

August 21, 2024

Debbi and Larry Vanselow 1010 57th Street Port Townsend, WA 98368

Laura Mason and Keith Flyckt 1022 57th Street Port Townsend, WA 98368

Re: Plans Review Addendum - Planned Bulkhead Project

1010 57th Street and 1022 57th Street Port Townsend, Washington Project No. AS240151

Dear Mr. and Ms. Vanselow and Ms. Mason and Mr. Flyckt:

Aspect Consulting (Aspect) completed a geotechnical assessment and prepared a letter report (Aspect, 2024) for the planned replacement of the existing failing bulkhead (Project) along the waterfront of two adjacent single-family residential properties at 1010 and 1022 57th Street in Port Townsend, Washington (Site), also known as Jefferson County (County) parcel numbers 972905801 and 972905105, respectively.

This letter addresses our review of the Project plans. The recommendations and conclusions presented in our previous letter report remain applicable.

# **Plans Review**

Based on our review of the Project plans (Sealevel, 2024a; Sealevel, 2024b), the new bulkhead will be constructed about 3 feet landward of the existing bulkhead, tie into the existing bulkhead on the western adjacent property, extend 20 feet onto the eastern adjacent property, and a wingwall will be constructed on each property at the adjoining property line between 1010 and 1022 57th Street. The replacement rock bulkhead will be about 6 feet tall, less than 100 feet long, will span the width of the property, will have a 1H:6V (horizontal:vertical) batter, and will have about 3 feet of embedment with 5-man rocks below the existing beach surface. Filter fabric will be placed along the temporary cut face and quarry spalls (4- to 8-inch angular rock) will fill the space between the cut face and the back of the face rocks. The existing stairs will be maintained and possibly repaired by others.

At the east end of the Project, the replacement bulkhead will extend 20 feet east, onto City of Port Townsend property, to provide adequate protection to the residence at 1010 57th Street. At the west end of the Project, a wingwall will extend about 10 feet landward (south) to provide adequate protection to the residence at 1022 57th Street.

This replacement will be completed from the waterward side of the bulkhead with equipment tracking down the beach from a City of Port Townsend property to the east (parcel number 000000210). No barge will be necessary. Construction of a temporary access ramp about 20 feet by

20 feet will be constructed just behind (landward) the existing rock bulkhead at the north end of a proposed, all weather access road about 12 feet wide by about 150 feet north to south (Sealevel, 2024c). The existing rock bulkhead will be removed to allow the equipment to travel down the ramp to the beach, and will be rebuilt and at the end of the Project to match existing conditions. The access road will consist of 6 inches of compacted crushed rock placed over a layer of filter fabric placed on medium dense or better existing materials. Restoration of the City of Port Townsend property will include a set of precast concrete steps with a rock wall on the upland side, as well as a rock bulkhead on the waterward side of the steps.

Based on our review, we confirm these Plans generally meet our geotechnical recommendations.

# References

- Aspect Consulting (Aspect), 2024, Shoreline Geotechnical Assessment of Bulkhead Replacement Project 1010 57th Street and 1022 57th Street Port Townsend, Washington, Prepared for: Debbi and Larry Vanselow and Laura Mason and Keith Flyckt, Project No. AS240151, May 7, 2024.
- Sealevel Bulkhead Builders, Inc. (Sealevel), 2024a, Reconstruct Rock Bulkhead, For: Debbi & Larry Vanselow 1010 57<sup>th</sup> St Port Townsend, WA, Drawing 1/1, June 13, 2024.
- Sealevel Bulkhead Builders, Inc. (Sealevel), 2024b, Reconstruct Rock Bulkhead, For: Laura Mason & Keith Flyckt 1022 57<sup>th</sup> St Port Townsend, WA, Drawing 1/1, June 14, 2024.
- Sealevel Bulkhead Builders, Inc. (Sealevel), 2024c, Vanslow & Flycht-Mason Bulkhead Repairs Gise Street Access Restoration, For: Debbi and Larry Vanselow & Laura Mason and Keith Flyckt 1010 & 1022 57<sup>th</sup> St Port Townsend, WA 98368, Drawing 1/1, June 14, 2024.

# Limitations

Work for this project was performed for Debbi and Larry Vanselow and Laura Mason and Keith Flyckt (Client), and this report was prepared consistent with recognized standards of professionals in the same locality and involving similar conditions, at the time the work was performed. No other warranty, expressed or implied, is made by Aspect Consulting (Aspect).

Recommendations presented herein are based on our interpretation of site conditions, geotechnical engineering calculations, and judgment in accordance with our mutually agreed-upon scope of work. Our recommendations are unique and specific to the project, site, and Client. Application of this report for any purpose other than the project should be done only after consultation with Aspect.

Variations may exist between the soil and groundwater conditions reported and those actually underlying the site. The nature and extent of such soil variations may change over time and may not be evident before construction begins. If any soil conditions are encountered at the site that are different from those described in this report, Aspect should be notified immediately to review the applicability of our recommendations.

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Risks are inherent with any site involving slopes and no recommendations, geologic analysis, or engineering design can assure slope stability. Our observations, findings, and opinions are a means to identify and reduce the inherent risks to the Client.

It is the Client's responsibility to see that all parties to this project, including the designer, contractor, subcontractors, and agents, are made aware of this report in its entirety. At the time of this report, design plans and construction methods have not been finalized, and the recommendations presented herein are based on preliminary project information. If project developments result in changes from the preliminary project information, Aspect should be contacted to determine if our recommendations contained in this report should be revised and/or expanded upon.

The scope of work does not include services related to construction safety precautions. Site safety is typically the responsibility of the contractor, and our recommendations are not intended to direct the contractor's site safety methods, techniques, sequences, or procedures. The scope of our work also does not include the assessment of environmental characteristics, particularly those involving potentially hazardous substances in soil or groundwater.

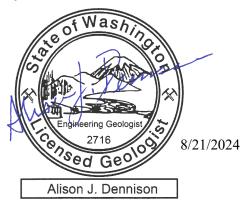
All reports prepared by Aspect for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect. Aspect's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Please refer to Attachment 1 titled "Report Limitations and Guidelines for Use" for additional information governing the use of this report.

We appreciate the opportunity to perform these services.

Sincerely,

# Aspect consulting



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Erik O. Andersen, PE Senior Principal Geotechnical Engineer erik.andersen@aspectconsulting.com

Attachments: Attachment 1 – Report Limitations and Guidelines for Use

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# **ATTACHMENT 1**

**Report Limitations and Guidelines for Use** 

# REPORT LIMITATIONS AND GUIDELINES FOR USE

#### **Geoscience is Not Exact**

The geoscience practices (geotechnical engineering, geology, and environmental science) are far less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or property, you should contact Aspect Consulting (Aspect).

# This Report and Project-Specific Factors

Aspect's services are designed to meet the specific needs of our clients. Aspect has performed the services in general accordance with our agreement (the Agreement) with the Client (defined under the Limitations section of this project's work product). This report has been prepared for the exclusive use of the Client. This report should not be applied for any purpose or project except the purpose described in the Agreement.

Aspect considered many unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you;
- Not prepared for the specific purpose identified in the Agreement;
- Not prepared for the specific subject property assessed; or
- Completed before important changes occurred concerning the subject property, project, or governmental regulatory actions.

If changes are made to the project or subject property after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

# **Reliance Conditions for Third Parties**

This report was prepared for the exclusive use of the Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual limitations. Within the limitations of scope, schedule, and budget, our services have been executed in accordance with our Agreement with the Client and recognized geoscience practices in the same locality and involving similar conditions at the time this report was prepared.

# **Property Conditions Change Over Time**

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope instability, or groundwater fluctuations. If any of the described events may have occurred following the issuance

of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

# Geotechnical, Geologic, and Environmental Reports Are Not Interchangeable

The equipment, techniques, and personnel used to perform a geotechnical or geologic study differ significantly from those used to perform an environmental study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions, or recommendations (e.g., about the likelihood of encountering underground storage tanks or regulated contaminants). Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

We appreciate the opportunity to perform these services. If you have any questions, please contact the Aspect Project Manager for this project.