



Clatsop County

Community Development – Planning

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GEOLOGIC HAZARD PERMIT REVIEW


Development Permit #20190450

Owner/Applicant: Joseph P. Blanchard
 19815 30th Ave. NE
 Shoreline, WA 98155

Subject Property: T4, R10, SEC 18BA, Tax Lot 2700
Zoning: CR (Coastal Residential)
Overlays: Geologic Hazard Overlay (GHO; Landslide Topography)

Proposed Development: Single-family dwelling with detached accessory structure, hardscape, driveways and retaining walls.

Geologic Hazard Report: October 1, 2019
 R. Warren Krager, Oregon C.E.G. E-957
 10655 SW Park Street, Tigard, OR 97223

CRITERIA		FINDINGS AND CONCLUSIONS
(A) Do the conclusions of the geotechnical report support a finding that there are no adverse effects of the site's geologic characteristics on the proposed development <u>and</u> the proposed site modifications will not adversely affect geologic conditions and processes in the immediate area? <i>Section 4.045(1)(A)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If yes, list the conclusions; If no, Criterion B must be met.</i>
(B) Do the conclusions of the geotechnical report support a finding that if specified actions are taken to address an identified potential hazard then the effects of the site's geologic characteristics on the proposed development will be at an acceptable level and the effects of the proposed site modifications on the geologic conditions and processes in the immediate area are at an acceptable level? <i>Section 4.045(1)(B)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If yes, list the conclusions and required actions; If no, Criterion A must be met. SEE ATTACHED CONCLUSIONS AND REQUIRED ACTIONS</i>
Is the Director planning to request a third party review of the Geotechnical Report? <i>Section 4.046</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If yes, Attach the review. The results of the third party review will be used in making the final decision.</i>
Were any comments received?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If yes, Attach comments.</i>
Approved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	 Gail Henrikson, Director Community Development Dept. October 23, 2019

CONCLUSIONS & REQUIRED ACTIONS

Per *Engineering Geologic Site Investigation Report* prepared by R. Warren Krager, dated 10/1/2019.

PROPOSED DEVELOPMENT

- Single-family dwelling with detached accessory structure, hardscape, driveways and retaining walls.

SITE GEOLOGIC HAZARDS

Geologic hazards affecting the subject property include:

- Landslide topography, which could result in slope or earth movement;
- Seismic activity, including a possible 8.5 - 9.5 magnitude Cascadia Subduction Zone event with several minutes of violent ground shaking resulting in slope instability, possible co-seismic land subsidence, liquefaction, and days or weeks of strong aftershocks.

CONCLUSIONS AND REQUIRED ACTIONS

Overall conclusions:

- There may be no complete engineering mitigation available for the seismic slope instability risk. *(Page 8)*
- The proposed grading and structural improvements are not expected to increase geologic hazard, slope hazard, or risk of coastal erosion on the subject property or other private or public property. *(Page 8)*
- The proposed home, RV garage and driveway access improvements are generally feasible as planned. The subject property has little risk of on-site slope instability concerns for the structural design life of the proposed home and other engineered structures. *(Page 8)*

Foundation Design and Construction

Conclusions:

- The excavated foundation footprint and structurally retained cut and fill slopes are appropriate for the geologic hazard risk. *(Page 8)*
- Prescriptive conventional spread foundation design according to the Oregon Structural Specialty Code is considered appropriate for this site and the proposed home. *(Page 8)*
- Possible concerns for excavation or foundation support may include boulders or bedrock, and subsurface springs or seepage in deeper cuts. *(Page 8)*
- In the test pit exploration west of the proposed home, the appropriate foundation support soil is about 4-feet to 5-feet below the ground surface. This soil would be suitable for up to 2000 pounds per square-foot allowable bearing pressure. *(Page 8)*
- Near surface soils including possible manmade fill may undergo seasonal soil creep on the steeper slopes. *(Page 8)*

Requirements:

1. Footings for structures shall penetrate fills and shallow disturbed soils.
2. Foundation support for the home and other retaining walls shall be obtained from firm to hard native clay or silt soils.
3. Conventional concrete spread footings shall be excavated to penetrate fill, organics and soft or disturbed soils to reach stiff to hard, undisturbed silt or clay.
4. The project design architect, engineer, or other design professional shall be retained for field engineering services and construction inspection, documentation of foundation bearing surfaces, engineered retaining wall foundation, backfill, and drainage system installation.

PUBLIC COMMENTS

Cameron La Follette, Executive Director, Oregon Coast Alliance:

Ms. La Follette stated that the Oregon Department of Forestry has proposed to clear-cut 70 acres of timber near the subject property on property it owns on the east side of Highway 101. Ms. La Follette shared concerns that the harvest would impact slope stability and drinking water supply for the subject property and surrounding residential neighborhood and stated that the geologic hazard permit decision should address public health and safety as well as landslide likelihood resulting from the proposed timber harvest.

Staff Response and Findings:

The Oregon Department of Forestry (ODF) owns a large area of land immediately to the east of the subject property, across Highway 101. The property owned by ODF is located in the Forest-80 Zone, where forestry operations are permitted subject to the applicable requirements of the Oregon Forest Practices Act and its Administrative rules. ODF proposed a timber harvest in this area (referred to as Norriston Heights), but it has been postponed indefinitely.

The applicant has provided a report which satisfies the requirements of Section 4.044, Land and Water Development and Use Ordinance 80-14. The conclusions of the geotechnical report support a finding that, if specified actions are taken to address identified potential hazards, the effects of the site's geologic characteristics on the proposed development will be at an acceptable level and the effects of the proposed site modifications on the geologic conditions and processes in the immediate area are at an acceptable level. Therefore, pursuant to Section 4.045(1)(B), the geologic hazard permit shall be approved.

OTHER REQUIREMENTS PER COUNTY REGULATIONS

1. **Natural vegetation will be protected and retained wherever possible.** (Land and Water Development and Use Ordinance #80-14, Section 4.047(3)(A))
2. **To the extent possible, roads and driveways shall follow the natural contours of the site.** (Land and Water Development and Use Ordinance #80-14, Section 4.047(3)(B))
3. **An erosion control plan shall be prepared and implemented in conformance with the requirements of Section S2.500.** (Land and Water Development and Use Ordinance #80-14, Section 4.047(3)(C))
4. **The development and use shall comply with all other applicable standards of Section 4.047, Clatsop County Land and Water Development and Use Ordinance #80-14**

*NOTE: If any **requirements** listed in this decision are inconsistent with those listed in the Geotechnical Report, the stricter regulation prevails.*

If you wish to appeal this decision, you may do so within the 12-day appeal period, which ends at 4 p.m. on Monday, November 4, 2019. The appeal must comply with Section 2.230 of the Clatsop County Land and Water Development and Use Ordinance #80-14 (procedure for an appeal). This department will not issue development permits for any activities or structures until the 12-day appeal period has expired, unless you choose to waive your right to appeal in writing.