SMITH PROJECT NARRATIVE

The below are questions provided after the pre-application meeting with COBI staff. Answers to each follow:

To assure that development activities contribute to meeting the no net loss provision, a site-specific impact analysis has been submitted. Please submit a copy of this document with your shoreline exemption application, taking into account the following comment:

SMP Section 4.1.2.4.1.g requires that shoreline development result in no net loss of ecological functions and processes necessary to sustain shoreline resources, including loss that may result from the cumulative impacts of similar developments over time. The site-specific impact analysis should address the cumulative impact of bulkheads (repairs, replacements, and new), including the continuous starvation of beach sediment, loss of shoreline vegetation and large woody debris, ground water and hydraulic impacts, and exacerbation of erosion within the drift cell. Please determine if mitigation (e.g. beach nourishment) is necessary to address cumulative impacts.

Conversations have been initiated with WDFW to complete a project site inspection to confirm if any nourishment is recommended following construction. This detail will be provided to the City once obtained along with a copy of the HPA.

SMP Section 4.1.5.7 applies to geologically hazardous areas. The repair work is proposed in a geologically hazardous area. Appropriately, a critical areas report from a licensed geotechnical engineer was provided. During the preapplication conference, the Development Engineer asked that the report address whether the bulkhead rocks will likely topple again, and if anything can be done on the upland to fix this issue. **Please submit the critical areas report with the shoreline exemption application.**

The following was provided by DE following the meeting and satisfies the above request: "The provided geotechnical report for this project is deemed acceptable to satisfy the critical areas assessment report requirements for this shoreline bulkhead repair. There was a discussion during the conference regarding providing additional information on the root cause of the current toppled condition and perhaps explicitly addressing that with additional recommendations. Upon further review, the Aspect report notes that this wall is over 50 years old and that the repair should not be regarded as permanent, providing enough clarification to satisfy the point of discussion during the Pre-Application conference. The submitted report also satisfies the step 1 and step 2 forms for Constructing in a Geologically Hazardous area, and as such should be submitted with the building permit for final review, approval, and issuance as a supporting document to the future permit. A step 3 form will be required upon completion of all construction details and prior to permit final inspections."

SMP Section 6.2.7 provides, repair of existing structural stabilization shall be allowed as follows: a. Existing shoreline stabilization which no longer adequately serves its intended purpose shall be considered a replacement.

Please identify the purpose of the existing bulkhead and substantiate how it is currently serves its intended purpose (note, the geotechnical report states that the bulkhead no longer functions as originally designed). If it no longer serves its intended purposes, the provisions related to bulkhead replacement in SMP Section 6.2 apply.

The bulkhead has been in place for at least 50 years, per Aspect Consulting report dated February 27, 2020. The toe of the bulkhead appears to be suitable and sufficient. Over time, the top rocks have become dislodged and/or fallen apart and this has resulted in the bulkhead height be reduced from the original above grade height of +/-8' to an average of +/-6'. The repair work proposed is to remove the fallen rock from the beach and restack rock on top of the bulkhead to reinstate the original height. This will increase the protection the bulkhead is intended to provide for the toe of the slope. The linear distance of the bulkhead is +/-100' and the total height is +/-6'. The work proposed would reinstate the height by adding back +/-2' to the bulkhead. This will result in placing +/-400 sf of material back onto the bulkhead.

b. Damaged structural stabilization may be repaired up to fifty percent (50%) of the linear length within a Five (5) year period. Repair area that exceeds fifty percent (50%) shall be considered a replacement. Stabilization repair applications shall consider cumulative approvals of each successive application within a five-year period.

Please provide a calculation that demonstrates the linear length of repaired bulkhead is in compliance with this provision as a part of the narrative required below, and dimension the repair areas on the site plan.

The repair work proposed is to remove the fallen rock from the beach and restack rock on top of the bulkhead to reinstate the original height. This will increase the protection the bulkhead is intended to provide for the toe of the slope. The linear distance of the bulkhead is +/-100° and the total above grade height is +/-6° with the footing +/-1-2° deep. Thus, the total bulkhead square footage currently is approximately 800 sf (100° x +/-8°). The work proposed would reinstate the height by adding back +/-2° to the bulkhead. This will result in placing +/-400 sf of material back onto the bulkhead, total of 50% repaired.

c. Stabilization repairs may require mitigation pursuant to Section 4.1.2, Environmental Impacts.

Discussed above, under section 4.1.2.

Any proposal to repair the existing bulkhead shall include the submittal requirements under SMP Section 6.2.10:

a. Purpose of the project including a calculation that demonstrates the amount proposed to be repaired and past amounts repaired and a summary of replacement and/or repair materials proposed; and

There are no records of pasts repairs done at the site. The bulkhead repair will comprise of adding back approximately 400 sf to the height of the bulkhead, this is 50% of the existing bulkhead which is +/-100' long, +/-6' above grade and +/-2' below beach grade height (800 sf existing).

b. Plan and cross section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and OHWM, including an indication of the amount of area proposed to be repaired; and *Cross section shows totals noted above.*

- c. Documentation of pre-construction shoreline characteristics; and *See property survey completed and included.*
- d. Description of physical, geological and/or soil characteristics of the site including existing and proposed slope profiles; and

Please review geotechnical report, Aspect dated February 27, 2020, page 2.

e. A description of any waste and debris disposal sites for materials generated during construction; and

No waste will be generated or produced from the proposed repair work. All on site rock will be utilized as needed.

f. For repair of shoreline stabilization, the design recommendations for minimizing impacts and ensuring the new construction, replaced or repaired stabilization measure is designed, located, sized and constructed to assure no net loss of ecological functions and processes.

The project will result in removal of dislodged and broken rock from the bulkhead that has fallen onto the beach. This will create a net gain of habitat footprint along the footing of the bulkhead. No digging will be done as the footing of the bulkhead appears to be intact. Therefore, there will be no encroachment waterward.

Please provide the above as a standalone narrative, addressing each item. The narrative should summarize the information contained in the application materials and may reference specific documents.