



City of Langley
Department of Community Planning

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STAFF REPORT
Shoreline Substantial Development Permit SDP-21-001
Public Hearing June 21, 2021

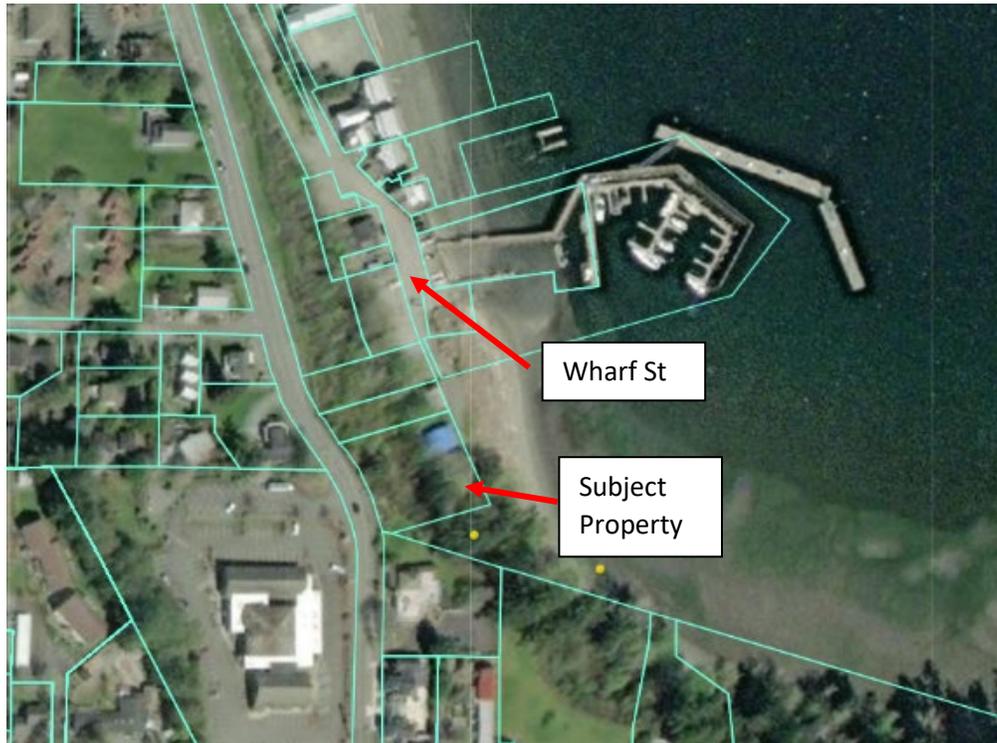
1. INTRODUCTION

a. Applicant

The property owner is Rebecca McLemore.
The applicant is Alan Armstrong, Strongwork Architecture
Application was submitted on January 29, 2021, Exhibit No. 1.

b. Subject Property

The property is located at 325 Wharf St, Parcel no. S8250-00-00025-0.
Parcel size – 22,735 SF (.54 ac)
The subject property was originally three small parcels and has been combined into one parcel as of July 2019. The existing dwelling unit straddled the lot line between lots 23 and 24.



Physical Description

- The parcel is rectangular with a north-northeast to south-southwest orientation.
- The parcel borders a residence to the north, marina to the north east, ordinary high water mark of the Puget Sound to the east, steep slopes that ascend to the slope crest at Cascade Avenue to the west and steep slopes to the south.
- The steep slopes are well vegetated with mature coniferous and deciduous trees over a dense underbrush of native bushes and shrubs.
- The beach area consists of a mix of native marine riparian vegetation and invasive vegetation.
- The site elevation ranges from sea level to approximately 15 feet above mean sea level (AMSL) to the east property line. The toe of the bluff is approximately 25 feet AMSL and the slope ascends between 100 to 110 feet AMSL.

Project description

- Existing development includes a single-family residence, carport, driveway, shed/cellar, wooden bulkhead and utilities.
- Impervious area - 865 SF single story DU includes 728 SF DU plus 168 SF deck
- Access is via a gravel driveway along the north east west property boundary from Wharf St 10 foot wide
- The application includes removing the existing 728 SF dwelling unit and replace it with a 2700 SF single family residence and 865 SF garage with accessory dwelling on the second floor.

- Construction will be wood-framed and the foundation consists of spread footings and retaining walls against the bluff and deep pin pile foundations on the shoreward side
- The proposed impervious area is 2811 SF.
- The development includes associated utility installation, landscaping, as well as habitat, slope and flood management mitigation measures.
- All new development is located outside the 25-foot shoreline buffer.

Drawing package of proposed development, See Exhibit No. 2 for site plans and elevation drawings.

c. Procedural information

The notice of application was issued on April 12, 2021 with a two-week notice period pursuant to LMC Section 18.36.025.D. and was mailed to property owners within a 500-foot radius of the subject property. Exhibit No. 3.

One comment was received from the neighbor to the north who expressed concern regarding the shared driveway and its structural ability to withstand construction traffic. This item is discussed in greater detail below.

This application is categorically exempt from SEPA pursuant to WAC 197-11-800 2) e)

A notice of public hearing was made as required by LMC Section 18.36.020.B. Exhibit No. 4

LMC Ch. 18.37.070 A.5. vests the hearing examiner with the duty and authority to hold public hearings and render final decisions on Shoreline Substantial Development Permits.

Appeals

SMP Section 7.4 Administration

.4 Appeals of the final decision of the City with regard to shoreline management shall be governed by the provisions of RCW 90.58.180

.5 Appeals to the Shoreline Hearings Board of a decision on a shoreline substantial development May be filed by the applicant/proponent or any aggrieved party pursuant to RCW 90.58.140.

SMP Section 7.7 Ecology Review

Ecology shall be notified of any Shoreline Substantial Development permit decisions made by the Shoreline Administrator, whether it’s an approval or denial. The notification shall occur after all local administrative appeals related to the permit have concluded or the opportunity to initiate such appeals has lapsed.

d. Approvals

- Shoreline Substantial Development Permit
- Shoreline Variance Permit
- Shoreline Conditional Use
- Flood Hazard Development Permit
- Tree Removal permit

Right of Way/Access permit

e. Development Code

Langley Municipal Code

Ch. 18.16 Zoning - CB zone district

Ch. 18.11 Wharf St Overlay including "Wharf Street Overlay Design Approach"

Section 18.22.130 Trees and Landscaping

Ch. 16.20.045 Geologically Hazardous Areas

Ch. 15.24 Flood Hazard

Shoreline Master Plan

2. FINDINGS OF FACT and CONCLUSIONS OF LAW

a. Infrastructure

The subject property is served by City sewer and water. These utilities must be upgraded to serve the new dwelling unit and accessory building. Sewer requires a new 6" side sewer line to be installed to the south into the manhole and both the dwelling unit and accessory building require their own lateral lines connected into the 6" line. Water requires a new water meter installed on the City right of way north of the adjacent property and a new water service line to be installed.

There is an existing easement for sewer across the property to the north but the exact location still has to be surveyed and due to old easements with unclear legal descriptions this is taking longer than anticipated. There is no easement for the water service so the proponent must negotiate this with the neighbor to the north.

Stormwater management drainage plan has been designed for the development. As the development is proposing more than 2000 SF of new plus replaced impervious surface, the Stormwater Management Manual for Western Washington (SWMMWW) Volume I minimum requirements 1 through 5 are applicable. The SWMMWW also requires include the development and implementation of a Stormwater Pollution Prevention Plan (SWPP). Temporary erosion and sediment control (TESC) measures are also required. Exhibit No. 5 Civil Plans and Exhibit No. 6 Drainage Report.

The civil plans C04 is the drainage and grading plan prepared by DCG and shows the various facilities including catch basins (three), infiltration drywells for downspout (three), and pervious driveway and walkways. Civil plans C05 and C06 contain additional details. The drainage report prepared by DCG detail the requirements for the SWMMWW, SWPP and TESC. These plans have been reviewed by the City's consulting engineer, PACE Consulting, and they have confirmed that the proposed development is consistent with Ch. 15.01 of the Municipal Code and State requirements with the exception of the utility plan as discussed above.

Access from Wharf St is via a gravel driveway that runs through the adjacent property north to south from Wharf St. There is a 10 foot wide access easement.

The neighbor to the east, Duane Den Adel, expressed concern about the use of the driveway access easement during construction and that it is unsuitable to accommodate large trucks with materials and machinery. The applicant is working with the adjacent property owners, Duane Den Adel and Port of South Whidbey to secure agreements to minimize the impacts of construction activity including marshalling heavy equipment and materials on the driveway access.

Conditions of Approval

A final utility plan for water and sewer must be provided and approved prior to the issuance of a building permit.

Prepare a utility easement for both sewer and water for review prior to the issuance of a building permit.

Right of way permit is required for utility works in the City's right of way prior to issuance of a grading permit.

Provide the City with a copy of the agreement between the proponent and neighbor to the north prior to the issuance of a building permit.

LAND USE REGULATIONS

Permitted Uses - Shoreline Master Program

As per LMC 18.31.010 A. Where there is a conflict between the regulations of the SMP and other regulations adopted by the City, the SMP regulations takes precedence.

The Shoreline Environment Designation for the subject property is "Urban" as identified in the Langley SMP Figure 2. However, Section 3.3.3.B Urban, Designation Criteria does not extend the Easterly boundary as far as this subject property. As a result, based upon [WAC 173-26-211 2\)b](#), and in confirmation with Department of Ecology staff, the Shoreline Designation defaults to "Residential".

Shoreline Master Plan, Table 2 Permitted Shoreline Uses permits detached single-family dwelling in the Shoreline Residential Environmental Designation, as well as multi-family dwellings. Accessory dwelling units are not identified in Table 2 and therefore triggers a conditional use permit to permit this use per SMP Section 4.10 Unclassified Uses.

As per Section 7.6.3.6 Exemptions – construction on shorelands by an owner of a single-family residence for their owner use ... is exempt from requiring a Shoreline Substantial Development Permit. Department of Ecology staff have confirmed that the accessory building and ADU is not exempt from this requirement.

Analysis

The proposed use of a single-family residence is permitted.

The garage is permitted but the ADU above the garage is an unclassified use and therefore requires a Shoreline Conditional Use permit. This part of the application is discussed in more detail below.

Langley Municipal Code

Wharf Street LMC 18.11 and Overlay Map LU-5

The Wharf Street Overlay was adopted in 2009. Section LMC 18.11.040 Context-sensitive standards are included and adopts by reference the document "Wharf Street Form-Based Design Approach".

However, the latter document is conceptual and does not give clear guidance for the development of the subject property. These design guidelines focus on mixed use and multi-family developments. As a result, staff has not included an analysis of the application using the Wharf Street Form Based Design Approach.

Zoning - CB zone district Ch. 18.16

18.16.060 Lot Coverage - No lot coverage limit

18.16.070 – Maximum height

A. The maximum height in the CB zone is 30 feet; provided, that the height may be built to 35 feet with a pitched roof if the lowest part of the pitch begins no higher than 30 feet; provided further, that the

height limit on the north side of First Street shall be 25 feet with the height measured from the center of the side(s) of the building fronting on First Street extended to the centerline of the First Street right-of-way; provided further, that on steeply sloping lots fronting on First Street, development shall step down the bluff and thereby better fit with the site terrain and be more compatible with the adjacent Seawall Park. A minimum setback of five feet per floor is required, but up to two steps may be combined in a single setback. A larger setback at the ground level may satisfy part of the required upper level setbacks.

LMC 18.16.080 - Setbacks

Street – n/a

Side yard: none except when abutting a residential zone then five feet – n/a

Rear yard: non except when abutting a residential zone then 25 feet – n/a

Analysis

The proposed siting of the single family residence and accessory building is consistent with LMC Ch. 18.16.

The maximum height of the single family residence is 29 ‘ and the accessory building is 24’6”. The height includes additional to accommodate the flood hazard. This is discussed in more detail below.

FLOOD

LMC 15.24.060 Application for development permit.

In addition to the standard information required with a permit application (Chapter [18.36](#), Administration) the following information is also required for any permit proposing development within a floodway or floodplain:

- A. Elevation in relation to mean sea level of the lowest floor (including basement) of all structures recorded on a current elevation certificate (FF 81-31) with Section B completed by the local official.
- B. Elevation in relation to mean sea level to which any structure has been flood-proofed.
- C. Certification by a registered professional engineer or architect that the flood-proofing methods for any nonresidential structure meet flood-proofing criteria in Section [15.24.110](#)(C).
- D. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.
- E. A habitat assessment that demonstrates that the proposed project will not cause any adverse effects to ESA-listed species, nor cause any adverse modification to designated critical habitat. ([44 CFR 60.3](#)(a)(2).) (Ord. 1034 § 1, 2017; Ord. 880, 2006)

LMC 15.24.110 Flood Hazard Areas

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section [15.24.040](#)(B), Basis for Establishing the Areas of Special Flood Hazard, or Section [15.24.080](#)(B), Use of Other Base Flood Data, the following provisions are required:

- A. Residential Construction ([44 CFR Part 60.3](#)(c)(2)(5)). New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation (BFE).
- B. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry

and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

1. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
2. The bottom of all openings shall be no higher than one foot above grade.
3. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.

LMC 15.24.040 General Provisions

A. Lands to Which This Chapter Applies ([44 CFR Part 59.22\(a\)](#)). This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city of Langley.

B. Basis for Establishing the Areas of Special Flood Hazard ([44 CFR Part 60.3\(c\)\(1\)\(d\)\(2\)](#)). The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled the "Flood Insurance Study for Island County, Washington, and Incorporated Areas," dated March 7, 2017, and any revisions thereto, with an accompanying flood insurance rate map (FIRM), and any revisions thereto, are hereby adopted by reference and declared to be a part of this chapter. The flood insurance study and the FIRM are on file at City Hall, Langley, Washington. The best available information for flood hazard area identification as outlined in Section [15.24.080\(B\)](#) shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under Section [15.24.080\(B\)](#).

C. Warning and Disclaimer of Liability. The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city of Langley, any officer, employee or agent thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder. (Ord. 1034 § 1, 2017; amended during 2013 reformat; Ord. 880, 2006)

FIRM maps

As per FEMA FIRM map number 530292C0342F effective 3/7/2017, the subject property is located in Zone AE with a Base Flood Elevation (BFE) of 15 feet. Exhibit No. 7 – FIRM map

FEMA FLOODPLAIN HABITAT ASSESSMENT

Wetlands and Wildlife, Inc prepared a response to the FEMA document *Floodplain Habitat assessment and Mitigation Regional Guidance for the Puget Sound Basin*. See Exhibit No. 8. The intent of the guidance document is to ensure that all development proposals located within the regulatory FEMA Flood Hazard Areas adequately assess potential impacts to fish and wildlife species and their habitats protected by the ESA.

(pg 3) states the property is located in the Water Resource Inventory Area (WRIA) 6 Puget Sound is considered a shoreline of the state (Type S water body)

The eastern portion of the subject property are mapped as being located within the regulated FEMA Flood Hazard Area (Zone AE).

The entire property is within the riparian habitat zone that extends 250 feet perpendicular from the OHWM of the Puget Sound. As a result a detailed Floodplain Habitat Assessment per the requirements of the FEMA Model Ordinance and Regional Guidance document has been prepared.

Pg 4 – The Puget Sound provides habitat for several ESA-listed species.

The report assesses potential adverse ecological impacts to federally threatened and/or endangered species as a result of the development and concludes that no adverse impacts to ESA-listed species will occur as a result of the project proposal.

Pg 5 – the report states that Due to the minimal impacts to vegetated areas and no net decrease in available floodwater storage within the base flood elevation that will occur as a result of this project, the overall level of ecological functions and values within the vicinity of the proposed single-family residence, garage, and driveway replacement are expected to remain the same as the existing (baseline) condition and no adverse impacts to ESA-listed species are expected to occur as a result of the proposed project.

Calculations prepared by DCG in its flood hazard storage calculation report (1/2021) (See Exhibit no. 9) confirms the project will not result in a loss of available floodwater storage capacity on the property and that there will be a net increase in available floodwater storage of approximately 45.8 cu yards due to the removal of existing non-vented structures and the proposed elevation of new structures above the Base Flood Elevation.

Pg 6 – The report establishes an Action Area to include all terrestrial and freshwater environments within 7,924 feet of the proposed work area. As this is the distance at which the project related construction noise would attenuate to the ambient (existing baseline) noise level.

This Action Area is required to determine how project-related activities may affect federally-listed species which utilize the terrestrial and freshwater habitats within the Action Area.

Pg 8 – “Based on a review of all project-related factors, the temporarily elevated noise levels is the factor that would have the greatest potential to affect species which use the terrestrial and aquatic environment in the project vicinity.”

Pg 8 – As defined by the assessed FEMA guidance documents, the Protected Area for this project site is determined to be the western extent of the riparian habitat zone (RHZ) which extends 250 feet from the OHWM and this RHZ extends across the entire subject site.

Pg 9 – Applications for proposed work in mapped FEMA Flood Hazard Areas are required to demonstrate that any proposed project will not have an adverse impact on the project site’s compensatory flood storage volume within mapped FEMA Special Flood Hazard Areas.

Analysis

Building height and Flood Protection (See Exhibit No. 2 for Elevation Drawings of both buildings)

Main SFD is 29 ‘, which is 2.5’ above BFE

ADU is 24’6” above BFE

The applicant has added an additional 2 feet to adapt to 2050 projected sea level rise elevations.

Due to the location of the subject property there is no opportunity to accommodate the proposed project outside the FEMA-defined Protected Area.

No adverse impacts to ESA-listed species will occur as a result of the project proposal.

The project will not result in a loss of available floodwater storage capacity on the property and that there will be a net increase in available floodwater storage of approximately 45.8 cu yards

GEO HAZARD

Regulations related to development adjacent to or on steep slopes are found in different sections of the LMC and SMP. These regulations are confusing and conflicting. LMC Section 18.31.010 A. states that ‘where there is a conflict between the regulations in the SMP and other regulations adopted by the City, the SMP regulations take precedence.’”

LMC 18.11.040 Context sensitive standards

B. Toe of Slope Setback. In recognition of the historic use of that area at the toe of the Cascade bluff that is subject to the toe of slope setback established at Section [16.20.045\(C\)\(1\)\(a\)](#), the following standards shall apply within the Wharf Street overlay district:

1. Except as modified by subsection (B)(2) of this section, the setback shall be the toe of the slope.
2. For proposals that seek to implement the retaining wall concept as described and defined in the “Wharf Street Form-Based Design Approach,” the setback shall be 20 feet from the toe of the retaining wall.
3. All proposals to develop within 50 feet of the toe of the slope shall be required to prepare and submit a geotechnical report that analyzes potential slope impacts and proposes a design that protects the long-term stability of the Cascade bluff.

Ch. 16.20.045 Geologically Hazardous Areas

C.1.a Buffers

(1) A minimum buffer shall be established at a horizontal distance of 50 feet from the top or toe (as applicable) of the slope and along all sides of slopes 15 percent or steeper; provided, that this requirement shall not apply to the north side of First Street in the downtown commercial area. The width of the required buffer for steep slopes located in areas other than along the marine shoreline and not associated with another critical area may be reduced to 25 feet by the planning official based on:

- (A) A study and recommendation prepared by a professional engineer licensed by the state of Washington with experience in geotechnical engineering; and
- (B) The installation of appropriate slope protection measures. Existing native vegetation within the buffer area shall be maintained and the buffer shall be extended beyond these limits as required to mitigate landslide and erosion hazards, or as otherwise necessary to protect the public health, safety and welfare. See also following subsection (C)(1)(e) of this section, Removal or Introduction of Revegetation on Slopes.

C.1.e. Removal or Introduction of Vegetation on Slopes.

Unless otherwise specified, the following restrictions apply to vegetation removal or introduction on slope areas and their buffers:

- (1) There shall be no removal of any vegetation from any steep slope area or buffer except for the limited plant removal necessary for surveying purposes and for the removal of hazardous trees determined to be unsafe by the city land use coordinator.
- (2) On slopes which have been disturbed by human activity or infested by noxious weeds, replacement with native species or other appropriate vegetation may be allowed subject to approval of an enhancement plan by the city planning official.

2. Development proposals on sites containing landslide hazard area shall meet the following requirements:

- a. Buffers. A minimum buffer of 50 feet shall be established from all edges of landslide hazard areas. Existing native vegetation within the buffer area shall be maintained, and the buffer shall be extended beyond these limits as required to mitigate steep slope and erosion hazards or as otherwise necessary to protect the public, health, welfare and safety;
- c. Building Setback Lines. Building setback lines of 15 feet shall be required from the edge of the landslide hazard area buffer;
- d. Alterations.
 - (1) A landslide hazard area located on a slope 15 percent or steeper shall be altered only as allowed under standards for steep slope areas.
 - (2) Where such alterations are approved, buffers and critical area tracts will not be required.

SMP 4.3.2.A.1.f. Adopts LMC 16.20.045 by reference.

SMP 4.3.2.

2. Exceptions to the applicability of the City of Langley Environmentally Critical Areas Regulations within shoreline jurisdiction are as follows:

d. Reasonable Use provisions of LMC 16.20.080.B.1.d shall not apply within shoreline jurisdiction. The SMP Shoreline Variance according to Section 7.6.4 of this Program and WAC 173-27 is intended to address these situations.

3. In the event development or performance standards in LMC Chapter 16.20 are inconsistent with standards and requirements in this Shoreline Master Program, the standard that is more protective of natural resources in the shoreline shall govern.

C. Marine Shoreline Buffers

1. Because development in the Shoreline Residential environment occurs predominantly on the top of steep coastal bluffs, conformance with the City's geologically hazardous areas buffers and setbacks as defined in LMC 16.20.045(C)(a) and adopted into this Program per SMP 4.3.2(B) shall provide adequate protection to the Marine shoreline to achieve no net loss of ecological functions.

2. Because shoreline functions within the Urban environment have been substantially altered by the seawall and removal of native vegetation, a standard buffer of 25 feet from the OHWM shall be established.

7. If buffers for any shoreline or critical areas are contiguous or overlapping, the buffers and setbacks that are most protective of shoreline resources shall apply.

SMP 6.8.2.6 Residential structures shall be located in geologically hazardous areas only if a geotechnical evaluation has been prepared and has been deemed acceptable by the Shoreline Administrator and if the residential structures are in compliance with the bluff setback standards and conditions contained in the City's Resource Lands and Environmentally Sensitive (Critical) Areas Management regulations, Chapter 16.20 LMC.

7. Accessory structures shall be constructed to minimize adverse impacts to the environment and shall comply with all required setbacks

GeoHazard Assessment

Scott Palmer, PE prepared the Geotechnical report and addendum letter for this application. Exhibit No. 10.

The slope described – the toe of the slope lies at relaxed angles between 12 and 15 degrees, while the slope face exhibits typical angles between 20 and 43 degrees, becoming relaxed at the slope crest with angles between 16 and 22 degrees. (pg. 5)

The toe of the bluff is shown on the marked up DCG Drainage and Grading Plan C04.

The subject property does not contain mapped faults. The Geotech report concludes that “we do not believe the proposed improvements will exacerbate the conditions associated with the nearby faults. (pg 5)

Based on the findings the Geotech finds the risk of fault rupture at the ground surface within the confines of the subject property to be low.

Geotechnical Report Conclusions

Based on the data used for this evaluation we do not believe this steep slope is likely to have deep-seated circular failure. The proposed retaining wall along the southwest side of the proposed residence and garage will be sufficient to provide protection for the structure. (pg 6)

Slope setback (pg. 7) The Geotech report acknowledges no setback to the slope is proposed. The analysis undertaken of the slope states that the existing and proposed factor of safety of the hillside is above 1.5 for static loading and above 1.1 for seismic loading. Based on this analysis, the report finds, the proposed building location, on pin pile foundation elements, is appropriate. (pg. 8)

Based on the weak soil at the surface we recommend that the proposed improvements are founded on an alternative foundation system, to bear on the stronger soil at depth, such as pin-pile detailed in Section 7.0.

The Geotechnical report (pg. 6) concludes “based on our review of available data, soil conditions encountered during exploration, laboratory testing and our analysis, we believe the site is suitable for the proposed improvements.”

The Geotechnical report provides recommendations for site development and foundation design.

Analysis

The most protective buffer found in LMC 16.20.045(C) 1.a (1) and 1.c. which is 50 feet buffer from the toe of the slope plus a 15 foot building setback from the edge of the buffer.

Because the lot becomes increasingly narrow moving in a southerly direction excavation into the slope is proposed for the south east corner of the single family DU, between the two buildings and for the accessory building. A retaining wall approximately 11 feet in height is proposed along the west side, between the slope and the proposed dwelling unit and accessory building/ADU.

The existing DU and cellar is cut into the toe of the slope in the same general location as the south east corner of the proposed single family DU. The cellar is excavated further into the bank and this structure will be removed.

The depth of developable area between the toe of the bluff and 25-foot shoreline buffer ranges from approximately 63 feet at the north end of the property and narrows to approximately 34 feet at the south end of the property.

The main dwelling unit is approximately 29.5 feet deep with an additional 8 foot wide deck on the east side. The main dwelling is 49.9 feet wide. The accessory building/ADU is 21 feet deep and 21 feet wide.

A 10 foot wide driveway provides access across the front of the main dwelling. The driveway is less than five feet from the 25-foot shoreline buffer at its closest point.

The accessory building/ADU could be moved closer to the shoreline buffer but a retaining wall would still be required and the cars would not have the space to turn around and the potential for encroaching into the shoreline buffer would increase.

As shown on Site Plan Exhibit No. 11, the geo-hazard buffer overlaps the shoreline buffer. The steep slope buffer and shoreline buffer combine to establish an undevelopable lot.

The Geotechnical engineer concludes that the site is suitable for the proposed improvements.

The Geotechnical report recommendations for site development and foundation design shall be incorporated into the development of the site.

Bulkhead

SMP 5.1.2.6 - New development, including newly created parcels, shall be designed and located so as to preclude the need for future shoreline stabilization over the life of the structure.

A low-profile wooden bulkhead runs north south roughly along the edge of the shoreline buffer. It is overgrown with vegetation and does not provide any function. The consultants have confirmed that a bulkhead is not necessary for this property.

The Critical Area report (pg 15) states that no change in shoreline stabilization will be necessary. Exhibit No. 12.

The Geotechnical engineer has verbally stated that a bulkhead is not needed for this property because:

- The existing condition of the shoreline is a depositional environment,
- The prevailing winds are from the north west,
- The marina breakwater provides protection, and
- The existing natural shoreline of logs built up with native grasses has established a softshore condition, a preferred condition.

Vegetation Management on the Bluff

SMP Section 4.3.2.C.5

“Shoreline buffer areas that contain non-native trees, shrubs, and herbaceous vegetation may be maintained in their existing condition until such time as the site is developed or redeveloped under these regulations.”

Section 4.8.2.2 “If non-native vegetation is to be removed then it shall be replaced within native vegetation within the shoreline jurisdiction.”

Geotechnical Assessment

(pg 5) The upper and lower portions of the bluff on the subject property generally consist of dense vegetation with mature deciduous and coniferous trees over thick underbrush of native bushes and shrubs to just below the slope crest.

No areas of exposed soils were observed throughout the face or near the slope crest.

Trees were observed in varying positions, though generally near vertical.

A review of historical photos reflects consistent vegetation patterns and a lack of exposed soils.

The geotechnical report concludes that based on the observations in the field and photographic record the slope appears to exhibit stable features including vegetation density and a lack of exposed soils, but also notes that the slope profile was approximated and the actual slope conditions may vary.

(pg. 7) Initial grading will include removing vegetation within the proposed construction area.

Geotech report (pg 11) recommends avoiding clearing existing vegetation outside of the development area, unless approved by a qualified professional.

Drainage report (pg 5) To protect adjacent properties and to reduce the area of soil exposed to construction, the limits of construction will be clearly marked before land-disturbing activities begin. The BMPs relevant to marking the clearing limits that will be applied for this project may include:

- Silt Fence (BMP C233)

Steep Slope Vegetation

Blake Durr, ISA Certified Arborist report 11/25/2019 (Exhibit No. 13) recommends:

- Remove as much invasive plant species of English Ivy and Himalayan Blackberry Vines from the slope tree as possible.

- Remove invasive plants from the tree canopies.
- Thin canopy tops of the largest Maples within striking distance of the dwelling

Analysis

The vegetation removal on the bluff is limited to facilitate the siting of the new dwelling unit, accessory building, related retaining structures and also to remove the invasive plants consistent with the recommendations in the geotechnical and drainage reports.

The recommendations in these reports are required to be incorporated into the development of the site and construction of the buildings and structures.

Impervious Area

LMC Section 18.16.060 Maximum Lot Coverage

There is no limit for maximum lot coverage in the CB zone, except as required per Section [18.16.080](#).

Section 18.16.080 Setbacks –

The proposed development meets the setbacks established in this section.

SMP 6.8.2.4

New residential construction and additions to residential structures that increase net impervious surface by 200 feet or more shall be required to provide a detailed drainage plan as part of any permit application. The drainage plan may include tight line systems, the use of native vegetation or other measures that are not likely to exacerbate bluff erosion. Run-off from residential development shall be directed away from the shoreline. Where run-off must be directed toward the shoreline, stormwater facilities shall be designed to prevent water pollution and erosion. Stormwater management facilities and practices shall comply with applicable City and state regulations and guidelines. Residential development containing wetlands shall use those areas consistent with the City's Environmentally Critical Areas Regulations, Chapter 16.20 LMC.

DCG Drainage report is based upon the 2019 Stormwater Management Manual for Western Washington (pg 1).

DCG Drainage report (pg 2) states that stormwater roof runoff from the proposed single-family residence and garage will be tightlined through roof downspouts into three (3) separate DOE approved downspout infiltration systems (BMP T5.10A) where feasible. Two (2) Downspout Infiltration Drywells are proposed, one from each the northwest corner and southwest corner of the proposed single-family residence and shall be placed east of the residence. One (1) Downspout Infiltration Drywell is proposed for the garage. Downspouts will be connected together at the southwest corner of the garage and continue to the proposed drywell location east of the garage.

DCG Drainage report (Section 5) details the Stormwater Pollution Prevention Plan (SWPPP)

The report states that the project will add or replace greater than 2,000 square feet of impervious surface and therefore requires the development and implementation of a SWPPP in compliance with Section 3.4.2 of Volume I and Section 2.4 and 3.1 of Volume II of the Washington State Department of Ecology's SWMMWW. Temporary erosion and sediment control (TESC) measures are shown in the Project Plans, submitted separately. The civil plan set, including the TESC, includes SWPPP drawing

requirements as outlined in Section 2.4 of Volume II. Information in this drainage report contains sections that satisfy SWPPP narrative and other requirements included in the SWPPP checklist in Section 3.1 of Volume II.

Analysis

The Drainage and Geotech reports analyze the soils, the extent of excavation and disturbance, and identifies stormwater management measures and stormwater pollution prevention plan measures to be incorporated into the development of the site and construction of the dwelling unit and accessory building. The recommendations in these reports are required to be incorporated into the development of the site and construction of the buildings and structures.

VEGETATION (shoreline)

SMP Section 4.3.2.C.5

“Shoreline buffer areas that contain non-native trees, shrubs, and herbaceous vegetation may be maintained in their existing condition until such time as the site is developed or redeveloped under these regulations.”

SMP Section 4.3.2.C.6

“Development outside any required setback or buffer, the percentage of the buffer to be enhanced should equal the percentage increase in impervious lot coverage on the site.

SMP 4.3.2.D.2 Shoreline Buffer Modification within the Urban Environment

“Within the Urban environment, expansion or redevelopment of existing development or structures may be allowed within the shoreline buffer under the following conditions:

- a. New development or redevelopment may not encroach waterward of the existing structure’s foundation walls; and
- b. For any new structure or expansion of an existing structure, in which the footprint of the expansion will increase total impervious surface in the buffer by more than 200 square feet, the proponent shall enhance an equal area of the setback with native vegetation.”

SMP 4.8.2.2 Shoreline Vegetation Conservation Regulation

“Removal of native vegetation shall be avoided, where feasible. Where removal of native vegetation cannot be avoided, it shall be minimized to protect ecological functions.”

4.8.2.2 “If non-native vegetation is to be removed then it shall be replaced within native vegetation within the shoreline jurisdiction.”

4.8.2.3 “Native plant materials that are equivalent to those which would typically occur with respect to size, structure, and diversity at maturation shall be used in restoration, rehabilitation, or enhancement projects.”

4.8.2.7 “Clearing by hand-held equipment of invasive or non-native shoreline vegetation or plants listed on the State Noxious Weed List is permitted in shoreline locations if native vegetation is promptly re-established in the disturbed area.

Critical Areas and Shoreline Report, 1/29/2021 (Exhibit No. 12)

Impervious area and mitigation

Existing impervious area 1055 sf (DU, carport, shed/cellar)

Proposed 2803 sf of roof area. The new construction will result in a net increase of 1748 sf of impervious area that is a 7.7% increase which translates to 292 SF of marine buffer to be enhanced. The mitigation includes removing non-native invasive vegetation and replanting native trees and shrubs. This is identified as Restoration Area A.

The 25-foot buffer area totals 2129 SF and is made up of 50% native dune grass and 50% English ivy. The Invasive vegetation (English ivy) will be removed and replanted. The approximate area is 1065 SF. This is identified as Restoration Area B. This is 50% of the 2129 SF buffer area. The existing native dune grass will be maintained to the greatest extent possible.

The assessment concludes no net loss as per WAC 173-26-201(3)(d)(i)(C) pg 15 -16 and details site specific and project specific Shoreline Ecological Functions Assessment based on Table 4-1 of the SMP handbook

Proposed Compensatory Mitigation/Restoration Efforts

There are three distinct restorations areas identified in the report.

Restoration Area A (pg 9) 292 SF

Restoration Area B (pg 9) 2,129 SF

- Both restoration areas are located in the shoreline buffer
- Remove an existing wood deck platform partially located in the 25-foot marine buffer
- Remove all non-native, invasive vegetation (English ivy)
- Enhance buffer mitigation /restoration planting areas (pg 9)
- Replant mitigation area 60% native trees (2-2 gal pot Shore pine on 9 foot centers) and 40% native shrubs (3-2 gal pot Nootka rose on 6 foot centers) –
- Enhance 50% of 2129 SF on site buffer by removing invasive English ivy and replating an area of 1065 SF with herbaceous plants –

Restoration Area C

- Is located outside of buffer
- Is established to mitigate the removal of 1 Big Leaf Maple (discussed below)
- Three trees will be planted to offset removing 1 Big Leaf Maple

Post restoration planting recommendations are included in the report.

TREES

Blake Durr, ISA Certified Arborist report 11/25/2019 (Exhibit No. 13) recommends removing 1 Big Leaf Maple as due its defects and potential for failure. Three replacement trees are to be planted northeast of the existing hazard tree, in close proximity to it. This is identified as Restoration Area C.

Additional mitigation recommendations are outlined in the report.

Analysis

The development does not encroach into the Shoreline buffer.

No net loss as per WAC 173-26-201(3)(d)(i)(C) pg 15 -16 details site specific and project specific Shoreline Ecological Functions Assessment based on Table 4-1 of the SMP handbook

Three restoration areas are identified and detailed mitigation recommendations are outlined.

SHORELINE VARIANCE PERMIT to reduce the setback to the bluff.

7.6.4 Shoreline Variance

1. The purpose of a variance is to grant relief to specific bulk or dimensional requirements set forth in this Program where there are extraordinary or unique circumstances relating to the property such that the strict implementation of this Program would impose unnecessary hardships on the applicant/proponent or thwart the policies set forth in RCW 90.58.020 and this program.
2. Shoreline variance permits should be granted in circumstances where denial of the permit would result in a thwarting of the policy enumerated in the SMA (RCW 90.58.020). In all instances extraordinary circumstances shall be shown and the public interest shall suffer no substantial detrimental effect.
3. Variance permits for development and/or uses that will be located landward of the ordinary high water mark (OHWM), as defined in RCW 90.58.030(2)(b), and/or landward of any wetland as defined in RCW 90.58.030(2)(h), may be authorized provided the applicant can demonstrate all of the following:
 - a. That the strict application of the bulk, dimensional or performance standards set forth in the This Program precludes, or significantly interferes with, reasonable use of the property;
 - b. That the hardship described in (a) of this subsection is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of the master program, and not, for example, from deed restrictions or the applicant's own actions;
 - c. That the design of the project is compatible with other authorized uses within the area and with uses planned for the area under the City's Comprehensive Plan and this Program and will not cause adverse impacts to the shoreline environment;
 - d. That the variance will not constitute a grant of special privilege not enjoyed by the other properties in the area;
 - e. That the variance requested is the minimum necessary to afford relief; and
 - f. That the public interest will suffer no substantial detrimental effect.
5. In the granting of all variance permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area.

Analysis

The developable area of the subject property is virtually non-existent due to the steep slope and related buffers on the west side and the shoreline and its buffer on the east side. As shown on the Site Plan Exhibit No. 11 the remaining area is less than 200 SF making the subject property undevelopable. The hardship is created by the constraints of the topography and shoreline.

The proposed dwelling unit is located in the same location the existing dwelling unit but with a larger footprint by approximately 620 SF. The proposed dwelling unit follows the same frontage plane as the dwelling. The stairs for the proposed dwelling extends further waterward than the existing dwelling.

Both the proposed dwelling unit and accessory building follow the same frontage plane and that of the existing dwelling unit in order to reduce impacts to the shoreline buffer.

The garage/ADU could be moved further east so there is less encroachment into the slope however that pushes the driveway and garage/ADU closer to the shoreline buffer which could negatively impact the buffer and cause unsafe access conditions in a garage with no turnaround space. Vehicles would have to back out of the property as well as through the adjacent property and turn around on the Wharf St right of way and marina parking lot.

The design of the dwelling unit and accessory building is compatible with many of the single-family residences located further north on Sunrise Lane. The Wharf Street Overlay (LMC Ch. 18.11) envisions a multi-family development in this general location.

As detailed in the technical reports prepared for this application, the proposed use will not cause adverse effects to the shoreline environment. Addition of the retaining walls at the rear elevations with additional catchment height provides improved slope stability and protects the development. The retaining walls will be installed with drainage systems. The proposed development will result in excavation of depositional material brought from off site and not native soils. The native soils of the bluff will not be excavated.

Public use and public interest are not affected. The lot is at the end of a private drive and there is no public access to the property.

SHORELINE CONDITIONAL USE PERMIT for the accessory dwelling unit above the garage.

SMP 7.6.5 - Conditional Use

4. Conditional use permits shall be authorized only when they are consistent with all of the following criteria:
 - a. The proposed use is consistent with the policies of RCW 90.58.020, WAC 173-27-160 and all provisions of this Program;
 - b. The use will not interfere with normal public use of public shorelines;
 - c. That the proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and this Program;
 - d. That the proposed use will cause no significant adverse effects to the shoreline environment in which it is located;
 - e. The public interest will suffer no substantial detrimental effect;
5. In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area.

Analysis

Proposed development is for a new single-family dwelling and detached garage with ADU. The single-family dwelling is permitted in the SMP – Table no. 1. The garage is included in the definitions of ‘appurtenance’ (SMP definitions no. 9). However, accessory dwelling units are not identified as permitted and therefore is considered an unclassified use and therefore may only be permitted as a conditional use per SMP 4.10 even though it is not a detached ADU but the second story of the garage/accessory building.

RCW 90.58.020 states that “To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single-family residences and their appurtenant structures...”

The size of the proposed single-family dwelling is generally consistent with the size of the single family residences located further north on Sunrise Lane.

Public use and public interest is not affected. The lot is at the end of a private drive and there is no public access to the property.

As detailed in the technical reports prepared for this application, the proposed use will not cause significant adverse effects to the shoreline environment.

The subject property is one of a few remaining underdeveloped low bluff properties. The existing cottage is almost uninhabitable and could not be remodeled due to its state of disrepair. The proposed new dwelling unit will generally be sited within the existing cottage footprint with some minor expansion. It is the ADU above the garage that triggers the conditional use permit request. The garage itself does not. The footprint of this accessory building is 400 SF.

The addition of the ADU above the garage does not produce adverse effects to the shoreline environment.

Department of Ecology

SMP 7.7 Ecology Review

7.7.2 After City approval of a conditional use or variance permit, the city shall submit the permit to the State Department of Ecology for the department’s approval, approval with conditions or denial. ... The department shall render and transmit to the City and the applicant its final decision approving, approving with conditions or disapproving the permit within thirty days of the date of submittal by the city.

Analysis

Staff has informed DOE staff of the application and the Shoreline Planner has provided some initial comments regarding this application. These comments have been considered as part of this staff report.

STAFF RECOMMENDATION

Staff recommends approval of the requested applications for the applications contained here for the property at 325 Wharf St for the following approvals

- Shoreline Substantial Development Permit
- Shoreline Variance Permit
- Shoreline Conditional Use
- Flood Hazard Development Permit
- Tree Removal permit
- Right of Way/Access permit

This recommendation is based upon:

- the small developable area of approximately 200 SF on the subject property;
- the technical analyses submitted in support of the proposed development that include detailed recommendations and mitigation requirements to reduce impacts to the critical areas on the subject property;
- the geotechnical and flood hazard analyses of the proposed development conclude that the site is safe for the intended use subject to the recommendations in these reports;
- the staff report findings conclude that subject to these analyses the application requests are generally consistent with the Langley Municipal Code and Shoreline Master Plan; and
- the following conditions of approval must be incorporated into the development of the subject property.

CONDITIONS OF APPROVAL

1. Submitting a final utility plan for water and sewer must be provided and approved prior to the issuance of a building permit.
2. Preparing a utility easement for both sewer and water for review prior to the issuance of a building permit.
3. Submitting a right of way permit application for utility works in the City's right of way prior to issuance of a grading permit.
4. Providing the City with a copy of the agreement between the proponent and neighbor to the north prior to the issuance of a building permit.
5. Undertaking development of the site consistent with the recommendations and mitigation requirements detailed in the technical reports prepared for this application
6. Entering into an agreement that runs with the land and indemnifies and hold the City harmless against any claims that could result due this development.