

**CITY OF FLORENCE  
PHASE I SITE INVESTIGATION REPORT**

Todd Larsen  
Applicant

September 7, 2021  
Date

New residence construction  
Proposal or Project

18-12-16-41                      700  
Map No.                                      Tax Lot

Purpose of Proposal or Project (attach additional sheets, as needed)

Low Density Residential  
Comprehensive Plan Designation

Not addressed  
Street Address

Residential Restricted  
Zoning District

Overlay District

Based on submitted information, zoning and comprehensive plan requirements, and the completed Site Investigation Report, this proposal **does / does not** comply with Title 10 of the City Code and the Comprehensive Plan. The proposal **will / will not** achieve the stated purpose. The site and/or building design **will / will not** have adverse impacts and **will / will not** mitigate any adverse impacts.

The completed Site Investigation Report is available at the Planning Department.

This investigation was done by:

Lauren Zatkos  
Print

*Lauren Zatkos*  
Signature

Staff Scientist  
Title

**PHASE I SITE INVESTIGATION  
INITIAL PROPOSED DEVELOPMENT APPLICATION CHECKLIST**

- | YES           | NO            |   |
|---------------|---------------|---|
| <u>X</u>      | <u>      </u> | 1. <u>LOCAL ZONING REGULATIONS</u><br>Does the proposed development site plan conform to City, or County Zoning Regulations regarding setback lines and other code provisions? (Contact the City or County Engineer for details.) |
| <u>X</u>      | <u>      </u> | 2. <u>COMPREHENSIVE PLAN SETBACK LINE OR DESIGNATION</u>  |
| <u>      </u> | <u>X</u>      | a. Has a Coastal Construction Setback line (CCSBL) been adopted for this County or city? (Inquire from the County or City Engineer.)  |
| <u>      </u> | <u>      </u> | b. If a CCSBL has been adopted for this County or City is the proposed site seaward of the CCSBL?   |
| <u>N/A</u>    | <u>      </u> | c. If the proposed site is seaward of the adopted CCSBL, has application for a variance or exception been made to the Planning Commission having jurisdiction?  |

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YES	NO	
		3. <u>DUNAL FORMS</u>
	<u>X</u>	a. Does the property contain any of the following dune formations?
<u>X</u>	<u>      </u>	1. Active Dune
<u>      </u>	<u>X</u>	2. Newer Stabilized Dune
<u>      </u>	<u>X</u>	3. Older Stabilized Dune
<u>      </u>	<u>X</u>	4. Deflation Plan
<u>      </u>	<u>X</u>	5. Leading Edge of Sand dune
<u>      </u>	<u>X</u>	6. Foredune
		3. <u>IDENTIFIED HAZARDOUS CONDITIONS</u>
<u>X</u>	<u>      </u>	a. Has any portion of the property been identified as being affected by any potential or existing geological hazard? (Contact County or City Planning Departments for information published by the State Department of Geology and Mineral Industries, US Department of Agriculture-Soil Conservation Service, US Geological Survey, US Army Corps of Engineers and other government agencies.)
		b. Are any of the following identified hazards present?
<u>      </u>	<u>X</u>	1. foredune
<u>      </u>	<u>X</u>	2. Active Dunes
<u>X</u>	<u>      </u>	3. Water erosion
<u>      </u>	<u>X</u>	4. Flooding
<u>      </u>	<u>X</u>	5. Wind erosion
<u>X</u>	<u>      </u>	6. Landslide or sluff activity
		7. leading edge of active Sand Dune
		c. Are there records of these hazards ever being present of the site? Describe: <i>See attached Additional Information document.</i>
		4. <u>EXISTING SITE VEGETATION</u>
<u>X</u>	<u>      </u>	a. Does the vegetation on the site, afford adequate protection against soil erosion from wind and surface water runoff?
<u>      </u>	<u>X</u>	b. Does the condition of vegetation present constitute a possible fire hazard or contributing factor to slide potential? (If answer is Yes, full details and possible remedies will be required.)
		5. <u>FISH AND WILDLIFE HABITAT</u>
<u>X</u>	<u>      </u>	a. Does the site contain any identified rare or endangered species or unique habitat (feeding, nesting or resting)?
<u>      </u>	<u>X</u>	b. Will any significant habitat be adversely affected by the development? (Contact Oregon Department of Fish and Wildlife.) <i>See attached Additional Information document.</i>
		6. <u>HISTORICAL AND ARCHEOLOGICAL SITES</u> Are there any identified historical or archaeological sites within the area proposed for development? (Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians.)
<u>      </u>	<u>X</u>	
		7. <u>FLOOD PLAIN ELEVATION</u>
<u>      </u>	<u>X</u>	a. If the elevation of the 100 year flood plain or storm tide has been determined, does it exceed the existing ground elevation at the proposed building site? (Contact the Federal Insurance Administration, City or County Planning

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YES    NO

\_\_\_\_ N/A \_\_\_\_

Departments for information on 100 year flood plain. Existing site elevations can be identified by local registered surveyor.)

- b. If elevations of the proposed development is subject to flooding during the 100 year flood or storm tide, will the lowest habitable floor be raised above the top of the highest predicted storm-wave cresting on the 100 year flood or storm tide?

8. CONDITION OF ADJOINING AND NEARBY AREAS

Are any of the following natural hazards present on the adjoining or nearby properties that would pose a threat to this site?

\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X  
X \_\_\_\_  
X \_\_\_\_  
\_\_\_\_ X

- a. Active dunes
- b. foredune
- c. Storm runoff erosion
- d. Wave undercutting or wave overtopping
- e. Slide areas
- f. Combustible vegetative cover

(Contact County and City Planning staffs for local hazard information.)

*See attached Additional Information document.*

9. DEVELOPMENT IMPACTS

\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X  
X \_\_\_\_  
X \_\_\_\_  
\_\_\_\_ X  
X \_\_\_\_  
\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X  
\_\_\_\_ X

- a. Will there be adverse off-site impacts as a result of this development?
- b. Identify possible problem type
  - 1. Increased wind exposure
  - 2. Open sand movement
  - 3. Vegetative destruction
  - 4. Increased water erosion (storm runoff, driftwood removal, reduction of foredune, etc.)
  - 5. Increased slide potential
  - 6. Affect on aquifer
- c. Has landform capability (density, slope failure, groundwater, vegetation, etc) been a consideration in preparing the development proposal?
- d. Will there be social and economic benefits from the proposed development?
- e. Identified benefits
  - 1. New jobs
  - 2. Increased tax valuation
  - 3. Improved fish and wildlife habitat
  - 4. Public access
  - 5. Housing needs
  - 6. Recreation potential
  - 7. Dune stabilization (protection of other features)
  - 8. Other \_\_\_\_\_

10. PROPOSED DESIGN

X \_\_\_\_  
X \_\_\_\_  
\_\_\_\_ N/A \_\_\_\_  
X \_\_\_\_

- a. Has a site map been submitted showing in detail exact location of proposed structures?
- b. Have detailed plans showing structure foundations been submitted?
- c. Have detailed plans and specifications for the placement of protective structures been submitted if need is indicated?
- d. Has a plan for interim stabilization, permanent revegetation and continuing vegetative maintenance been submitted?
- e. Is the area currently being used by the following?

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<b>YES</b>	<b>NO</b>
___	<u>X</u>
___	<u>X</u>
___	<u>X</u>
___	N/A ___

1. Off-road vehicles
2. motorcycles
3. horses
- f. Has a plan been developed to control or prohibit the uses of off-road vehicles, motorcycles and horses?

11. LCDC COASTAL GOAL REQUIREMENTS

<u>X</u>	___
___	<u>X</u>
<u>X</u>	___
<u>X</u>	___

- a. Have you read the LCDC Goals affecting the site? (contact LCDC, City or County office for copies of Goals.)
- b. Have you identified any possible conflicts between the proposed development and the Goals or acknowledged comprehensive plans? (If so, list them and contact local planning staff for possible resolution.)
- c. Have all federal and state agency consistency requirements been met? (Contact local planning office.)
- d. Has applicant or investigator determined that the development proposal is compatible with the LCDD Beaches and Dunes Goal and other appropriate statewide land use planning laws?

Rev. 4/09



## CITY OF FLORENCE

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Additional Information3. Identified Hazardous Conditions:

c. The Oregon Department of Geology and Mineral Industries (DOGAMI) Hazard Viewer (HazVu) Map maps the entirety of the property as having a moderate to high potential for landslide activity. The DOGAMI HazVu tool also maps the entirety of the property as having a high potential for liquefaction in the event of an earthquake. Currently, no pre-existing earthquakes have been mapped on-site.

5. Fish and Wildlife Habitat:

a. The following table lists the “Species of Greatest Conservation Need” that are mapped as potentially utilizing the site at least part of the year. These species and their habitats are designated as in need of conservation efforts by the Oregon Department of Fish and Wildlife (ODFW) and the Oregon Conservation Strategy. Site-specific habitat use was obtained from habitat modeling displayed through the ODFW [Compass](#) tool.

Table 1:

Designated “Species of Greatest Conservation Need” Habitat On-Site	
Species	Modeled Habitat Season Use
Clouded Salamander	Year-Round
Common Nighthawk	Summer
Harlequin Duck	Summer
Marbled Murrelet	Year-Round
Peregrine Falcon	Year-Round
Red-Necked Grebe	Winter
Short-eared Owl	Winter
Snowy Egret	Winter
Trumpeter Swan	Winter
Western Snowy Plover	Year-Round
Silver Haired Bat	Year-Round
Townsend’s Big-eared Bat	Year-Round
Pallid Bat	Year-Round
Long-legged myotis	Year-Round
California myotis	Year-Round

8. Condition of Adjoining and Nearby Areas:

Catastrophic bank failure at 16 Sea Watch Court, Florence, approximately 0.35-miles southeast of the site, occurred in 2010 (GeoScience, Inc., 2011). An approximately 80-foot-wide by 70-foot-tall piece of slope slid down into the Siuslaw River. This landslide was found to be caused by a

combination of wave erosion of the marine terrace deposits at the base of the slope and surface water runoff over the steep top-of-slope. The U.S. Coast Guard Station Siuslaw River, located 0.18-miles south of the site, also submitted an Environmental Assessment for stabilization of the shoreline along the west edge of the Guard Station Property (USCG Civil Engineering Unit, 2012). This report, submitted in 2012, indicates that in the areas where steel pipe piles were driven into the subgrade to support the USCG boathouse, between 5- to 20-feet of riverbank and bottom has been lost since 1961. Both river bottom and shoreline erosion were threatening USCG activities at the time of report submittal.

Beginning approximately 0.2-miles north of the site is the southern end of the North Cove bank stabilization project, for which a geotechnical evaluation and design was submitted in May, 2006 (Ash Creek Associates, 2006). This report found that a 1,650-foot-long bluff along the Siuslaw River was at risk of eroding at rates of up to 30- to 40-feet per year with adequate precipitation. A vegetated buttress was designed for installation along the study area.

At the time of Branch Engineering's site visit to the lot currently addressed in June, 2021, the north-adjacent lot 36 (Tax Lot 600) had active landslide activity along the Siuslaw River-facing slope. The Marine Terrace Deposits and impermeable clays under newly stabilized dunes, which constitute the geology of the majority of the subdivision, seem to have resulted in groundwater seepage near the base of the slope which, combined with wave erosion, has caused undercutting of the bank. Based on Google Earth Imagery, the majority of the slide occurred sometime between 2012 and 2015, with smaller subsequent losses of the vegetation and topsoil layer above the landslide since 2015. According to Google Earth Imagery dated 2021, the landslide has resulted in a cumulative 130-foot-wide and 90- to 130-foot-tall section of the slope having been eroded. This landsliding will likely continue to occur and could potentially impact the slope of the currently investigated lot in the future.

#### References:

Bank Failure Assessment, 16 Sea Watch Court Florence, Oregon. GeoScience, Inc. Dated March 18, 2011.

Draft Environmental Assessment for Shoreline Stabilization at Station Siuslaw River Florence, Oregon. U.S. Coast Guard Civil Engineering Unit, Oakland. Dated February 2012.

Geotechnical Engineering Evaluation and Design; Proposed Erosion Control Project for North Cove Bank Preservation Coalition, Florence, Oregon. Ash Creek Associates, Environmental and Geotechnical Consultants. Dated May 16, 2006.