## Toth and Associates Environmental Services



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May 28, 2020

**Doug Jarvie** 2238 The Jib, Nanoose Bay, BC. V9P-9B6

Re: Environmental Summary for proposed development of 3258 Stephenson Point Road, Nanaimo.

Toth and Associates conducted an environmental assessment of the proposed residential development of the 0.2217 ha undeveloped property located at 3258 Stephenson Point Road (the subject property) on March 29, 2019. The subject property is located within the City of Nanaimo's 30 m from top of bank Watercourse Development Permit Area (DPA 1) associated with Cottle Creek, and 15 m from natural boundary Environmentally Sensitive Area (DPA 2) for the ocean. DPA2 is also designated a Development Approval Information Area.

The proposed development plan includes construction of a single family residential home, driveway, and associated supporting infrastructure (e.g. power, water, sewer, gas), yard and landscaping. All of these development activities will occur outside the SPEA setbacks, with the possible exception of potential temporary intrusion / disturbance during excavation along the west side of the proposed foundation, the extent of which will largely be dictated by the requirements of Section 20 of WorkSafe BC's Occupation Health and Safety Regulation regarding excavations.

Our prior experience with Cottle Creek gained over the past 27 years includes several RAR assessments and detailed fish habitat assessments, water quality and fish population sampling. Fish cannot access Cottle Creek from the ocean due to channel gradients exceeding 24% grade immediately upstream of the ocean. However, Cottle Creek does support a population of resident cutthroat trout, most of which appear to be downstream migrants from Cottle Lake.

The stream channel through the subject property is cut through sandstone, with large blocks of sandstone within the channel, frequent cascades and near vertical sandstone banks. Forest cover consists of mature Douglas-fir, western redcedar, red alder, arbutus and a few Garry oak, with an understorey largely comprised of introduced invasive species including spurge laurel, cotoneaster, Asian plum, daffodil and Himalayan blackberry. Most of the trees within the ocean setback are covered with English ivy. Native plant species include tall Oregon-grape, salal, salmonberry, common snowberry, pacific sanicle, yerba buena, Indian plum and Saskatoon.

Evidence of wildlife use included raccoon, introduced gray squirrel and blacktail deer. There was no evidence (e.g. significant game trails) found on site to suggest that the subject property serves as a wildlife corridor. No raptor or heron nests were observed on the subject property.

Our provincial *Riparian Areas Regulation* (RAR) Detailed Assessment prepared for the proposed development determined that Cottle Creek would receive Streamside Protection and Enhancement

Area (SPEA) setbacks of 10.0 m from high water mark. The RAR Assessment (#5936) was reviewed and accepted by the province on January 14, 2020.

Based on current conditions within the Coast ESA DPA, I believe that remediation / rehabilitation of the 15 m DPA is warranted as a condition of development. As indicated previously, the vegetation community within the DPA is largely composed of invasive species and the viability of many of the trees has been impacted by English ivy infestation.

It is my understanding that since our field assessment you have removed by hand the vast majority of invasive plants (spurge laurel, Himalayan blackberry, English ivy and Scotch broom) from the property.

A detailed Landscape Plan has been prepared for the development by Kate Stefiuk Studio. The plan includes planting of approximately 1,329 native plants representing 24 different species. Implementation of the plan will ensure that the ecological community on the property following development is far superior to current ecological conditions.

Based on our assessment, residential development of the portions of the property located outside the 10 m SPEA setback and 15 m Coast ESA DPA can be undertaken without causing significant environmental impacts.

Please contact us if you require any additional information.

Sincerely,

Steve Toth, AScT, R.P.Bio.

**Toth and Associates Environmental Services** 

