

GEOTECHNICAL MEMORANDUM

Company: GT Mann Contracting

Contact: Sean Love

Email: sean@gtmann.com

Project Title: Proposed Landscaping Wall

Project Address: 8012 Turgoose Place - Central Saanich, BC

Date: February 4, 2025 **Project #:** 5981-112

As requested, we initially attended the referenced waterfront property May 1 and May 7, 2024, to meet with you and subsequently with Central Saanich staff to review and discuss a proposal to construct a low height retaining wall terrace along the property line to mitigate an ongoing issue of sloughing/erosion (loss) of landscaping soils from within the property to the foreshore area. Further to recent discussions and our site visit of January 27, 2025, we note that excavation work has commenced in advance of wall construction, but that there is now a desire to construct a single concrete wall of greater height, rather than the terrace.

The property is located at the north end of a bedrock controlled headland known as Turgoose Point. See attached Site Plan taken from CRD Natural Areas Atlas. The foreshore property line is delineated by the Present Natural Boundary (PNB). From our recent site observations, the PNB and/or foreshore is bedrock controlled. See attached Site Photograph 1.

An approximate 10 Lm section of the PNB on the west side of the property is characterized by a near vertical 2 m exposure of jointed bedrock overlain by a similar thickness of steeply sloping overburden soils. Over time, the owner has observed erosion and movement of the overburden soils, leading to a gradual loss of soils from the property. The foreshore is relatively protected, and bedrock controlled, accordingly, we expect this loss of soil is primarily due to the steepness of the soils.

To address the noted ongoing erosional processes in the long term, it is proposed that the existing vegetation be removed. Construction of a reinforced concrete retaining wall is proposed atop the crest of the bedrock in order to stabilize the soils behind the PNB. See Photograph 2. The wall would be located between an existing deck (to the north) and an existing masonry wall (to the south). The wall may be up to 4 m in height but would generally reduce in height towards the north. The wall would be of structural design and likely be pinned to stable/clean bedrock with the face of the wall located at least 1 m back from the crest of the rock slope (landward the PNB).

We have no concern with this approach from a geotechnical perspective. The proposal will stabilize the landscaping soils behind the PNB. The work can be completed without equipment access needed beyond the PNB and upon the foreshore area. That being said, we would recommend that works be carried out in accordance with DFO guidelines for working near water.





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In the long term, we do not expect the proposal will unduly influence existing conditions within the foreshore area.

We trust the preceding is suitable for your purposes at present. If you have any questions or require anything further, please do not hesitate to contact us.

Sincerely,

Ryzuk Geotechnica

Scott Currie, P.Eng.
Geotechnical Engineer

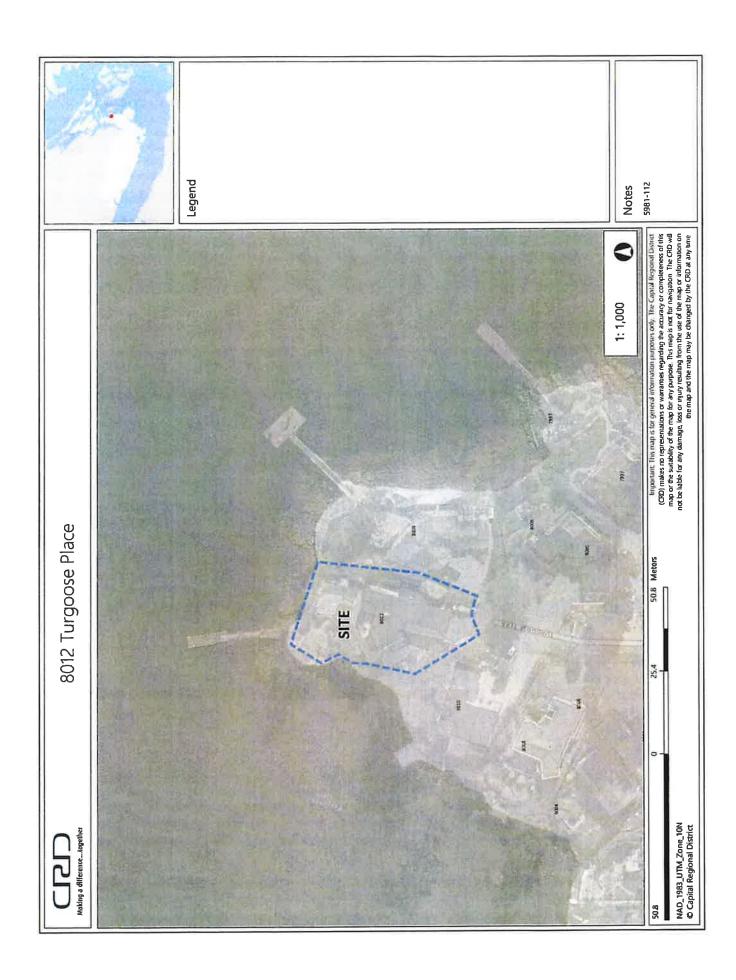
Permit to Practice Number: 1002996

Attachment(s): Site Plan

February 4, 2025

Site Photographs 1 and 2

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Photograph 1 – Looking east towards the property from the foreshore



Photograph 2 - Looking south along crest of bedrock slope and future wall alignment