



NOTICE OF LAND USE DECISION

You may have received this because you are an adjacent property owner, and this notice is required to be provided pursuant to ORS 215.416. The proposal is identified in this decision and will be located on the subject property.

Coos County Planning
60 E. Second
Coquille, OR 97423
<http://www.co.coos.or.us/>
Phone: 541-396-7770
planning@co.coos.or.us

This decision notice is required to be sent to the property owner(s), applicant(s), adjacent property owners (distance of notice is determined by zone area – Urban 100 feet, Rural 250 feet, and Resource 750 feet), special taxing districts, agencies with interest, or person that has requested notice. Please read all information carefully as this decision. (See attached vicinity map for the location of the subject property).

Date of Notice: **Wednesday, February 09, 2022**
File No: ACU-21-059

Proposal: Request for Single Family Dwelling in the Beaches and Dunes & Coastal Shoreland Boundary Overlay Zones.

Applicant(s): Deets Construction LLC
74968 Stargazer Lane
Coquille, OR 97423

Staff Planner: Amy Dibble, Planner II

Decision: **Approved with Conditions.** All decisions are based on the record. This decision is final and effective at close of the appeal period unless a complete application with the fee is submitted by the Planning Department at 5 p.m. on **Thursday, February 24, 2022**. Appeals are based on the applicable land use criteria. *Coos County Zoning and Land Development Ordinance (CCZLDO) General Compliance with Sections 1.1.300 Compliance with Comprehensive Plan and Ordinance Provisions and Article 6.1 Lawfully Created Lots or Parcels. The Dwelling Review is subject to Article 4.3.200.30 Zoning Tables for Urban and Rural Residential, Mixed Commercial-Residential, Industrial, Minor Estuary and South Slough; Section 4.3.220 Additional Conditional Use Review Standards criteria. Properties that are in a Special Development Consideration and/or overlays shall comply with the applicable review process identified by that Special Development Consideration and/or overlay located in Article 4.11. Civil matters including property disputes outside of the criteria listed in this notice will not be considered. For more information please contact the staff planner listed in this notice.*

Subject Property Information

Account Number: 2898900 / 2899300
Map Number: 29S1501CB-01600 / 1602

Property Owner: DURBIN LASTING LEGACY TRUST

Situs Address: No Situs Address Issued

Acreage: 0.24 / 0.12 Acres

Zoning: CONTROLLED DEVELOPMENT-10 (CD-10)

Special Development Considerations and Overlays: ARCHAEOLOGICAL AREAS OF INTEREST (ARC)
BANDON AIRPORT CONICAL ZONE (ABC)
BANDON URBAN GROWTH BOUNDARY (BGB)
BEACHES/DUNES - LIMITED (BDL)
COASTAL SHORELAND BOUNDARY (CSB)
NATURAL HAZARD - TSUNAMI (NHTHO)
NATURAL HAZARD - WILDFIRE (NHWF)

This notice shall be posted from February 9, 2022 to February 24, 2022

The purpose of this notice is to inform you about the proposal and decision, where you may receive more information, and the requirements if you wish to appeal the decision by the Director to the Coos County Hearings Body. Any person who is adversely affected or aggrieved or who is entitled to written notice may appeal the decision by filing a written appeal in the manner and within the time period as provided below pursuant to Coos County Zoning and Land Development Ordinance (CCZLDO) Article 5.8. If you are mailing any documents to the Coos County Planning Department the address is 225 N. Adams, Coquille OR 97423. Mailing of this notice to you precludes an appeal directly to the Land Use Board of Appeals.

Mailed notices to owners of real property required by ORS 215 shall be deemed given to those owners named in an affidavit of mailing executed by the person designated by the governing body of a county to mail the notices. The failure of the governing body of a county to cause a notice to be mailed to an owner of a lot or parcel of property created or that has changed ownership since the last complete tax assessment roll was prepared shall not invalidate an ordinance. **NOTICE TO MORTGAGEE, LIENHOLDER, VENDOR OR SELLER: ORS CHAPTER 215 (ORS 215.513) REQUIRES THAT IF YOU RECEIVE THIS NOTICE, IT MUST PROMPTLY BE FORWARDED TO THE PURCHASER.**

The application, staff report and any conditions can be found at the following link: <https://www.co.coos.or.us/planning/page/applications-2021-2>. The application and all documents and evidence contained in the record, including the staff report and the applicable criteria, are available for inspection, at no cost, in the Planning Department located at 60 E. Second, Coquille, Oregon. Copies may be purchased at a cost of 50 cents per page. The decision is based on the application submittal and information on record. The name of the Coos County Planning Department representative to contact is Amy Dibble, Planner II and the telephone number where more information can be obtained is (541) 396-7770.

Failure of an issue to be raised in a hearing, in person or in writing, or failure to provide statements of evidence sufficient to afford the Approval Authority an opportunity to respond to the issue precludes raising the issue in an appeal to the Land Use Board of Appeals.

Reviewed by: Amy Dibble Date: Wednesday, February 09, 2022 .
Amy Dibble, Planner II

This decision is authorized by the Coos County Planning Director, Jill Rolfe based on the staff's analysis of the Findings of Fact, Conclusions, Conditions of approval, application and all evidenced associated as listed in the exhibits.

EXHIBITS

Exhibit A: Conditions of Approval

Exhibit B: Vicinity Map & Template Map

The following exhibits are on file at the Coos County Planning Department and may be accessed by contacting the department. All noticeable decisions are posted on the website for viewing when possible.

Exhibit C: Staff Report -Findings of Fact and Conclusions

Exhibit D: Comments Received

Exhibit E: Application

EXHIBIT "A"

The applicant shall comply with the following conditions of approval with the understanding that all costs associated with complying with the conditions are the responsibility of the applicant(s) and that the applicant(s) are not acting as an agent of the county. If the applicant fails to comply or maintain compliance with the conditions of approval the permit may be revoked as allowed by the Coos County Zoning and Land Development Ordinance. Please read the following conditions of approval and if you have any questions contact planning staff.

CONDITIONS OF APPROVAL

1. All applicable federal, state, and local permits shall be obtained prior to the commencement of any development activity. If there were comments from any other agency were provided as part of this review, it is the responsibility of the property owner to comply.
2. Pursuant to CCZLDO § 5.9.100, a Zoning Compliance Letter shall be required prior to the commencement of construction of the proposed dwelling. This authorization is based on conditions of approval and the conditions that are required to be completed prior obtaining the ZCL are defined in this section. To show compliance with this section the applicant shall submit a letter with the following items to request that staff find the following conditions have been satisfied:
 - a. The property owner is responsible for ensuring compliance, and land use authorization shall remain recorded in the chain of title. The statement needs to include language that the purchaser of the property has been provided a copy of the land use approval containing all conditions or restrictions understands the obligation and agrees to fulfill the conditions unless a modification is approved as provided in this ordinance. The property owner is responsible for ensuring compliance, and land use authorization. The recorded deed convent shall be recorded with the County Clerk and copy provided to the Planning Department.
 - b. Section 4.11.132.4.4.a: Firebreak: a. This firebreak will be a primary safety zone around all structures. Vegetation within this primary safety zone may include mowed grasses, low shrubs (less than ground floor window height), and trees that are spaced with more than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet from the ground) branches. Accumulated needles, limbs and other dead vegetation should be removed from beneath trees. b. Sufficient Garden Hose to reach the perimeter of the primary safety zone (30 feet) shall be available at all times. c. The owners of the dwelling shall maintain a primary fuel-free break (30 feet) area surrounding all structures and clear and maintain a secondary fuel-free break on land surrounding all structures and clear and maintain a secondary fuel-free break on land surrounding the dwelling that is owned or controlled by the owner in accordance with the provisions in "Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design Standards for Roads" dated March 1, 1991, and published by Oregon Department of Forestry and shall demonstrate compliance with Table 1. Table one is addressed in the staff report based on down slope. This can be shown on a plot plan.
 - c. Section 4.11.132.4.4.e: All new and replacement structures shall use non-combustible or fire resistant roofing materials, as may be approved by the certified official responsible for the building permit. If they are not available yet then this will be a condition of approval on the ZCL.
 - d. Section 4.11.132.4.4.h: If the dwelling has a chimney or chimneys, each chimney shall have a spark arrester. A copy of the building plans shall be submitted. If they are not available, then this will be a condition of approval on the ZCL.
 - e. Access to new dwellings shall meet road and driveway standards in Chapter VII. Driveway/ Access Parking/Access permit application shall be signed off by the Coos County Road Department prior to issuance of a Zoning Compliance Letter.
 - f. Section 5.2.700 Development Transferability - Unless otherwise provided in the approval, a land use approval that was obtained through a conditional use process shall be transferable provided the transferor files a statement with the Planning Director signed by the transferee. This document

shall be recorded in the chain of title of the property, indicating that the transferee has been provided a copy of the land use approval containing all conditions or restrictions understands the obligation and agrees to fulfill the conditions, unless a modification is approved as provided in this ordinance. The property owner is responsible for ensuring compliance, and land use authorization shall remain recorded in the chain of title to alert a purchaser that development was approved subject to conditions and possible restrictions.

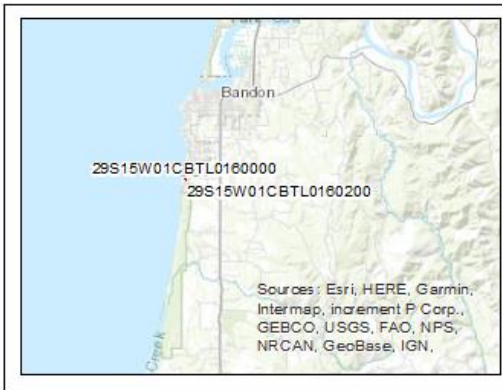
- g. Shall comply with the recommendations set forth in the Geologic Site Evaluation Report performed by Cascadia Geoservices, Inc. A representative from CGS be retained to observe general excavation, stripping, fill placement, footing subgrades, and subgrades and base rock for floor slabs and pavements. A post-construction report, from an Oregon Certified Engineering Geologist, is required that states all recommendations of the Geologic Site Evaluation Report have been complied with.
- h. All domestic and irrigation shall come from an offsite public water source.
- i. Shall submit an updated plot plan.
- j. Lot consolidation shall be completed.
- k. The applicant will be required to contact the Coquille Indian Tribe to schedule a monitor a minimum of 72-hours prior to project start time.

EXHIBIT "B"
Vicinity Map

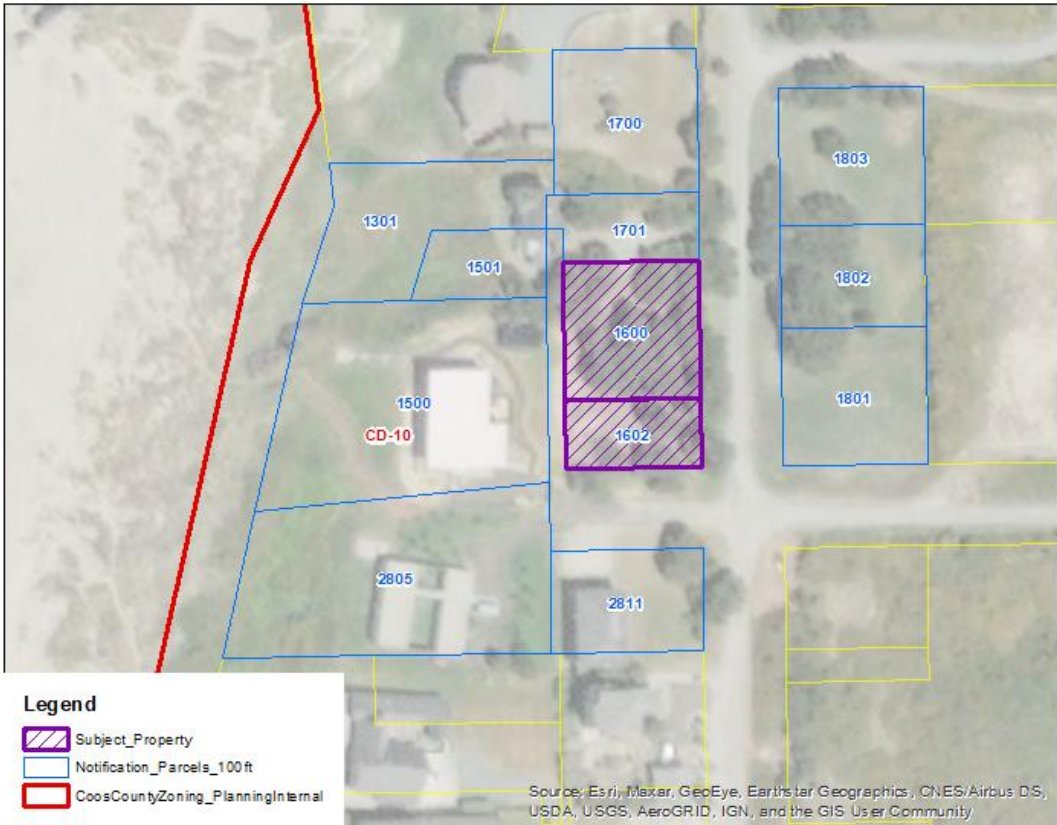


COOS COUNTY PLANNING DEPARTMENT

Mailing Address: 225 N. Adams, Coquille, Oregon 97423
Physical Address: 60 E. Second, Coquille Oregon
Phone: (541) 396-7770
TDD (800) 735-2900



File:	ACU-21-059
Applicant/ Owner:	Deets Construction LLC Summer and Corey Durbin
Date:	February 7, 2022
Location:	Township 29S Range 15W Section 1CB TL 1600/1602
Proposal:	Administrative Conditional Use



**EXHIBIT “C”
STAFF REPORT
FINDINGS OF FACT AND CONCLUSIONS**

I. PROPOSAL AND BACKGROUND/PROPERTY HISTORY INFORMATION AND PRIOR COMPLIANCE:

A. PROPOSAL: According to the application the property owner is seeking approval for a new Single-Family Dwelling in the Beaches & Dunes and Coastal Shoreland Boundary overlay zones. There is no indication that any other development is proposed at this time.

B. BACKGROUND/PROPERTY HISTORY:

On September 19, 1995, a zoning compliance letter (ZCL-95-437) was issued for septic site evaluation only

On February 27, 2000, a zoning compliance letter (ZCL-00-498) was issued for septic site evaluation only

C. LOCATION: The subject property is located southwest of the City of Bandon in the Sunset City area. Sunset City is part of the Bandon Urban Growth Boundary.

D. ZONING: - This property is zoned Controlled Development-10 (CD-10).

CONTROLLED DEVELOPMENT (CD)

The intent of the Controlled Development is to reserve areas that are experiencing or are projected to experience limited conversion of residential areas to commercial uses. Urban Growth Areas include Urban Growth Boundaries (UGB) and Urban Unincorporated Communities (UUC) that were developed to urban levels of development and could be included in an Urban Growth Boundary expansion in the future. This designation is applied to specific portions of the following Urban Growth Areas: Bandon, Charleston, Barview and Bunker Hill.

There are two different controlled development zoning districts: Controlled Development-5 (CD-5) and Controlled Development-10 (CD-10).

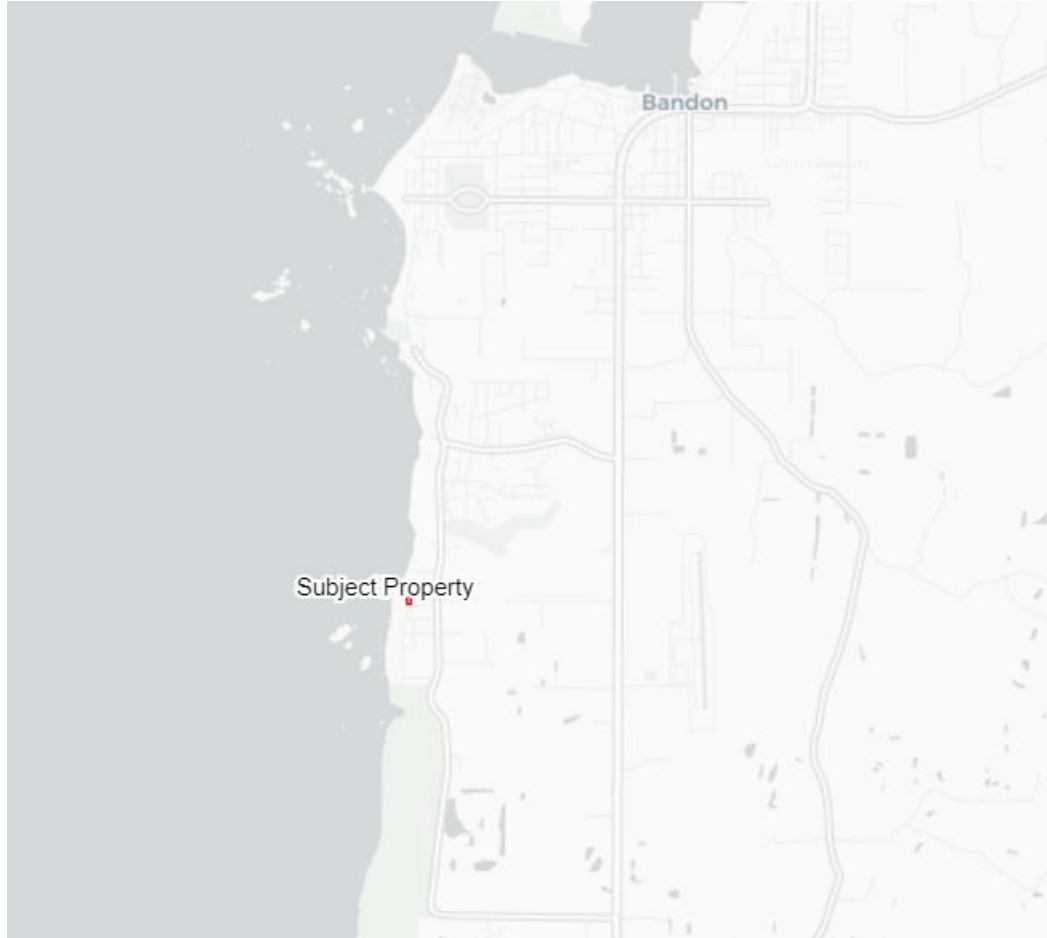
The purpose of the “CD-5” and “CD-10” district is to recognize the scenic and unique quality of selected areas within Urban Growth Boundaries, to enhance and protect the unique “village atmosphere,” to permit a mix of residential, commercial, and recreational uses and to exclude those uses which would be inconsistent with the purpose of this district, recognizing tourism as a major component of the County’s economy.

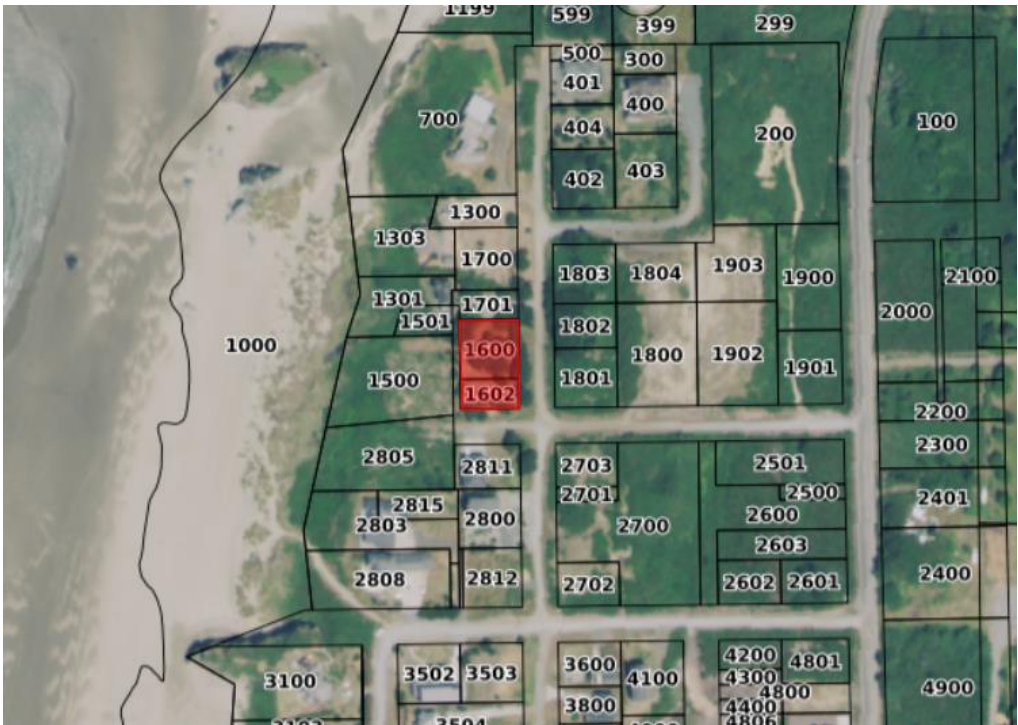
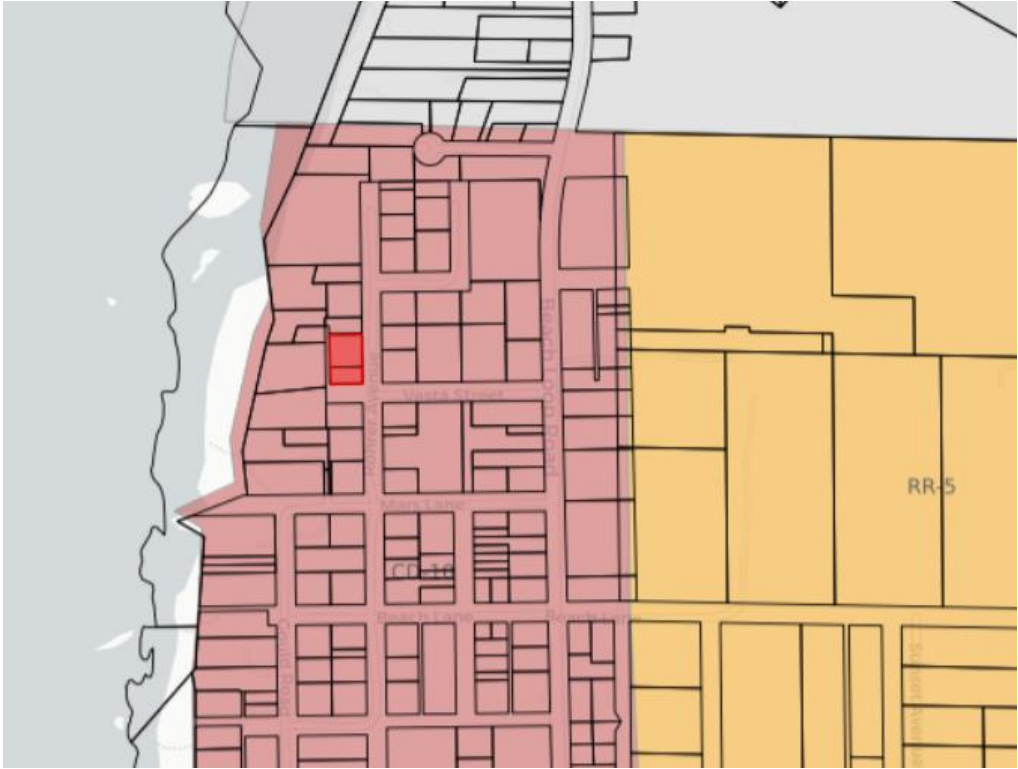
E. SITE DESCRIPTION AND SURROUNDING USES:

The subject property is located in Sunset City. Sunset City is a pre-ordinance platted subdivision within the City of Bandon Urban Growth Boundary. This area has been historically serviced with City of Bandon water and onsite septic treatment systems. This area is zoned Controlled Development-10. Sunset City consists of a mixture of single-family primary dwellings, single family secondary dwellings or investment properties, short-term vacation rentals, and undeveloped lots. While commercial use is plausible in CD-10, there historically has not been much interest in developing commercial uses in this area. The City of Bandon lies directly north

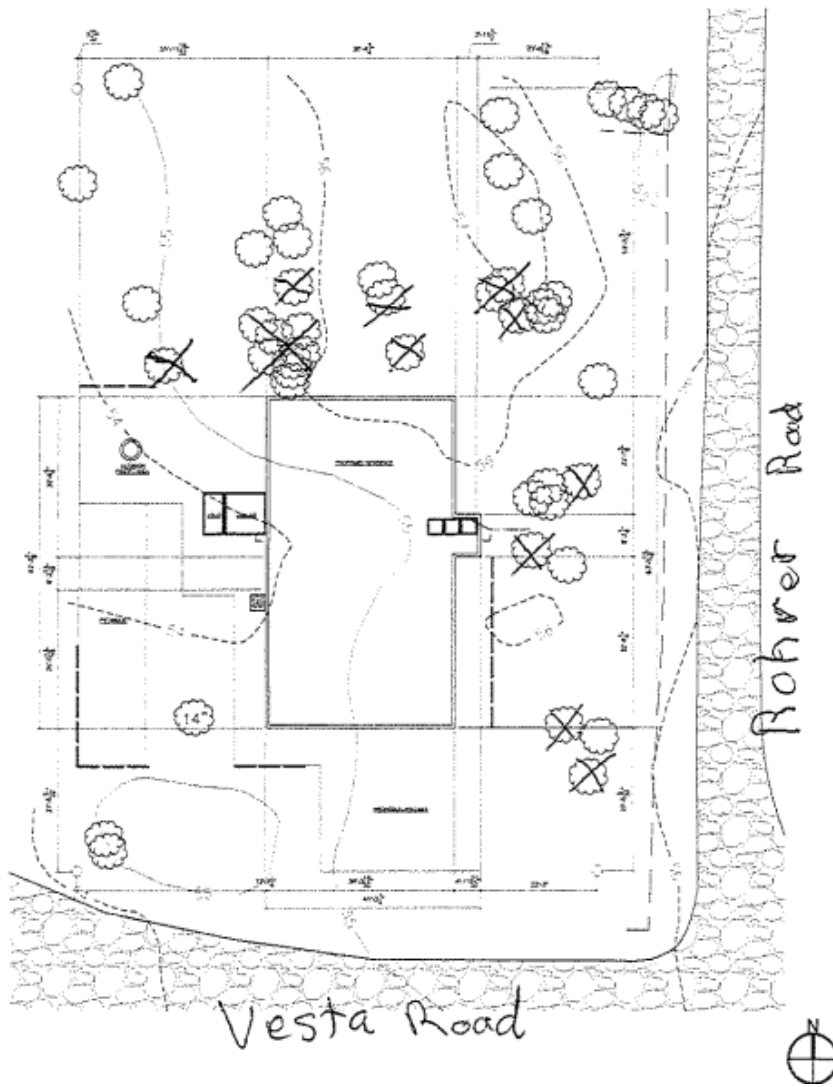
of Sunset City, while Devils Kitchen State Park is located south of the subdivision. To the east of the subdivision is lightly developed Rural Residential-5 properties. The Pacific Ocean and State beaches are located to the west of Sunset City. There is a public beach access point, on Mars Lane, located southwest of the subject property.

The subject property is a corner lot at the corner of Vesta Lane and Rohrer Road. There are undeveloped properties towards the east of subject property. There is a property being developed with a single-family dwelling located directly east across Rohrer Road. West of the subject property are developed properties with newer single-family dwellings with beach-frontage.





ACU-21-059



Maps are not to scale

F. COMMENTS:

- a. **PUBLIC AGENCY:** This property required request for comments from the Oregon Department of Aviation and the City of Bandon prior to the release of the decision.

The Oregon Department of Aviation stated that they no comment on File Number: ACU-21-059.

The City of Bandon state that a former agreement for water is in place. The City advises the landowner to contact the City Manager, Dan Chandler, for more information.

The comments received can be found in Exhibit D.

- b. **PUBLIC COMMENTS:** This property did not require any request for comments prior to the release of the decision and none were received.

LOCAL TRIBE COMMENTS: This property required request for comments from the Coquille Indian Tribe.

The Coquille Indian Tribe's response is as follows "*Our records show known cultural resources within extreme proximity to the project area. Due to the proximity to known cultural resources, we request that the landowner and/or contractor contact our office at (541) 808-5554 (Kassandra Rippee, Archaeologist/THPO) to schedule a Cultural Resource Monitor to be on site during all ground-disturbing activities. Please schedule the monitor a minimum of 72-hours in advance of anticipated project start time.*

The comments can be found in Exhibit D.

II. GENERAL PROPERTY COMPLIANCE:

A. COMPLIANCE PURSUANT TO SECTION 1.1.300:

It shall be unlawful for any person, firm, or corporation to cause, develop, permit, erect, construct, alter or use any building, structure or parcel of land contrary to the provisions of the district in which it is located. No permit for construction or alteration of any structure shall be issued unless the plans, specifications, and intended use of any structure or land conform in all respects with the provisions of this Ordinance, unless approval has been granted by the Hearings Body.

FINDING: Staff has reviewed the property history and the County determined at the time of this report this property is compliant. This does not mean that there is not additional information that was unavailable during this review that would make the properties non-complaint.

B. SECTION 6.1.125 LAWFULLY CREATED LOTS OR PARCELS:

C. "*Lawfully established unit of land*" means:

1. *The unit of land was created:*

- a. *Through an approved or pre-ordinance plat;*
- b. *Through a prior land use decision including a final decision from a higher court. A higher court includes the Land Use Board of Appeals;*
- c. *In compliance with all applicable planning, zoning and subdivision or partition ordinances and regulations at the time it was created.*
- d. *By a public dedicated road that was held in fee simple creating an interviewing ownership prior to January 1, 1986;*
- e. *By deed or land sales contract, if there were no applicable planning, zoning or subdivision or partition ordinances or regulations that prohibited the creation.*
- f. *By the claim of intervening state or federal ownership of navigable streams, meandered lakes or tidewaters. "Navigable-for-title" or "title-navigable" means that ownership of the waterway, including its bed, was passed from the federal government to the state at statehood. If a waterway is navigable-for-title, then it also is generally open to public use for navigation, commerce, recreation, and fisheries.*

FINDING: The unit of land was created pursuant to 6.1.125.1.a, through an approved or pre-ordinance plat. This property was found to be lawfully created. Therefore, at the time of this report the units of land are lawfully created.

III. STAFF FINDINGS AND CONCLUSIONS:

A. SUMMARY OF PROPOSAL AND APPLICABLE REVIEW CRITERIA:

The proposal is for Planning Director Approval of a new single-family conventional dwelling in Controlled Development-10 zoning district and within the Beaches & Dunes Area with Limited Development Suitability and Coastal Shoreland Boundary overlay zones.

B. KEY DEFINITIONS:

ACTIVITY: Any action taken either in conjunction with a use or to make a use possible. Activities do not in and of themselves result in a specific use. Several activities such as dredging, piling and fill may be undertaken for a single use such as a port facility. Most activities may take place in conjunction with a variety of uses.

COASTAL SHORELAND AREA: The lands lying between the Coastal Shorelands Boundary set forth elsewhere in this Plan and the line of nonaquatic vegetation, which is also known as the Section 404 Line.

DEVELOP: To bring about growth or availability; to construct or alter a structure, to conduct a mining operation, to make a physical change in the use or appearance of land, to divide land into parcels, or to create or terminate rights to access.

DEVELOPMENT: The act, process or result of developing.

DUNES, YOUNGER STABILIZED: A wind stable dune with weakly developed soils and vegetation.

LOT, PARCEL, OR TRACT FRONT LOT LINE: In the case of an interior lot, parcel, or tract, a line separating the lot, parcel or tract from the street; in the case of a corner lot, parcel or tract, a line separating a lot, parcel or tract from the street on which the improvement or contemplated improvement will face.

USE: The end to which a land or water area is ultimately employed. A use often involves the placement of structures or facilities for industry, commerce, habitation, or recreation.

ZONING DISTRICT: A zoning designation in this Ordinance text and delineated on the zoning maps, in which requirements for the use of land or buildings and development standards are prescribed.

ZONING TABLES FOR URBAN AND RURAL RESIDENTIAL, MIXED COMMERCIAL-RESIDENTIAL, COMMERCIAL, INDUSTRIAL, MINOR ESTUARY AND SOUTH SLOUGH

SECTION 4.3.200 Residential Uses – This category is for uses and structure for human occupancy as living quarters

30. Dwelling – Single Family Conventional	CD-10 CD	Subject To (27)(k)
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SECTION 4.3.210 – CATEGORIES AND REVIEW STANDARDS

(27)(k) Single family dwelling- A single household unit. Construction is characterized by no common wall or ceiling with another unit, including a mobile home unless otherwise allowed by under this ordinance.

Finding: According to the application the property owner is seeking approval to construct a new single-family dwelling on parcel in Controlled Development-10 zoning district. The dwelling—single family conventional is typically permitted in CD-10 zoning district as a compliance determination subject to condition 27 (k) in Section 4.3.210. A Conditional Use Application was required to be submitted because this proposal includes development within both the Beaches & Dunes Area with Limited Development Suitability and Coastal Shoreland Boundary overlay zones. There is no indication that any other development is proposed at this time.

The applicant's plot indicated they plan on a 27-foot setback from the southern property line (Vesta Lane). The plot plan also indicated they intend to use Vesta Lane for their driveway access. According to both the written application and plot plan, the proposed dwelling meets the definition of single-family dwelling. Therefore, these criteria have been addressed.

- **SECTION 4.3.220 ADDITIONAL CONDITIONAL USE REVIEW STANDARDS FOR USES, DEVELOPMENT AND ACTIVITIES LISTED IN TABLE 4.3.200. THIS SECTION HAS SPECIFIC CRITERIA SET BY THE ZONING DISTRICT FOR USES, ACTIVITIES AND DEVELOPMENT:**

FINDING: While this property requires a discretionary review for the Special Development Consideration the use proposed is permit and not subject to any special conditional use review. Therefore, this section is not applicable.

- **SECTION 4.3.225 GENERAL SITING STANDARDS**

All new USES, activities and development are subject to the following siting standards:

- (1) *Agricultural and Forest Covenant - Any applicant for a dwelling permit adjacent to a Forest or Exclusive Farm Zone shall sign a statement on the Compliance Determination or Zoning Clearance Letter acknowledging that: "the normal intensive management practices occurring on adjacent resource land will not conflict with the rural residential landowner's enjoyment of his or her property.*
- (2) *Fences, Hedges, and Walls: No requirement, but vision clearance provisions of Section 7.1.525 apply.*
- (3) *Limitation on uses of manufactured dwellings/structures for commercial purposes pursuant to ORS 466 et seq. Manufactured dwellings shall not be used for commercial purposes except:*
 - (a) Where use of the manufactured dwelling for commercial purposes is authorized by the Building Codes Agency.*
 - (b) Where used as a temporary sales office for manufactured structures; or*
 - (c) As part of an approved home occupation. [OR-92-07-012PL]*
- (4) *New lots or parcels - Creation of lots or parcels, unless it meets the circumstances of § 5.6.130, shall meet the street frontage, lot width, lot depth and lot size. Minimum road frontage/lot width shall be met unless waived by the Planning Director in consultation with the County Surveyor and County Roadmaster due to creating an unsafe or irregular configuration:*
 - (a) Minimum Street frontage should be at least 30 feet; and*
 - (b) Minimum lot width and Minimum lot depth is 50 feet.*

Minimum parcel/lot size cannot be waived or varied unless otherwise provided by a specific zoning regulation. Tax lot creation and consolidations do not change the legally created status of a lot or parcel.
- (5) *Parking - Off-street access, parking and loading requirements per Chapter VII apply.*
- (6) *Riparian -*

- (a) *Riparian vegetation setback within 50 feet of a estuarine wetland, stream, lake or river, as identified on the Coastal Shoreland and Fish and Wildlife habitat inventory maps, shall be maintained except:*
- i. *Trees certified as posing an erosion or safety hazard. Property owner is responsible for ensuring compliance with all local, state and federal agencies for the removal of the tree.*
 - ii. *Riparian vegetation may be removed to provide direct access for a water-dependent use if it is a listed permitted within the zoning district;*
 - iii. *Riparian vegetation may be removed in order to allow establishment of authorized structural shoreline stabilization measures;*
 - iv. *Riparian vegetation may be removed to facilitate stream or stream bank clearance projects under a port district, ODFW, BLM, Soil & Water Conservation District, or USFS stream enhancement plan;*
 - v. *Riparian vegetation may be removed in order to site or properly maintain public utilities and road right-of-ways;*
 - vi. *Riparian vegetation may be removed in conjunction with existing agricultural operations (e.g., to site or maintain irrigation pumps, to limit encroaching brush, to allow harvesting farm crops customarily grown within riparian corridors, etc.) provided that such vegetation removal does not encroach further into the vegetation buffer except as needed to provide an access to the water to site or maintain irrigation pumps; or*
 - vii. *The 50 foot riparian vegetation setback shall not apply in any instance where an existing structure was lawfully established and an addition or alteration to said structure is to be sited not closer to the estuarine wetland, stream, lake, or river than the existing structure and said addition or alteration is not more than 100% of the size of the existing structure's "footprint".*
- (b) *Riparian removal within the Coastal Shoreland Boundary requires an Administrative Conditional Use application and review. See Special Development Considerations Coastal Shoreland Boundary.*
- (c) *The 50' measurement shall be taken from the closest point of the ordinary high water mark to the structure using a right angle from the ordinary high water mark.*
- (7) *Setbacks:*
- (a) *All Development with the exception of fences shall be set back a minimum of thirty-five (35) feet from any road right-of-way centerline, or five (5) feet from the right-of-way line, whichever is greater. This setback may be greater under specific zoning siting requirements.*
 - (b) *Firebreak Setback - New or replacement dwellings on lots, parcels or tracts abutting the "Forest" zone shall establish and maintain a firebreak, for a distance of at least 30 feet in all directions. Vegetation within this firebreak may include mowed grasses, low shrubs (less than ground floor window height), and trees that are spaced with more than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet from the ground) branches. Accumulated needles, limbs and other dead vegetation should be removed from beneath trees.*
- (8) *OUTDOOR STORAGE IN RESIDENTIAL ZONES (a) Boats and trailers, travel trailers, pick-up campers or coaches, motorized dwellings, and similar recreation equipment may be stored on a lot but not used as an accessory use; (b) Automotive vehicles or trailers of any kind or type without current license plates, where required, and which are not in mechanical working order, shall not be parked or stored on any residentially zoned property other than in completely enclosed buildings; (c) One operating truck may be stored on the lot of a truck driver provided it is accessory to the main use of the property. Additional trucks shall not be allowed.*

FINDING: The application had a driveway and parking form included. This shall be signed off by the Road Access Manager prior to receiving a Zoning Compliance Letter. There is no riparian area that requires setbacks. The applicant shall comply with the outdoor storage in residential zones. The proposal meets the applicable requires with conditions of approval.

• **SECTION 4.3.230 ADDITIONAL SITING STANDARDS**

*This section has specific siting standards and criteria set by the zoning district for USES, activities and development: ****

(3) *Controlled Development (CD) - The following siting standards apply to all USES, activities and development within the CD zoning district.*

(a) *Minimum Lot size:*

(1) *The following Controlled Development-5 minimum lot sizes shall apply:*

1. *Sites having both public water and public sewer cannot be less than 5,000 square feet.*
2. *Sites not having both public water and public sewer cannot be less than one (1) acre.*
3. *Dwelling unit density shall not exceed one (1) unit per minimum lot size, except each additional attached dwelling unit requires 1200 additional square feet above the minimum lot size.*

(2) *The following Controlled Development-10 minimum lot sizes shall apply:*

1. *Site not having both public water and public sewer cannot be less than one (1) acre.*
2. *Sites having both public water and public sewer cannot be less than 10,000 square feet.*
3. *Dwelling unit density shall not exceed one (1) unit per minimum lot size, except each additional attached dwelling unit requires 1200 additional square feet above the minimum lot size. (OR-00-05-014PL)*

(b) *Density or Size limits -*

- (1) *Dwelling density shall be no more than one dwelling per lawfully created parcel unless otherwise provided for by this ordinance.*
- (2) *If lawfully created parcels are less than one acre in size and not served by a public sewer then Department of Environmental Quality, State Building Codes and Oregon Department of Water Resources should be consulted by the developer prior to seeking a land use authorization to construct a dwelling as there may be development limitations.*

(c) *Setbacks:*

- (1) *Front Setback: 20 feet.*
- (2) *Side and Rear Set-Back: The side and rear setback shall be a minimum of 5 feet unless the side or rear yard is adjacent to a street or road (corner lot) the minimum setback shall be 15 feet from that street or road.*
- (3) *Setback exception – Front yard setback requirements of this Ordinance shall not apply in any residential district where the average depth of existing front yards on developed lots within the same zoning district block, but no further than 250 feet from the exterior side lot lines of the lot and fronting on the same side of the street as such lot, is less than the minimum required front yard building setback. In such cases the front yard setback requirement on*

any such lot shall not be less than the average existing front yard building setback.

- (d) Building Height - Maximum Building height is 35 feet. However, spires, towers, domes, steeples, flag poles, antennae, chimneys, solar collectors, smokestacks, ventilators or other similar objects may be erected above the prescribed height limitations, provided no usable floor.*

FINDING: There is only one Single Family Dwelling proposed. No new lot creation is proposed. The applicant stated that a consolidation request has been submitted. The applicant's plot indicated once the tax lots are consolidated the dwelling is approximately 27 feet from Vesta Lane. The plot plan also indicated they intend to use Vesta Lane their driveway access. As a condition of approval, the applicants will be required to submit a new plot plan indicating the setback distance from Rohrer Road, the rear and western boundary. The building height is not indicated but shall not exceed the 35 feet requirement. The new plot plan shall meet the submittal requirements indicated in the application packet for staff to ensure that all setbacks will be complied with. Therefore, this has been addressed.

SECTION 4.11.125 Special Development Considerations:

The considerations are map overlays that show areas of concern such as hazards or protected sites. Each development consideration may further restrict a use. Development considerations play a very important role in determining where development should be allowed in the Balance of County zoning. The adopted plan maps and overlay maps have to be examined in order to determine how the inventory applies to the specific site.

4.11.128 Historical, Cultural and Archaeological Resources, Natural Areas and Wilderness (Balance of County Policy 5.7)

The Historical/Archeological maps have inventoried the following:

- Historical;
- Area of Archaeological Concern;
- Botanical; and
- Geological Resources.

Purpose Statement:

Coos County shall manage its historical, cultural and archaeological areas, sites, structures and objects so as to preserve their original resource value. This strategy recognizes that preservation of significant historical, cultural and archaeological resources is necessary to sustain the County's cultural heritage.

- b. Areas of Archaeological Concern: Coos County shall continue to refrain from wide-spread dissemination of site-specific inventory information concerning identified archaeological sites. Rather, Coos County shall manage development in these areas so as to preserve their value as archaeological resources.
- i. This strategy shall be implemented by requiring development proposals to be accompanied by documentation that the proposed project would not adversely impact the historical and archaeological values of the project's site. "Sufficient documentation" shall be a letter from a qualified archaeologist/historian and/or a duly authorized representative of a local Indian tribe(s).

ii. Properties which have been determined to have an "archaeological site" location must comply with the following steps prior to issuance of a "Zoning Compliance Letter" for building and/or septic permits.

1) The County Planning Department shall make initial contact with the Tribe(s) for determination of an archaeological site(s). The following information shall be provided by the property owner/agent:

- a) Plot plan showing exact location of excavation, clearing, and development, and where the access to the property is located;
- b) Township, range, section and tax lot(s) numbers; and
- c) Specific directions to the property.

2) The Planning Department will forward the above information including a request for response to the appropriate tribe(s).

3) The Tribe(s) will review the proposal and respond in writing within 30 days to the Planning Department with a copy to the property owner/agent.

4) It is the responsibility of the property owner/agent to contact the Planning Department in order to proceed in obtaining a "Zoning Compliance Letter" (ZCL) or to obtain further instruction on other issues pertaining to their request.

iii. In cases where adverse impacts have been identified, then development shall only proceed if appropriate measures are taken to preserve the archaeological value of the site. "Appropriate measures" are deemed to be those which do not compromise the integrity of remains, such as:

- 1) Paving over the sites;
- 2) Incorporating cluster-type housing design to avoid the sensitive areas; or
- 3) Contracting with a qualified archaeologist to remove and re-inter the cultural remains or burial(s) at the developer's expense. If an archaeological site is encountered in the process of development, which previously had been unknown to exist, then, these three appropriate measures shall still apply. Land development activities found to violate the intent of this strategy shall be subject to penalties prescribed by ORS 97.745 (Source: Coos Bay Plan).

iv. This strategy is based on the recognition that preservation of such archaeologically sensitive areas is not only a community's social responsibility but is also a legal responsibility pursuant to Goal #5 and ORS 97.745. It also recognizes that historical and archaeological sites are non-renewable, cultural resources (Source: Coos Bay Plan).

Finding: This property required comments from the local Tribes prior to the release of this decision. The Coquille Indian Tribe requested that the landowner and/or contractor contact their office at (541) 808-5554 (Kassandra Rippee, Archaeologist/THPO) to schedule a Cultural Resource Monitor to be on site during all ground-disturbing activities. Please schedule the monitor a minimum of 72-hours in advance of anticipated project start time. Therefore, this criterion has been addressed.

BEACH AND DUNES AREAS WITH LIMITED DEVELOPMENT SUITABILITY CRITERIA

4.11.129 Beaches and Dunes (Policy 5.10)

The Beaches and Dunes map has inventoried the following:

- *Beaches and Dunes*
 - *Suitable for most uses; few or no constraints (Does not require a review)*
 - *Limited Suitability; special measures required for most development*
 - *Not Suitable for Residential, commercial or Industrial Structures*

Purpose Statement:

Coos County shall base policy decisions for dunes on the boundaries for these areas as identified on the plan map titled "Development Potential within Ocean Shorelands and Dunes" and the boundaries delineates the following specific areas "Suitable", "Limited Suitability" and "Not Suitable" areas of development potential.

- a. *Limited Suitability: "Beach and Dune Areas with Limited Development Suitability" includes all dune forms except older stabilized dunes, active foredunes, conditionally stable foredunes that are subject to ocean undercutting or wave overtopping, and interdune areas (deflation plains) subject to ocean flooding.*

The measures prescribed in this policy are specifically required by Statewide Planning Goal #18 for the above-referenced dune forms; and that this strategy recognizes that designated mitigation sites must be protected from other uses.

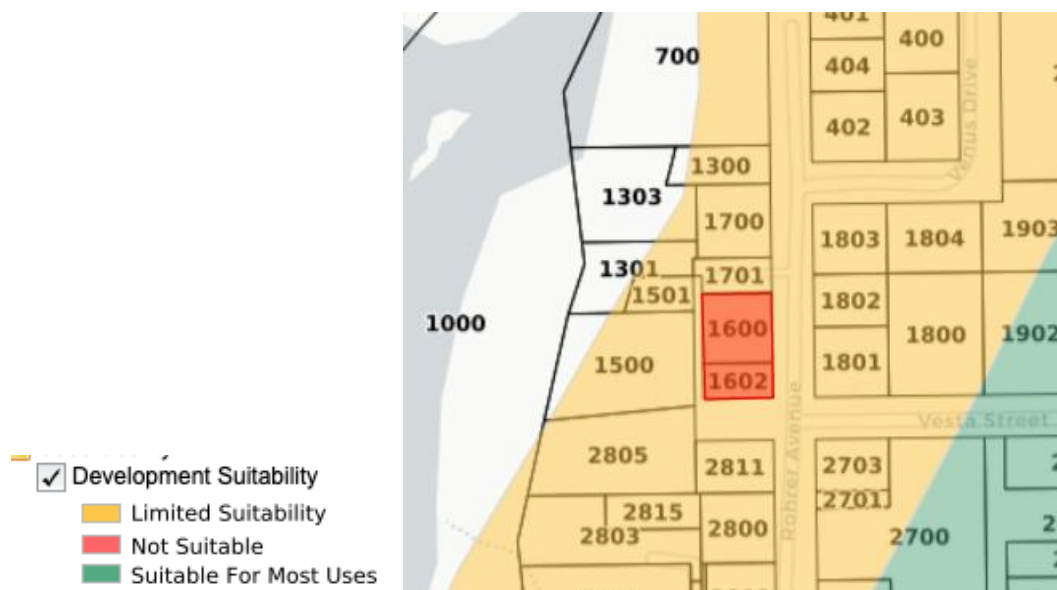
Implementation shall occur through an Administrative Conditional Use process, which shall include submission of a site investigation report that addresses this subsection, by a qualified registered and licensed geologist or engineer.

- i. *Coos County shall permit development within areas designated as "Beach and Dune Areas with Limited Development Suitability" only upon the establishment of findings that consider at least:*
 - a) *The type of use proposed and the adverse effects it might have on the site and adjacent areas;*
 - b) *The need for temporary and permanent stabilization programs and the planned maintenance of new and existing vegetation;*
 - c) *The need for methods for protecting the surrounding area from any adverse effects of the development; and*
 - d) *Hazards to life, public and private property, and the natural environment which may be caused by the proposed use.*
- ii. *Further, Coos County shall cooperate with affected local, state and federal agencies to protect the groundwater from drawdown, which would lead to loss of stabilizing vegetation, loss of water quality, or intrusion of saltwater into water supplies. Coos*

County shall cooperate with state and federal agencies in regulating the following actions in the beach and dune areas with limited development potential:

- a) Destruction of desirable vegetation (including inadvertent destruction by moisture loss or root damage);
- b) The exposure of stable and conditionally stable areas to erosion;
- c) Construction of shore structures which modify current air wave patterns leading to beach erosion; and
- d) Any other development actions with potential adverse impacts.

Finding: The applicant submitted a Geological Site Evaluation Report for the proposed dwelling as it is located within the limited suitability for Beaches & Dunes.



The Geotechnical Site Evaluation Report was performed by Cascadia Geoservices and is written and stamped by Eric Oberbeck, Certified Engineering Geologist #1332. The engineering geologist acknowledged the applicant’s proposal is to construct a new two-story, approximately 2500 sq ft, single-family dwelling and the geological report is based on this proposed use. According to the geological report, a preliminary site visit by Cascadia Geoservices was conducted on June 18, 2021. A second site visit was conducted on August 8, 2021 which five exploratory test pits were excavated.

The geologic report noted that the subsurface as follows: “*the sand dunes on the site are classified as Younger, Stabilized Dunes, in accordance with USDA findings. This agrees with our site evaluation. Coos County has inventoried the site and surrounding area and has classified the site as having “limited suitability” for development.*”

The dune formation is classified as a **DUNES, YOUNGER STABILIZED: A wind stable dune with weakly developed soils and vegetation.** This type of dune formation is classified as a limited suitability for

development since it does not fit the definition of ‘beaches and dunes area unsuitable for development’ per Coos County Comprehensive Plan 5.10.3.iv.a.



The geological report including the results of soil testing and the recommendations for site preparation and grading, structural fill placement and compaction, cut and fill slopes, site drainage and erosion control, trenching and piping, and recommendation for the construction of building foundations. As a condition of approval, the applicants/landowners will be required to follow all design and site development recommendations prescribed by this report. The geologic report specifically required that *“a representative from CGS be retained to observe general excavation, stripping, fill placement, footing subgrades, and subgrades and base rock for floor slabs and pavements”*. These requirements will be made a condition of approval.

Based on the applicant’s proposal, the engineering geologist noted that *“based on our site evaluation and on our experience working in this region, it is our opinion that the proposed development will not have an adverse impact on either the site or adjacent areas”*. Therefore, (a)(i)(a) criteria has been addressed.

The engineering geologist also stated in their report that *“it is our opinion that because the site is level and the soils well drained, there is no need for temporary or permanent stabilization programs and/or maintenance of new and existing vegetation other than those typically incorporated into residential landscaping”*. Therefore, (a)(i)(b) criteria has been addressed.

The geologic report stated that *“we see no hazards to life, public and private property, or to the natural environment by the proposed development”*. Therefore, (a)(i)(c) criteria has been addressed.

The engineering geologist stated that *“we see no hazards to life, public and private property, or to the natural environment by the proposed development”*. Therefore, (a)(i)(d) criteria has been addressed.

The geologic report noted *“, it is our professional opinion that the proposed development will not cause excessive destruction of desirable vegetation (including inadvertent destruction by moisture loss or root damage), cause exposure of stable and conditionally stable areas to erosion or modify current air wave patterns leading to beach erosion”*. Therefore, (a)(ii)(a) criterion has been addressed. In order to meet the criteria for (a)(ii)(b,c), a condition of approval will be place on the subject property that all domestic and irrigation shall come from an offsite public water source. This condition will help prevent water drawn down which will negatively affect native vegetation and may cause saltwater intrusion into the water table.

The geologic report also stated, “the proposed development will not have an adverse impact on either the site or adjacent areas”. Therefore, (a)(ii)(d) criterion has been addressed.

4.11.130 Non-Estuarine Shoreland Boundary (Balance of County Policy 5.10)

The Coastal Shoreland Boundary map has inventoried the following:

- *Coastal Shoreland Boundary*
- *Beach Erosion*
- *Coastal Recreation Areas*
- *Area of Water-Dependent Uses*
- *Riparian Vegetation*
- *Fore Dunes*
- *Head of Tide*
- *Steep Bluffs over 50% Slope*
- *Significant wetland wildlife habitats*
- *Wetlands under agricultural use*
- *Areas of Exceptional Aesthetic or Scenic Quality and Coastal Headlands*
- *Headland Erosion*

Purpose Statement:

Protection of major marshes (wetlands), habitats, headlands, aesthetics, historical and archaeological sites: Coos County shall provide special protection to major marshes, significant wildlife habitat, coastal headlands, exceptional aesthetic resources, and historic and archaeological sites located within the Coastal Shorelands Boundary of the ocean, coastal lakes and minor estuaries. This strategy shall be implemented through plan designations and ordinance measures that limit uses in these special areas to those uses that are consistent with protection of natural values, such as propagation and selective harvesting of forest products, grazing, harvesting wild crops, and low intensity water-dependent recreation. This strategy recognizes that special protective consideration must be given to key resources in coastal shorelands over and above the protection afforded such resources elsewhere in this plan.

- i. Uses allowed within the Coastal Shoreland Boundary: This strategy recognizes: (1) that Coos County's rural shorelands are a valuable resource and accordingly merit special consideration; and (2) that Statewide Planning Goal #17 places strict limitations on land divisions within coastal shorelands.*
 - f) single family residences on existing lots, parcels, or units of land when compatible with the objectives and implementation standards of the Coastal Shorelands goal, and as otherwise permitted by the underlying zone; or*

FINDING: The applicant is proposing a single-family dwelling within the CD-10 zone. The subject property has multiple other overlay zones, including the Coastal Shoreland Boundary. Additional findings for compatibility of the proposed dwelling and Coastal Shoreland Boundary are below.

ii. A site plan and design review is only necessary when required in Coos County Comprehensive Plan Volume I Part 3 § 3.5: Structures associated with the above uses, with the exception of farm and forest uses, shall only be permitted after an Administrative Conditional Use Review or higher review addressing the criteria and requirements of this subsection below and upon a finding that such uses do not otherwise conflict with the Special Development Considerations and Overlay Zones found in this Ordinance.

- a) Site Review and Approval Criteria.*

Construction, site development and landscaping shall be carried out in substantial accord with the plans, drawings, sketches and other documents as approved.

Nothing in this subsection shall be construed to prevent ordinary repair, maintenance and replacement of any part of the building or landscaping which does not involve a substantial change from the purpose and objectives of this section. Proposed "substantial changes" shall be submitted to the Planning Director for approval.

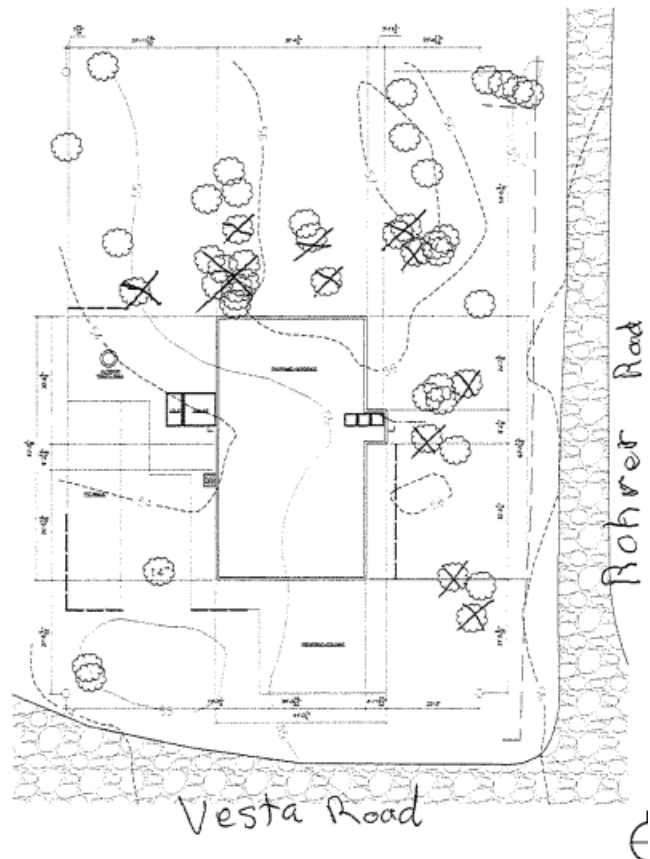
All variances from the site development criteria which are deemed necessary by the applicant shall be requested pursuant to ARTICLE 5.3.

These standards are intended to provide a frame of reference for the applicant to the development of a site and building plans as well as a method of review. These standards shall not be regarded as inflexible requirements, nor do they advocate any particular architectural style, for they are intended to encourage creativity, invention and innovation. The following standards shall be utilized in reviewing the plans, drawings, sketches and other documents required under for this review:

1. Landscaping
 - a. The landscape shall be such to minimize soil erosion and lessen the visual impact;

FINDING: The applicant is stated that the "proposed residence will be built amongst the existing Shore Pine trees to help preserve the unique coastal forest feel of the area".

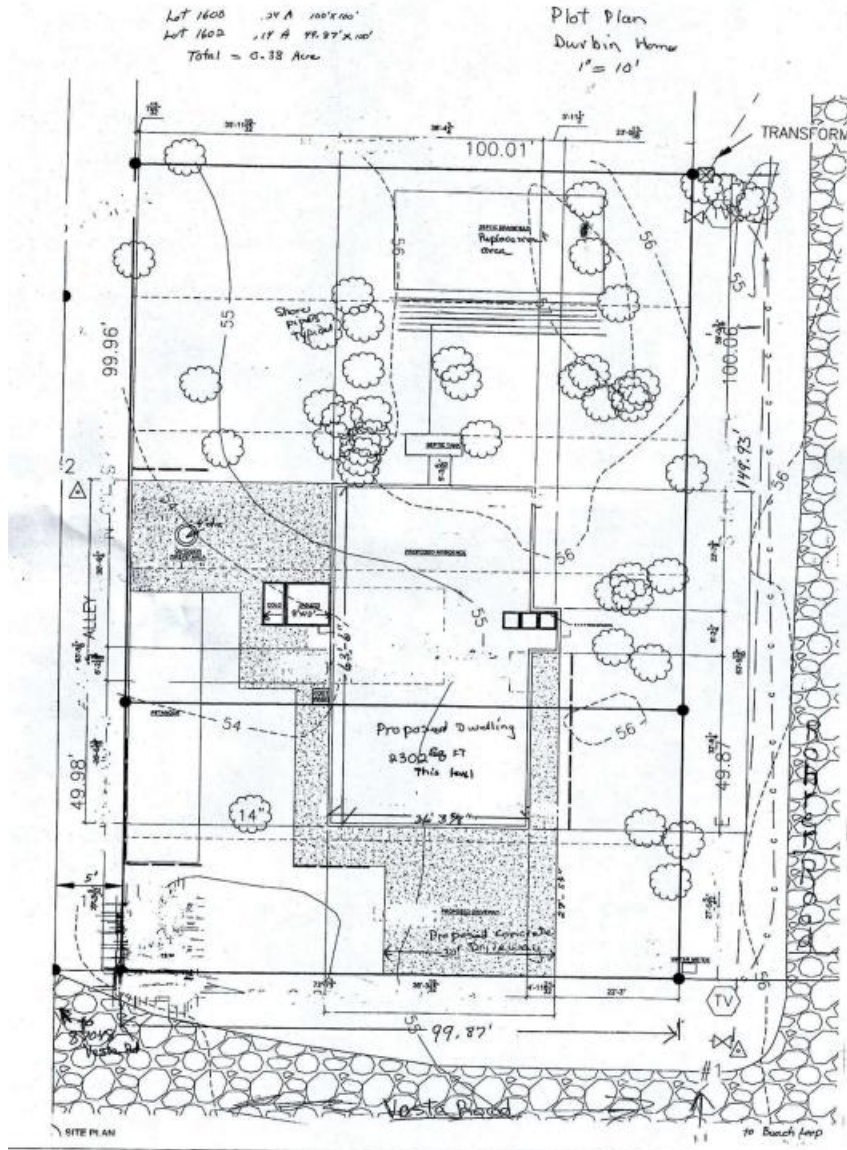
Trees to be removed
to create Firebreak



The applicant noted a few Shore Pine trees will need to be removed by home to meet the firebreak standards. The firebreak standards will be addressed further below. Therefore, this criterion has been met.

b. Any grade changes shall be in keeping with the general appearance of neighboring developed areas.

FINDING: The subject property is located in Sunset City. Sunset City is a pre-ordinance platted subdivision within the City of Bandon Urban Growth Boundary. The applicant stated “the property is mostly flat with approximately 3 feet of elevation change occurring throughout the lot. Please see attached plot plan for elevations”.

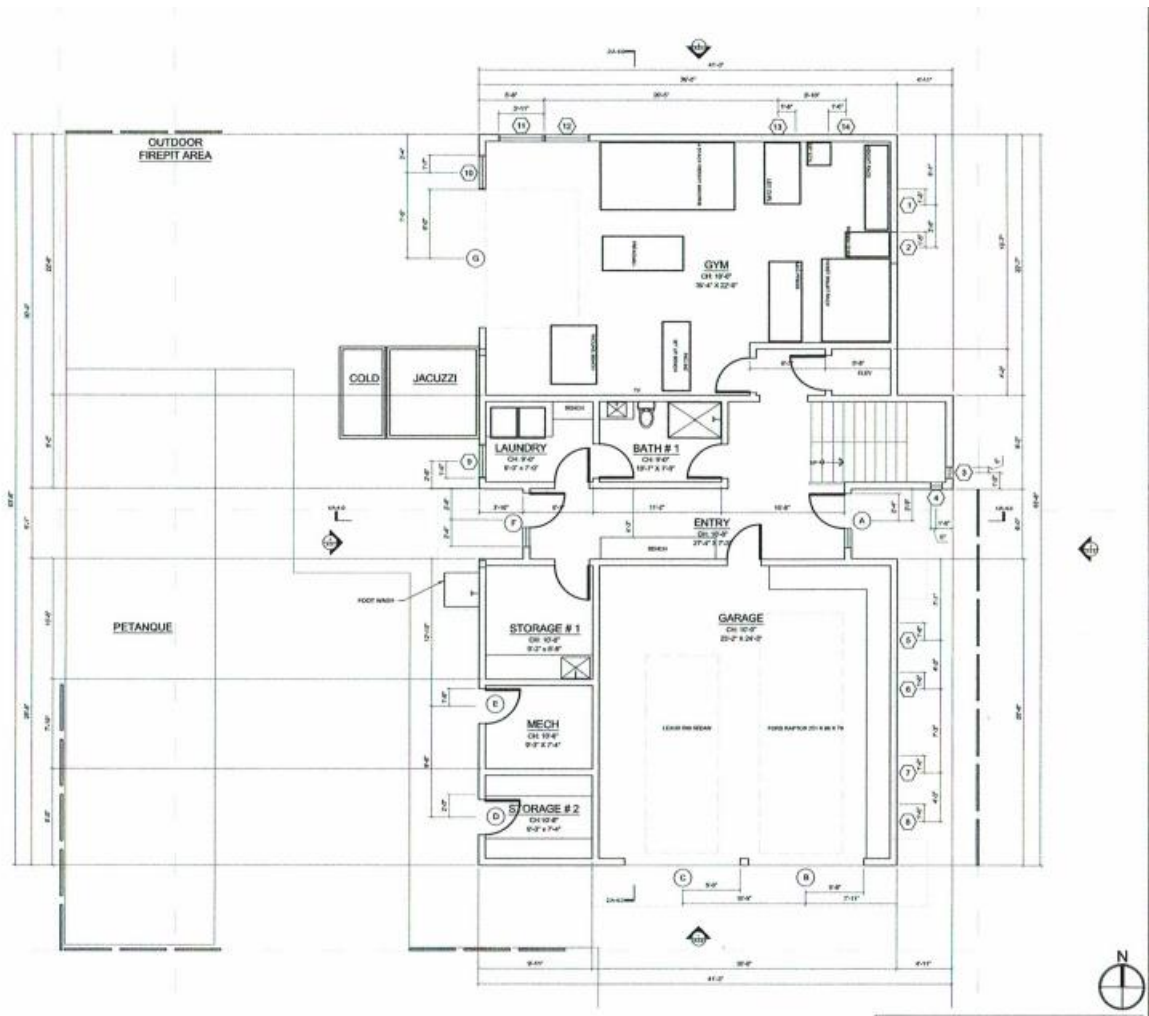


2. Structures

a. Proposed structures shall be related harmoniously to the terrain and to existing buildings in the vicinity that have a visual relationship to the proposed buildings;

FINDING: The subject property is located in Sunset City. Sunset City is a pre-ordinance platted subdivision within the City of Bandon Urban Growth Boundary. This area has been historically serviced with City of Bandon water and onsite septic treatment systems. This area is zoned Controlled Development-10. Sunset City consists of a mixture of single-family primary dwellings, single family secondary dwellings or investment properties, short-term vacation rentals, and undeveloped lots. While commercial use is plausible in CD-10, there historically has not been much interest in developing commercial uses in this area. The City of Bandon lies directly north of Sunset City, while Devils Kitchen State Park is located south of the subdivision. To the east of the subdivision is lightly developed Rural Residential-5 properties. The Pacific Ocean and State beaches are located to the west of Sunset City. There is a public beach access point, on Mars Lane, located southwest of the subject property.

The subject property is on the corner of Vesta Lane and Rohrer Road. There are undeveloped properties towards the east of subject property. There is a property being developed with a single-family dwelling located directly east across Rohrer Road. West of the subject property are developed properties with newer single-family dwellings with beach-frontage.



Staff finds that proposed development will be occupy the usual amount of lot coverage as the existing residential properties.

b. *The achievement of such relationship may include the enclosure of space in conjunction with other existing buildings or other proposed buildings and the creation of focal points with respect to avenues of approach, terrain features or other buildings.*

FINDING: There are no existing buildings on the subject property. The applicant notes the proposal is for a new two-story home with enclosed garage. Staff took into consideration the shape and smaller portion of the subject property where development could be placed, the need for onsite septic installation, the distance between the drain field locations, and the substantially developed single family residential development on adjoining neighboring properties. Staff determines there is no reasonable need for enclosure of any space in conjunction with existing or proposed buildings.

3. *Drives, Parking and Circulation*

With respect to vehicular and pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to the location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and must comply with the standards found in Chapter VII. The Roadmaster is responsible for determining compliance with this subsection.

FINDING: The access driveway is from the existing Vesta Lane. The developable portion of the subject property is limited to a specific access point given the need for placing the septic drain field on the northern portion of the subject property. The applicant will need to submit a Driveway Confirmation, this will have to be signed off from the County Roadmaster prior to requesting a Zoning Compliance Letter. The County Road Department will verify this criterion is sufficient during this process.

4. *Surface Water Drainage*

Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties, the public storm drainage system, or create environmental problems.

FINDING: First, Staff has access to Coos County Public Works records and is unaware of any public storm drainage systems within the Sunset City subdivision. The developable portion of the subject property is relatively flat with only a few feet of site elevation changes. Staff finds that there is no evidence presented that this proposal would result in a negative effect. The only portion of the application that mentions drainage is in the geologic report. The engineering geologist noted that “*we recommend that a robust perimeter drainage system be installed around the foundation and that the pad be graded to provide positive drainage away from the house*”. The geologic report did note that “*it is our opinion that because the site is level and the soils well drained, there is no need for temporary or permanent stabilization programs and/or maintenance of new and existing vegetation other than those typically incorporated into residential landscaping*”. Therefore, Staff finds that the criteria for surface water drainage have been met.

5. *Utility Service*

- a. *Whenever feasible, electric, telephone and other utility lines shall be underground;*
- b. *Any utility installations remaining above ground shall be located so as to have an harmonious relation to neighboring properties and the site;*
- c. *The proposed method of sanitary sewage disposal from all buildings shall be indicated.*

FINDING: The applicant did not indicate they plan on installing underground power. However, the City of Bandon supplies electric services to Sunset City through underground power lines. Therefore, Staff concludes it is reasonable to conclude the power lines will be underground. The applicant did not indicate if any telephone line services will be installed at this time. Telephone service in this area is also thru

underground service lines. The applicant does not appear to be requesting utility development to be placed above ground. Staff also notes that any future substantial installations of utility improvements will trigger additional reviews of proposed said developments, being that the property is in the Beaches and Dunes overlay zone. The applicant is proposing to install an onsite septic treatment system. Therefore, Staff finds the applicant has addressed all applicable criteria.

b) *Application Submittal and Review Procedure.*

1. *Submission of Documents - A prospective applicant for a building or other permit who is subject to site design review shall submit the following to the County Planning Director:*

- a. *A site plan, drawn to scale, shows the proposed layout of all structures and other improvements;*
- b. *A landscape plan, drawn to scale, showing the location of existing trees proposed to be retained on the site, the location and design of landscaped areas, the varieties and sizes of trees and plant materials to be planted on the site, other pertinent landscape features, and irrigation systems required to maintain trees and plant materials;*
- c. *Architectural drawings or sketches, drawn to scale, including floor plans, in sufficient detail to permit computation of yard requirements and showing all elevations of the proposed structures and other improvements as they will appear on completion of construction;*
- d. *Specifications as to type, color and texture of exterior surfaces of proposed structures including reflective surfaces of solar collectors;*
- e. *An application request which shall include:*
 - 1) *Name and address of applicant;*
 - 2) *Statement of applicant's legal interest in the property (owner, contract purchaser, lessee, renter, etc.) and a description of that interest, and in case the applicant is not the owner, verification of the owner's consent;*
 - 3) *Address and legal description of the property;*
 - 4) *Statement explaining the intended request;*
 - 5) *The required fee; and*
 - 6) *Any other materials or information as may be deemed necessary to assist in evaluation of the request. The request will be made prior to deeming the application complete. However, if this review is before the hearings body they may request for additional information to ensure compliance.*

FINDING: Staff found that during the completeness review process that all applicable documents were submitted prior to this review. Therefore, these criteria have been addressed.

2. *Threshold Standard. The Planning Director has the discretion to waive part or all of the site plan requirements if, in the Director's judgment, the proposed development is "de minimis" in extent to the existing development.*

FINDING: The Planning Director has waived the requirements for full landscaping and architectural plans. Therefore, this criterion is not applicable.

4.11.132 Natural Hazards (Balance of County Policy 5.11)

Coos County has inventoried the following *hazards*:

- Flood Hazard
 - Riverine flooding
 - Coastal flooding
- Landslides and Earthquakes

- Landslide Susceptibility
- Liquefaction potential
- Tsunamis
- Erosion
 - Riverine streambank erosion
 - Coastal
 - Shoreline and headlands
 - Wind
- Wildfire

Purpose Statements:

Coos County shall regulate development in known areas potentially subject to natural disasters and hazards, so as to minimize possible risks to life and property. Coos County considers natural disasters and hazards to include river and coastal flooding, landslides, liquefaction potential due to earthquakes, fault lines, tsunamis, river bank erosion, coastal erosion along shorelines and headlands, coastal erosion due to wind, and wildfires, including those areas affected by gorse.

This strategy shall be implemented by enacting special protective measures through zoning and other implementing devices, designed to minimize risks to life and property associated with new development and substantial improvements. The determination of whether a property is located in one of the above referenced potentially hazardous areas shall be made by the reviewing body (Planning Director, Planning Commission, Board of Commissioners, or any designee based upon adopted inventory mapping). A specific site may not include the characteristics for which it is mapped. In these circumstances staff shall apply § 4.11.132.ii.2m.

c. Tsunamis: Coos County shall promote increased resilience to a potentially catastrophic Cascadia Subduction Zone (CSZ) tsunami through the establishment of a Tsunami Hazard Overlay Zone (THO) in the Balance of County Zoning. See Sections 4.11.260-4.11.270 for the requirements of this overlay zone.

TSUNAMI HAZARD OVERLAY ZONE:

4.11.260 Tsunami Hazard Overlay Zone (Background)

The Tsunami Hazard Overlay zone is designed to serve as the principal implementation mechanism for land use measures addressing tsunami risk. As the name indicates, it is designed to be applied in the form of an overlay zone, i.e. in combination with underlying base zones. The boundaries of the overlay would correspond to the area of the jurisdiction subject to inundation from a local source tsunami indicated in § 4.11.265 below.

Oregon Statewide Planning Goal 7 envisions a process whereby new hazard inventory information generated by federal and state agencies is first reviewed by the Department of Land Conservation and Development (DLCD). DLCD then notifies the County of the new information, and the County has three years to respond to the information by evaluating the risk, obtaining citizen input, and adopting or amending implementation measures to address the risk. The County has not received notice from DLCD but has taken the proactive role in working with DLCD to address tsunami hazards.

This section of the ordinance places restrictions and limitations on certain categories of uses. These limitations apply primarily to uses which present a high potential for life safety risk, or to uses which provide an essential function during and after a disaster event. ORS 455, which is implemented through the state building code, currently prohibits certain facilities and structures in the tsunami inundation zone as defined by the Oregon Department of Geology and Mineral Industries

as indicated in Section 4.11.245 below. The overlay incorporates the requirements that can be limited through the land use program. Nothing in this ordinance is meant to conflict with the State Building Code but will focus on integration of development and improvement of evacuation infrastructure into the land use and development review process.

Coos County does not house the building codes program and; therefore, Coos County lacks certain enforcement authority over the Oregon Structural Specialty Code as explained in OAR 632-005-0070 exemption responsibility. This section of the ordinance is not meant to obstruct the authority of the structural code.

These provisions establish requirements to incorporate appropriate evacuation measures and improvements in most new development, consistent with the Coos County Tsunami Evacuation Facility Improvement Plan. Coos County Planning has worked with Coos County Emergency Management in planning for emergency preparedness and developing hazard mitigation plans.

The maps that will be used to implement this section of the Coos County Zoning and Land Development ordinance are the 2012 [Tsunami Inundation Maps](#) produced by Oregon Department of Geology and Mineral Industries. The maps will be printed and filed as part of the Coos County Comprehensive Plan.

The series of maps consists of a Small (S), Medium (M), Large (L), Extra Large (XL) and Extra-Extra Large (XXL), with the XXL indicating the worst case scenario. When a size is identified in the section it includes all smaller sizes. For an example if a facility is regulated in an L tsunami inundation event then it includes all M and S tsunami inundation mapped areas.

4.11.265 Tsunami Hazard Overlay (THO) Zone (Definitions)

Definitions applicable to the tsunami hazard overlay zone.

As used in tsunami hazard overly zone Section 4.11.270:

1. “Essential Facilities” means:
 - a. Hospitals and other medical facilities having surgery and emergency treatment areas;
 - b. Fire and police stations;
 - c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures;
 - d. Emergency vehicle shelters and garages;
 - e. Structures and equipment in emergency preparedness centers;
 - f. Standby power generating equipment for essential facilities; and
 - g. Structures and equipment in emergency preparedness centers.
2. “Hazardous facility” means structures housing, supporting or containing sufficient quantities of toxic or explosive substances to be of danger to the safety of the public if released.
3. “Special occupancy structures” means:
 - a. Covered structures whose primary occupancy is public assembly with a capacity greater than 300 persons;
 - b. Buildings with a capacity of greater than 250 individuals for every public, private or parochial school through secondary level or child care centers;
 - c. Buildings for colleges or adult education schools with a capacity of greater than 500 persons;
 - d. Medical facilities with 50 or more resident, incapacitated persons not included subsection (a);
 - e. Jails and detention facilities; and

- f. All structures and occupancies with a capacity of greater than 5,000 persons. *See* ORS 455.466
- 4. “Substantial improvement” means any repair, reconstruction, or improvement of a structure which exceeds 50 percent of the real market value of the structure.
- 5. “Tsunami vertical evacuation structure” means a building or constructed earthen mound that is accessible to evacuees, has sufficient height to place evacuees above the level of tsunami inundation, and is designed and constructed with the strength and resiliency needed to withstand the effects of tsunami waves.
- 6. “Tsunami Inundation Maps (TIMs)” means the map, or maps in the DOGAMI Tsunami Inundation Map (TIM) Series, published by the Oregon Department of Geology and Mineral Industries, which cover(s) the area within Coos County.

4.11.270 Tsunami Hazard Overlay Zone (Purpose, Applicability and Uses)

1. Purpose

The purpose of the Tsunami Hazard Overlay Zone is to increase the resilience of the community to a local source (Cascadia Subduction Zone) tsunami by establishing standards, requirements, incentives, and other measures to be applied in the review and authorization of land use and development activities in areas subject to tsunami hazards. The standards established by this section are intended to limit, direct and encourage the development of land uses within areas subject to tsunami hazards in a manner that will:

- a. Reduce loss of life;
- b. Reduce damage to private and public property;
- c. Reduce social, emotional, and economic disruptions; and
- d. Increase the ability of the community to respond and recover.

Significant public and private investment has been made in development in areas which are now known to be subject to tsunami hazards. It is not the intent or purpose of this section to require the relocation of or otherwise regulate existing development within the Tsunami Hazard Overlay Zone. However, it is the intent of this section to control, direct and encourage new development and redevelopment such that, overtime, the community’s exposure to tsunamis will be reduced.

2. Applicability of Tsunami Hazard Overlay Zone

The Tsunami Hazard Overlay is applicable to all Balance of County Zoning Districts and any zoning districts located within the Coos Bay Estuary and Coquille Estuary Management Plans when the Estuary Policies directly reference this section. Areas of inundation depicted on the Tsunami Inundation Map(s) (TIM) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) are subject to the requirements of this section as follows:

- a. Except as provided in subsection (b), all lands identified as subject to inundation from the XXL magnitude local source tsunami event as set forth on the applicable Tsunami Inundation Map(s) (TIM) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) are subject to the requirements of this section.
- b. Lands within the area subject to inundation from the XXL magnitude local source tsunami event as set forth on the applicable Tsunami Inundation Map(s) (TIM) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) that have a grade elevation, established by fill or other means, higher than the projected elevation of the XXL magnitude local source tsunami event are exempt from the requirements of this section. Grade elevations shall be established by an elevation survey performed by a Professional Land Surveyor licensed in Oregon.

3. Uses

In the Tsunami Hazards Overlay Zone, except for the prohibited uses set forth in subsection 4 all uses permitted pursuant to the provisions of the underlying zone map may be permitted, subject to the additional requirements and limitations of this section. The Tsunami Hazard Overlay Zone does not establish any new or additional review processes. Application of the standards and requirements of the Tsunami Hazard Overlay Zone is accomplished through the applicable review processes of the underlying zone.

4. Prohibited Uses

Unless authorized in accordance with subsection 6, the following uses are prohibited in the specified portions of the Tsunami Hazard Overlay Zone:

- a. In areas identified as subject to inundation from the L magnitude local source tsunami events set forth on the TIM, the following uses are prohibited:
 - i. Hospitals and other medical facilities having surgery and emergency treatments area as;
 - ii. Fire and police stations;
 - iii. Hospital and other medical facilities having surgery and emergency treatment areas;
 - iv. Structures and equipment in government communication centers and other facilities required for emergency response;
 - v. Building with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or childcare centers;
 - vi. Buildings for colleges or adult education schools with a capacity of greater than 500 persons; and
 - vii. Jails and detention facilities
- b. In areas identified as subject to inundation from the M magnitude local source tsunami event as set forth on the Tsunami Inundation Map (TIM), the following uses are prohibited:
 - i. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures;
 - ii. Emergency vehicle shelters and garages;
 - iii. Structures and equipment in emergency preparedness centers;
 - iv. Standby power generating equipment for essential facilities;
 - v. Covered structures whose primary occupancy is public assembly with a capacity of greater than 300 persons;
 - vi. Medical facilities with 50 or more resident, in capacitated patients;
 - vii. Manufactured home parks, of a density exceeding 10 units per acre; and
 - viii. Hotels or motels with more than 50 units.
- c. Notwithstanding the provisions of Article 5.6 of the Coos County Zoning and Land Development Ordinance, the requirements of this subsection shall not have the effect of rendering any lawfully established use or structure nonconforming. The Tsunami Hazard Overlay is, in general, not intended to apply to or regulate existing uses or development.

5. Use Exceptions

A use listed in subsection (4) of this section may be permitted upon authorization of a Use Exception in accordance with the following requirements:

- a. Public schools may be permitted upon findings that there is a need for the school to be within the boundaries of a school district and fulfilling that need cannot otherwise be accomplished.
- b. Fire or police stations may be permitted upon findings that there is a need for a strategic location.
- c. Other uses prohibited by subsection (4) of this section may be permitted upon the following findings:

- i. There are no reasonable, lower-risk alternative sites available for the proposed use;
- ii. Adequate evacuation measures will be provided such that life safety risk to building occupants is minimized;
- iii. The buildings will be designed and constructed in accordance with the Oregon Structural Specialty Code to minimize the risk of structural failure during the design earthquake and tsunami event; and
- iv. Developers of new essential facilities, hazardous facilities and major structures, and special occupancy structures that are located in an identified tsunami inundation zone, as described in subsection ORS 455.446. The provision of ORS 455.446 does not apply to water-dependent and water-related facilities, including but not limited to docks, wharves, piers and marinas. Decisions made under ORS 455.446 are not land use decisions.

Applications, reviews, decisions and appeals for Use Exceptions authorized by this subsection with the exclusion of subsections iii and iv shall be in accordance with the requirements for an administrative conditional use procedure as set forth in Article 5.2 – Conditional Uses.

- 6. Evacuation Route Improvement Requirements. Except single family dwellings on existing lots and parcels, all new development, substantial improvements and land divisions in the Tsunami Hazard Overlay Zone shall incorporate evacuation measures and improvements, including necessary vegetation management, which are consistent with and conform to the adopted Tsunami Evacuation Facilities Improvement Plan. Such measures may include:
 - a. On-site improvements:
 - i. Improvements necessary to ensure adequate pedestrian access from the development site to evacuation routes designated in the Tsunami Evacuation Facilities Improvement Plan in all weather and lighting conditions.
 - ii. Frontage improvements to designate evacuation routes that are located on or contiguous to the proposed development site, where such improvements are identified in the Tsunami Evacuation Facilities Improvement Plan. Such improvements shall be proportional to the evacuation needs created by the proposed development.
 - iii. Where identified in the Tsunami Evacuation Facilities Improvement Plan as the only practicable means of evacuation, tsunami evacuation structure(s) of sufficient capacity to accommodate the evacuation needs of the proposed development.
 - b. Off-site improvements: Improvements to portions of designated evacuation routes that are needed to serve, but are not contiguous to, the proposed development site, where such improvements are identified in the Tsunami Evacuation Facilities Improvement Plan. Such improvements shall be proportional to the evacuation needs created by the proposed development.
 - c. Evacuation route signage consistent with the standards set forth in the Tsunami Evacuation Facilities Improvement Plan. Such signage shall be adequate to provide necessary evacuation information consistent with the proposed use of the site.
 - d. Evacuation route improvements and measures required by this subsection may include the following:
 - i. Improved streets and/or all-weather surface paths of sufficient width and grade to ensure pedestrian access to designated evacuation routes in all lighting conditions;
 - ii. Improved streets and paths shall provide and maintain horizontal clearances sufficient to prevent the obstruction of such paths from downed trees and structure failures likely to occur during a Cascadia earthquake; and

- iii. Such other improvements and measures identified in the Tsunami Evacuation Facilities Improvement Plan. See Volume I, Part 2 Section 3.9. 400 of the Coos County Comprehensive Plan

7. Tsunami Evacuation Structures

- a. All tsunami evacuation structures shall be of sufficient height to place evacuees above the level of inundation for the XXL local source tsunami event.
- b. Tsunami evacuation structures are not subject to the building height limitations of this chapter.

8. Flexible Development Option

- a. The purpose of the Flexible Development Option is to provide incentives for, and to encourage and promote, site planning and development within the Tsunami Hazard Overlay Zone that results in lower risk exposure to tsunami hazard than would otherwise be achieved through the conventional application of the requirements of this chapter. The Flexible Development Option is intended to:
 - i. Allow for and encourage development designs that incorporate enhanced evacuation measures, appropriate building siting and design, and other features that reduce the risks to life and property from tsunami hazard; and
 - ii. Permit greater flexibility in the siting of buildings and other physical improvements and in the creation of new lots and parcels in order to allow the full realization of permitted development while reducing risks to life and property from tsunami hazard.
- b. The Flexible Development Option may be applied to the development of any lot, parcel, or tract of land that is wholly or partially within the Tsunami Hazard Overlay Zone.
- c. The Flexible Development Option may include any uses permitted outright or conditionally in any zone, except for those uses prohibited pursuant to subsection 5 of this section.
- d. Overall residential density shall be as set forth in the underlying zone or zones. Density shall be computed based on total gross land area of the subject property, excluding street right-of-way.
- e. Yards, setbacks, lot area, lot width and depth, lot coverage, building height and similar dimensional requirements may be reduced, adjusted or otherwise modified as necessary to achieve the design objectives of the development and fulfill the purposes of this section.
- f. Applications, review, decisions, and appeals for the Flexible Development Option shall be in accordance with the requirements for an administrative conditional use procedure as set forth in Article 5 of the Coos County Zoning and Land Development Ordinance.
- g. Approval of an application for a Flexible Development Option shall be based on findings that the following criteria are satisfied:
 - i. The applicable requirements of sub-paragraphs (b) and (d) of this subsection are met; and
 - ii. The development will provide tsunami hazard mitigation and/ or other risk reduction measures at a level greater than would otherwise be provided under conventional land development procedures. Such measures may include, but are not limited to:
 - 1. Providing evacuation measures, improvements, evacuation way finding techniques and signage;
 - 2. Providing tsunami evacuation structure(s) which are accessible and provide capacity for evacuees from off-site;
 - 3. Incorporating building designs or techniques which exceed minimum structural specialty code requirements in a manner that increases the capacity of structures

- to withstand the forces of a local source tsunami; and
4. Concentrating or clustering development in lower risk portions or areas of the subject property, and limiting or avoiding development in higher risk areas.

Finding: The proposal is for constructing a new residential dwelling. This use is not regulated as an essential facility, hazardous facility, special occupancy structures, substantial improvement, or tsunami vertical evacuation structure. Therefore, the above criteria are not applicable to this request for land use approval.

f. Wildfires: Coos County shall promote protection of property from risks associated with wildfires. New development or substantial improvements shall, at a minimum, meet the following standards, on parcels designated or partially designated as “High” or “Moderate” risk on the Oregon Department of Forestry 2013 Fire Threat Index Map for Coos County or as designated as at-risk of fire hazard on the 2015 Coos County Comprehensive Plan Natural Hazards Map:

1. The dwelling shall be located within a fire protection district or shall be provided with residential fire protection by contract. If the dwelling is not within a fire protection district, the applicant shall provide evidence that the applicant has asked to be included within the nearest such district or is provided fire protection by contract.
2. When it is determined that these standards are impractical the Planning Director may authorize alternative forms of fire protection that shall comply with the following:
 - a. The means selected may include a fire sprinkling system, onsite equipment and water storage or other methods that are reasonable, given the site conditions, as established by credible documentation approved in writing by the Director;
 - b. If a water supply is required for fire protection, it shall be a swimming pool, pond, lake, or similar body of water that at all times contains at least 4,000 gallons per dwelling or a stream that has a continuous year-round flow of at least one cubic foot per second per dwelling;
 - c. The applicant shall provide verification from the Water Resources Department that any permits or registrations required for water diversion or storage have been obtained or that permits, or registrations are not required for the use; and
 - d. Road access shall be provided to within 15 feet of the water’s edge for firefighting pumping units. The road access shall accommodate the turnaround of firefighting equipment during fire season. Permanent signs shall be posted along the access route to indicate the location of the emergency water source.
3. Fire Siting Standards for New Dwellings:
 - a. The property owner shall provide and maintain a water supply of at least 500 gallons with an operating water pressure of at least 50 PSI and sufficient ¾ inch garden hose to reach the perimeter of the primary fuel-free building setback.
 - b. If another water supply (such as a swimming pool, pond, stream, or lake) is nearby, available, and suitable for fire protection, then road access to within 15 feet of the water’s edge shall be provided for pumping units. The road access shall accommodate the turnaround of firefighting equipment during the fire season. Permanent signs shall be posted along the access route to indicate the location of the emergency water source.
4. Firebreak:
 - a. A firebreak shall be established and maintained around all structures, including decks, on land owned or controlled by the applicant for a distance of at least 30 feet in all directions.

- b. This firebreak will be a primary safety zone around all structures. Vegetation within this primary safety zone may include mowed grasses, low shrubs (less than ground floor window height), and trees that are spaced with more than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet from the ground) branches. Accumulated needles, limbs and other dead vegetation should be removed from beneath trees.
- c. Sufficient garden hose to reach the perimeter of the primary safety zone shall be available at all times.
- d. The owners of the dwelling shall maintain a primary fuel-free break area surrounding all structures and clear and maintain a secondary fuel-free break on land surrounding all structures that is owned or controlled by the owner in accordance with the provisions in “Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design Standards for Roads” dated March 1, 1991, and published by Oregon Department of Forestry and shall demonstrate compliance with Table 1.

Table 1 – Minimum Primary Safety Zone

Slope	Feet of Primary Safety Zone	Feet of Additional Primary Safety Zone Down Slope
0%	30	0
10%	30	50
20%	30	75
25%	30	100
40%	30	150

- e. All new and replacement structures shall use non-combustible or fire resistant roofing materials, as may be approved by the certified official responsible for the building permit.
 - f. If a water supply exceeding 4,000 gallons is suitable and available (within 100 feet of the driveway or road) for fire suppression, then road access and turning space shall be provided for fire protection pumping units to the source during fire season. This includes water supplies such as a swimming pool, tank or natural water supply (e.g. pond).
 - g. The structure shall not be sited on a slope of greater than 40 percent.
 - h. If the structure has a chimney or chimneys, each chimney shall have a spark arrester.
 - i. Except for private roads and bridges accessing only commercial forest uses, public roads, bridges, private roads, and driveways shall be constructed so as to provide adequate access for firefighting equipment. Confirmation shall be provided from the Coos County Road Department or local fire protection district that these standards have been met.
5. Wildfires inside urban growth boundaries. Certain areas inside urban growth boundaries may present special risks and may be made subject to additional or different standards and requirements jointly adopted by a city and the county in the form of code requirements, master plans, annexation plans, or other means.

Finding: The proposed dwelling will be located within the Bandon Rural Fire Protection district. The subject property is completely within the City of Bandon’s Urban Growth Boundary. Under the agreement between the City of Bandon and Coos County; as a condition of approval, the subject

property will be required to meet the fire siting standards identified in section 4.11.132.f.4. The applicant submitted additional information that they will remove Shore Pines within the primary fuel break. The applicant is also planning on removing the invasive Gorse vegetation on the subject property. The Planning Director also finds that for rule 3 and 5; that the 500 gallon tank requirement may be supplemented by utilized the existing water main and hydrants in the Sunset City subdivision. Other than 4.f & i; all requirements of subsection 4 will be conditions of approval. Therefore, these criteria have been addressed.

FLOATING ZONE: AIRPORT SURFACES
Bandon, Lakeside and Powers Airports

SECTION 4.11.300 PURPOSE:

The purpose of the Airport Surface Floating zone is to protect public health, safety and welfare. It is recognized that obstructions to aviation have potential for endangering the lives and property of users of selected airports, and property of occupancy of land in the airport’s vicinity. An obstruction may affect future instrument approach minimums and obstructions may reduce the area available for the landing, take-off and maneuvering of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein.

SECTION 4.11.305 DESIGNATION OF AIRPORT SURFACES:

Those lands lying beneath the approach surfaces, transition surfaces, horizontal surfaces and conical surfaces as they apply to the “Bandon, Lakeside and Powers Airports Approach and Clear Zone Inventory Map” shall be subject to the requirements of this floating zone. Southwest Regional Airport Surfaces (AKA North Bend Municipal Airport) regulations can be found in Sections 4.11.400 through 4.11.460.

SECTION 4.11.310 AIRPORT SUB-ZONES:

Sub-zones are hereby established and defined as follows:

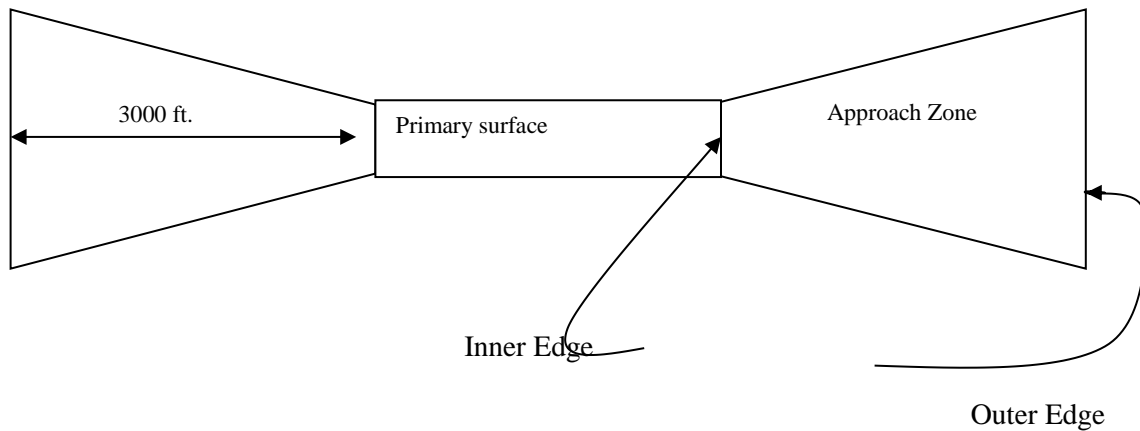
1. Approach zone—The inner edge of the approach zone coincides with the primary surface of the runway:

Bandon =	500 ft. wide
Lakeside =	50 ft. wide
Powers =	100 ft. wide

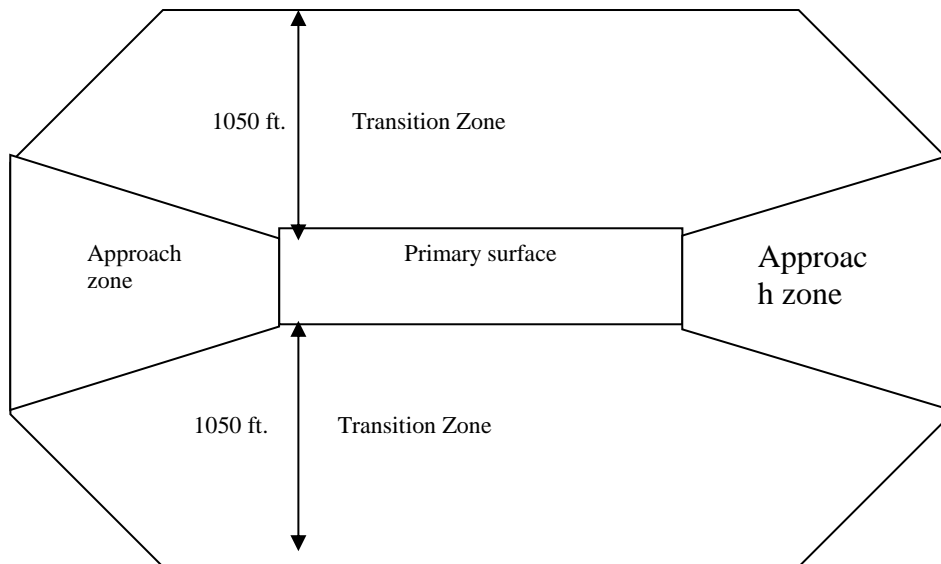
The approach zone expands outward uniformly to a width of:

Bandon =	1400 ft. wide
Lakeside =	900 ft. wide
Powers =	900 ft. wide

At a horizontal distance of 3000 feet for all airports from the primary surface. Its centerline is the continuation of the runway centerline.



1. Transition Zone – The inner edge of the transition zone coincides with the outer edges of the primary surface and approach zone. The outer edge of the transition zone parallels the primary surface and is 1050 feet wide tapering to the end of the approach zone.



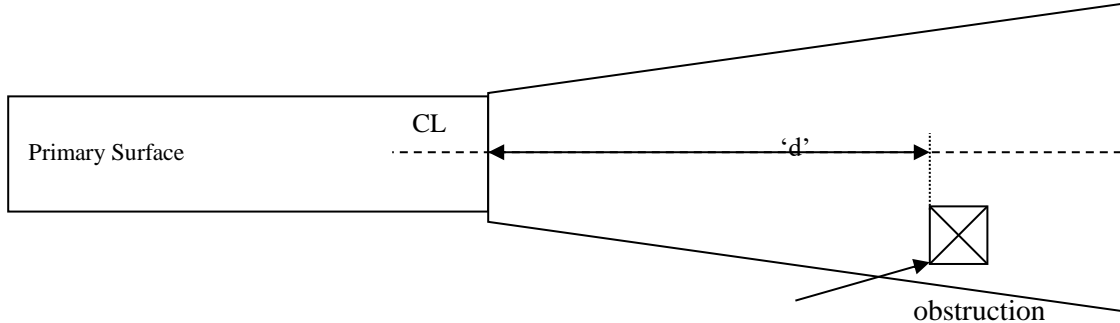
3. Horizontal Conical Zone – The horizontal conical zone is established by swinging arcs of 9,000 feet radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal conical zone does not include the approach and transitional zones.
4. Primary Surface Zone – The primary surface zone overlays the runway surface:

Bandon =	500 ft. wide
Lakeside =	50 ft. wide
Powers =	100 ft. wide

SECTION 4.11.315 AIRPORT SURFACES HEIGHT LIMITATIONS:

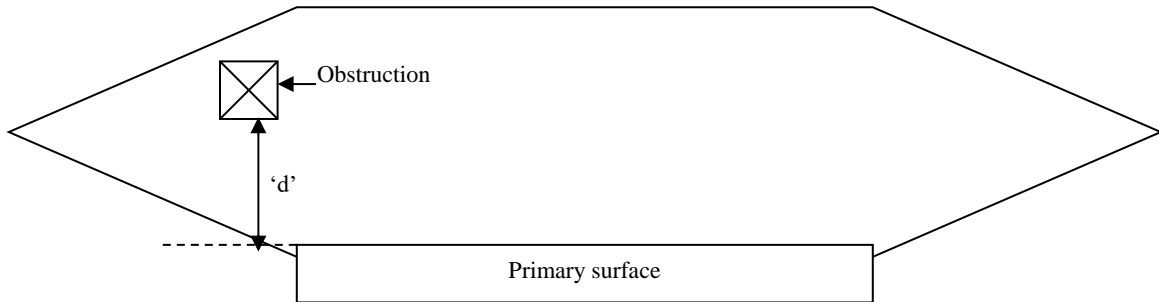
Notwithstanding other provisions of this Ordinance, no structure shall be created or altered to a height in excess of the applicable height limits herein established. Such applicable height limitations are hereby established:

1. Approach zone – The maximum height allowed shall be 5% of the distance from the primary surface as measured along the centerline to a point, perpendicular to the obstruction, and shall not exceed 35 ft.



'd' = distance from primary surfaces allowable height = $(0.05) \times ('d')$. and not to exceed 35 ft.

2. Transition Zone – The maximum height allowed shall be 14% of the distance as measured perpendicular to the outer edge of the primary surface (or an extension of the outer edge) but shall not exceed 35 feet.



'd' = distance from the primary surface outer edge allowable height = $(0.14) \times ('d')$ and not to exceed 35 feet.

3. Horizontal Conical Zone – Maximum allowable height = 35 feet.
4. Primary Surface – Maximum allowable building height = 0 (zero) feet for structures or other improvements. Siting of structures or improvements other than navigational aides permitted by State Aeronautics is prohibited.

SECTION 4.11.320 PERMITTED USES:

Except as restricted by Section 4.11.330, in a District in which the /AS zone is combined, those uses permitted by the underlying district are permitted outright in the /AS FLOATING ZONE.

SECTION 4.11.325 CONDITIONAL USES:

Except as restricted by Section 4.11.330, in a District with which the /AS is combined, those uses subject to the provisions of ARTICLE 5.2 (Conditional Uses) may be permitted in the /AS FLOATING ZONE.

SECTION 4.11.330 USE RESTRICTIONS:

Notwithstanding any other provision of this Ordinance, no use may be made of land or water within any zone established by this Ordinance in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport light and other, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.

SECTION 4.11.335 CLARIFICATION OF GRANDFATHER USES AND RIGHTS:

1. In addition to Article 3.4, the regulations prescribed by this zone shall not be construed to require the removal, lowering, or other change or alteration of any structure not conforming to the regulations as of the effective date of this Ordinance, or otherwise interfere with the continuance of the Grandfathered Use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this Ordinance, and is diligently prosecuted.

However, no permit shall be granted that would allow the establishment or creation of an obstruction or permit a Grandfathered Use or structure to become a greater hazard to air navigation than it was on the effective date of this Ordinance or any amendments thereto or than it is when the application for a permit is made.

2. Marking and Lighting – Notwithstanding the preceding provision of this Section, the owner of any existing Grandfathered structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the Airport Owner to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport obstruction. Such markers and lights shall be installed, operated, and maintained at the expense of the Airport Owner.

SECTION 4.11.340 VARIANCES:

Variations may be granted where consistent with the procedural and substantive requirements of Article 5.3.

SECTION 4.11.345 CONFORMANCE REQUIREMENT:

All structures and uses within the Airport Operations District shall conform to the requirements of Federal Aviation Agency Regulation FAR-77 or its successor, and to other Federal and State laws as supplemented by Coos County Ordinances regulating structure height, steam or dust, and other hazards to flight, air navigation or public health, safety and welfare.

Finding: 4.11.315.3 requires all structures be limited to a height restriction of 35 feet. The property is already subject to the 35 feet height limitation in the Controlled Development-10 zoning district. The applicant did not request a variance to the height limitation for this proposal. Therefore, these criteria have been addressed.

IV. DECISION

In conclusion Staff finds that the applicant has address most of the relevant criteria and the ones that have not been address or cannot be completed until after the approval is obtained have been made conditions of approval. Therefore, the proposed dwelling in Beaches & Dunes and Coastal Shorelands Boundary meets the requirements of the Coos County Zoning and Land Development Ordinance, with conditions listed in Exhibit “A” of this report.

V. EXPIRATION:

This application type does not have an expiration date however, Geological Reports are only valid for five (5) years.

4.11.155 Geological Assessment Review

Geologic Assessment Review: The applicant(s) shall complete the following review to determine compliance with this section. This type of review requires a conditional use application and shall follow the administrative procedures for conditional uses found in Article 5 of the CCZLDO.

4. Engineering geologic reports required by this section shall be valid for a period of five years from the date of preparation of such report. No extensions to this time line shall be granted.

This conditional use is for a residential development within the Coastal Shoreland Boundary and Beaches and Dunes Areas with Limited Development Suitability and is valid for five years for the date of final approval Wednesday, February 24, 2027.

VII. NOTICE REQUIREMENTS:

A notice of decision will be provided to property owners within 100 feet of the subject properties and the following agencies, special districts, or parties: Bandon Rural Fire Protection District and Southern Coos Health District

A Notice of Decision and Staff Report will be provided to the following:

Applicants/Owners, Department of Land Conservation and Development, Coos County Assessor’s Office and the Planning Commission and Board of Commissioners.

Adjacent property owners will receive a Notice of Decision and maps, but all other attachments can be found by contacting the Planning Department or visiting the website. If not found on the website the public may contact the department to view the official record.

EXHIBIT "D"

Comments Received

Reply Reply All Forward

Wed 11/10/2021 2:37 PM



Dana Nichols <dnichols@ci.bandon.or.us>

RE: ACU-21-059 Deets for Durbin

To Amy Dibble

Phish Alert

+ Get more add-i

This Message originated outside your organization.

Hi Amy,

Thanks for sending this our way! It looks like they have a former agreement for water in place, but you might pass along that if they haven't already, they'll probably want to talk with the City Manager, Dan Chandler, about the connection process. His email is citymanager@cityofbandon.org. The applicant is still required to pay all cities fees, which include utility connection fees and system development charges.

If you have any questions, please let me know.

Best,
Dana

Dana Nichols
Planning Manager
She/her/hers ([Why these pronouns?](#))

City of Bandon
[P.O. Box 67](#)
[Bandon, OR 97411](#)
(541) 347-7922
dnichols@cityofbandon.org

Public Office Hours:
Monday through Thursday 9:00 AM - 3:00 PM
Please note: We are closed to the public on Fridays.

PUBLIC RECORDS LAW DISCLOSURE:
This is a public document. This email is subject to the State Retention Schedule and may be made available to the public upon request.

 Reply  Reply All  Forward

Tue 10/19/2021 8:43 AM



THOMPSON Seth <Seth.THOMPSON@aviation.state.or.us>

RE: ACU-21-059 Request for Comments

To Michelle Berglund

Cc Planning Department

Phish Alert

This Message originated outside your organization.

Good morning, Michelle.

The Oregon Department of Aviation (ODA) has no comment on File Number: ACU-21-059.

Thank you for allowing the ODA to comment on this proposal.

Please let me know if you have any questions.

Best regards,

Seth Thompson
OREGON DEPARTMENT OF AVIATION
AVIATION PLANNER



OFFICE 503-378-2529 CELL 503-507-6965

EMAIL seth.thompson@aviation.state.or.us

3040 25TH STREET SE, SALEM, OR 97302

WWW.OREGON.GOV/AVIATION



COQUILLE INDIAN TRIBE

3050 Tremont Ave. North Bend, OR 97459
Telephone: (541) 756-0904 ~ Fax: (541) 756-0847
www.coquilletribe.org

October 25, 2021

Coos County Planning Department
250 N Baxter
Coquille, Oregon 97429

Re: ACU-21-059

Project location: T29S, R15W, Section 01CB, TL1600 & 1602

Thank you for the opportunity to comment on the proposal to construct a new single-family dwelling at the above referenced location. Our records show known cultural resources within extreme proximity to the project area.

Due to the proximity to known cultural resources, we request that the landowner and/or contractor contact our office at (541) 808-5554 (Kassandra Rippee, Archaeologist/THPO) to schedule a Cultural Resource Monitor to be on site during all ground-disturbing activities. Please schedule the monitor a **minimum of 72-hours** in advance of anticipated project start time.

Please be aware that state statutes and federal law governs how archaeological sites are to be managed. 43 CFR 10 applies on tribal and federal lands, federal projects, federal agencies, as well as to federal actions and federally funded (directly or indirectly) projects. ORS 97.745 prohibits the willful removal, mutilation, defacing, injury, or destruction of any cairn, burial, human remains, funerary objects, or objects of cultural patrimony of a Native Indian. ORS 358.920 prohibits excavation, injury, destruction, or alteration of an archaeological site or object, or removal of an archaeological object from public or *private lands*. If archaeological materials are discovered, uncovered, or disturbed on the property, we will discuss the appropriate actions with all necessary parties.

Thank you again and feel free to contact me if you have any questions.

Masi (thank you),

Todd Martin
Tribal Historic Preservation Specialist

CRT21441

ACU-21-059

EXHIBIT "E"
Application & Supplemental Submittals



Coos County Land Use Permit Application
 SUBMIT TO COOS COUNTY PLANNING DEPT. AT 60 E. SECOND STREET OR MAIL
 TO: COOS COUNTY PLANNING 250 N. BAXTER, COQUILLE OR 97423. EMAIL
PLANNING@CO.COOS.OR.US PHONE: 541-396-7770

FILE NUMBER: ACU-21-059

10/6/21
 Date Received: ~~10/6/21~~ Receipt #: 228632 Received by: LOM

This application shall be filled out electronically. If you need assistance please contact staff.
 If the fee is not included the application will not be processed.
 (If payment is received on line a file number is required prior to submittal)

LAND INFORMATION

A. Land Owner(s) Summer and Corey Durbin
 Mailing address: 6819 N.W, 192nd St, Ridgefield, WA 98642
 Phone: 314-359-2511 Email: _____

Township: 29S Range: 15W Section: 1 ¼ Section: C 1/16 Section: B Tax lots: 1600/1602
 Select Select Select Select Select

Tax Account Number(s): 2898 900 Zone: Select Zone Controlled Development (CI)
 Tax Account Number(s) 2899 300 Controlled Development (CI)

B. Applicant(s) Deets Construction LLC
 Mailing address: 74968 Stargazer Lane Coquille, Oregon 97423
 Phone: 541-404-7202

C. Consultant or Agent: Michael Deets
 Mailing Address _____
 Phone #: 541-404-7202 Email: michaeldeets@ymail.com

Type of Application Requested

<input type="checkbox"/> Comp Plan Amendment	<input checked="" type="checkbox"/> Administrative Conditional Use Review - ACU	<input type="checkbox"/> Land Division - P, SUB or PUD
<input type="checkbox"/> Text Amendment	<input type="checkbox"/> Hearings Body Conditional Use Review - HBCU	<input type="checkbox"/> Family/Medical Hardship Dwelling
<input type="checkbox"/> Map - Rezone	<input type="checkbox"/> Variance - V	<input type="checkbox"/> Home Occupation/Cottage Industry

Special Districts and Services

Water Service Type: City Water Sewage Disposal Type: On-Site Septic
 School District: Bandon Fire District: Bandon RFPD

Please include the supplement application with request. If you need assistance with the application or supplemental application please contact staff. Staff is not able to provide legal advice. If you need help with findings please contact a land use attorney or consultant.

Any property information may be obtained from a tax statement or can be found on the County Assessor's webpage at the following links: [Map Information](#) Or [Account Information](#)

- D. **ATTACHED WRITTEN STATEMENT.** With all land use applications, the “burden of proof” is on the applicant. It is important that you provide information that clearly describes the nature of the request and indicates how the proposal complies with all of the applicable criteria within the Coos County Zoning and Land Development Ordinance (CCZLDO). You must address each of the Ordinance criteria on a point-by-point basis in order for this application to be deemed complete. A planner will explain which sections of the Ordinance pertain to your specific request. The information described below is required at the time you submit your application. The processing of your application does not begin until the application is determined to be complete. An incomplete application will postpone the decision, or may result in denial of the request. Please mark the items below to ensure your submittal is complete.

Application Check List: Please make off all steps as you complete them.

- I. A written statement of intent, attached to this application, with necessary supporting evidence which fully and factually describes the following:
- A complete explanation of how the request complies with the applicable provisions and criteria in the Zoning Ordinance. A planner will explain which sections of the Ordinance pertain to your specific request. You must address each of the Ordinance criteria on a point-by-point basis in order for this application to be deemed complete.
 - A description of the property in question, including, but not limited to the following: size, vegetation, crops grown, access, existing buildings, topography, etc.
 - A complete description of the request, including any new structures proposed.
 - If applicable, documentation from sewer and water district showing availability for connection.
- II. A plot plan (map) of the property. Please indicate the following on your plot plan:
- Location of all existing and proposed buildings and structures
 - Existing County Road, public right-of-way or other means of legal access
 - Location of any existing septic systems and designated repair areas
 - Limits of 100-year floodplain elevation (if applicable) N/A
 - Vegetation on the property
 - Location of any outstanding physical features
 - Location and description (paved, gravel, etc.) of vehicular access to the dwelling location
- III. A copy of the current deed, including the legal description, of the subject property. Copies may be obtained at the Coos County Clerk's Office.

I certify that this application and its related documents are accurate to the best of my knowledge. I am aware that there is an appeal period following the date of the Planning Director's decision on this land use action. I understand that the signature on this application authorizes representatives of the Coos County Planning Department to enter upon the subject property to gather information pertinent to this request. If the application is signed by an agent, the owner's written authorization must be attached.

If this application is refereed directly to a hearings officer or hearings body I understand that I am obligated to pay the additional fees incurred as part of the conditions of approval. I understand that I/we are not acting on the county's behalf and any fee that is a result of complying with any conditions of approval is the applicants/property owner responsibility. I understand that conditions of approval are required to be complied with at all time and an violation of such conditions may result in a revocation of this permit. Signatures required below for application processing.

Michael Deets - agent

ACCESS INFORMATION

The Coos County Road Department will be reviewing your proposal for safe access, driveway, road, and parking standards. There is a fee for this service. If you have questions about these services please contact the Road Department at 541-396-7660. Please fill out this portion of the application for all development proposals.

Property Address: Vesta Road, Bandon, OR

Type of Access: Select County Rd Name of Access: Vesta

Is this property in the Urban Growth Boundary? Select yes

Is a new road created as part of this request? Select NO

Required parking spaces are based on the use of the property. If this is for a residential use two spaces are required. Any other use will require a separate parking plan submitted that is required to have the following items:

- Current utilities and proposed utilities;
- Roadmaster may require drawings and specs from the Oregon Standards Specification Manual (OSSC) (current edition).
- The location and design of bicycle and pedestrian facilities shall be indicated on the site plan if this is a parking plan;
- Location of existing and proposed access point(s) on both sides of the road where applicable;
- Pedestrian access and circulation will be required if applicable. Internal pedestrian circulation shall be provided in new commercial, office, and multi-family residential developments through the clustering of buildings, construction of walkways, landscaping, accessways, or similar techniques;
- All plans (industrial and commercial) shall clearly show how the internal pedestrian and bicycle facilities of the site connect with external existing or planned facilities or systems;
- Distances to neighboring constructed access points, median openings (where applicable), traffic signals (where applicable), intersections, and other transportation features on both sides of the property;
- Number and direction of lanes to be constructed on the road plus striping plans;
- All planned transportation features (such as sidewalks, bikeways, auxiliary lanes, signals, etc.); and
- Parking and internal circulation plans including walkways and bikeways, in UGB's and UUC's.

Additional requirements that may apply depending on size of proposed development.

- Traffic Study completed by a registered traffic engineer.
- Access Analysis completed by a registered traffic engineer
- Sight Distance Certification from a registered traffic engineer.

Regulations regarding roads, driveways, access and parking standards can be found in Coos County Zoning and Land Development Ordinance (CCZLDO) Article 7. See Page 8 for additional information.

Through applying for this application I authorize the Coos County Roadmaster or designee to enter upon the property subject of the application to conduct a site visit necessary for processing the requested application. The applicant shall contact the Coos County Road Department to arrange for the site visit once the access, driveway, road and/or parking requirements have been met. If you would like to schedule a visit or inquire further about requirements including bonding please contact 541-396-7660. This signed form must be returned to the Planning Department prior to the issuance of a zoning compliance letter.

Coos County Road Department Use Only

Roadmaster or designee: _____

Driveway Parking Access Bonded Date: _____ Receipt # _____

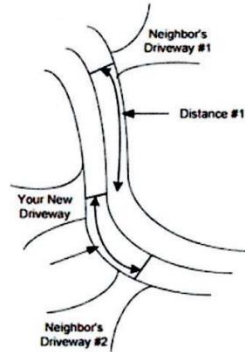
File Number: DR-20-

ADDRESS APPLICATION INFORMATION FILE NUMBER: AD-

ADDRESS OF DRIVEWAY #1 CLOSEST TO YOUR
NEW DRIVEWAY: 87052 Vesta Rd, Bandon

DISTANCE FROM DRIVEWAY #1 TO YOUR NEW
DRIVEWAY: 50'

Is this driveway on the same side of the road as your
Driveway: ~~Select~~ **NO**



ADDRESS OF DRIVEWAY #2 CLOSEST TO YOUR
NEW DRIVEWAY: 87048 Vesta Rd, Bandon

DISTANCE FROM DRIVEWAY #2 TO YOUR NEW
DRIVEWAY: 60'

Is this driveway on the same side of the road as your
Driveway: ~~Select~~ **yes**

The distance information is important from your new driveway to the closest driveways on either side of you (doesn't matter which side of the road) and what the addresses are to those two driveways. This information is important to include in the formula used to calculate the correct address.

Staff from the County Road Department will place the stake and once the driveway stake has been placed, it must not be moved. If your stake is removed or damaged you may purchase replacements.

Additional Notes or directions:



87048
Vesta

Subject
Property
Proposed
130' Driveway
22'

R
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B
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C
H

This application is not required.

87052
Vesta

R
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A
D

Vesta

L
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P

SANITATION INFORMATION

If this is a request for a recreational, commercial, industrial, vacation rental, manufactured home park, mass or small gathering Coos Health and Wellness, Environmental Health Staff will be reviewing the proposal to ensure the use meets environmental health standards for sanitation and water requirements to serve the facility. If the proposal indicates that you are using a community water system a review may be required. A fee is charged for this service and shall be submitted with the application \$83.00. If you have questions about regulations regarding environmental health services please call 541-266-6720. This form is required to be signed off for any type of subdivision, recreational, commercial, industrial, vacation rental, manufactured home park, mass or small gathering.

Water Service Type: Select *City of Bendon* Sewage Disposal Type: Select *on site*

Please check if this request is for industrial, commercial, recreational or home base business use and complete the following questions:

- How many employees/vendors/patrons, total, will be on site?
- Will food be offered as part of the an on-site business?
- Will overnight accommodations be offered as part of an on-site business?
- What will be the hours of operation of the business?

Please check if the request is for a land division.

Coos County Environmental Health Use Only:

Staff Reviewing Application: _____

Staff Signature: _____

- This application is found to be in compliance and will require no additional inspections
- This application is found to be in compliance but will require future inspections
- This application will require inspection prior to determining initial compliance. The applicant shall contact Coos Health and Wellness, Environmental Health Division to make an appointment.

Additional Comments:

DEETS CONSTRUCTION LLC

74968 STARGAZER LN

COQUILLE, OREGON

541-404-7202

michaeldeets@ymail.com

The intent of this application is to gain approval from Coos County Planning Dept to allow the construction of the Durbin family residence.

The proposed Durbin residence will be constructed on a legally created plot of land located on Vesta Road in Bandon, Oregon.

The Durbin property presently consists of two tax lots. A "Consolidation Request" has been filed with Coos County Assessors office and is currently pending completion by staff. Said request will create a legal parcel of adequate size to allow siting of proposed Dwelling. Please see attached copy of Consolidation request.

The Durbin property is in CD zone. CD zoning rules allow Residential use.

The proposed Durbin residence will be built in an existing small neighborhood with three other residences in the vicinity. The Durbin residence will contribute to the small coastal neighborhood feel of the area.

The proposed residence will be built amongst the existing Shore Pine trees to help preserve the unique coastal forest feel of the area.

The Durbin residence will allow the family to access the recreational opportunities of the area.

The property is .38 Acre in size.

The property has many small Shore Pines and gorse growing on it. Most of the pine trees will remain. The gorse shall be removed.

The property is accessed by existing Coos County roads- Vesta and Rohrer Roads.

There are no structures existing on the property.

The property is mostly flat with approximately 3' of elevation change occurring throughout the lot. Please see attached plot plan for elevations.

NON-REPUTABLE EASE

TO PROTECT THE INTERESTS OF THE TAXPAYER, THE ASSESSOR'S OFFICE WILL NOT CONSOLIDATE ACCOUNTS WITHOUT WRITTEN CONSENT.
Accounts (parcels) being considered for "consolidation" must meet the following criteria.

RECEIVED
OCT 05 2021
ASSESSOR'S OFFICE
JS 10/5/21

1. Names(s) of owner(s) of each parcel must be identical - to the letter.
2. Each owner's interest in each parcel must be identical.
3. Parcels must be touching or abutting.
4. All taxes must be paid.
 - You must voluntarily pre-pay your property taxes if you want your consolidation request processed between July 1, and September 1.
5. Any mortgage, lien contract, etc. must cover all parcels being considered for "consolidation". If the property is financed, the applicant should also check with their lending institution prior to consolidation.
6. Classes of the properties must be the same, (i.e. residential can't be consolidated with commercial, etc.)
7. Parcels must be in compliance with ORS 92.190(4) (Property line adjustment).
8. Parcels must be in compliance with ORS 92.060 (Partition plat) requirements.
9. Applicant may want to inquire at the appropriate planning department as to the effect the consolidation may have on the future use of the property.

Between Sept. 1 and the time that tax statements are mailed, no consolidations can be processed.

Please combine our property identified by the following accounts/or tax lot numbers.

2898 900 , 2899 300
Tax Lot 1600, 1602
295 15 W, 01 - CB 01600/01602

Signature of owner(s)

Summer R Durbin
Corey M Durbin

Print Name(s)

Summer R Durbin
Corey M Durbin

Date

10/5/2021

RECORDING REQUESTED BY:



300 Anderson Ave
Coos Bay, OR 97420

GRANTOR'S NAME:

James E. Darrow and Cheryl Darrow

GRANTEE'S NAME:

Durbin Lasting Legacy Trust u/a/d January 23, 2019

AFTER RECORDING RETURN TO:

Order No.: 360620033640-LS
Corey M. Durbin and Summer R. Durbin, Trustees of the Durbin
Lasting Legacy Trust u/a/d January 23, 2019
6819 NW 192nd Street
Ridgefield, WA 98642

SEND TAX STATEMENTS TO:

Durbin Lasting Legacy Trust u/a/d January 23, 2019
6819 NW 192nd Street
Ridgefield, WA 98642

APN: 2899300

2898900

Map: 29S1501CB01602

29S1501CB01600

0 Vesta Street, 29S1501CB01602 and 29S1501CB01600, Bandon,
OR 97411

Coos County, Oregon **2020-12546**
\$91.00 Pgs=2 12/14/2020 04:03 PM
eRecorded by: TICOR TITLE COOS BAY
Debbie Heller, CCC, Coos County Clerk

SPACE ABOVE THIS LINE FOR RECORDER'S USE

STATUTORY WARRANTY DEED

James E. Darrow and Cheryl Darrow, who acquired title as Cheryl Hackerott, Grantor, conveys and warrants to Corey M. Durbin and Summer R. Durbin, Trustees of the Durbin Lasting Legacy Trust u/a/d January 23, 2019, Grantee, the following described real property, free and clear of encumbrances except as specifically set forth below, situated in the County of Coos, State of Oregon:

PARCEL 1: Lots 6, 7, 8 and 9, Block 5, Sunset City, Coos County, Oregon.

PARCEL 2: Lots 10 and 11, Block 5, Sunset City, Coos County, Oregon.

THE TRUE AND ACTUAL CONSIDERATION FOR THIS CONVEYANCE IS FOUR HUNDRED FIFTY THOUSAND AND NO/100 DOLLARS (\$450,000.00). (See ORS 93.030).

Subject to:

1. Anti-Remonstrance Agreement

Recording Date: January 26, 2000
Recording No.: 2000-701

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

STATUTORY WARRANTY DEED
(continued)

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

Dated: December 10, 2020

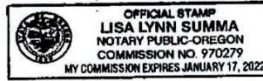
James E. Darrow
James E. Darrow
Cheryl Darrow
Cheryl Darrow, formerly known as Cheryl Hackerott

State of Oregon
County of COOS

This instrument was acknowledged before me on Dec. 10, 2020 by James E. Darrow and Cheryl Darrow.

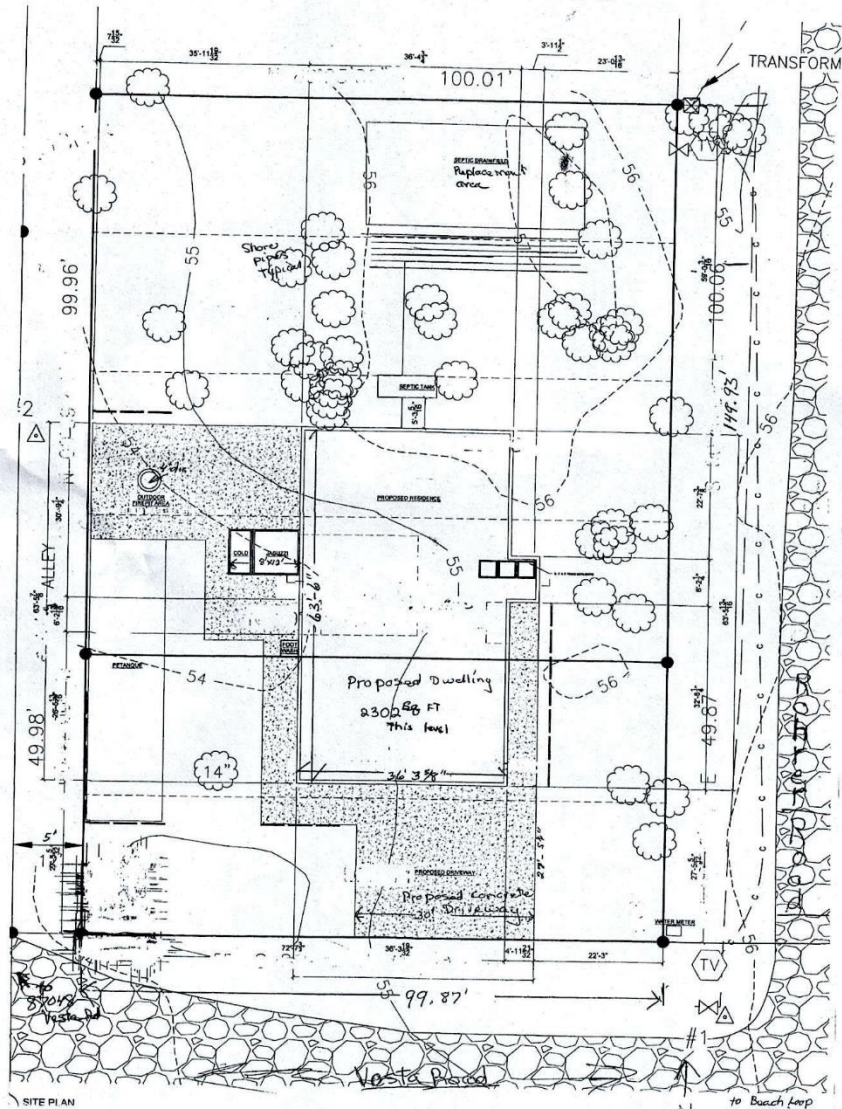
Lisa Lynn Summa
Notary Public - State of Oregon

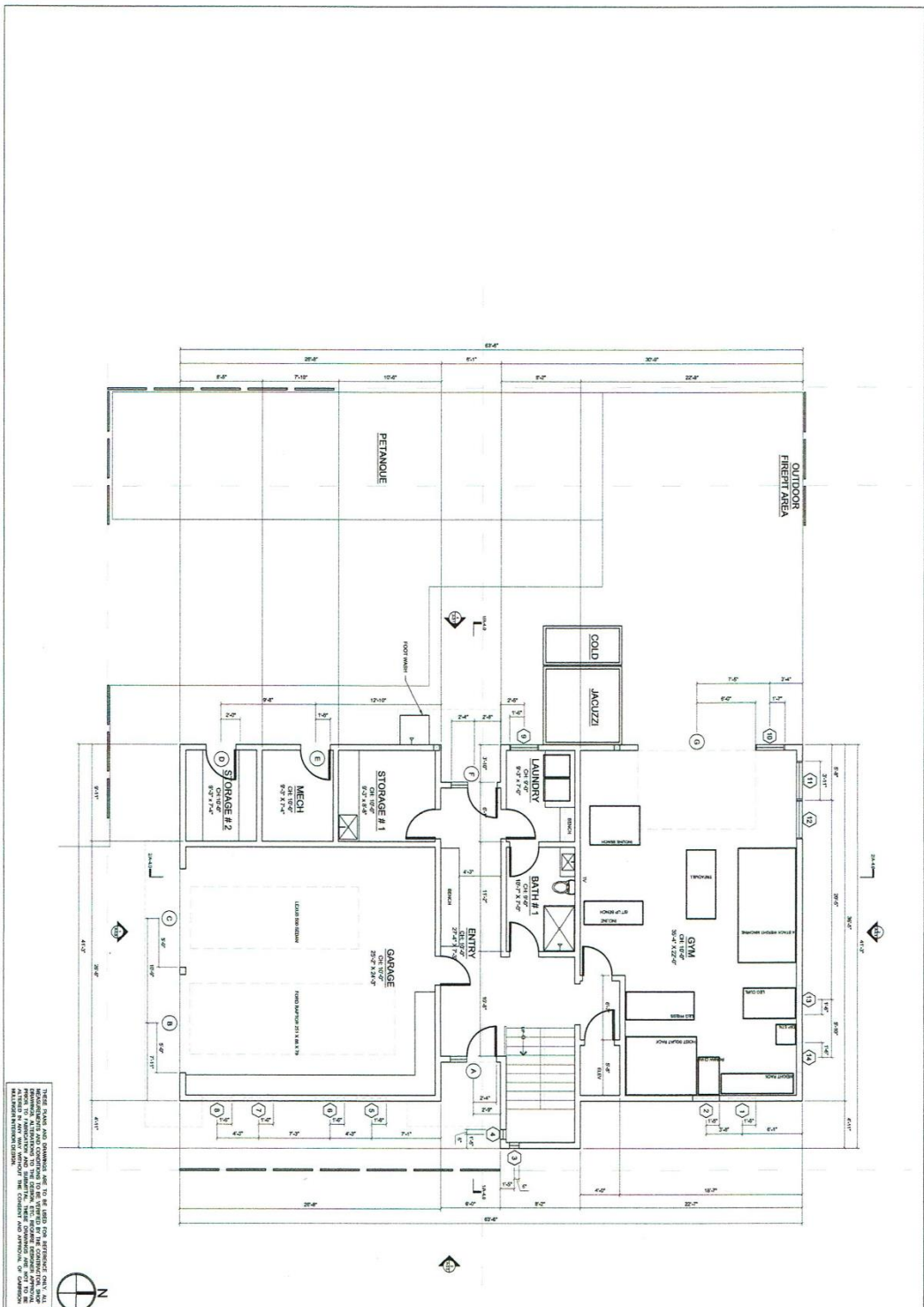
My Commission Expires: 1.17.2022



Lot 1600 .24 A 100'x100'
 Lot 1602 .14 A 99.87'x100'
 Total = 0.38 Acres

Plot Plan
 Durbin Home
 1" = 10'





FIRST FLOOR PLAN

DATE	REVISION
1.29.2021	

SCALE: 1/8" = 1'-0"

PROJECT NUMBER: 14-2018

DURBIN RESIDENCE
 TAX PARCELS 1600, 1602 VESTA LN
 BANDON, OR 97411

506 SW 6TH AVE, FIFTH FLOOR
 PORTLAND, OR 97204
 P: 971.255.0326 F: 971.255.0335
 INFO@GARRISONHULLINGER.COM



A
20

TO
Coos County Planning
60 E. Second Street
Coquille, OR 97423

In response to items #2 and #9 of " Notice of Completeness " letter dated November 5,2021.

Item 2.

Please find attached letter from property owners granting me permission to act as their agent in this matter.

Item #9.

The Durbin property is located within Bandon Fire Protection District.

Water service to the dwelling will be provided by City of Bandon .

A firebreak will be established and maintained as per requirements as set forth in the "Wildfire Criteria" on page 3, paragraph 4 of the Notice of Completeness letter:

4. *Firebreak:*

- a. *A firebreak shall be established and maintained around all structures, including decks, on land owned or controlled by the applicant for a distance of at least 30 feet in all directions.*
- b. *This firebreak will be a primary safety zone around all structures. Vegetation within this primary safety zone may include mowed grasses, low shrubs (less than ground floor window height), and trees that are spaced with more than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet from the ground) branches. Accumulated needles, limbs and other dead vegetation should be removed from beneath trees.*
- c. *Sufficient garden hose to reach the perimeter of the primary safety zone shall be available at all times.*

Please find attached a plot plan of property showing Firebreak Plan.

Michael Deets

74968 Stargazer Lane, Coquille, Oregon 97423

541-404-7202

[michaeldeets@ymail.com]

November 9, 2021

Coos County Planning Department
225 N. Adams Street
Coquille, OR 97423

To Whom it May Concern:

Please accept this letter as confirmation that Michael Deets has our permission to act as our agent in obtaining Permits and Clearances for our project.

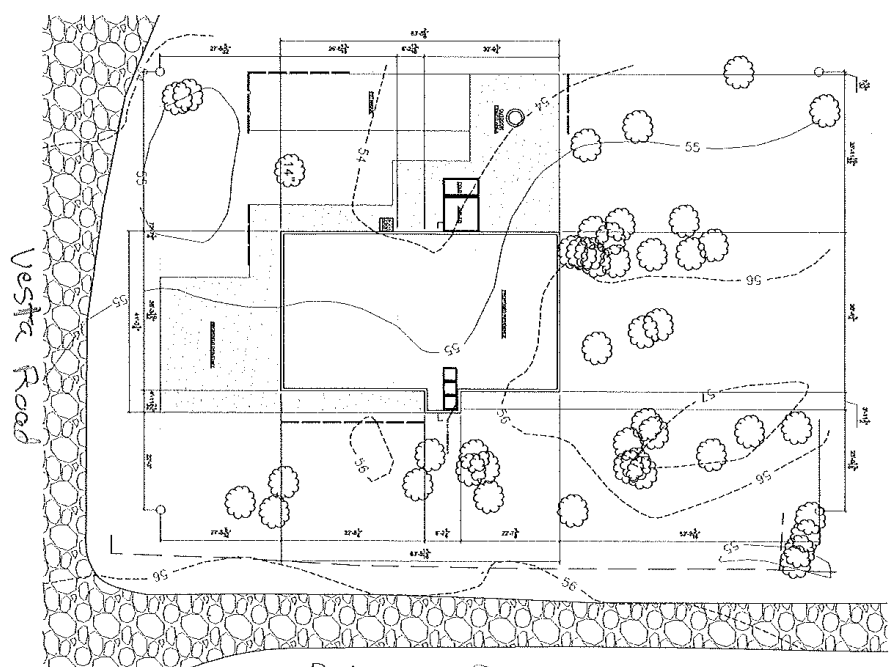
Sincerely,


Corey M. Durbin


Summer R. Durbin



Existing Trees



THESE PLANS AND PROVISIONS ARE TO BE USED FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL INFORMATION AND DATA PROVIDED HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT.

A
1.0

SITE PLAN	
DATE	6/23/11
SCALE	1/8" = 1'-0"
DRAWN BY	JC
PROJECT NUMBER	130166

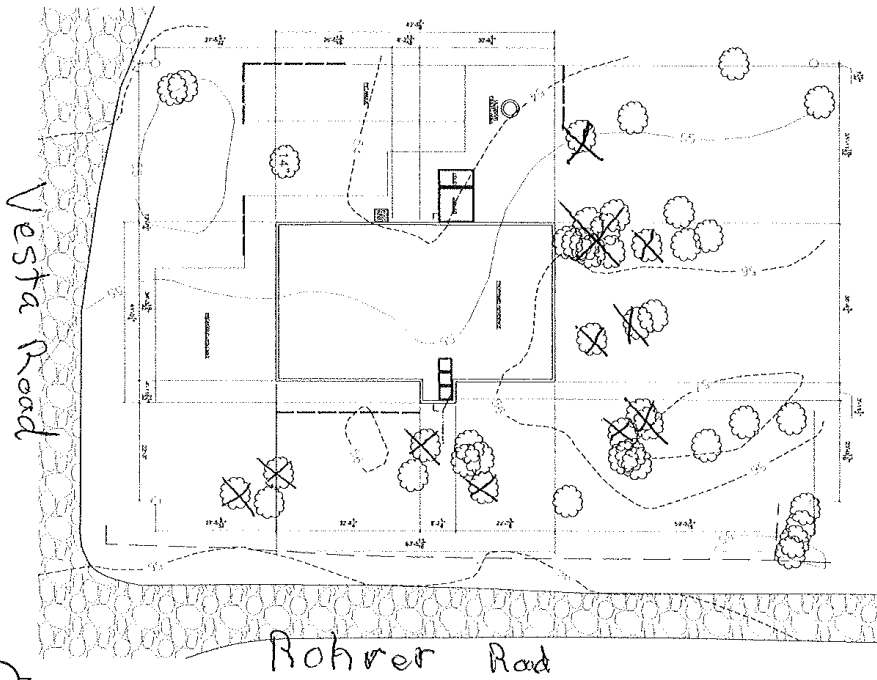
DURBIN RESIDENCE
 TAX PARCELS 1600, 1802 VESTA LN
 BANDON, OR 97411

506 SW 6TH AVE, FIFTH FLOOR
 PORTLAND, OR 97204
 P: 971.255.0326 F: 971.255.0335
 INFO@GARRISONHULLINGER.COM



N ↑

Trees to be removed
to create Firebreak



THESE PLANS AND SPECIFICATIONS ARE TO BE USED FOR INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL DIMENSIONS AND CONDITIONS OF THE SITE AND ADJUSTING THE PLANS AND SPECIFICATIONS THEREAS AS NECESSARY.

1.0
A

SITE PLAN	
DATE	4/2/21
SCALE	AS SHOWN
DRAWN BY	JC
PROJECT NUMBER	11251

DURBIN RESIDENCE
TAX PARCELS 1600, 1602 VESTA LN
BANDON, OR 97411

508 SW 6TH AVE, FIFTH FLOOR
PORTLAND, OR 97204
P: 971.255.0326 F: 971.265.0335
INFO@GARRISONHULLINGER.COM



**AGREEMENT TO PROVIDE WATER SERVICES
AND ANTI-REMONSTRANCE AGREEMENT
CITY OF BANDON
MICHAEL and BARBARA PICCININO**

The City of Bandon, a municipal corporation organization under the laws of the State of Oregon. MICHAEL and BARBARA PICCININO are owners of property located in Coos County, outside the city limits of Bandon. The property is legally described as:

Lots 6, 7, 8 and 9, Block 5, Sunset City, Coos County,
Oregon, also known as Tax Lots 1600 and 1601.

Currently, the City owns a water line that is adjacent to PICCININO's property. PICCININO's desire to obtain city water services.

The City has no commitment or obligation to provide PICCININO's water services. The City is interested in maintaining good planning and coordination with Coos County in the area in which PICCININO's property is located. In order to maintain options available for future planning, the City is willing to allow PICCININO's water services only on the conditions as set out in this agreement. The City is specifically concerned with development in the urban growth area that is not consistent with or pursuant to standards that the City desires maintained by the county, whether through an intergovernmental agreement or through county zoning. Therefore, the City is willing to allow a connection to the water system according to the following:

1. "Public improvements" in this agreement is meant to include, but not be limited to, streets, curbs and gutters, sidewalks, drainage and storm drains, water, sewer and other utilities, and improvements to each of the listed items.
2. In consideration of the allowance of water services by the City of Bandon to the PICCININO property, PICCININO's waive their right to exercise any statutory or other rights of objection against the formation of any local improvement district for public improvements that concern their property.
3. The City has an interest in the orderly development of the urban growth boundary area and is desirous of coordination with Coos County in applying the Bandon Development Ordinances. Notwithstanding the City's position, the City will not require PICCININO's to comply with Bandon Development Ordinances because of the unique and peculiar situation of the surrounding development in the area. PICCININO's shall be subject to paying all fees, SDC's and other charges imposed by the City regarding the water system connection.

After recording return to: City of Bandon, P. O. Box 67, Bandon, OR 97411

Piccino Agreement for Water Services

Page 1 of 3

01/26/2000 02:32 REC FEE: \$36.00
COOS COUNTY, OR, TERRI TURI - COUNTY CLERK

PAGE #: 0001 OF 0003
INST#: 2000 701 **

ACU-21-059

4. This agreement is specifically not a waiver of PICCININO's rights to participate at the formation hearing of a LID or any other hearings regarding formation assessment or reassessment. PICCININO's right to participate by testifying, either orally or in writing, are specifically not waived by this agreement. Notwithstanding the confirmation of PICCININO's rights to participate at the formation hearing, nothing herein changes the waiver of rights set out in paragraph 2 above.
5. The parties understand and agree that the effect of this agreement is that any objections by PICCININOs will not be counted as a remonstrance for the purpose of determining the percentage of property owners objecting to the LID and the percentage for which a LID may be defeated/delayed for up to six months.
6. As further inducement for the City to allow connection to the water system, PICCININO's irrevocably agree to annexation of their property into the City during any annexation hearings initiated by the Council or the citizens.

This agreement and its entire contents, promises and waivers is binding upon the heirs, successors and assigns of PICCININO.

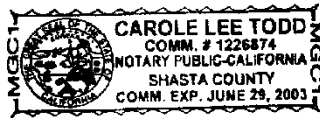
Michael Piccinino
Michael Piccinino

Barbara Piccinino
Barbara Piccinino

~~STATE OF OREGON~~)
STATE OF CALIFORNIA) ss
~~County of Coos~~)
County of SHASTA

On this 17 day of January 2000, before me personally appeared MICHAEL PICCININO and BARBARA PICCININO, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to this instrument, and acknowledged that they executed it.

WITNESS my hand and official seal the day and year last above written.



Carole Lee Todd
Notary Public for Oregon-
CALIFORNIA

CITY OF BANDON

By: M. Winkel
Matt Winkel, City Manager

STATE OF OREGON)
) ss
County of Coos)

On this 4th day of January 2000, before me personally appeared MATT WINKEL, personally known to me to be the person who executed the within instrument as City Manager on behalf of the City of Bandon, the municipal corporation therein named, and acknowledged to me that the municipal corporation executed it.

WITNESS my hand and official seal the day and year last above written.



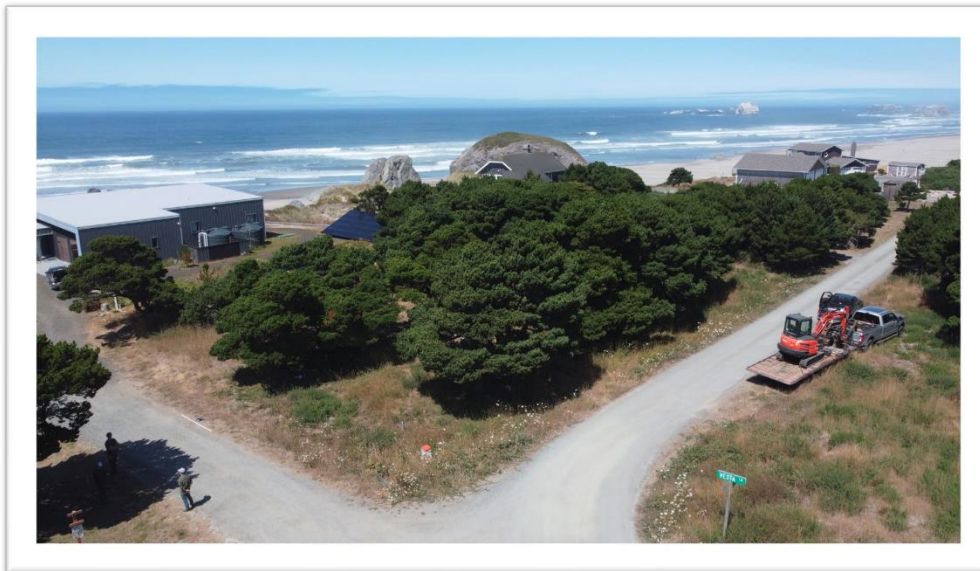
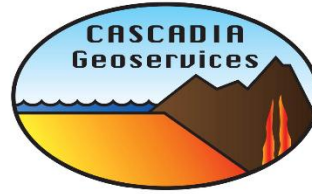
Beverly Lanier
Notary Public for Oregon

AFTER RECORDING RETURN TO:

City of Bandon
P. O. Box 67
Bandon, OR 97411

Cascadia Geoservices, Inc.

190 6th Street
PO Box 1026
Port Orford, Oregon 97465
D. 541-332-0433
C. 541-655-0021
Email: info@cascadiageoservices.com
[www: CascadiaGeoservices.com](http://www.CascadiaGeoservices.com)



Geotechnical Site Evaluation

87052 Vesta Lane
Bandon, Oregon 97411
T29S R15W Sec 01CB, Tax Lots 1600 and 1602

Corey Durbin
6819 NW 192nd St.
Ridgefield, Washington 98642
Sent via email: bandondreams@gmail.com

September 29, 2021
CGS Project No. 21096

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INTRODUCTION

Cascadia Geoservices, Inc. (CGS) is pleased to provide you with this Geotechnical Site Evaluation report which summarizes our evaluation of your client's property located on Vesta Lane near Bandon, Oregon (see Figure 1, Location Map). We understand that your client is proposing to develop the property (subject property or site) with a residential structure and have requested that CGS evaluate the subject property and provide you and the design team with geotechnical recommendations for developing the site. This report summarizes our project understanding and site investigation, including subsurface explorations, and provides our conclusions and recommendations.

PROJECT UNDERSTANDING AND DESCRIPTION

Our understanding is based on telephone correspondence with you beginning on June 4, 2021, and on a preliminary site visit on June 18, 2021. Our understanding is further based on a second site visit on August 8, 2021, at which time a geologic reconnaissance of the site was completed and five exploratory test pits were excavated.

We understand that the site consists of two tax lots which combined are 0.36 acres. We further understand that your client is proposing to develop the site with a wood-framed residential structure and that the structure will be two-story and will be approximately 2,500 square feet. And we understand that you have no plans for excavations over 4 feet deep (except possibly for utility trenches) and no planned fills over 4 feet thick.

BEACH AND DUNE HAZARD

Based on a review of the Coos County Map Atlas,¹ Tax Lots 1600 and 1602 have been classified, in accordance with Goal 18 Eligibility Inventory, as "Not Eligible for Protection". The sand dunes on the site are classified as Younger, Stabilized Dunes, in accordance with USDA findings. This agrees with our site evaluation. Coos County has inventoried the site and surrounding area and has classified the site as having "limited suitability" for development. We note that the site is within the Sunset City Subdivision and is zoned Controlled Development 10 (CD-10), and that adjoining parcels to the west and south have been developed with residential structures.

¹ Viewed online at <https://www.coastalatlaskas.net>

Based on our site evaluation and on our experience working in this region, it is our opinion that the proposed development will not have an adverse impact on either the site or adjacent areas. Further, it is our opinion that because the site is level and the soils well drained, there is no need for temporary or permanent stabilization programs and/or maintenance of new and existing vegetation other than those typically incorporated into residential landscaping. Further, we see no hazards to life, public and private property, or to the natural environment by the proposed development. Finally, it is our professional opinion that the proposed development will not cause excessive destruction of desirable vegetation (including inadvertent destruction by moisture loss or root damage), cause exposure of stable and conditionally stable areas to erosion or modify current air wave patterns leading to beach erosion.

SURFACE DESCRIPTION

The site is located within the Klamath Mountain physiographic region of southwestern Oregon and is within the Sunset City Subdivision in Coos County, Oregon. The site is generally level, rectangular in shape, and is located on an elevated coastal terrace, which is a regional landform on the southern Oregon coast, approximately 55.0 feet Above Mean Sea Level (AMSL) (see Figure 2, Site Map). The western boundary of the site is 230.0 feet east of an actively eroding sea cliff. The site is moderately to densely vegetated with native grasses and shore pines (see Photos 1 and 2).

During our recent site visits the subject property was observed to be stable and well drained with no ground cracks, areas of settlement, fresh earthen scarps, or landslides observed. Further, the site is not impacted by coastal erosion occurring along the base of the sea cliff to the west.

Based on mapping done by others,^{2,3} soils at the site consist of sandy loam (8B – Bullards sandy loam, 0 to 7 percent slopes). The soils are described as well drained and derived from mixed eolian and marine deposits. These overlie surficial sediments of Quaternary marine terrace deposits which consist of unconsolidated to semi-consolidated sand, silt, clay, and gravel. Underlying these sediments are

² United States Department of Agriculture. Natural Resource Conservation Service Web Soil Survey, viewed at <http://websoilsurvey.nrcs.usda.gov/app>

³ Thomas J. Wiley, et al. (2014). Geologic Map of the Southern Oregon Coast between Port Orford and Bandon, Curry and Coos Counties, Oregon. Oregon Department of Geology and Mineral Industries (DOGAMI) open-file report O-14-0.

bedrock deposits of Late Mesozoic Mélange rocks of Sixes River. These deposits are an assemblage of sedimentary, volcanic, and metamorphic rocks which vary in both composition and degree of metamorphism. The contact between the terrace sands and bedrock is unconformable. This assemblage of rocks has been subsequently elevated during coastal uplift associated with regional tectonics.

SUBSURFACE EXPLORATIONS

During our August 8, 2021, site visit, CGS observed the excavation of five test pits (TP-1 through TP-5) by Natural Origins LLC of Bandon, Oregon (see Photo 3). The purpose of the test pits was to observe the subsurface soils on the site. The test pits were excavated to depths ranging from 0.5 to 9.0 feet below ground surface (bgs) at various locations as determined in the field and are shown on Figure 2, Site Map. Detailed logs for the test pits are included at the end of this report as Attachment 1.

Our test pits encountered loose sandy organic topsoil which overlays medium dense tan-brown fine sand (Photo 4). The sand is well cemented and is part of the surficial Quaternary Marine Terrace Deposits as identified by others². In test pits TP-2 and TP-3 which were excavated in the northeastern portion of the site, a very dense dark gray gravel was encountered near surface (Photo 5). The gravel was very difficult to excavate causing TP-2 to be abandoned at 0.5 feet bgs and TP-3 to be started. TP-3 also encountered the gravel at 1.0-foot bgs which caused abandonment at 5.0 feet bgs. A review of historical photographs of the area⁴ indicate that a north-south road existed on this portion of the site that was subsequently abandoned and replaced by Roher Road to the east. We infer that the gravels encountered in TP-2 and 3 are part of the older roadbed.

Our analysis of the subsurface conditions on the site is based on the soils encountered in our test pits and is summarized as follows.

Topsoil: Encountered from 0.0 to 1.0 feet below ground surface (bgs) in the test pits. Consists of very-loose-to-medium-dense, brown and reddish brown, silty fine sand; damp with variable amounts of root and other organics.

⁴ Google Earth, 1985, indicates that

Fine Sand and Silty Sand (Quaternary Marine Terrace Deposits): Encountered from 0.5 to 1.0 feet bgs to the depth of our explorations in TP-1, TP-4, and TP-5, and from 1.0 to 2.0 feet bgs in TP-3. The Quaternary marine terrace deposits were not encountered in TP-2. Consists of medium-dense, tannish brown and reddish brown, silty fine sand (see Photo 4). These soils were observed to be damp and moderately to strongly cemented. Based on mapping done by others,² we infer that these are part of the Quaternary marine terrace deposits.

Gravel: Encountered from 0.0 to 0.5 feet bgs in TP-2 and from 2.0 to 5.0 feet bgs in TP-3. Consists of dark greenish gray volcanics (see Photo 5). Where it was encountered near the surface in TP-2, it was observed to be very dense, causing abandonment of the test pit.

A dynamic cone penetrometer (DCP)⁵ and pocket penetrometer were used by CGS to test the relative consistency of the soils in the test pits. In general, the surficial topsoil was determined to be loose, with a penetration rate (PR) of from 2 to 4. The Quaternary marine terrace deposits, encountered beginning at 0.5 to 2.0 feet bgs, were determined to be medium dense, with a PR of from 6 to 16. Gravel encountered near the surface in TP-2 and in TP-3, causing refusal with the mini excavator, and had a PR of from 8 to 15.

Upon completion, the test pits were filled using uncompacted excavated material. The locations of the test pits were surveyed, marked, and plotted on Figure 2 based on GPS.

LABORATORY ANALYSIS

Select samples were packaged in moisture-proof bags and transported to our laboratory where they were classified in general accordance with the Unified Soil Classification System, Visual-Manual Procedure. In addition, select samples were analyzed, where applicable, for water content (ASTM D698), percent of fines (ASTM D1140), and Atterberg limits (ASTM D4318). The results are summarized below in Table 1. The Lab Analysis Reports for the samples are provided at the back of this report as Attachment 2.

⁵ The dynamic cone penetrometer (DCP) test uses a 15 lb. steel mass falling 20 inches to strike an anvil to penetrate a 1.5-inch-diameter 45° (vertex angle) cone that has been seated in the bottom of a hand-augered hole or test pit. The penetrometer is used to determine a penetration resistance relationship with the standard penetration resistance of virgin soils. N is the average number of blows needed to advance the cone a distance of 1 inch.

Table 1: Laboratory Testing Results

Sample ID	Depth below Surface (feet) / (Test Pit No.)	Type of Soil	Water Content (%)	Fines (%)	USCS Symbol ⁶
SS-2	3/(TP-1)	Fine Sand	8.0	3.0	SP
SS-10	2/ (TP-4)	Silty Fine Sand	10.0	5.0	SM
SS-12	1.0/(TP-5)	Silty Fine Sand	12.0	27.0	SM

Our lab analysis indicates that the sands have a relatively low water content and variable, typically low percentage of fines. The sands are subangular to subrounded and are moderately to strongly cemented.

Our analysis and recommendations are based on the following physical properties of the soils encountered, which are listed below in Table 2.

Table 2: Physical Properties of Soil

Type of Soil	Depth below Surface (feet)	N Value ⁷	Effective Unit Weight (pcf)	Drained Friction Angle, ϕ' (degrees)	Drained Cohesion, c' (psf)
SP/SM	0.0 - 9.0	10 - 20	80 - 125	38	0 - 200

GROUNDWATER

Groundwater was not encountered in our test pits. Further, there was no seepage or caving detected in the test pits. Our review of water-well cards for the area⁸ indicates that groundwater levels are typically less than 30.0 feet bgs. Our soil samples were described as moist. We infer that the primary groundwater table forms at the contact between the overlying porous sands of the Quaternary marine terrace deposits and bedrock. It is our opinion that water levels will rise during periods of sustained rainfall and that perched groundwater will form within the surficial sands above confining layers. Based on the topography, we anticipate that the hydraulic gradient is to the west towards the Pacific Ocean.

GEOLOGIC HAZARDS

⁶ Classification symbols are estimated based on visual observation.

⁷ Determined based on Penetration rate

⁸ Oregon Water Resources Department well report query, viewed online at <https://apps.wrd.state.or.us/>

A review of the State Landslide Inventory Database (Oregon HazVu)⁹ indicates that the site is not part of an identified landslide, earthflow, or debris-flow complex.

A review of LIDAR mapping for the area¹⁰ indicates that the site is located on a broad, level terrace east of a sea cliff. Based on our LIDAR review, there are no landforms which are indicative of geologic hazards which impact the site.

Based on a review of U.S. Geological Survey maps,¹¹ there are no geologically young fault systems within ½ mile of the subject property. As with other folds and faults located in the Cascadia forearc, it is suspected that great megathrust earthquakes along the Cascadia Subduction Zone will cause future rupture and displacement on these faults.

Seismic Design Criteria

Our seismic design parameters are based on Site Class D – Stiff Soil. The subject property is located in an area that is highly influenced by regional seismicity due to the proximity to the Cascadia Subduction Zone (CSZ). Seismic design criteria, in accordance with the ASCE¹² 7-16 (IBC-12¹³), are summarized in Table 3 below.

Table 3: ASCE 7-16 Seismic Design Parameters

Seismic Design Parameters	Short Period	1 Second
Maximum Credible Earthquake Spectral Acceleration	$S_s = 2.023 \text{ g}$	$S_1 = 0.969 \text{ g}$
Site Class	D – Stiff Soil	
Site Coefficient	$F_a = 1.000$	$F_v = \text{null}$
Adjusted Spectral Acceleration	$S_{MS} = 2.023$	$S_{M1} = \text{null}$
Design Spectral Response Acceleration Parameters	$S_{DS} = 1.349$	$S_{D1} = \text{null}$
Peak Ground Acceleration	$\text{PGA} = 1.009 \text{ g}$	

⁹ (HazVu). Oregon Department of Geology and Mineral Industries (DOGAMI) Statewide Geohazards Viewer. Viewed at <https://www.oregongeology.org>

¹⁰ LIDAR is an aerial imagery technology that penetrates the vegetative cover by measuring distance by measuring the amount of time it takes for light to travel from a light-emitting source to an object and back to a sensor.

¹¹ U.S. Geological Survey (USGS), Quaternary Faults Web Mapping Application, viewed at <https://earthquake.usgs.gov>

¹² American Society of Civil Engineers

¹³ 2012 International Building Code

Liquefaction

Liquefaction occurs when loosely packed, water-logged granular sediments lose their strength in response to strong ground shaking during a seismic event. Liquefaction of soils occurring beneath buildings and other structures can cause major damage.

Liquefaction potential was assessed based on the information obtained from our test pits and using the parameters provided in Youd & Andrus, et al., 2001.¹⁴ According to our seismic analysis, the site will experience a peak ground acceleration (PGA) during a design seismic event of 1.009 g. Further, groundwater was not observed in our test pits to a depth of 9.0 feet bgs.

Based on the inferred depth of groundwater, the consistency and cementation of the soils encountered in our test pits, it is our opinion that liquefaction potential for the site is low to moderate.

Tsunamis

Based on recent mapping and modeling done by the state of Oregon,¹⁵ the site is within the Tsunami Inundation Zone and may be inundated during a tsunami generated by a local-source (Cascadia Subduction Zone) moment magnitude (M_m) earthquake of 9.0 or greater. Because of this, we strongly recommend that your clients check local resources and the state of Oregon's Department of Geology and Mineral Industries (DOGAMI) Tsunami Resource Center¹⁶ for current information regarding tsunami preparedness and emergency procedures.

DISCUSSION AND RECOMMENDATIONS

Based on our surface and subsurface investigation, it is our opinion that the subject property is suitable to site a single-family residence on a conventional shallow foundation, provided the site is prepared in accordance with our recommendations.

Due to the variability of soils encountered in our test pits, and to anticipated disturbance of the soils by the removal of shore pines on the site, we recommend that

¹⁴ Youd, T. L., Andrus, I. M., et al., 2001. Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils. ASCE, Journal of Geotechnical and Geoenvironmental Engineering, v. 127, no. 10, pp. 817-833.

¹⁵ Local-source (Cascadia Subduction Zone) Tsunami Inundation Map for Sisters Rock, Curry County, Oregon. DOGAMI TIM-Curr-06, Plate 1, State of Oregon Department of Geology and Mineral Industries online at <http://www.oregongeology.org>

¹⁶ Viewed online at www.oregongeology.org

the topsoil and surficial soils be removed, and the foundation be built on mechanically compacted structural fill which is placed on the underlying medium-dense fine sand. We further recommend that the topsoil and surficial soils be removed to a depth of 3.0 feet bgs under the building footprint and a 5-foot margin around the footprint and that the building pad be rebuilt using clean, mechanically compacted structural fill. The fill should be approved by CGS.

Finally, we recommend that the site be graded to provide positive drainage away from the structure.

DESIGN

Spread Footing

As discussed, a single-family residence can be supported on a shallow foundation (such as conventional spread footings) which in turn is supported on mechanically compacted structural fill placed on the underlying fine sand encountered in our test pits.

Footings bearing on the structural fill should be sized for an allowable bearing capacity of 2,000 psf. This is a net bearing pressure. The weight of the footing and overlying backfill can be disregarded in calculating footing sizes. The recommended allowable bearing pressure applies to the total of dead loads plus long-term live loads, and this bearing pressure may be doubled for short-term loads such as those resulting from wind or seismic forces.

Based on CGS's estimates, total post-construction settlement is calculated to be less than one (1) inch, with post-construction differential settlement of less than 0.5 inch over a 50-foot span.

Lateral loads on footings can be resisted by passive earth pressure on the sides of the structures and by friction at the base of the footings. Adjacent floor slabs, pavements, or the upper 12-inch depth of adjacent, unpaved areas should not be considered when calculating passive resistance. For footings in contact with native soils, use a coefficient of friction equal to 0.5 when calculating resistance to sliding. The footings should be founded below an imaginary line projecting at a 1 horizontal to 1 vertical (1H:1V) slope from the base of any adjacent, parallel utility trenches.

Floor Slabs

Satisfactory subgrade support for reinforced building floor slabs can be obtained from the subgrade prepared in accordance with our site preparation recommendations. All loose fill and disturbed topsoil should be removed to a depth of 1.0-foot bgs. A minimum of 12 inches of loose, imported granular material should be placed and compacted over the prepared subgrade. Imported granular material should be clean sand, crushed rock or crushed gravel that is fairly well graded between coarse and fine, contains no deleterious materials, has a maximum particle size of one (1) inch, and has less than 5 percent by weight passing the U.S. Standard No. 200 Sieve.

CONSTRUCTION

Site Preparation

All loose surficial topsoil and underlying sands should be removed from the building footprint and a 5-foot margin around the footprint. The stripping depth should be a minimum of 3.0 feet bgs and may vary. The actual stripping depth should be based on field observations at the time of construction. Near-surface root zones should be stripped and removed from the project site in all proposed building and slab or pavement areas and for a 5-foot margin around such areas. In addition, root balls should be grubbed out to the depth of the roots which could exceed 4 feet bgs. Depending on the methods used to remove the root balls, considerable disturbance and loosening of the subgrade could occur during site grubbing. The soil disturbed during grubbing operations should be removed to expose firm, undisturbed subgrade. The resulting excavations should be backfilled with mechanically compacted structural fill.

Stripped materials should not be used as structural fill and should be transported off-site for disposal or stockpiled for use in landscaped areas. A CGS engineering geologist (or their representative) should confirm suitable bearing conditions and evaluate all footing subgrades. Deeper excavations and debris removal may be required at the discretion of the engineering geologist. The resulting subgrade should be compacted using a smooth-drum roller or plate compactor.

Structural fill should meet the specifications of Selected Granular Backfill in accordance with Oregon Standards for Specifications for Construction¹⁷. The imported granular material should be either clean sand, crushed rock or crushed gravel that is fairly well graded between coarse and fine, contain no deleterious material, has a maximum particle size of one (1) inch, and has less than 5 percent by weight passing the U.S. Standard No. 200 Sieve. The granular fill should be placed in 9-inch lifts and compacted to at least 95 percent of the maximum dry density, as determined by ASTM D1557. Compaction should be checked using either a nuclear gauge or Sand Cone Test, as determined by ASTM D1556, and by a proof-roll.

Where imported granular material is placed over soft-soil subgrades, we recommend a geotextile be placed as a barrier between the subgrade and imported granular material. Depending on site conditions, the geotextile should meet the specifications of ODOT SS 02320.10 – Geosynthetics, Acceptance, for soil separation or stabilization. The geotextile should be installed in conformance with ODOT SS 00350.40 – Geosynthetic Construction, General Requirements.

A CGS engineering geologist (or their representative) should confirm suitable bearing conditions and evaluate all footing subgrades. Observations should also confirm that loose or soft materials, organics, unsuitable fill, and old topsoil zones are removed. Localized deepening of footing excavations may be required to penetrate any deleterious materials.

Probing

Following stripping, excavation, and site preparation and prior to placing structural fill, the exposed excavated surface and the footing or slab subgrade should be evaluated by probing. A member of our geotechnical staff should carry out the probing. Soft or loose zones identified during the field evaluation should be compacted to an unyielding condition or be excavated and replaced with structural fill.

¹⁷ Oregon Standards for Specifications for Construction, 2021. Oregon Department of Transportation. Viewed online at <https://www.oregon.gov>

Excavation

Subsurface conditions at the project site show predominately medium-dense fine sand and silty fine sand. Excavations in these soils may be readily accomplished with conventional earthwork equipment. The gravel encountered in our test pits TP-2 and TP-3 will likely require excavation using rock ripping excavation methods. We estimate that the rock will likely be variably rippable to depths of 3 feet.

Excavation and trench cuts in native materials should stand vertical to a depth of approximately 4 feet, provided no groundwater seepage is present in the trench walls, with the understanding that some sloughing may occur. The trenches should be flattened to 1.5H:1V if excessive sloughing occurs or seepage is present.

Groundwater was not encountered during our site exploration. However, during the wet months of the year, some shallow perched groundwater may be expected. If shallow groundwater is observed during construction, use of a trench shield (or other approved temporary shoring) is recommended for cuts that extend below groundwater seepage or if vertical walls are desired for cuts deeper than 4 feet. If shoring or dewatering is used, CGS recommends that the type and design of the shoring and dewatering systems be the responsibility of the contractor, who is in the best position to choose systems that fit the overall plan of operation. These excavations should be made in accordance with applicable Occupational Safety and Health Administration and state regulations.

DRAINAGE

We recommend that a robust perimeter drainage system be installed around the foundation and that the pad be graded to provide positive drainage away from the house.

WET-WEATHER/WET-SOIL CONDITIONS

The granular soils at the site are susceptible to disturbance during the wet season. Trafficability or grading operations within the exposed soils may be difficult during or after extended wet periods or when the moisture content of the soils is more than a few percentage points above optimum. Soils disturbed during site-preparation activities, or soft or loose zones identified during probing, should be removed and replaced with compacted structural fill.

CONSTRUCTION OBSERVATIONS

Satisfactory pavement and earthwork performance depends on the quality of construction. Sufficient monitoring of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications. We recommend that a representative from CGS be retained to observe general excavation, stripping, fill placement, footing subgrades, and subgrades and base rock for floor slabs and pavements.

Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions requires experience; therefore, qualified personnel should visit the site with sufficient frequency to detect whether subsurface conditions change significantly from those anticipated.

LIMITATIONS

Cascadia Geoservices, Inc.'s (CGS) professional services are performed, findings obtained, and recommendations prepared in accordance with generally accepted principles and practices for engineering geologists. No other warranty, express or implied, is made. The Customer acknowledges and agrees that:

1. CGS is not responsible for the conclusions, opinions, or recommendations made by others based upon our findings.
2. This report has been prepared for the exclusive use of the addressee, and their agents, and is intended for their use only. It is not to be photographed, photocopied, or similarly reproduced, in total or in part, without the expressed written consent of the Customer and Cascadia Geoservices, Inc.
3. The opinions, comments, and conclusions presented in this report are based upon information derived from our literature review, historical topographic map and aerial photograph review, and on our site observations. The scope of our services is intended to evaluate soil and groundwater (ground) conditions within the primary influence or influencing the proposed development area. Our services do not include an evaluation of potential ground conditions beyond the depth of our explorations or agreed-upon scope of our work. Conditions between or beyond our site observations may vary from those encountered.

4. Recommendations provided herein are based in part upon project information provided to CGS. If the project information is incorrect or if additional information becomes available, the correct or additional information should be immediately conveyed to CGS for review.
5. The scope of services for this subsurface exploration and report did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous substances in the soil, surface water, or groundwater at this site.
6. If there is a substantial lapse of time between the submission of this report and the start of work at the site, if conditions have changed due to natural causes or construction operations at or adjacent to the site, or if the basic project scheme is significantly modified from that assumed, this report should be reviewed to determine the applicability of the conclusions and recommendations. Land use, site conditions (both on and off site), or other factors may change over time and could materially affect our findings. Therefore, this report should not be relied upon after two years from its issue, or in the event that the site conditions change.
7. The work performed by the Consultant is not warranted or guaranteed.
8. There is an assumed risk when building on marginal ground, sites subject to flooding, or adjacent to bluffs, sea cliffs, or on steep ground.
9. The Consultant's work will be performed to the standards of the engineering and geology professions and will be supervised by licensed professionals. Attempts at improving marginal ground, sites subject to flooding, or adjacent to bluffs, sea cliffs, or on steep ground supporting the Customer's property may, through acts of God or otherwise, be temporary and that marginal ground, sites subject to flooding, or adjacent to bluffs, sea cliffs, or on steep ground may continue to degrade over time. The Customer hereby waives any claim that they may have against CGS for any claim, whether based on personal injury, property damage, economic loss, or otherwise, for any work performed by CGS for the Customer relating to or arising out of attempts to stabilize the marginal ground, sites subject to flooding, or bluffs, sea cliffs, or steep ground located at the Customer's property identified hereunder. It is further understood and agreed that continual monitoring of the Customer's property may be required, and that such

monitoring is done by sophisticated monitoring instruments used by CGS. It is further understood and agreed that repairs may require regular and periodic maintenance by the Customer.

10. The Customer shall indemnify, defend, at the Customer's sole expense, and hold harmless CGS, affiliated companies of CGS, its partners, joint ventures, representatives, members, designees, officers, directors, shareholders, employees, agents, successors, and assigns (Indemnified Parties) from and against any and all claims for bodily injury or death, damage to property, demands, damages, and expenses (including but not limited to investigative and repair costs, attorney's fees and costs, and consultant's fees and costs) (hereinafter "Claims") which arise or are in any way connected with the work performed, materials furnished, or services provided under this Agreement by CGS or its agents.

PROFESSIONAL QUALIFICATIONS

To review our professional qualifications, please visit our website at www.CascadiaGeoservices.com.

Sincerely,

Cascadia Geoservices, Inc.



Eric Oberbeck, RG/CEG
Expires June 1, 2022

A handwritten signature in black ink that reads "Adam Fulthorpe".

Adam Fulthorpe, Staff Geologist

PHOTOS

FIGURES

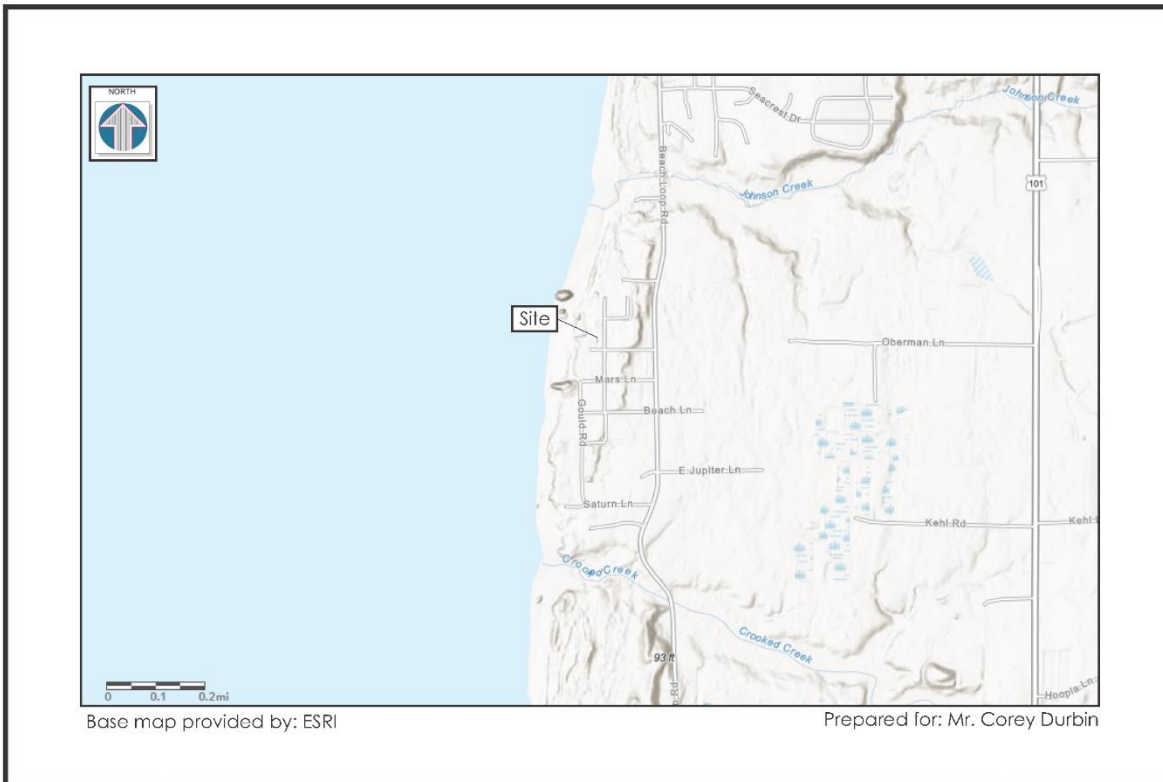
Figure 1, Location Map

Figure 2, Site Map

ATTACHMENTS

Attachment 1 – Summary Test Pit Logs

Attachment 2 – Lab Analysis Reports



	<p>Project: 21096</p> <p>September 2021</p>	<p>Location Map Geotechnical Site Evaluation 87052 Vesta Lane, Bandon, Oregon 97411 T29S R15W Sec 01CB, Tax Lots 1600 and 1602</p>	<p>Figure 1</p>
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Prepared for Mr. Corey Durbin



Project: 21096

September 2021

Site Map

Geotechnical Site Evaluation
 87052 Vesta Lane, Bandon, Oregon 97411
 T29S R15W Sec 01CB, Tax Lots 1600 and 1602

**Figure
2**

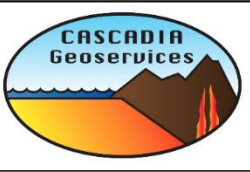
	Geotechnical Site Evaluation 87052 Vesta Lane Bandon, Oregon 97411	Photographic Log
	Date: September 2021	Cascadia Geoservices, Inc. Project No: 21096

Photo No:	1	
Direction Photo is Taken:	West	
Photo Description:		
Aerial view of the site looking west		

Photo No:	2	
Direction Photo is Taken:	East	
Photo Description:		
Aerial view of the site looking south		

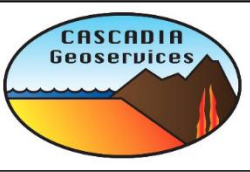

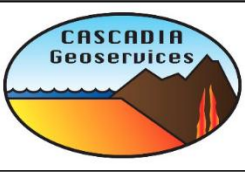
	Geotechnical Site Evaluation 87052 Vesta Lane Bandon, Oregon 97411	Photographic Log Cascadia Geoservices, Inc. Project No: 21096
	Date: September 2021	

Photo No: 3	
Direction Photo is Taken: West	
Photo Description:	
CGS observed the excavation of five test pits on the site.	

Photo No: 4	
Direction Photo is Taken:	
Photo Description:	
Topsoil encountered from 0.0 to 1.0 feet over lays medium-dense, tannish brown and reddish brown, silty fine sand.	

	Geotechnical Site Evaluation 87052 Vesta Lane Bandon, Oregon 97411	Photographic Log Cascadia Geoservices, Inc. Project No: 21096
	Date: September 2021	

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Photo No:	5	
Direction Photo is Taken:		
Photo Description:		
Bedrock was encountered near the surface in TP-2 and was medium weak (R3) dark greenish gray severely weathered and highly fractured volcanics.		

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Photo No:		
Direction Photo is Taken:		
Photo Description:		

**TABLE 1
FIELD CLASSIFICATIONS**

SOILS

ATTACHMENT 1



SOIL DESCRIPTION FORMAT	
(1) consistency,	(9) structure,
(2) color,	(10) cementation,
(3) grain size,	(11) reaction to HCL,
(4) classification name [secondary PRIMARY additional];	(12) odor,
(5) moisture,	(13) groundwater seepage,
(6) plasticity of fines,	(14) caving,
(7) angularity	(15) (unit name and/or origin),
(8) shape,	

Note: Bolded items are the minimum required elements for a soil description.

1. CONSISTENCY - COARSE-GRAINED				
TERM	SPT (140-LB. HAMMER) ¹	D & M SAMPLER (140-LB. HAMMER) ¹	DYNAMIC CONE PENETROMETER PENETRATION RATE SAMPLER (DCP) ^{5,6}	FIELD TEST (USING 1/4-INCH REBAR)
Very loose	0 – 4	0 – 11	0 – 2	Easily penetrated when pushed by hand
Loose	4 – 10	11 – 26	2 – 5	Easily penetrated several inches when pushed by hand
Medium dense	10 – 30	26 – 74	6 – 31	Easily to moderately penetrated when driven by 5 lb. hammer
Dense	30 – 50	74 – 120	32 – 42	Penetrated 1-foot with difficulty when driven by 5 lb. hammer
Very dense	>50	>120	>43	Penetrated only few inches when driven by 5 lb. hammer

1. CONSISTENCY - FINE-GRAINED						
TERM	SPT (140-LB. HAMMER) ¹	D & M SAMPLER (140-LB. HAMMER) ¹	DYNAMIC CONE PENETROMETER PENETRATION RATE SAMPLER (DCP) ^{5,6}	POCKET PEN. ²	TORVANE ³	FIELD TEST
Very soft	<2	<3	<2	<0.25	<0.13	Easily penetrated several inches by fist
Soft	2 – 4	3 – 6	2 – 3	0.25 – 0.5	0.13 – 0.25	Easily penetrated several inches by thumb
Medium stiff	5 – 8	7 – 12	4 – 7	0.50 – 1.0	0.25 – 0.5	Can be penetrated several inches by thumb with moderate effort
Stiff	9 – 15	13 – 25	8 – 16	1.0 – 2.0	0.5 – 1.0	Readily indented by thumb but penetrated only with great effort
Very stiff	16 – 30	26 – 65	17 – 27	2.0 – 4.0	1.0 – 2.0	Readily indented by thumbnail
Hard	>30	>65	>28	>4.0	>2.0	Difficult to indent by thumbnail

1 Standard penetration resistance (SPT N-value); Dames and Moore (D & M) sampler, number of blows/ft. for last 12" and 30" drop. Unconfined
2 compressive strength with pocket penetrometer; in tons per square foot (tsf).

3 Undrained shear strength with torvane (tsf).

4 Up to maximum medium-size sand grains only.

5 Dynamic cone penetration resistance; number of blows/inch.

6 Reference: George F. Sowers et. al. "Dynamic Cone for Shallow In-Situ Penetration Testing of In-Situ Soils, ASTM STP 399, ASTM, , pg. 29. 1966.

2. COLOR
Use common colors. For combinations use hyphens. To describe tint use modifiers: pale, light, and dark. For color variations use adjectives such as "mottled" or "streaked". Soil color charts may be required by client. **Examples:** red-brown; or orange-mottled pale green; or dark brown.

3. GRAIN SIZE			
DESCRIPTION	SIEVE*	OBSERVED SIZE	
boulders	—	>12"	
cobbles	—	3" – 12"	
gravel	coarse	3/4" – 3"	
	fine	#4 – 3/4"	4.75 mm (0.19") – 3/4"
sand	coarse	#10 – #4	2.0 – 4.75 mm
	medium	#40 – #10	0.425 – 2.0 mm
	fine	#200 – #40	0.075 – 0.425 mm
fines	<#200	<0.075 mm	

4. CLASSIFICATION NAME
* Use of #200 field sieve encouraged for estimating percentage of fines.

	NAME AND MODIFIER TERMS	CONSTITUENT PERCENTAGE	CONSTITUENT TYPE
Coarse grained	GRAVEL, SAND, COBBLES, BOULDERS	>50%	PRIMARY
	sandy, gravelly, cobbly, bouldery	30 – 50%	secondary
	silty, clayey*	15 – 50%	
	with (gravel, sand, cobbles, boulders)	15 – 30%	additional
	with (silt, clay)*	5 – 15%	
	trace (gravel, sand, cobbles, boulders)	<5%	
Fine grained	CLAY, SILT*	>50%	PRIMARY
	silty, clayey*	30 – 50%	secondary
	sandy, gravelly	15 – 30%	additional
	with (sand, gravel, cobbles, boulders)	5 – 15%	
	with (silt, clay)*	5 – 15%	
	trace (sand, gravel, cobbles, boulders)	5 – 15%	
Organic	PEAT	50 – 100%	PRIMARY
	organic (soil name)	15 – 50%	secondary
	(soil name) with some organics	5 – 15%	additional









* For classification and naming fine-grained soil: dry strength, dilatancy, toughness, and plasticity testing are performed (see Describing Fine-Grained Soil page 2). Confirmation requires laboratory testing (Atterberg limits and hydrometer).

**TABLE 1
FIELD CLASSIFICATIONS**

SOILS

5. MOISTURE	
TERM	FIELD TEST
dry	absence of moisture, dusty, dry to touch
moist	contains some moisture
wet	visible free water, usually saturated

6. PLASTICITY OF FINES	
See "Describing fine-grained Soil" on Page 2.	

7. ANGULARITY	
 rounded 	 Angular 
 subrounded 	 Subangular 

8. Shape	
TERM	OBSERVATION
flat	particles with width/thickness ratio >3
elongated	particles with length/width ratio >3
flat and elongated	particles meet criteria for both flat and elongated

9. STRUCTURE	
TERM	OBSERVATION
stratified	alternating layers >1 cm thick, describe variation
laminated	alternating layers <1 cm thick, describe variation
fissured	contains shears and partings along planes of weakness
slickensides	partings appear glossy or striated
blocky	breaks into lumps, crumbly
lensed	contains pockets of different soils, describe variation
homogenous	same color and appearance throughout

10. CEMENTATION	
TERM	FIELD TEST
weak	breaks under light finger pressure
moderate	breaks under hard finger pressure
strong	will not break with finger pressure

11. REACTION TO HCL	
TERM	FIELD TEST
none	no visible reaction
weak	bubbles form slowly
strong	vigorous reaction

12. ODOR	
Describe odor as organic; or potential non-organic* *Needs further investigation	

13. GROUNDWATER SEEPAGE	
Describe occurrence (i.e. from soil horizon, fissures with depths) and rate: slow (<1 gpm); moderate (1-3 gpm); fast (>3 gpm)	

14. CAVING	
Describe occurrence (depths, soils) and amount with term	
Test Pits	minor (<1 ft ²) moderate (1-3 ft ²) Severe (>3 ft ²)

15. (UNIT NAME/ORIGIN)	
Name of stratigraphic unit (e.g. Willamette Silt), and/or origin of deposit (Topsoil, Alluvium, Colluvium, Decomposed Basalt, Loess, Fill, etc.).	

DESCRIBING FINE-GRAINED SOIL				
FIELD TEST				
NAME	PLASTICITY (A BELOW)	DRY STRENGTH (B BELOW)	DILATANCY REACTION (C BELOW)	TOUGHNESS OF THREAD (D BELOW)
SILT	non-plastic, low	none, low	rapid	low
SILT with some clay	low	low, medium	rapid, slow	low, medium
clayey SILT	low, medium	medium	slow	medium
silty CLAY	medium	medium, high	slow, none	medium, high
CLAY with some silt	high	High	none	high
CLAY	high	very high	none	high
organic SILT	non-plastic, low	low, medium	slow	low, medium
organic CLAY	medium, high	medium to very high	none	medium, high

A. PLASTICITY	
TERM	OBSERVATION
non-plastic	A 1/8" (3-mm) thread cannot be rolled at any water content.
low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be re-rolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
high	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be re-rolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

B. DRY STRENGTH	
TERM	OBSERVATION
none	Dry specimen crumbles into powder with mere pressure of handling.
low	Dry specimen crumbles into powder with some finger pressure.
medium	Dry specimen breaks into pieces or crumbles with considerable finger pressure.
high	Dry specimen cannot be broken with finger pressure. Will break into pieces between thumb and a hard surface.
very high	Dry specimen cannot be broken between thumb and a hard surface.

C. DILATANCY REACTION	
TERM	OBSERVATION
none	No visible change in the specimen.
slow	Water appears slowly on surface of specimen during shaking and doesn't disappear or disappears slowly upon squeezing.
rapid	Water appears quickly on the surface of the specimen during shaking and disappears quickly upon squeezing.

D. TOUGHNESS OF THREAD	
TERM	OBSERVATION
low	Only slight hand pressure is required to roll the thread near the plastic limit. The thread and lump are weak and soft.
medium	Medium pressure is required to roll the thread to near the plastic limit. The thread and lump have medium stiffness.
high	Considerable hand pressure is required to roll the thread to near the plastic limit. The thread and lump have very high stiffness.

TABLE 1
FIELD CLASSIFICATIONS

ROCKS

ATTACHMENT 1

Rock Descriptions				
Scale of Rock Strength				
Description	Designation	Unconfined Compressive Strength, psi	Unconfined Compressive Strength, MPa	Field Identification
Extremely weak rock	R0	35 – 150	0.25 – 1	Indented by thumbnail.
Very weak rock	R1	150 – 725	1 – 5	Crumbles under firm blows with point of geology pick; can be peeled by a pocket knife.
Weak rock	R2	725 – 3,500	5 – 25	Can be peeled with a pocket knife; shallow indentation made by firm blow with point of geological hammer.
Medium weak rock	R3	3,500 – 7,000	25 – 50	Cannot be scraped or peeled with a pocket knife; specimen can be fractured with a single firm blow of geological hammer.
Strong rock	R4	7,000 – 15,000	50 – 100	Specimen requires more than one blow with a geological hammer to fracture it.
Very strong rock	R5	15,000 – 36,000	100 – 250	Specimen requires many blows of geological hammer to fracture it.
Extremely strong rock	R6	> 36,000	> 250	Specimen can only be chipped with geological hammer.
Descriptive Terminology for Joint Spacing or Bedding				
Descriptive Term		Spacing of Joints		
Very close	Less than 2 inches	< 50 mm		
Close	2 inches - 1 foot	50 mm – 300 mm		
Moderately close	1 foot - 3 feet	300 mm – 1 m		
Wide	3 feet -10 feet	1 m – 3 m		
Very wide	Greater than 10 feet	> 3 m		
Descriptive Terminology for Vesicularity				
Descriptive Term		Percent voids by volume		
Dense	< 1%			
Slightly vesicular	1 – 10%			
Moderately vesicular	10 – 30%			
Highly vesicular	30 – 50%			
Scoriaceous	> 50%			
Correlation of RQD and Rock Quality				
Rock Quality Descriptor		RQD Value		
Very poor	0 – 25			
Poor	25 - 50			
Fair	50 - 75			
Good	75 – 90			

**TABLE 1
FIELD CLASSIFICATIONS**

ROCKS

Scale of Rock Weathering		
Stage	Description	Quality Distinction
Fresh	Rock is fresh, crystals are bright, few joints may show slight staining as a result of ground water.	No discoloration
Very Slight	Rock is generally fresh, joints are stained, some joints may have thin clay coatings, crystals in broken face show bright.	Discoloration only on major discontinuity surfaces ¹
Slight	Rock is generally fresh, joints are stained and discoloration extends into rock up to 1 in. Joints may contain clay. In granitoid rocks some feldspar crystals are dull and discolored. Rocks ring under hammer if crystalline.	Discoloration on all discontinuity surfaces and on rock
Moderate	Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some are clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.	Decomposition and/or disintegration < 50% of rock ²
Moderately Severe	All rock, except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick. Rock goes "clunk" when struck.	Decomposition and/or disintegration > 50%, but not complete
Severe	All rock, except quartz, discolored or stained. Rock "fabric" is clear and evident, but reduced in strength to strong soil. In granitoid rocks, all feldspars kaolinized to some extent. Some fragments of harder rock usually left, such as corestones in basalt.	
Very Severe	All rock, except quartz, discolored or stained. Rock "fabric" is discernible, but mass effectively reduced to "soil" with only fragments of harder rock remaining.	Decomposition and/or disintegration 100% with structure/fabric intact
Complete	Rock is reduced to "soil". Rock "fabric" is not discernible, or only in small scattered locations. Quartz may be present as dikes or stringers.	Decomposition and/or disintegration 100% with structure/fabric destroyed
<p>NOTES: ¹ Discontinuities consist of any natural break (joint, fracture or fault) or plane of weakness (shear or gouge zone, bedding plane) in a rock mass</p> <p>² Decomposition refers to chemical alteration of mineral grains; disintegration refers to mechanical breakdown</p> <p>³ Stage and description from ASCE Manual No. 56 (1976), quality distinction from Murray (1981)</p>		

Rock strength scale taken from Duncan C. Wyllie, "Foundations on Rock, Second Edition, 1999".

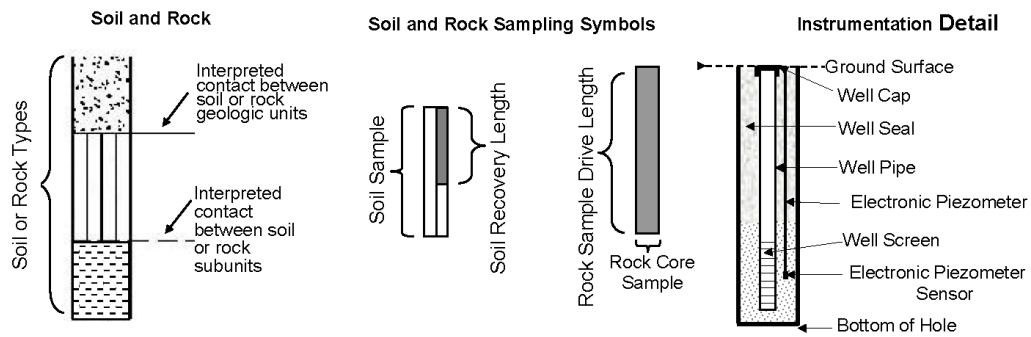
TABLE 2
KEY TO TEST PIT AND BORING LOG SYMBOLS



SAMPLE NUMBER ACRONYMS/WATER SYMBOLS

DM - Dames & Moore Sampler		
GR - Grab or Bulk Samples		
OS - Osterberg (Piston) Sampler		
C - Rock Core	Water Level During Drilling/ Excavation	Water Level on Date Measured
SA - Screen Air Sampling	▽	▽
SW - Screen Water Sampling		
SS - SPT Standard Penetration Drive Sampler (ASTM D1586)		
ST - Shelby Tube Push Sampler (ASTM D1587)		

LOG GRAPHICS/INSTALLATIONS



GEOTECHNICAL FIELD & LABORATORY TESTING/ACRONYM EXPLANATIONS


ATT	Atterberg Limits	OC	Organic Content
AMSL	Above Mean Sea Level	OD	Outside Diameter
BGS	Below ground surface	P200	Percent Passing U.S. Standard No. 200 Sieve
CBR	California Bearing Ratio	PI	Plasticity Index
CON	Consolidation	PL	Plasticity Limit
DCP	Dynamic Cone Penetrometer	PP	Pocket Penetrometer
DD	Dry Density	RES	Resilient Modulus
DS	Direct Shear	SC	Sand Cone
GPS	Global Positioning System	SIEV	Sieve Gradation
HCL	Hydrochloric Acid	SP	Static Penetrometer
HYD	Hydrometer Gradation	TOR	Torvane
kPa	kiloPascal	UC	Unconfined Compressive Strength
LL	Liquid Limit	VS	Vane Shear

ENVIRONMENTAL TESTING/ACRONYM EXPLANATIONS


ATD	At Time of Drilling	ND	Not Detected
BGS	Below ground surface	NS	No Sheen
CA	Sample Submitted for Chemical Analysis	PID	Photoionization Detector Headspace Analysis
HS	High Sheen	PPM	Parts Per Million
MS	Moderate Sheen		

Rev. 3/2019


ATTACHMENT 1

TEST PITS		DURBIN PROPERTY 87052 VESTA LANE BANDON, OREGON 97411		Cascadia Geoservices, Inc. 190 6th Street Port Orford, OR 97465 D. 541-332-0433 C. 541-655-0021			
CASCADIA GEOSERVICES PROJECT NO: 21096							
DEPTH IN FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE/ SAMPLE ID	◆ DYNAMIC PENEIROMETER (DP or DCP) ■ STATIC PENEIROMETER (SP) ● MOISTURE CONTENT (%) ● INDEX PROPERTIES (IP) ● NUCLEAR DENSITY (ND) ● DRY DENSITY (DD) ● SIEVE (SIEV)	COMMENTS
<p>TP-1 SURFACE CONDITIONS: Dry</p> <p>0.0 Very loose, brown, sandy ORGANICS; dry, with roots (TOPSOIL)</p> <p>0.5 Loose, light gray, fine SAND; dry, moderate cementation</p> <p>QUATERNARY MARINE TERRACE DEPOSITS</p> <p>3.0 becomes medium dense, tannish-orangeish-brown fine sand: moist, well cemented</p> <p>4.0</p> <p>5.0</p> <p>6.0</p> <p>7.0</p> <p>8.0 becomes loose tannish-brown fine sand</p> <p>9.0 Final depth 9.0 feet bgs; test pit backfilled with uncompacted excavated material</p>							
				P200	1	●	P200 = 54% W% = 5.0%
				DCP P200	2	● 16	P200 = 3% W% = 8.0%
				DCPs P200	3	● 9-10	P200 = 5% W% = 11.0%
				DCP P200	4	● 5	P200 = 2% W% = 4.0%
				P200	5	●	P200 = 2% W% = 4.0%
							No seepage or caving observed to the depth explored
<p>TP-1 Location: Lat: 43.088197 Long: -124.432867 (See Figure 2); Elevation: 56 feet (GPS) Date Completed: 8/20/2021</p>							
<p>TP-2 SURFACE CONDITIONS: Dry</p> <p>0.0 Hard, dark greenish-gray, GRAVEL; dry, angular (fresh volcanic BEDROCK). Hard digging, test pit abandoned</p> <p>SIXES RIVER MELANGE</p> <p>0.5 Final depth 0.5 feet bgs; test pit backfilled with uncompacted excavated material</p> <p>1.0</p> <p>2.0</p> <p>3.0</p> <p>4.0</p> <p>5.0</p> <p>6.0</p> <p>7.0</p> <p>8.0</p> <p>9.0</p>							
				P200	1	●	P200 = 2% W% = 1.0% No seepage or caving observed to the depth explored
<p>TP-2 Location: Lat: 43.088197 Long: -124.432867 (See Figure 2); Elevation: 56 feet (GPS) Date Completed: 8/20/2021</p>							
<p>EXCAVATION METHOD: Mini Excavator EXCAVATED BY: Natural Origins LLC LOGGED BY: A. Fullthorpe</p>							

ALL EXPLANATIONS 2 PER PAGE DURBINPROP-TP-1-5_082021.GPJ PRINT DATE 8/30/21

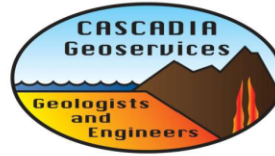
TEST PITS		DURBIN PROPERTY 87052 VESTA LANE BANDON, OREGON 97411		Cascadia Geoservices, Inc. 190 6th Street Port Orford, OR 97465 D. 541-332-0433 C. 541-655-0021				
CASCADIA GEOSERVICES PROJECT NO: 21096								
DEPTH IN FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE/ SAMPLE ID	◆ DYNAMIC PENETROMETER (DP or DCP) ■ STATIC PENETROMETER (SP) ● MOISTURE CONTENT (%) ● INDEX PROPERTIES (IP) ● NUCLEAR DENSITY (ND) ● DRY DENSITY (DD) ● SIEVE (SIEV)		COMMENTS
<p>TP-3 SURFACE CONDITIONS: Dry</p> <p>0.0 Medium dense, reddish-brown, fine SAND; dry, with roots (TOPSOIL)</p> <p>1.0 Medium dense, reddish-brown, fine SAND; damp</p> <p>2.0 QUATERNARY MARINE TERRACE DEPOSITS Medium dense, reddish-brown and dark greenish-gray, sandy GRAVEL; damp, gravel is angular volcanics (Severley Weathered Volcanics)</p> <p>3.0 SIXES RIVER MELANGE</p> <p>4.0</p> <p>5.0 Final depth 5.0 feet bgs; test pit backfilled with uncompacted excavated material</p> <p>6.0</p> <p>7.0</p> <p>8.0</p> <p>9.0</p>								
				P200 DCPs	337	8.9	9	W% = 24.0% P200 = 34%
				P200 DCPs	339	14.15		W% = 8.0% P200 = 4%
				P200	339			P200 = 2% W% = 8.0% No seepage or caving observed to the depth explored
<p>TP-3 Location: Lat: 43.088197 Long: -124.432867 (See Figure 2); Elevation: 56 feet (GPS) Date Completed: 8/20/2021</p>								
<p>TP-4 SURFACE CONDITIONS: Dry</p> <p>0.0 Loose, brown, fine SAND; dry, with roots (TOPSOIL)</p> <p>1.0 Medium dense, tannish-brown, fine SAND; dry, moderate cementation</p> <p>2.0 QUATERNARY MARINE TERRACE DEPOSITS</p> <p>3.0</p> <p>4.0</p> <p>5.0 Final depth 5.0 feet bgs; test pit backfilled with uncompacted excavated material</p> <p>6.0</p> <p>7.0</p> <p>8.0</p> <p>9.0</p>								
				P200 DCPs	330	6	7	W% = 10.0% P200 = 5%
				P200 DCPs	331	6	7	W% = 13.0% P200 = 11%
								No seepage or caving observed to the depth explored
<p>TP-4 Location: Lat: 43.088197 Long: -124.432867 (See Figure 2); Elevation: 56 feet (GPS) Date Completed: 8/20/2021</p>								
<p>EXCAVATION METHOD: Mini Excavator EXCAVATED BY: Natural Origins LLC LOGGED BY: A. Fulthorpe</p>								

ALL EXPLORATIONS 2 PER PAGE DURBINPROP_TP1-5_082021.GPJ PRINT DATE 8/30/21

TEST PIT		DURBIN PROPERTY 87052 VESTA LANE BANDON, OREGON 97411			Cascadia Geoservices, Inc. 190 6th Street Port Orford, OR 97465 D. 541-332-0433 C. 541-655-0021			
CASCADIA GEOSERVICES PROJECT NO: 21096								
DEPTH IN FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE/ SAMPLE ID	◆ DYNAMIC PENETROMETER (DP or DCP) ■ STATIC PENETROMETER (SP) ● MOISTURE CONTENT (%) ● INDEX PROPERTIES (IP) ● NUCLEAR DENSITY (ND) ● DRY DENSITY (DD) ● SIEVE (SIEV)		COMMENTS
<p>TP-5 SURFACE CONDITIONS: Dry TP-5</p> <p>0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0</p> <p>Loose, brown, fine SAND; dry, with roots (TOPSOIL)</p> <p>Medium dense, tannish-brown, fine SAND; damp, strong cementation</p> <p>QUATERNARY MARINE TERRACE DEPOSITS becomes tannish-orangeish-brown</p> <p>Final depth 3.0 feet bgs; test pit backfilled with uncompacted excavated material</p> <p>0 25 50</p> <p>P200 3S12</p> <p>DCP</p> <p>P200 3S13</p> <p>15</p> <p>P200 = 27% W% = 12.0%</p> <p>P200 = 0% W% = 4.0%</p> <p>No seepage or caving observed to the depth explored</p>								
<p>TP-5 Location: Lat: 43.088197 Long: -124.432867 (See Figure 2); Elevation: 56 feet (GPS) Date Completed: 8/20/2021</p>								
<p>EXCAVATION METHOD: Mini Excavator EXCAVATED BY: Natural Origins LLC</p> <p>LOGGED BY: A. Fulthorpe</p>								

ALL EXPLORATIONS 2 PER PAGE DURBINPROP_TP1-5_082021.GPJ PRINT DATE 8/30/21

CASCADIA GEOSERVICES, INC.
 Material Laboratory
 190 6th St
 Port Orford, Oregon 97465
 P.541-332-0433



Project No.: 21096
 Testing Date: 08/26/2021
 Tests Performed: Water Content, Soil Finer Than 75µm
 Standards Followed: D2216, D1140
 Performed By: AF

Notes:

Water Content (D2216)

Sample Name	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13
Pan Letter	A	B	C	D	E	F	G	H	I	J	K	L	M
M _c = Mass of Container, g	1.87	1.87	1.87	1.87	1.88	1.84	1.86	1.87	1.87	1.89	1.85	1.86	1.85
M _{cms} = Mass of Container and Moist Specimen, g	26.07	38.44	35.46	28.41	36.30	31.33	36.59	54.02	37.52	30.86	36.56	32.71	30.16
M _{cds} = Mass of Container and Dry Specimen, g	24.94	35.82	32.19	27.31	34.95	31.07	29.76	50.37	34.90	28.14	32.53	29.33	29.05
M _s = Mass of Oven Dry Specimen = M _{cds} - M _c , g	23.07	33.95	30.32	25.44	33.07	29.23	27.90	48.50	33.03	26.25	30.68	27.47	27.20
M _w = Mass of Water = M _{cms} - M _{cds} , g	1.13	2.62	3.27	1.10	1.35	0.26	6.83	3.65	2.62	2.72	4.03	3.38	1.11
w = Water Content = M _w /M _s X 100%	5%	8%	11%	4%	4%	1%	24%	8%	8%	10%	13%	12%	4%

% Finer Than 75µm (D1140)

Sample Name	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13
Pan Letter	A	B	C	D	E	F	G	H	I	J	K	L	M
M _c = Mass of Container, g	1.87	1.87	1.87	1.87	1.88	1.84	1.86	1.87	1.87	1.89	1.85	1.86	1.85
M _{crs} = Mass of Container and Retained Specimen, g	17.69	46.78	40.76	46.77	47.06	31.83	31.83	60.84	48.98	37.67	41.62	29.86	42.95
M _s = Mass of Oven Dry Specimen = M _{crs} - M _c , g	23.07	33.95	30.32	25.44	33.07	29.23	27.90	48.50	33.03	26.25	30.68	27.47	27.20
M _r = Mass of Retained Specimen = M _{crs} - M _c , g	10.66	32.91	28.70	24.88	32.41	28.71	18.48	46.74	32.23	24.85	27.25	19.95	27.07
% Finer Than 75µm = (M _s - M _r)/M _s X 100%	54%	3%	5%	2%	2%	2%	34%	4%	2%	5%	11%	27%	0%