhood Greenway Overlay (NGO) Zone is intended to protect views of and access to the Columbia River, provide for an enhance open space and landscaping, support limited water-dependent uses consistent with Astoria’s working waterfront. The NGO Zone extends from approximately 41st Street to the east side of Alderbrook neighborhood at approximately 54th Street and between Lief Erikson Drive and the pier head line of the Columbia River as depicted on the City’s Zoning Map.

14.131. APPLICABILITY AND REVIEW PROCEDURES.

The provisions of the Neighborhood Greenway Overlay Zone shall apply to all new construction or major renovation, where “major renovation” is defined as construction valued at 25% or more of the assessed value of the existing structure, unless otherwise specified by the provisions in this Ordinance.

Review of applications in the Neighborhood Greenway Overlay Zone is subject to the administrative procedures and approval of the Community Development Director established in Article 9.

A. Residential Development Exception

These standards shall not apply to single-family and two-family dwellings.

B. Residential Development

Applications for multi-family dwellings may be reviewed administratively subject to the Design Review Standards in Section 14.134 or through the public design review process subject to the Design Review Guidelines in Section 14.135.

C. Non-Residential and Mixed Use Development.

Applications shall be reviewed through the public design review process subject to the Design Review Guidelines in Section 14.135.

14.132. ALLOWABLE USES FOR OVERWATER DEVELOPMENT.

Outright and Conditional uses within the Neighborhood Greenway Overlay Zone shall be limited to allowable uses in the A-4 Zone (Aquatic Natural) with the following exceptions:

1. In pile supported buildings existing prior to October 1, 2002, non-water-dependent or non-water-related uses as follows are allowed as a conditional use:
 - a. Arts and crafts studios.
 - b. Bed and breakfast, home stay lodging, or inn.
 - c. Home occupation.
 - d. Professional and business office, personal service establishment limited to beauty and barber services and garment alterations.
 - e. Residential home.
 - f. Single-family dwelling.
 - g. Two-family dwelling.
 - h. Multi-family dwelling.
 - i. Off-street parking requirements for the above uses may be located in the upland zone adjacent to the use. The Planning Commission may impose additional landscape buffering to protect the adjacent residential uses.

14.133. STANDARDS FOR OVERWATER DEVELOPMENT.

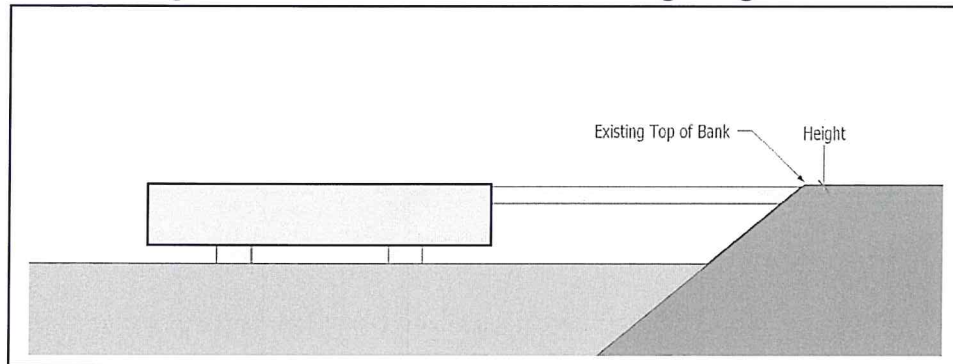
The following development standards apply to overwater development in the Neighborhood Greenway Overlay Zone. The Overwater Development standards shall also apply to on-land development north of the River Trail and/or 50' wide railroad line property between 41st Street and approximately 54th Street. In the event of a conflict between this Section and other Sections of the Astoria Development Code, this Section shall control.

Maintenance, repair, or restoration of buildings existing prior to 2002 shall be exempt from the standards of this Section. Additions and/or new construction on these buildings shall be subject to these standards.

A. Height.

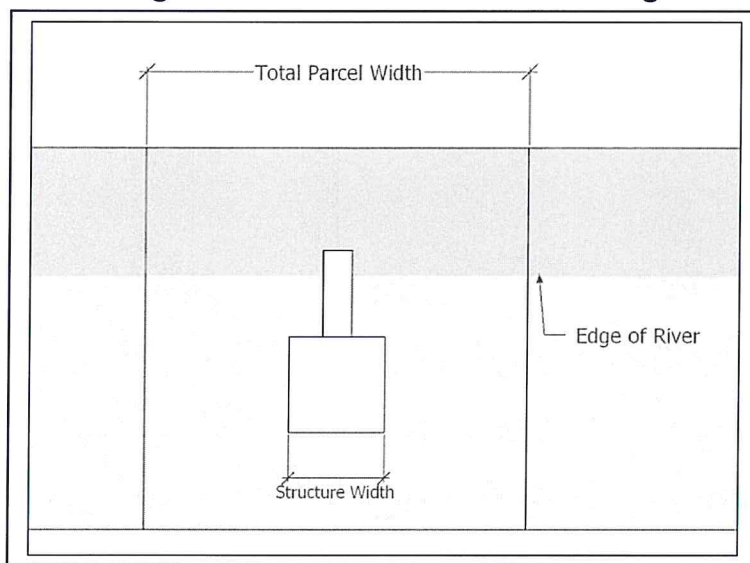
1. Maximum building height, except hand rails, shall be the top of the existing adjacent riverbank. No variance may be granted for an exception to this height limitation.

Figure 14.133-1: Maximum Building Height



- B. The maximum width of an overwater structure is 25% of the total parcel width (measured along the parcel frontage adjacent to the Columbia River) or 50 feet, whichever is smaller. In cases where total parcel width is 100 feet or less, the structure width may be up to 25 feet.

Figure 14.133-2: Maximum Building Width



14.134. RESIDENTIAL DEVELOPMENT DESIGN STANDARDS.

A. Applicability.

1. Residential.

- a. Single-family and two-family dwellings are not subject to the design standards.
- b. Multi-family dwellings proposed in the Neighborhood Greenway Overlay Zone may be reviewed in accordance with one of two review options:

- (1) Applications in compliance with Multi-Family Development Design Standards of Section 14.*** shall be reviewed pursuant to procedures for administrative review by the Community Development Director established in Article 9; or
- (2) All other multi-family dwelling applications shall be reviewed in accordance with the Residential Development Design Guidelines of Section 14.*** and shall be reviewed pursuant to design review procedures in Article 9 and 14.

2. Figures.

Figures included in Section 14.133 through 14.135 are included for illustrative purposes only and are not intended to be regulatory in and of themselves. If there is an inconsistency between the Figure and the Development Code text, the text shall prevail.

B. Design Standards.

1. Building Forms.

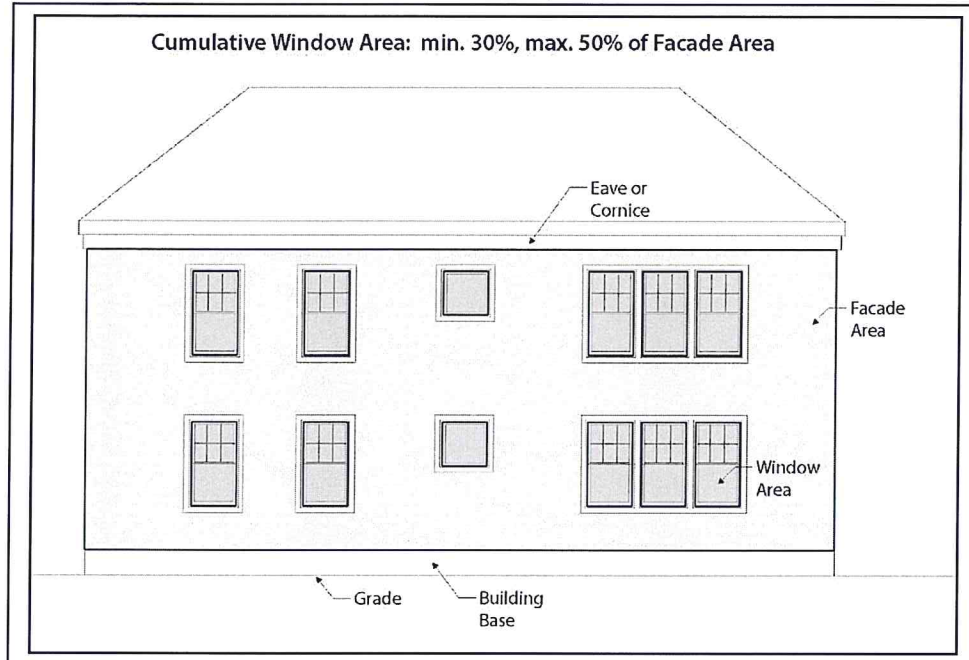
- a. All buildings shall be based on a rectangular or square form.
- b. All multi-family dwelling unit buildings shall have a front porch, at least six (6) feet deep and 60 square feet in area.

2. Window Design.

The following design standards apply to all facades.

- a. Windows required. All facades facing a right-of-way, River Trail, or common open space shall have windows.
- b. Window area. Window area shall cover a minimum of 30% of all street-facing facade areas and shall not exceed 50% of street-facing facade areas.

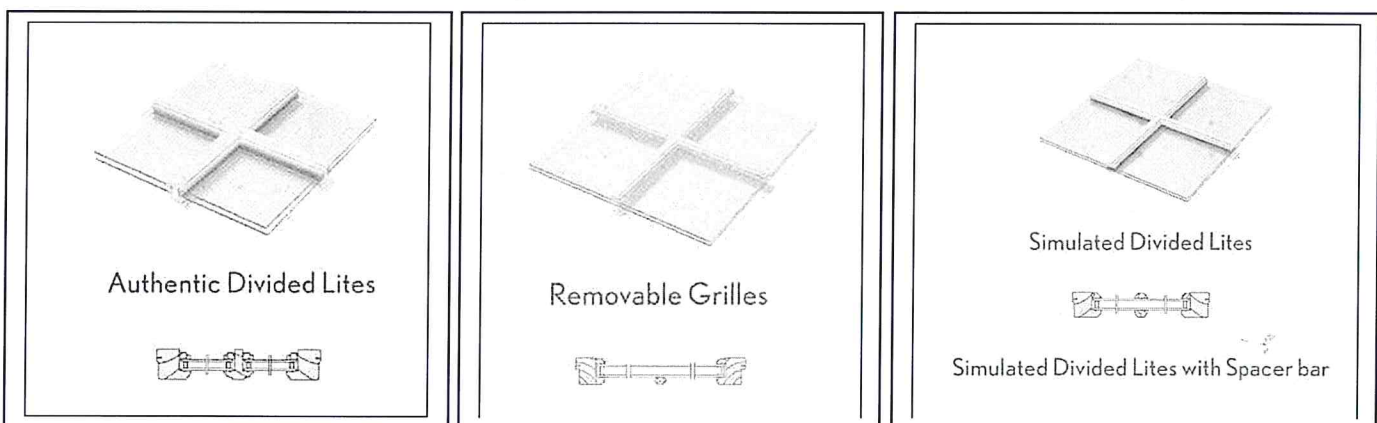
Figure 14.134-1: Window Area



c. Window lites. Window lite design shall be one of the following:

- 1) Single-lite windows; or
- 2) Multiple-lite true-divided windows; or
- 3) Combination of single and multiple-lite true-divided windows; or
- 4) Applied muntins with profile facing window exterior.

Figure 14.134-2: Window Lites

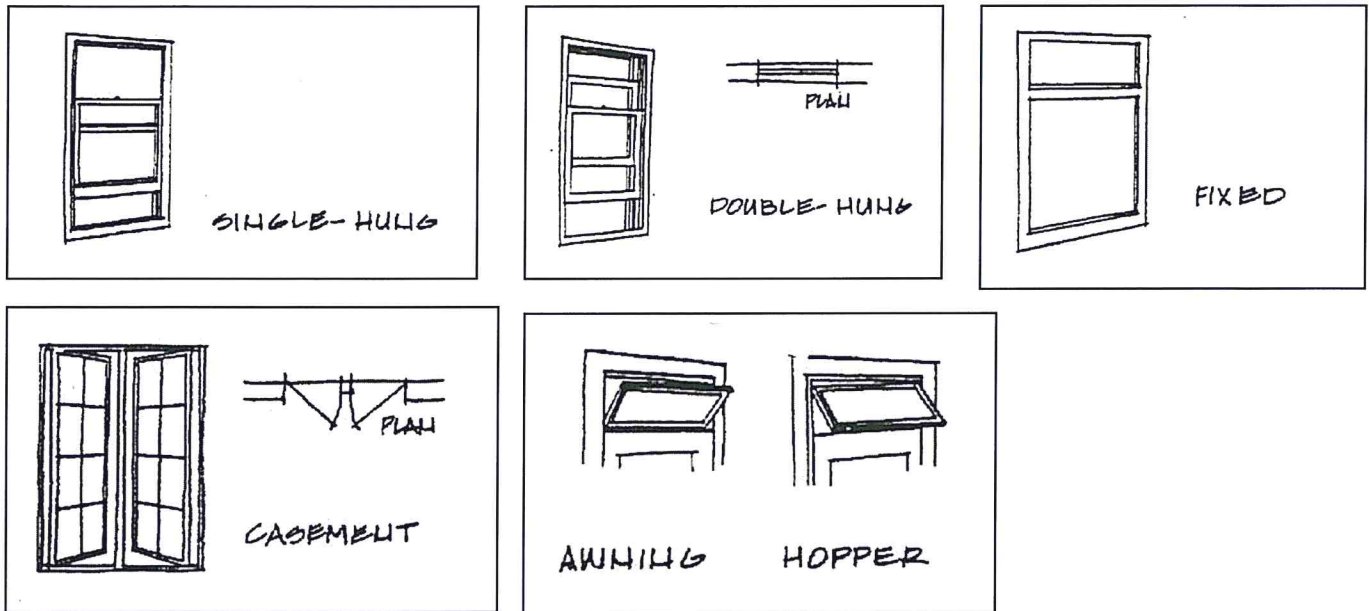


d. Windows shall be fixed or open in one of the following configurations:

- 1) Fixed window; or
- 2) Single-hung windows; or
- 3) Double-hung windows; or

- 4) Awning or hopper windows; or
- 5) Casement windows.

Figure 14.134-3: Fixed and Opening Windows

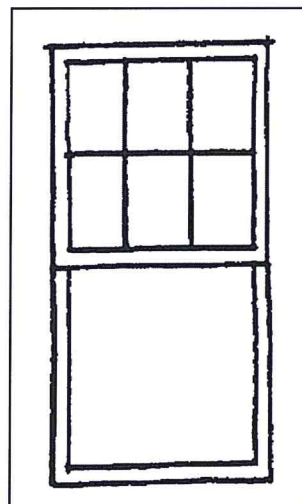


e. Window shape. Window shape shall be one of the following:

- 1) Vertical rectangle; or
- 2) Square.
- 3) Arched or decorative windows are permitted but should not exceed more than 30% of the total window coverage on all facades of the building.

Figure 14.134-4: Window Shapes

Vertical rectangular window

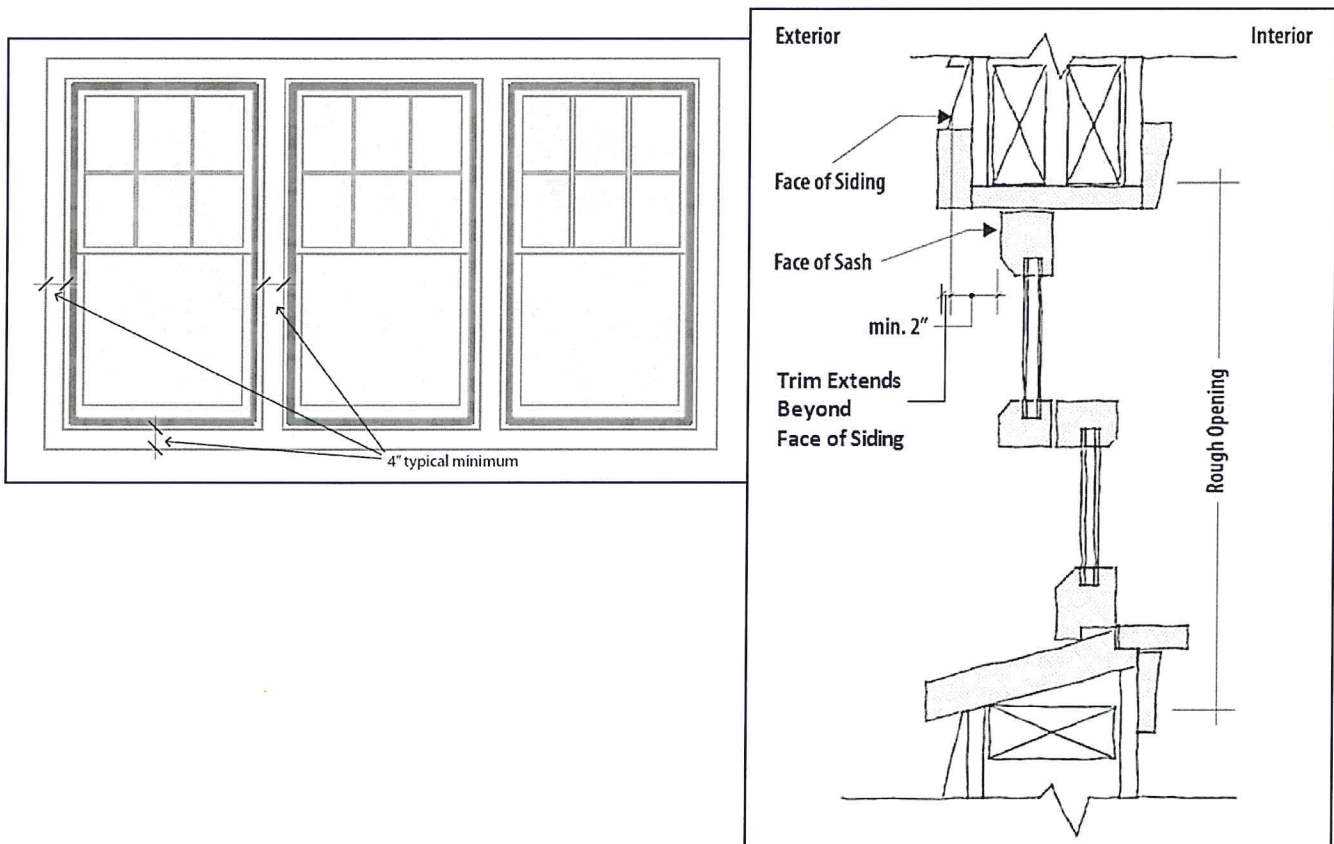


Examples of arched or decorative windows



- f. Window detailing. Windows shall have casings/trim, sills, and crown moldings. Window detailing shall meet the following requirements.
- 1) Casings/trim shall have minimum dimensions of 5/4 inch x 4 inch and shall extend beyond the facade siding.
 - 2) Windows shall be recessed a minimum distance of two (2) inches from the trim surface to ensure a shadow line/effect.

Figure 14.134-5: Window Detailing – Trim and casement location and dimensions



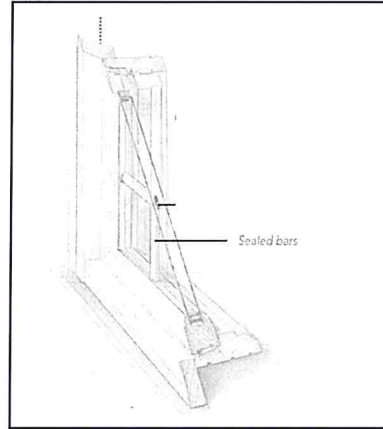
- g. Window design prohibited. The follow window design features are prohibited.

- 1) Applied muntins that have no profile.

- 2) Smoked, tinted, or frosted glass, except for bathroom windows not on the street-facing facade.
- 3) Mirrored glass.

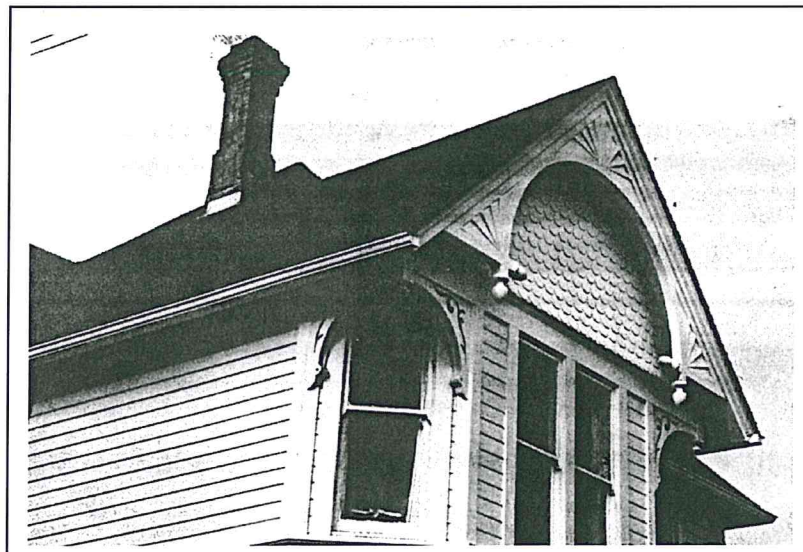
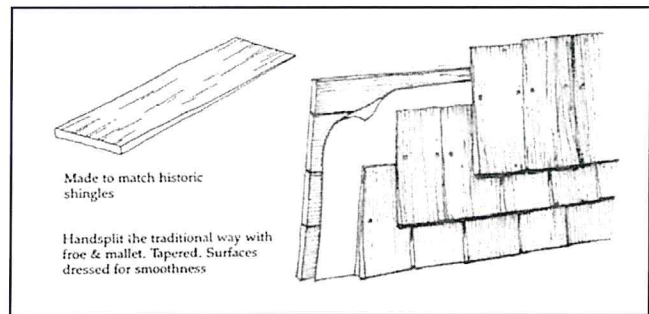
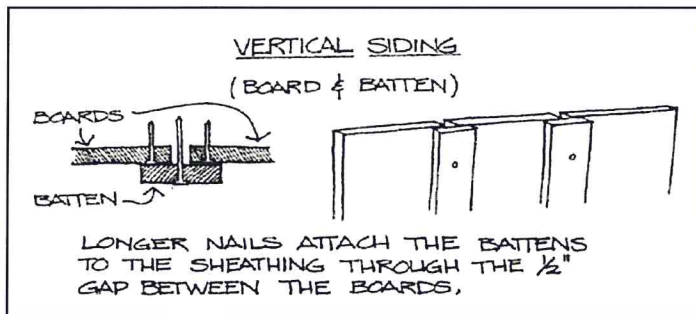
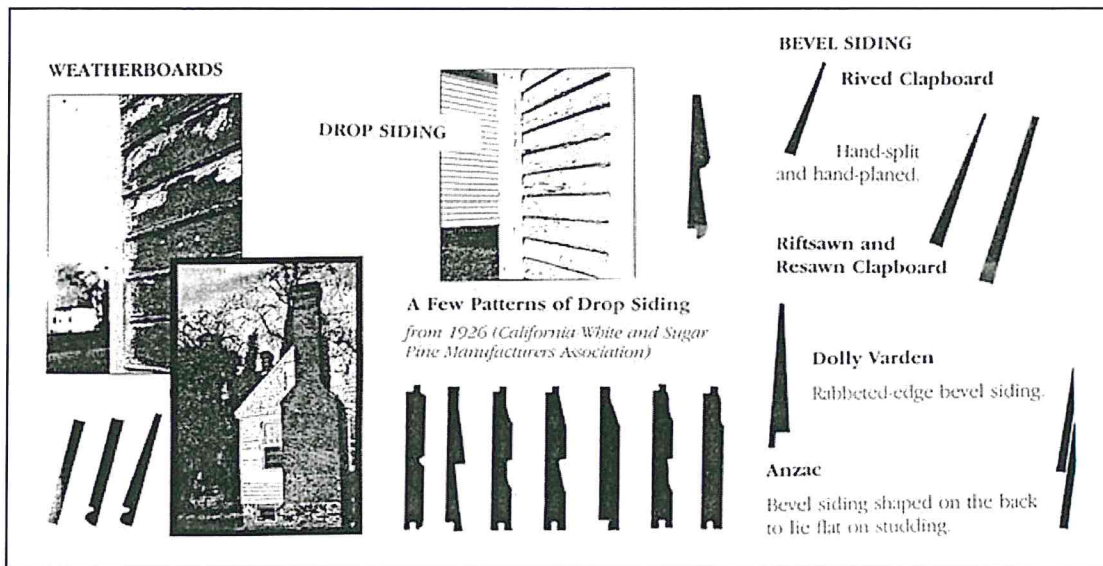
Figure 14.134-6: Window Design Prohibited

Muntins with no profile



3. Exterior Wall Treatments and Materials.
 - a. A minimum of 80% of exterior walls shall be constructed of one or more of the following sets of treatments and materials.
 - 1) Drop siding; or
 - 2) Weatherboard siding; or
 - 3) Clapboard; or
 - 4) Rectangular wood shingle or shake; or
 - 5) Decorative wood shingle or shake; or
 - 6) Board and batten.
 - b. Horizontal siding shall have six inches or less exposure.
 - c. Vertical board and batten shall have true battens.

Figure 14.134-7: Exterior Walls – Permitted Materials



- d. Paneled material shall be applied in a manner which avoids the occurrence of seams along the wall plane. Where seams cannot be avoided, they shall be located in a manner that relates logically to windows and other architectural features of the facade. Horizontal seams shall be covered by a trim board or cornice piece.

Figure 14.134-8: Exterior Walls – Seam Treatment

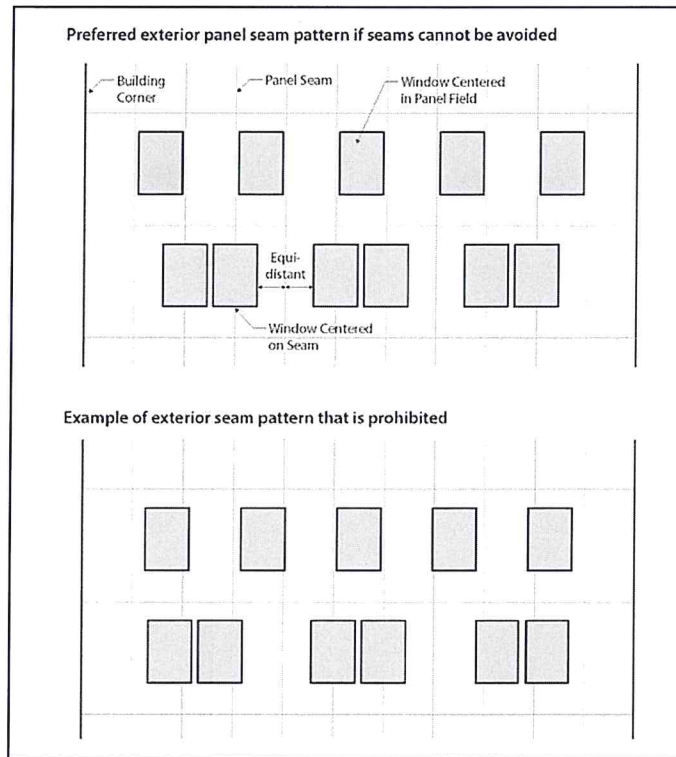
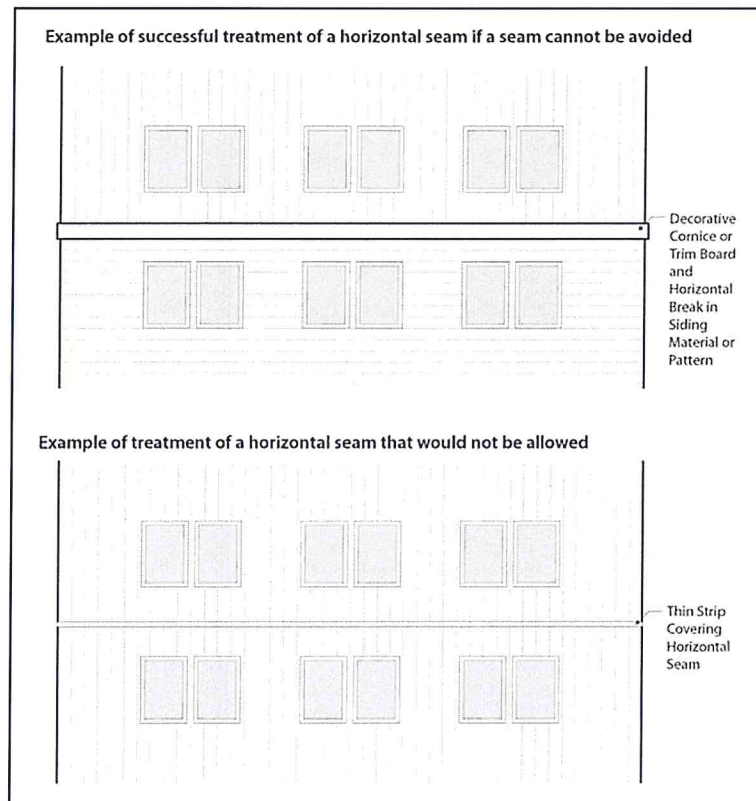


Figure 14.134-9: Exterior Walls – Horizontal Seam Treatment



- e. Exterior wall treatments and materials prohibited. The following types of treatments and materials are prohibited.

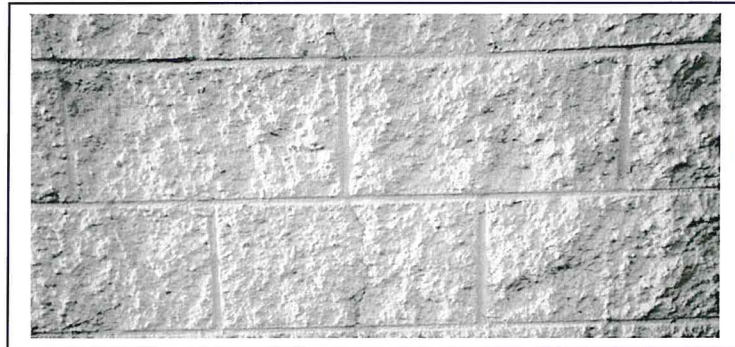
- 1) Exposed textured concrete block.
- 2) Flagstone or other applied stone products.
- 3) Precast concrete or decorative concrete panels.
- 4) Plywood paneling.

Figure 14.134-10: Exterior Wall Treatments and Materials Prohibited

Applied stone



Textured concrete



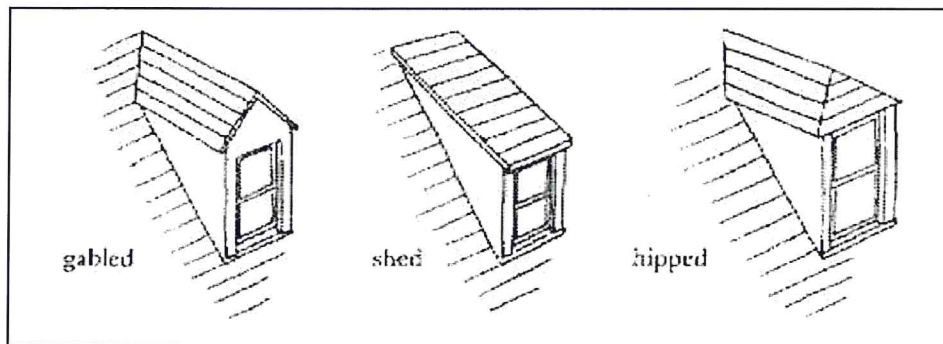
Pitch of roof may need to be reworded as "average" may not allow for the same roof as adjacent properties.

4. Roof Elements.

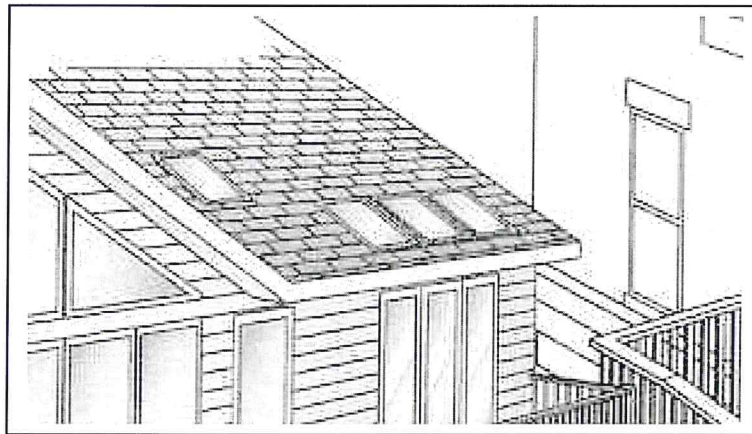
- a. Roof design shall have a pitch ~~no greater and/or no less~~ that does not vary by more than 50% from the average roof pitch of all adjacent residential structures. For the purposes of this ordinance, "adjacent" shall mean any lot abutting the subject parcel (including all tax lots) excluding rights-of-way.
- b. Roof elements permitted. The following roof design elements are permitted.
 - 1) Dormers with gable, hip, or shed roofs.
 - 2) Flat panel skylights or roof windows on secondary elevations.

Figure 14.134-11: Roof Elements Permitted

Gabled, shed, and hipped dormers



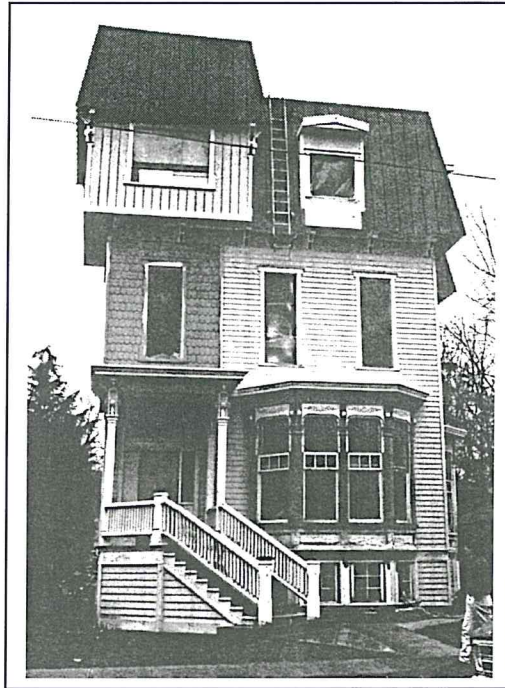
Flat panel skylights



- c. Roof elements prohibited. The following roof design elements are prohibited.
- 1) False mansard or other applied forms.
 - 2) Dome skylights.

Figure 14.134-12: Roof Elements Prohibited

False mansard roof



6. Signs.

Signs are subject to the sign provisions in Section 8.040 and 8.160.

7. Doors.

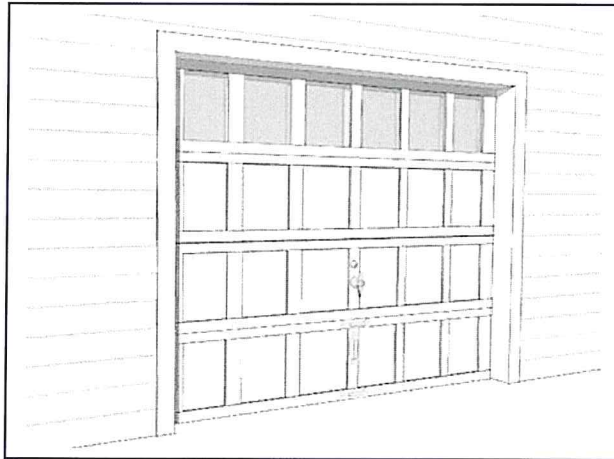
- a. Doors shall have at least one lite (glass) panel.
- b. Sliding doors are not permitted on the ground floor of the front facade.
- c. All materials are permitted.
- d. Metal or metal-clad doors shall be painted.

8. Garage Doors.

The following design standards apply to attached and detached garages:

- a. A minimum of 10% of each garage door shall be window panels, raised trim, or other architectural details.

Figure 14.134-13: Garage Doors Permitted



14.135. NON-RESIDENTIAL DEVELOPMENT DESIGN GUIDELINES.

A. Purpose.

These guidelines promote architectural elements that unify the Neighborhood Greenway Area by encouraging styles characteristic of Astoria. The historic architecture of Astoria is represented by a variety of styles. Differences in details may be seen from one neighborhood to the next. These guidelines advocate the simplicity of design which is characteristic of Alderbrook and the working man's neighborhood. Building styles and details not inspired by Astoria's past will be discouraged but not prohibited. Monotony of design should be avoided. Variety of detail, form, and siting should be used to provide visual interest.

The Guidelines make reference to, but do not require the use of, historic materials. Contemporary substitutions (i.e. composite materials), will not be discouraged if their texture, profile, and proportions are similar to those materials with historic precedent. As guidelines, the code provisions shall encourage or allow for design features or approaches that provide flexibility and discretion for the appropriate review body to interpret and apply the guidelines.

B. Design Review Process.

All uses proposed in the Neighborhood Greenway Overlay Zone other than residential single-family, two-family, and multi-family dwellings or uses that are not enclosed structures or located within enclosed structures shall be reviewed in accordance with the design review guidelines of Section 14.135 pursuant to the design review procedures in Article 14.

This section need to be reworded so that structures such as public utilities are not reviewed but non-residential carport style structures would be reviewed.

C. Design Guidelines.

The following design guidelines shall apply to multi-family dwelling development that does not comply with the design standards of Section 14.134 and/or all non-residential development design review.

1. Building Forms.

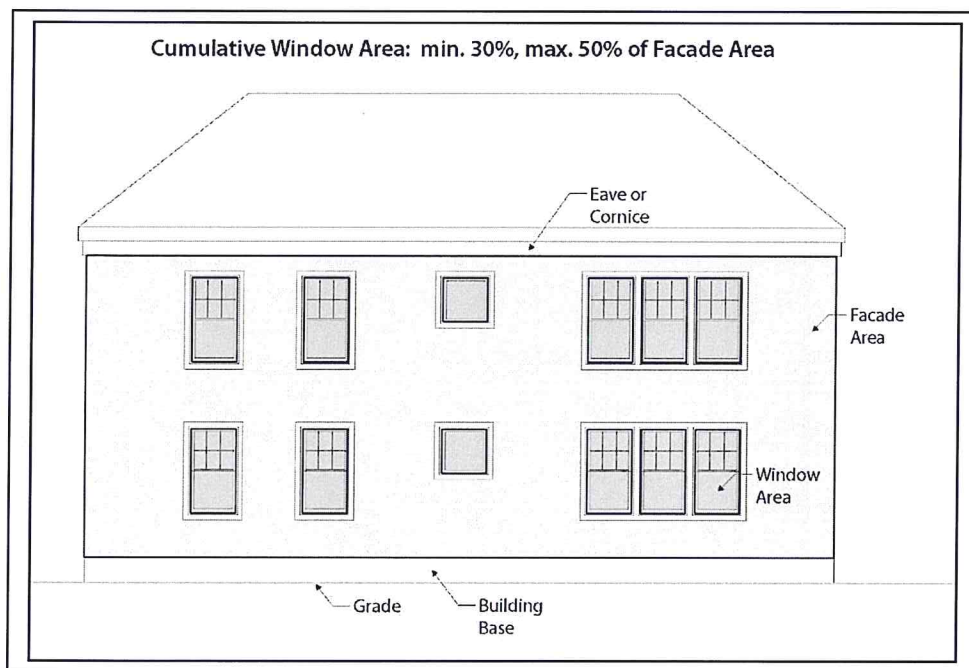
- a. All buildings should be based on a rectangular or square form.
- b. All multi-family dwelling unit buildings should have a front porch, at least six (6) feet deep and 60 square feet in area.

2. Window Design.

The following design guidelines apply to all facades.

- a. Windows required. All facades facing a right-of-way, River Trail, or common open space should have windows.
- b. Window area. Window area should cover a minimum of 30% of all street-facing facade areas and should not exceed 50% of street-facing facade areas.

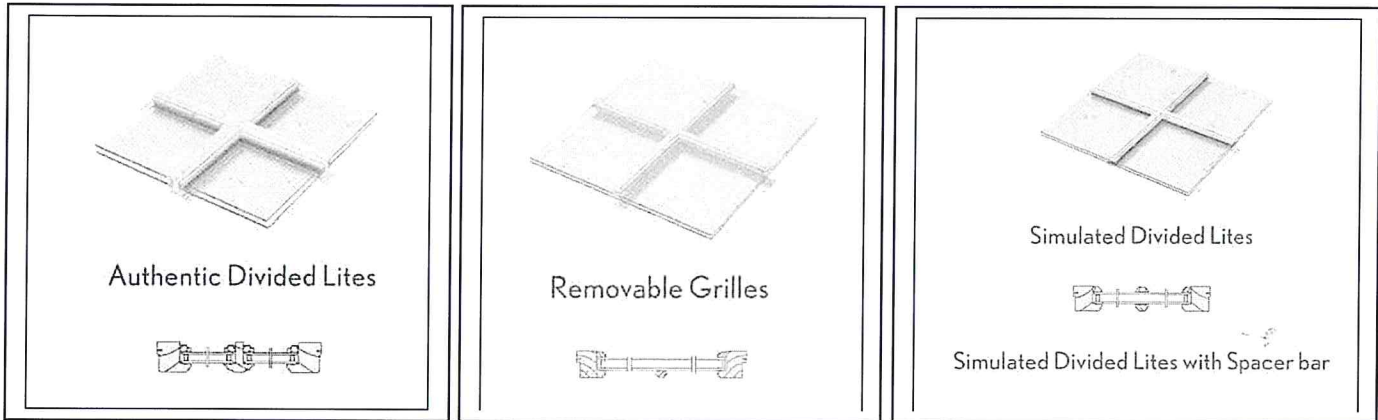
Figure 14.135-1: Window Area



c. Window lites. Window lite design should be one of the following:

- 1) Single-lite windows; or
- 2) Multiple-lite true-divided windows; or
- 3) Combination of single and multiple-lite true-divided windows; or
- 4) Applied muntins with profile facing window exterior.

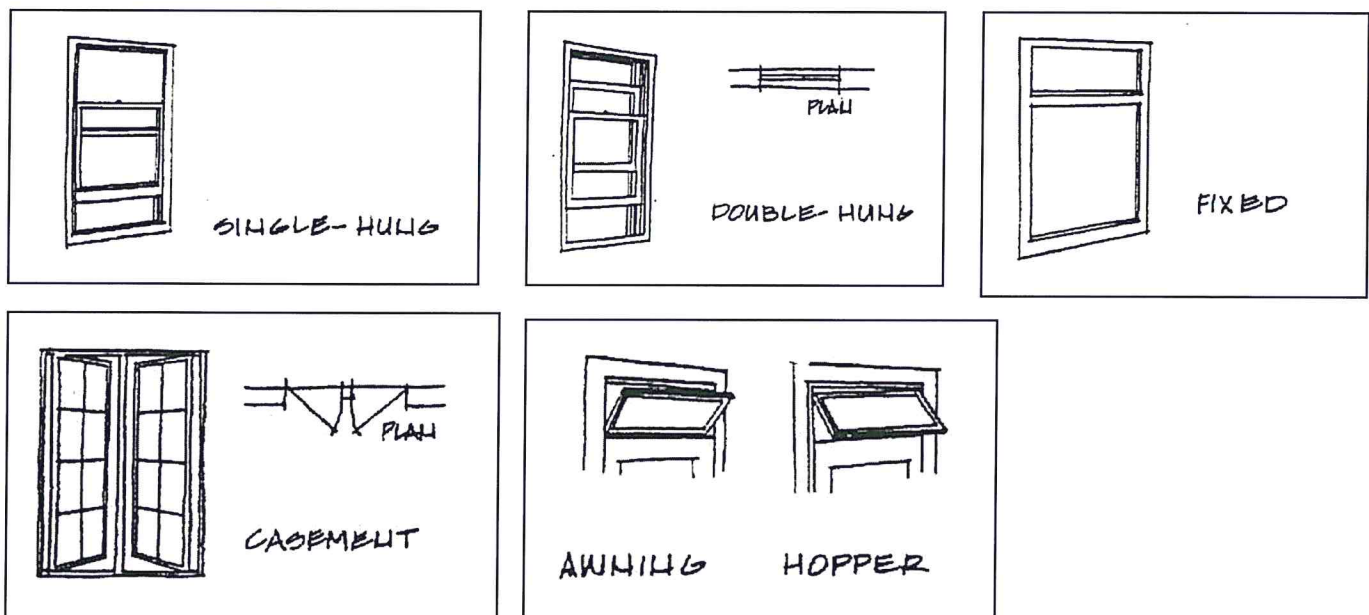
Figure 14.135-2: Window Lites



d. Windows should be fixed or open in one of the following configurations:

- 1) Fixed window; or
- 2) Single-hung windows; or
- 3) Double-hung windows; or
- 4) Awning or hopper windows; or
- 5) Casement windows.

Figure 14.134-3: Fixed and Opening Windows

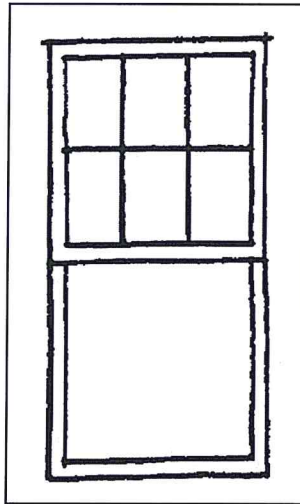


e. Window shape. Window shape should be one of the following:

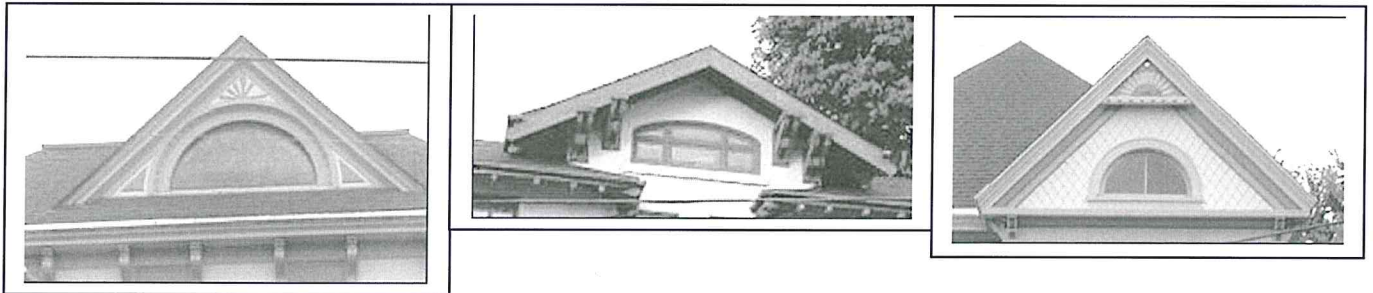
- 1) Vertical rectangle; or
- 2) Square.
- 3) Arched or decorative windows are permitted but should not exceed more than 30% of the total window coverage on all facades of the building.

Figure 14.135-4: Window Shapes

Vertical rectangular window



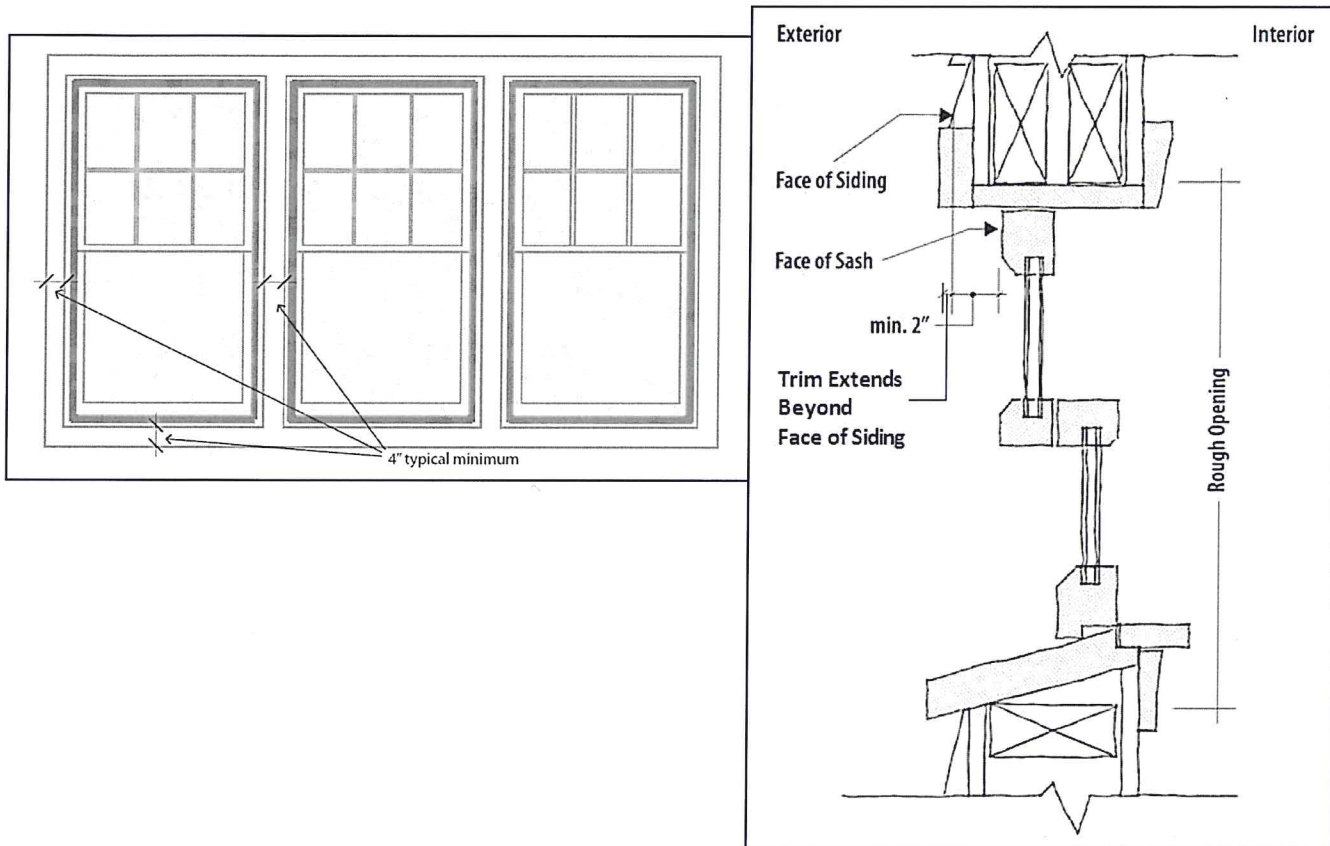
Examples of arched or decorative windows



f. Window detailing. Windows should have casings/trim, sills, and crown moldings. Window detailing should meet the following requirements.

- 1) Casings/trim shall have minimum dimensions of 5/4 inch x 4 inch and shall extend beyond the facade siding.
- 2) Windows should be recessed a minimum distance of two (2) inches from the trim surface to ensure a shadow line/effect.

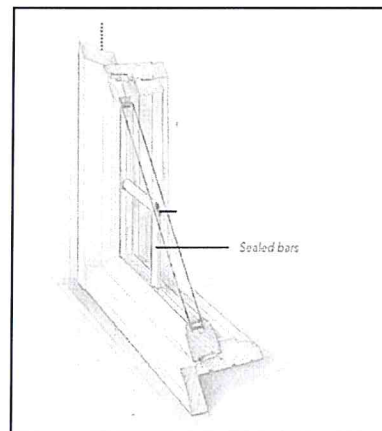
Figure 14.135-5: Window Detailing – Trim and casement location and dimensions



- g. Window design prohibited. The follow window design features are prohibited.
- 1) Applied muntins that have no profile.
 - 2) Smoked, tinted, or frosted glass, except for bathroom windows not on the street-facing facade.
 - 3) Mirrored glass.

Figure 14.135-6: Window Design Prohibited

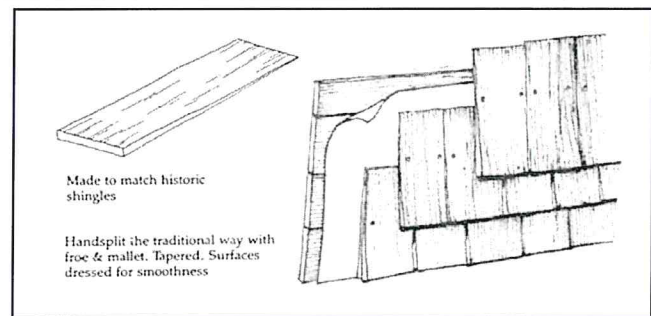
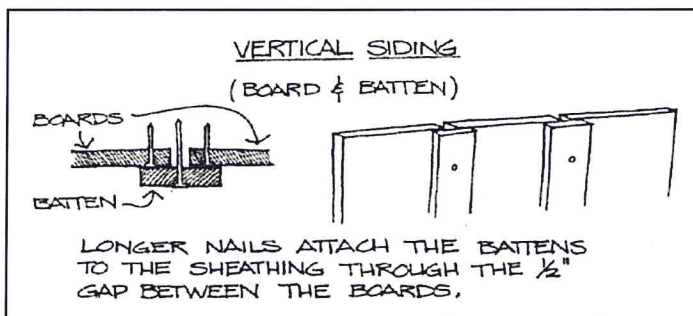
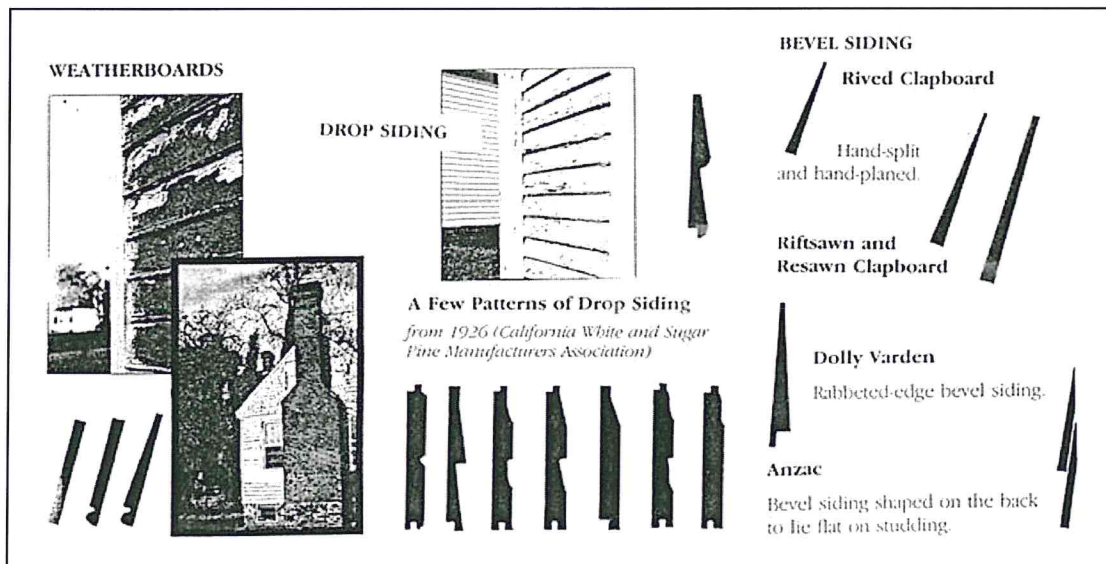
Muntins with no profile



3. Exterior Wall Treatments and Materials.

- a. A minimum of 80% of exterior walls should be constructed of one or more of the following sets of treatments and materials.
- 1) Drop siding; or
 - 2) Weatherboard siding; or
 - 3) Clapboard; or
 - 4) Rectangular wood shingle or shake; or
 - 5) Decorative wood shingle or shake; or
 - 6) Board and batten.
- b. Horizontal siding should have six inches or less exposure.
- c. Vertical board and batten should have true battens.

Figure 14.135-7: Exterior Walls – Permitted Materials





- d. Paneled material shall be applied in a manner which avoids the occurrence of seams along the wall plane. Where seams cannot be avoided, they shall be located in a manner that relates logically to windows and other architectural features of the facade. Horizontal seams shall be covered by a trim board or cornice piece.

Figure 14.135-8: Exterior Walls – Seam Treatment

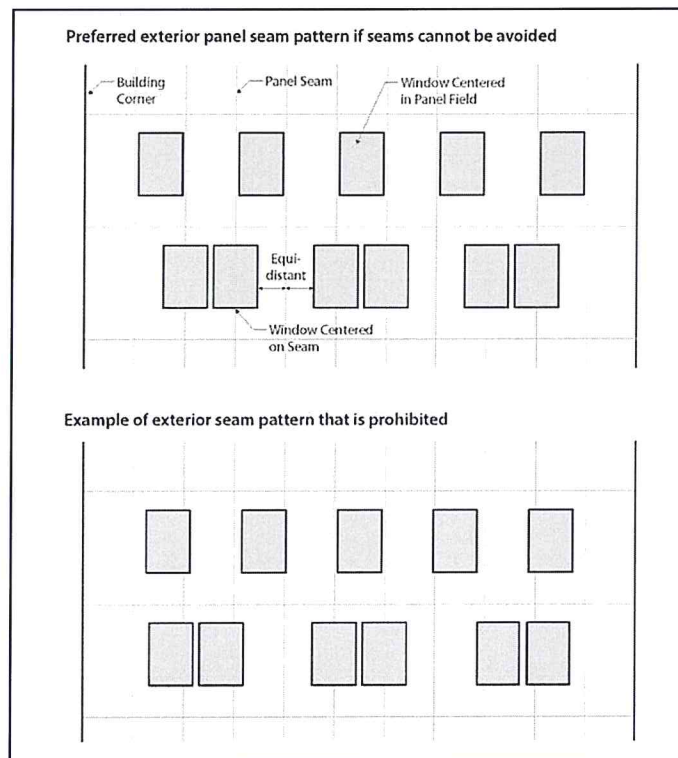
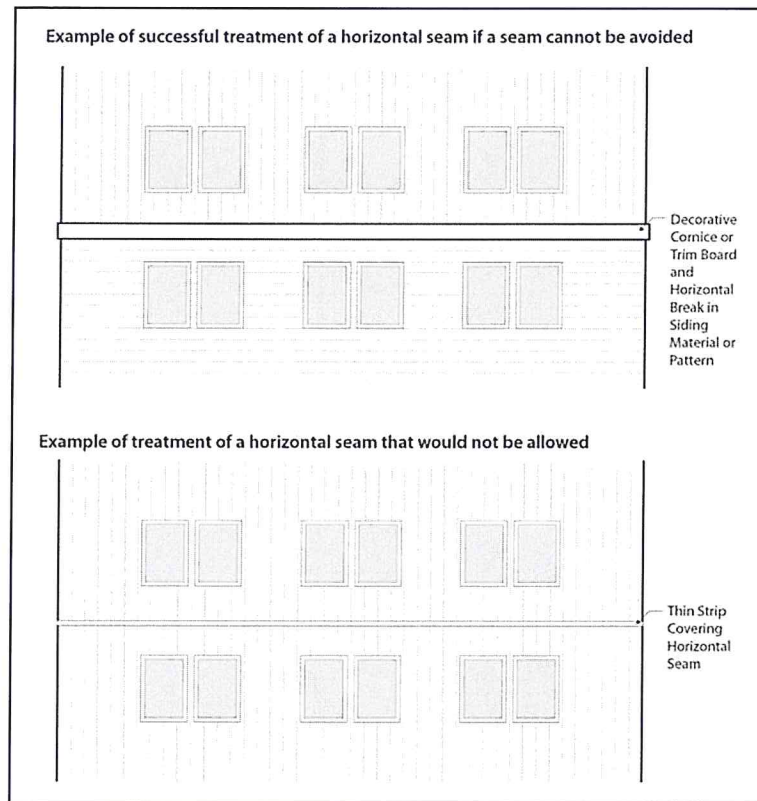


Figure 14.135-9: Exterior Walls – Horizontal Seam Treatment



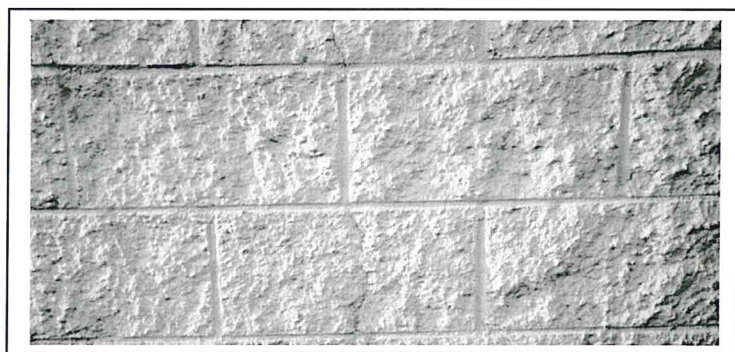
- e. Exterior wall treatments and materials prohibited. The following types of treatments and materials are prohibited.
- 1) Exposed textured concrete block.
 - 2) Flagstone or other applied stone products.
 - 3) Precast concrete or decorative concrete panels.
 - 4) Plywood paneling.

Figure 14.135-10: Exterior Wall Treatments and Materials Prohibited

Applied stone



Textured concrete

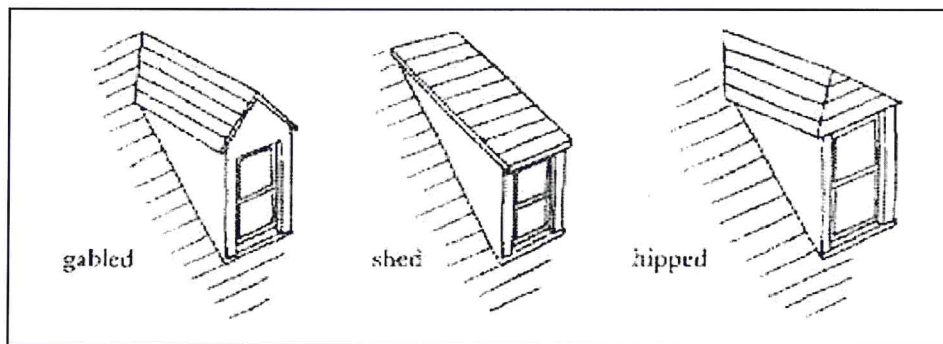


4. Roof Elements.

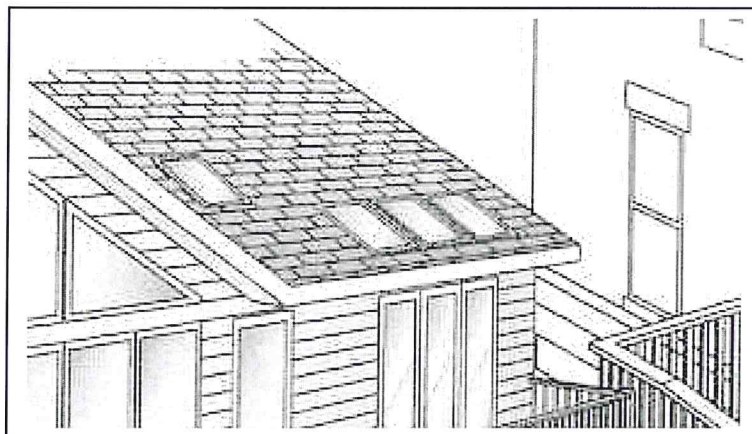
- a. Roof design should have a pitch ~~no greater and/or no less~~ that does not vary by more than 50% from the average roof pitch of all adjacent residential structures. For the purposes of this ordinance, "adjacent" shall mean any lot abutting the subject parcel (including all tax lots) excluding rights-of-way.
- b. Roof elements permitted. The following roof design elements are permitted.
 - 1) Dormers with gable, hip, or shed roofs.
 - 2) Flat panel skylights or roof windows on secondary elevations.

Figure 14.135-11: Roof Elements Permitted

Gabled, shed, and hipped dormers



Flat panel skylights

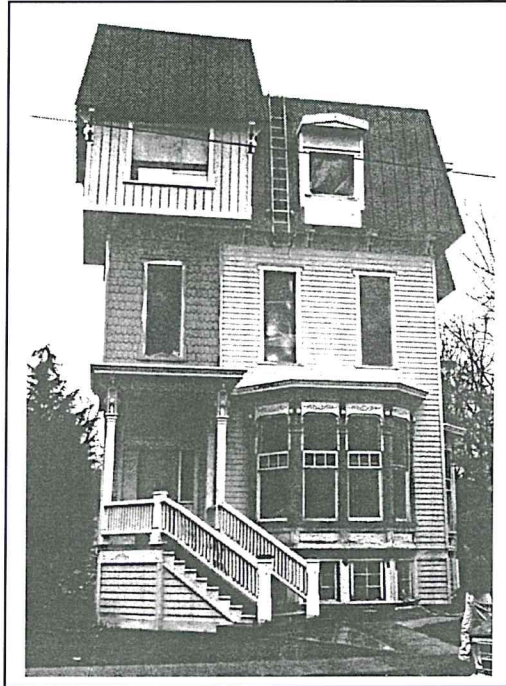


- c. Roof elements prohibited. The following roof design elements are prohibited.
 - 1) False mansard or other applied forms.

- 2) Dome skylights.

Figure 14.135-12: Roof Elements Prohibited

False mansard roof



6. Signs.

Signs are subject to the sign provisions in Section 8.040 and 8.160.

7. Doors.

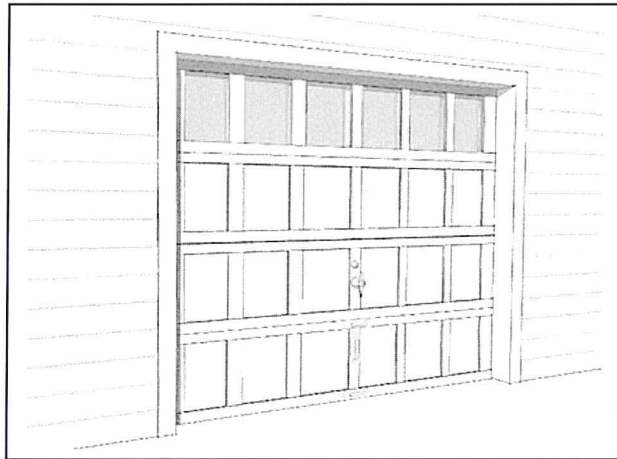
- a. Doors should have at least one lite (glass) panel.
- b. Sliding doors are not permitted on the ground floor of the front facade.
- c. All materials are permitted.
- d. Metal or metal-clad doors should be painted.

8. Garage Doors.

The following design guidelines apply to attached and detached garages:

- a. Garage door should include window panels, raised trim, or other architectural details.

Figure 14.135-13: Garage Doors Permitted



14.137. OTHER DEVELOPMENT STANDARDS.

A. The following development standards are applicable within the Neighborhood Greenway Overlay Zone.

1. Exterior lighting.

Outdoor lighting shall be designed and placed so as not to cast glare into adjacent properties. Light fixtures shall be designed to direct light downward and minimize the amount of light directed upward. The Community Development Director may require the shielding or removal of such lighting where it is determined that existing lighting is adversely affecting adjacent properties or contributing to light directed into the night sky.

2. Fences.

Fences located between the River Trail and the Columbia River shall not exceed a height of three (3) feet.

14.138. LANDSCAPING.

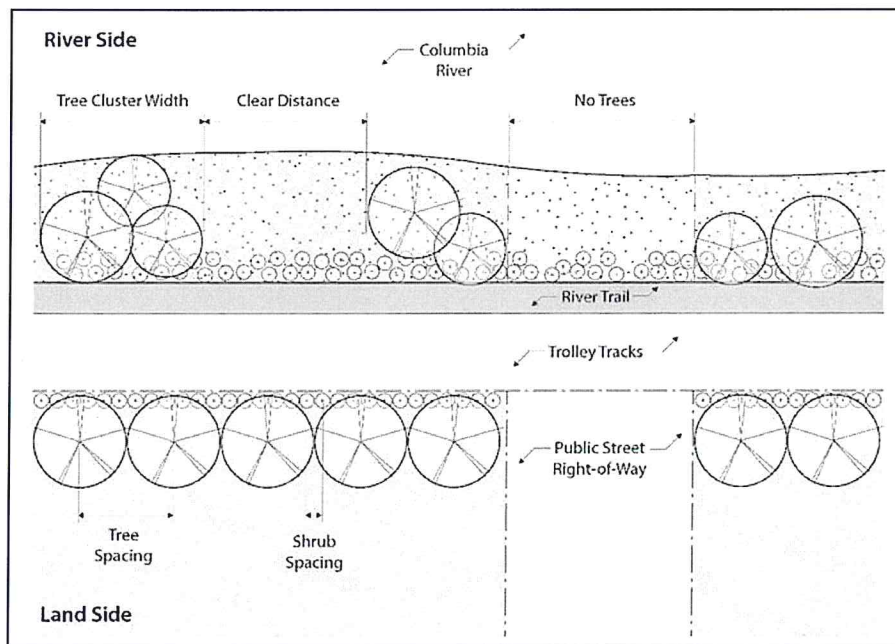
Landscaping is required in the Neighborhood Greenway Overlay Zone in accordance with the provisions in this Section and those in Section 3.120 to 3.125. The provisions in this Section apply to new construction or exterior renovations with a value of at least 20% of the assessed value of the structure, or in the event of installation of new parking areas for multi-family dwellings and/or development other than single-family or two-family dwellings. Single-family and two-family dwellings are not subject to the landscaping standards except as noted.

A. River Side or Riparian Standards.

1. Height and Spacing.

- a. Maximum shrub height is 30 inches.
- b. Maximum width of clusters of trees is 30 feet.
- c. Clusters of trees shall have a minimum of 50 feet clear between branches at maturity.
- d. Trees are not permitted to be planted on the river side of the River Trail within the extended public right-of-way or view corridor extending from it for a distance of 70 feet centered on the right-of-way centerline.
- e. Trees shall not exceed 25 feet in height at maturity
- f. Maximum height of fences is three (3) feet.

Figure 14.138-1: River Side/Riparian Landscaping



2. Native Plants.

See Section 3.125 concerning use of native plants and list of recommended native plants.

3. Landscaping Credits for Non-Vegetation Features.

- a. The Community Development Director may approve non-vegetative features to account for up to 40% of required landscaping when the features consist of hardscaped pedestrian-oriented areas (e.g.,

courtyards, plazas). Permeable paving and other stormwater management techniques are encouraged in the design of these areas.

- b. An application proposing more than 40% of required landscaping be credited by non-vegetative features is subject to approval in accordance with procedures in Article 9 and Article 12.
 - c. Non-vegetative features allowed in the public right-of-way and/or on the River Trail in lieu of required landscaping shall be maintained by the applicant. There shall be a maintenance agreement or other City approved agreement. Failure to maintain or loss of the non-vegetative feature will result in the requirement for installation of the landscaping in accordance with the Code at the time of the loss.
2. Parking Area Landscaping.
- a. Landscaping required between parking areas, streets, and sidewalks in accordance with Section 3.120.A.7 shall also be required between parking areas and the River Trail.
 - b. Landscaping shall minimize pedestrian exposure to parking lots with a hedge or a decorative fence that is 36" to 42" high.
 - c. Maximum tree height and width in parking areas shall be 15 feet at maturity.
3. Landscaping Credits for Non-Vegetation Features.
- a. The Community Development Director may approve non-vegetative features to account for up to 25% of required landscaping when the features consist of the following:
 - (1) Hardscaped pedestrian-oriented areas (e.g., courtyards, plazas); and/or
 - (2) At least one of the following amenities meeting the City approved design within the public right-of-way and/or River Trail right-of-way:
 - (a) bike rack
 - (b) bench
 - (c) table
 - (d) drinking fountain
 - (e) directional or interpretive/information signage
 - (f) trash or recycling container
 - (g) lighting
 - (h) restroom

Permeable paving and other stormwater management techniques are encouraged in the design of these areas.

- b. An application proposing more than 25% of required landscaping be credited by non-vegetative features is subject to approval in accordance with procedures in Article 9 and Article 12.
- c. Non-vegetative features allowed in the public right-of-way and/or on the River Trail in lieu of required landscaping shall be maintained by the applicant. There shall be a maintenance agreement or other City approved agreement. Failure to maintain or loss of the non-vegetative feature will result in the requirement for installation of the landscaping in accordance with the Code at the time of the loss.

C. Street Trees.

Street trees planted within the right-of-way along either side of the street in the Neighborhood Greenway Overlay Zone shall be planted in accordance with the provisions in this Section.

This Section shall apply to all street trees planted including those for single-family and two-family dwellings.

- 1. Spacing should be 30 feet on center, depending on species and branching habit.
- 2. Minimum size of deciduous trees should be 2" caliper, with an upright form.
- 3. Mature branching height should be a minimum of 15 feet.
- 4. Required street trees shall be maintained by the adjacent property owner and/or other identified entity. There shall be a maintenance agreement or other City approved agreement.

Section 2. Astoria Development Code Section 1.300 pertaining to Establishment of Zones is hereby amended with the addition to read as follows:

"Neighborhood Greenway Overlay

NGO"

Section 3. Section 3.190.F pertaining to Nonconforming Structures is added to read as follows:

"F. Reconstruction of Existing Non-Conforming Overwater Buildings

Nonconforming overwater buildings located between 16th and 41st Street within the Civic Greenway Overlay Area existing prior to 2013, and between 41st and

approximately 54th Street in the Neighborhood Greenway Overlay Area existing prior to 2015 may be rebuilt if unintentionally destroyed by any means to an extent exceeding 80% of its fair market value as indicated in Section 3.190.D, provided the reconstruction of the building complies with the following standards:

1. The building shall be rebuilt on the same location on the lot, or in compliance with the setback standards for the underlying zone. This does not allow any construction beyond the property lines; and
2. The square footage of the replacement structure and/or replacement uses does not exceed the square footage of the original structure and use classifications by more than 10%; and
3. The height of the building shall be the same or less than the existing building height prior to destruction; and
4. If the property is within an area subject to architectural design review standards, the design of the replacement structure shall comply with those architectural standards; and
5. Substantial construction of the building shall begin within two years of the date of destruction, unless an extension has been granted in accordance with Section 9.100; and
6. All other City and Building Codes relative to construction, including but not limited to, geologic concerns, stormwater management, grading, driveways, sidewalks, etc. shall apply.”

Section 4. Section 3.180.D pertaining to Nonconforming Uses is added to read as follows:

“D. Reestablishment of Existing Non-Conforming Uses in Overwater Buildings

Nonconforming uses in overwater buildings located between 16th and 41st Street within the Civic Greenway Overlay Area existing prior to 2013, and between 41st and approximately 54th Street within the Neighborhood Greenway Overlay Area existing prior to 2015 may be reestablished if the building housing the use is unintentionally destroyed by any means to an extent exceeding 80% of its fair market value as indicated in Section 3.190.D, provided the reconstruction of the building complies with the standards in Section 3.190.F and reestablishment of the use occurs within one year of the completion of construction. Completion of construction shall be determined by issuance of a temporary and/or final Certificate of Occupancy from the Building Official.”

Section 5. The 1992 Astoria Land Use and Zoning Map is amended to apply the Neighborhood Greenway Overlay (NGO) Zone as indicated on the map shown as Attachment A and further described below:

The area is generally described as 41st Street to 54th Street north of Lief Erikson Drive to the pier head line.

Section 6. The 1992 Astoria Land Use and Zoning Map is amended to rezone the following area from A-3 (Aquatic Conservation) to A-4 (Aquatic Natural) as indicated on the map shown as Attachment B and further described below:

The water area generally described as 41st Street to approximately 53rd Street north of the shoreline to the pier head line.

Section 7. Section 9.100.B, Permit Extensions, is amended to read as follows:

"Permit extension may be granted for all land use permits. Extensions may also be granted for time limits applicable to non-conforming buildings and/or non-conforming uses located over water between 16th and ~~41st~~ approximately 54th Streets as described in Sections 3.180.D and 3.190.F. One year extensions may be granted in accordance with the requirements of this Section as follows."

Section 8. Astoria Development Code Section 14.015.A, Gateway Overlay Zone, General Provisions, map exhibit only is deleted in its entirety.

Section 9. Astoria Development Code Section 14.010, Definitions, is renumbered as follows:

"14.001. DEFINITION.

As used in Article 14, unless the context requires otherwise, the following word shall have the meaning indicated:

SHOULD: A requirement, unless it can be shown that to comply with the requirement would be unreasonable, impractical, or unfeasible. Economic hardship alone shall not be justification for noncompliance with the requirement, but may be considered in conjunction with other reasons for noncompliance."

Section 10. Effective Date. This ordinance and its amendment will be effective 30 days following its adoption and enactment by the City Council.

ADOPTED BY THE COMMON COUNCIL THIS ____ DAY OF _____, 2015.

APPROVED BY THE MAYOR THIS ____ DAY OF _____, 2015.

Mayor

ATTEST:

Brett Estes, City Manager

ROLL CALL ON ADOPTION:

YEA

NAY

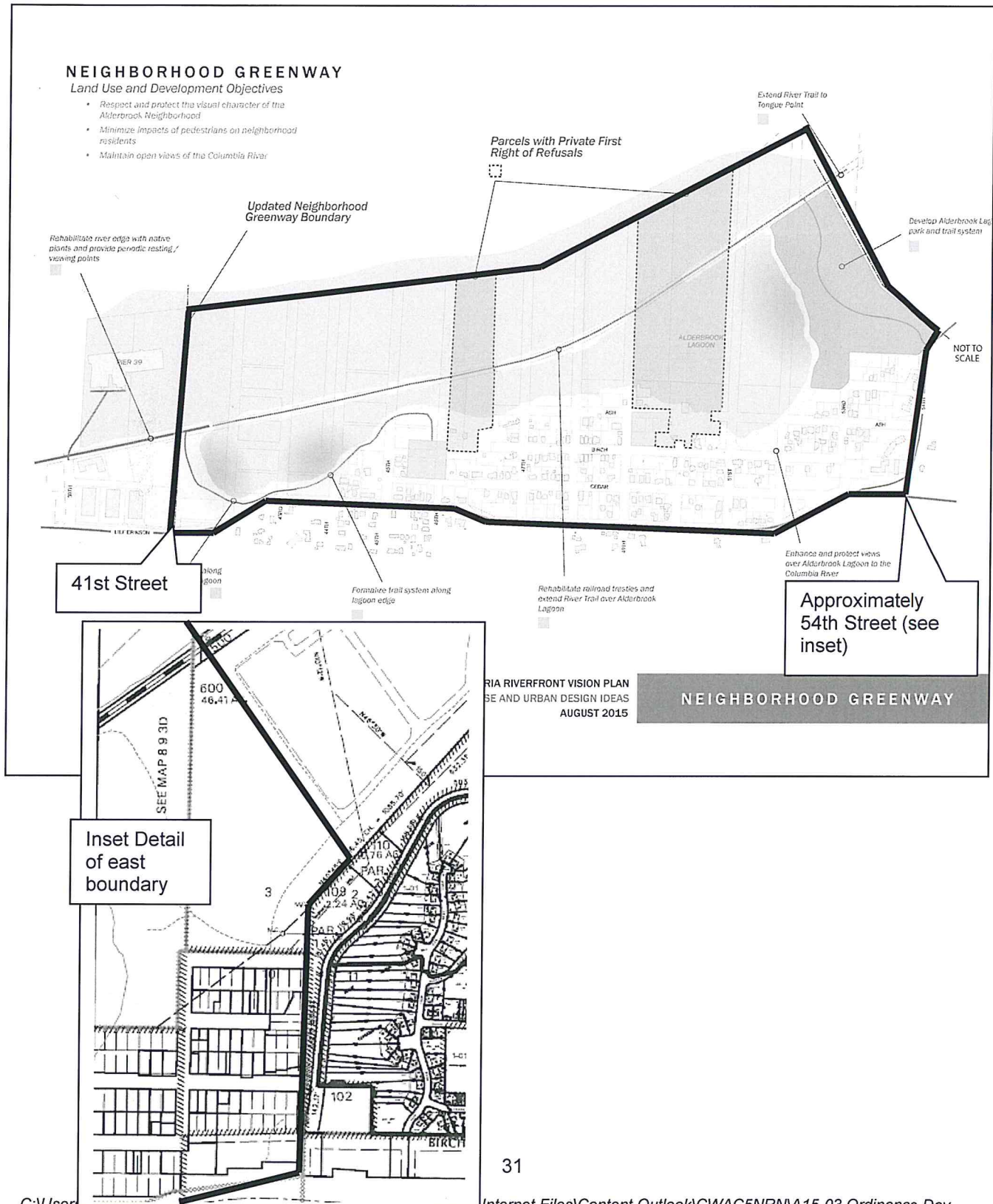
ABSENT

Commissioner Nemlowill
 Herzig
 Price
 Warr

Mayor LaMear

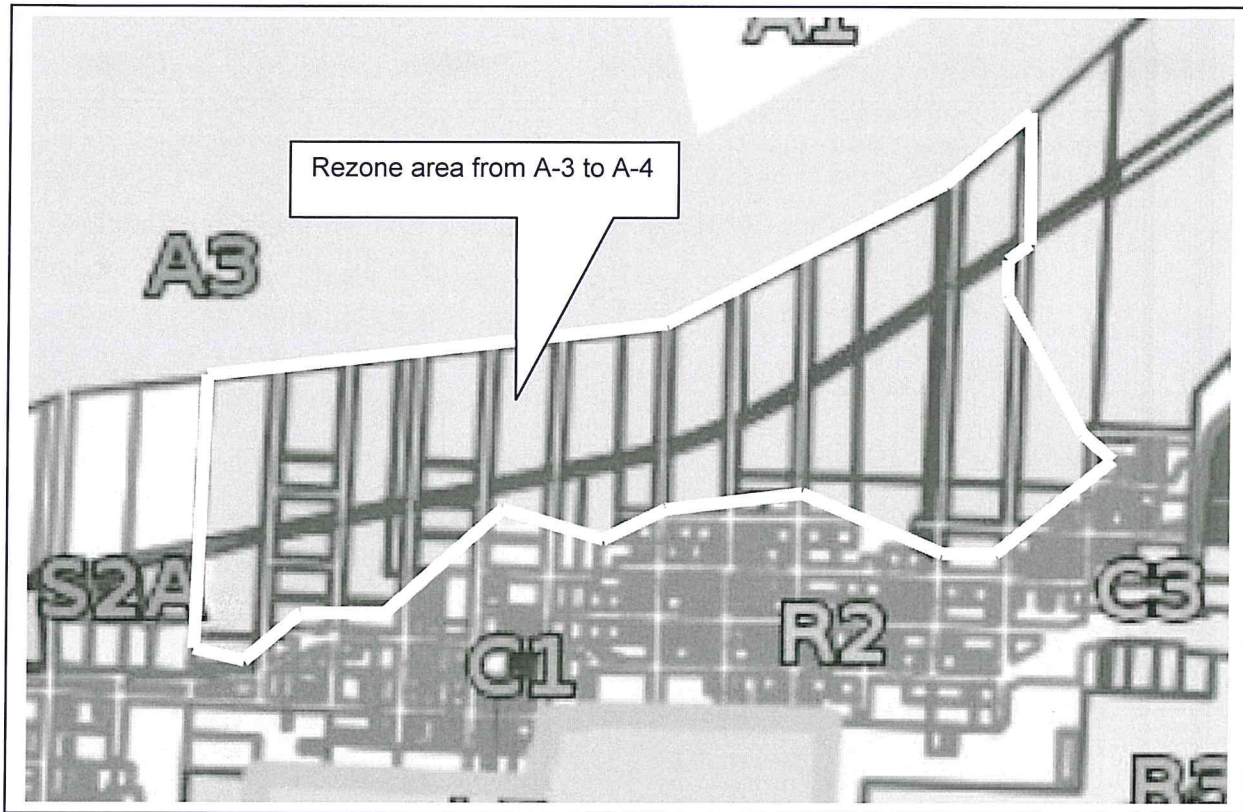
Ordinance 14-____ - Attachment A

NEIGHBORHOOD GREENWAY OVERLAY ZONE



Ordinance 14-____ - Attachment B

A-3 (Aquatic Conservation) to A-4 (Aquatic Natural) Zone



ORDINANCE NO. 15-_____

AN ORDINANCE AMENDING THE ASTORIA COMPREHENSIVE PLAN PERTAINING TO IMPLEMENTATION OF THE ASTORIA RIVERFRONT VISION PLAN FOR THE NEIGHBORHOOD GREENWAY PLAN AREA

THE CITY OF ASTORIA DOES ORDAIN AS FOLLOWS:

Section 1. Astoria Comprehensive Plan Section CP.080, Alderbrook Area, is deleted in its entirety and hereby amended to read as follows:

“CP.080. Alderbrook Area.

The Alderbrook Area generally lies between Lief Erikson Drive and the pier head line, and from ~~42nd~~ 41st to 54th Streets. It is an area of primarily older, single-family homes, with a few scattered duplexes. The area is topographically low, and some of it is in the 100-year floodplain. There are ~~two~~ four small parks ~~—, Alderbrook Hall and Park —one on at 4509 Lief Erikson Drive; LaPlante Park in the 4500 Block Cedar Street; Birch Street Ball Field at 49th and Birch Street; and Alderbrook Lagoon Beach at the foot of 53rd Street~~ the other on Birch Street. The only commercial uses are is the a small business on Lief Erikson Drive, a motel at 54th and Lief Erikson Drive, and a construction business at 49th and Ash Streets. A commercial fishing facility was located on the waterfront between 49th and 50th Streets; however this facility is currently being converted into an art studio/retreat. The Area also overlaps with the Astoria Riverfront Vision Plan “Neighborhood Greenway” area which extends along the Riverfront from 41st Street to the east side of the Alderbrook neighborhood at approximately 54th Street and between Lief Erikson Drive and the pier head line of the Columbia River as depicted on the City’s Zoning Map.

Alderbrook Area is the only older neighborhood directly on the waterfront, and this is discussed in the shorelands/estuary section. The area has historically been zoned Medium Density Residential (R-2). The adjacent Blue Ridge and Emerald Heights areas are zoned High Density Residential (R-3), and are primarily multi-family housing areas. The majority of structures in the Blue Ridge area were demolished prior to 2007 and the land is mostly vacant pending redevelopment. The adjacent motel is zoned General Commercial (C-3). The City limits line stops east of Blue Ridge and includes North Tongue Point industrial area and South Tongue Point, but excludes North Tongue Point Job Corps Center and the US Coast Guard station, although this area is in the City’s Urban Growth Boundary.

Advantages of the Alderbrook Area are the proximity to the waterfront, the lack of through traffic (away from Lief Erikson Drive), the neighborhood hall and neighborhood character, and the availability of lower cost housing. However, the limited access into the Alderbrook Area from Lief Erikson Drive creates concerns with increased traffic to the area with no secondary vehicular outlets. Disadvantages include the flooding potential, the traffic along Lief Erikson Drive (a problem when crossing to the playground), and the distance to school.”

Section 2. Astoria Comprehensive Plan Section CP.085.2, Alderbrook Area Policies, is deleted in its entirety and hereby amended to read as follows:

"The residential character of Alderbrook will be protected through the designation of the aquatic area from 41st Street to Tongue Point as ~~conservation~~natural, and by the present zoning pattern. Development in the 100-year flood area shall be subject to the requirements of the City's Flood Hazard Overlay Zone."

Section 3. Astoria Comprehensive Plan Section CP.085.3, Alderbrook Area Policies, is deleted in its entirety and hereby amended to read as follows:

"3. ~~Light industrial~~water-dependent / water-related development consistent with the ~~conservation~~natural estuary designation (such as commercial fishing operation) may be allowed so long as it does not conflict with the residential area and is consistent with the City's Riverfront Vision Plan."

Section 4. Astoria Comprehensive Plan Section CP.085.6, Alderbrook Area Policies, is deleted in its entirety and hereby amended to read as follows:

"6. The property west of the sewer lagoons is ~~presently~~ designated as a ~~potential~~ park site and is the current (2015) east terminus of the River Trail; it is zoned Institutional (IN) Medium-Density Residential (R-2). However, the site's use as a regional park raises problems of traffic generation on residential streets. The local community must be involved in any future decision regarding this area."

Section 5. Astoria Comprehensive Plan Section CP.085.8, Alderbrook Area Policies, is hereby amended by the addition to read as follows:

"8. Extension of the trolley service to the Alderbrook neighborhood should be investigated and considered.

Section 6. Astoria Comprehensive Plan Section CP.175.F, Uppertown / Alderbrook Subarea Plan, Aquatic and Shoreland Designations, is hereby deleted in its entirety and hereby amended to read as follows:

"The aquatic area between 29th and 41st Streets is designated Development to the pierhead line, except at the East End Mooring Basin where the designation corresponds to the outer boundary of the pier. East of 41st Street, the aquatic area is designated Conservation~~Natural~~."

Section 7. Effective Date. This ordinance and its amendment will be effective 30 days refollowing its adoption and enactment by the City Council.

ADOPTED BY THE COMMON COUNCIL THIS ____ DAY OF _____, 2015.

APPROVED BY THE MAYOR THIS ____ DAY OF _____, 2015.

Mayor

ATTEST:

Brett Estes, City Manager

ROLL CALL ON ADOPTION:

YEA

NAY

ABSENT

Commissioner Nemlowill
Herzig
Price
Warr

Mayor LaMear