

Development Permit – DPA 2
Sensitive Ecosystem Assessment

Portion of Remainder of Block 176, Zone I-1D;

1755 Mill Bay Rd., Mill Bay, BC

Prepared by:

QEP Environmental

Prepared for:

Northpark

Properties LLP;

and Pacifica 8

Systems Inc

Date: 2024-05-06

Contents

1 Introduction 1

1.1. Scope of Services.....1

1.2. Site Location

2 Methodology3

2.1. Field Methodology4

2.2. Literature Review4

3 Site Description.....4

3.1. Biophysical Characteristics.....4

3.2. Drainage and Watercourses4

3.2.1. Creeks4

3.3. Terrestrial Habitat5

4 Species and Ecological Communities at Risk.....6

4.1. BC CDC Occurrences and Critical Habitat7

4.2. BC CDC Species & Ecosystem Explorer7

6 Recommendations8

6.1. Best Management Practices (BMPs)8

6.2. General Recommendations9

6.3. Erosion and Sediment Control.....9

6.4. Soil and Water9

6.5. Environmental Monitoring.....9

Closure

APPENDIX 1: Site Photographs

.....

APPENDIX 2: BC CDC Species Occurrence Map

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1 Introduction

QEP Environmental Ltd. (QEP Environmental) was retained by NorthPark Properties LLP (the “**Owner**”) and Pacifica 8 Systems Inc. (the “**Tenant**”) to prepare a Sensitive Ecosystem assessment (SEA) for the Development Permit Area (DPA) 2: Sensitive Ecosystem assessment, for the lands zoned I-1D with an address of 1755 Mill Bay Road Mill Bay, BC V0R 2P4 consisting of approximately 50 acers (the “**Site**”) which is part of PID: 000-446-670 the remainder of Block 176, (the “**Property**”). This SEA has been prepared for the Site in accordance with professional guidelines, best management practices (BMPs) and industry best-practices, as well as supplementary information provided by the Owner. The author of this report is a registered and Qualified Environmental Professional (“**QEP**”) and has the expertise and experience to provide this SEA, in accordance to meet the DPA-2 requirement.

1.1 Scope of Services

QEP Environmental completed this report based on the following scope of work:

- A field visit and assessment of the existing habitat, biophysical conditions, riparian issues, and species occurrence at the Site undertaken on August 14, 2023.
- A desktop literature review assessment of potential species at risk occurrence on the Site.
- A desktop literature review of publicly accessible databases and other resources containing background information and potential species occurrence on the Site.
- Provision of high-level, general mitigation measures to be undertaken during future construction activities.

1.2 Site Location

The Site is located within the Cowichan Valley Regional District (“**CVRD**”), within Electoral Area A, approximately 5 km south of the center of the community of Mill Bay, and is bounded by the Trans-Canada Highway to the east, Easement Plan 40471 also referred to as the Private Haul/Truck Road to the West, Mill Bay Rd to the South, and Lot A Plan 137 to the north. See Figure 1 for details regarding the site location.

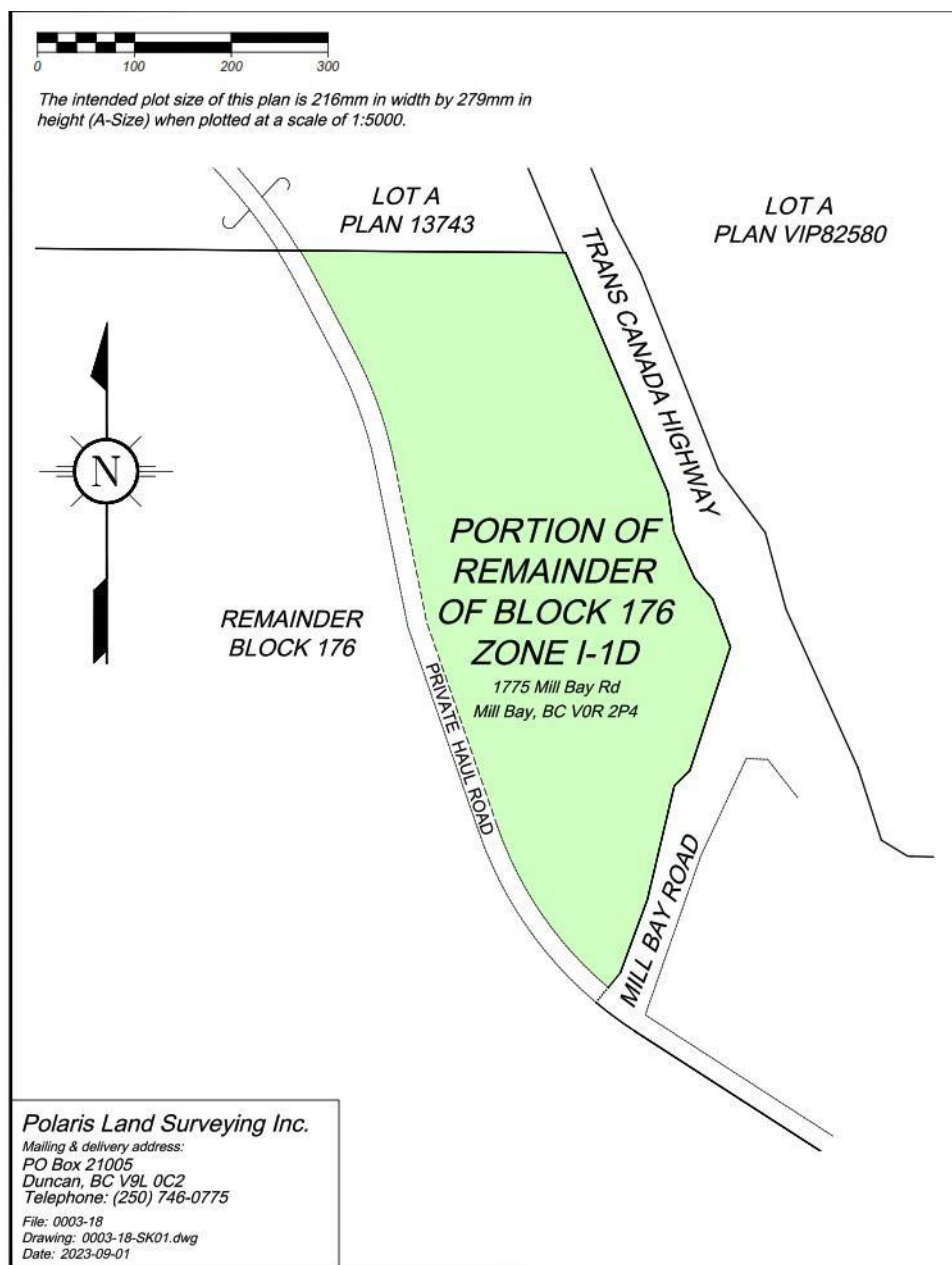


Figure 1: The Site is within the Green Polygon.

2 Methodology

2.1 Site Use and Zoning

The use of the Property is governed by CVRD's *Official Community Plan for Electoral Areas Bylaw No. 4270* (the "**OCP**"), under Electoral Area A – Mill Bay/Malahat Local Area Plan (the "**LAP**") and has the following land use designations under the OCP: The Site is zoned I-1D Business Park Industrial - Commercial under the *South Cowichan Zoning Bylaw No. 3520* (the "**Zoning Bylaw**").

2.2 Field Methodology

QEP Environmental conducted a field visit to the Site on August 14th, 2023. The weather on the day of the assessment was sunny and calm with an ambient air temperature of approximately 28°C. The entirety of the Site was walked and assessed. The field assessment included visual observation for on-site conditions, including vegetation, evidence of wildlife inhabitation, surface water features, drainage features, and habitat conditions.

2.3 Literature Review

A search of publicly available scientific and governmental databases was conducted relating to lands within 2 km of the Property. The following information sources were used to determine and/or infer baseline conditions, biophysical information and potential species at risk occurrence on the Site:

- CVRD Webmap
- CVRD *Official Community Plan for Electoral Areas Bylaw No. 4270*
- BC Invasive Alien Plant Program (IAPP)
- BC Conservation Data Centre (CDC) Species and Ecosystems Explorer
- BC CDC iMap
- iMap BC & various provincial layers
- Wildlife Tree Stewardship Atlas (WiTS)
- BC Breeding Bird Atlas
- Fish Inventory Data Queries (FIDQ)

3 Site Description

The Site consists of graded gravel lots on the West side fronting along the Private Haul Road, cleared land, and a ribbon of trees at the East of the Site along the Trans-Canada Highway. The Site has an approximate grade of 2% sloping West to East from a high point at the Private Haul Road towards the Trans-Canada Highway (“**Downslope**”).

3.1 Biophysical Characteristics

The Property is located within the Spectacle Creek watershed, approximately 5 km east of Shawnigan Lake and 2 km west of Saanich Inlet.

Two biogeoclimatic (BGC) zones are mapped on the Property:

- The majority of the Property is located within the Coastal Western Hemlock (CWH) BGC zone, very dry maritime (xm1) subzone. The CWH BGC zone is characterized by high moisture and forest coverage comprising dominant Douglas-fir (*Pseudotsuga meneziesii*), western hemlock (*Tsuga heterophylla*) and western redcedar (*Thuja plicata*) with typical understorey comprised of salal (*Gaultheria shallon*), sword fern (*Polystichum munitum*), bracken fern (*Pteridium aquilinum*) and vine maple (*Acer circinatum*), with a flat moss (*Plagiothecium undulatum*) and lanky moss (*Rhytidiadelphus loreus*) layer at the ground surface (Pojar *et al.* 1991).
- The eastern portion of the Property starting just west of Hwy 1 is within the Coastal Douglas Fir (CDF) BGC zone, moist maritime (mm) subzone. The CDF BGC zone is characterized by forests of dominant Douglas fir coverage and also containing Western redcedar, grand fir (*Abies grandis*), arbutus (*Arbutus* spp.), Garry oak (*Quercus garryana*), and red alder (*Alnus rubra*) trees (Pojar *et al.* 1991).

The Property has higher elevation to the southwest (highest of approximately 280 m ASL) and slopes down southeastward to Saanich Inlet. The Site sits at the lowest elevation of the Property at approximately 120 m ASL (CVRD 2023).

3.2 Terrestrial Habitat

Both the property and the Site have been extensively logged by previous owners, and the Site was last logged and cleared in approximately 2011, and is now graded with a number of flat gravel lots. Terrestrial wildlife access and habitation are considered to be inhibited by anthropogenic activity in the surrounding area, including traffic along highway and roadways, right-of-way clearings (e.g., transmission line ROW to the west of the Property). Bird nesting unlikely to occur within the Site. The nearest documented raptor nest was identified approximately 2 km southeast of the Site in Bamberton Provincial Park (WiTS, 2023). Raptor nesting is unlikely due to the nature of the Site and its adjacent proximity to Hwy 1. If works are planned within the songbird nesting season (April 11 to August 23; ECCC, 2023), a songbird nesting survey² is recommended to be performed a maximum of 3 days before the start of any works at the Site.

Great Blue Heron *fannini* subspecies (*Ardea herodias fannini*) occurrence was identified approximately 1.2 km south of the Property (BC Gov 2023). However, the last known occurrence at this location was documented in 2001, while more recent occurrences (up to 2008) have been documented near Bamberton Provincial Park as part of the same nest count project (FLNRO n.d.). Great Blue Heron nesting is considered unlikely to occur within the Site.

No information about amphibian occurrence or habitat use at the Site was found during background information review. The Site lacks stream or surface water features and was observed to be dry during the assessment.

3.3 BC CDC Species & Ecosystem Explorer

Species and Ecological Communities at Risk

Species listed provincially or federally under Schedule 1 of the *Species at Risk Act* (SARA), as well as their critical habitat, with documented occurrences within 2 km of the Site, were studied in this report. Schedule 1 of SARA ranks species, starting from highest level of risk, as Endangered (E), Threatened (T) or of Special Concern (SC). The Province of BC categorizes species that are endangered in BC as Red-listed and those species considered to be of special concern in BC as Blue-listed. Provincial rankings also apply to ecological communities as

ranked by the Province of BC, which have also been considered in this report. Species that are extinct or extirpated, or species occurrences that are classified as historical by the BC Conservation Data Centre (CDC) have not been included in the search.

BC CDC Occurrences and Critical Habitat

No documented critical habitat for federally-listed species at risk was identified on the Site, or within 2 km of the Site (BC CDC, 2023b). Occurrences of species at risk within 2 km of the Site are identified in Table 2. Additionally, provincially-ranked ecological communities at risk are listed in Table 3 (BC CDC, 2023b). A map of the search results has been included in **Appendix**.

Table 1: Species at Risk Occurrences within 2 km of the Site (CDC, 2023b).

Species	Scientific Name	SARA Status	BC List	Location
Dun Skipper	<i>Euphyes vestris</i>	T	Blue	Approximately 400 m west of the Site.
Howell's triteleia	<i>Triteleia howellii</i>	E	Red	Approximately 1.7 km northeast of the Site on a rocky outcrop at Saanich Inlet.

Table 2: Ecological Communities at Risk Occurrences within 2 km of the Site (CDC, 2023b).

Species	Scientific Name	BC List	Location
Douglas-fir / dull Oregon-grape	<i>Pseudotsuga menziesii</i> / <i>Mahonia nervosa</i>	Red	Immediately across Hwy 1 approximately 70 m east of the Site.

The Edwards Beach Moth (*Anarta edwardsii*), red listed insect species mentioned in Species Occurrence Report, BC Coconservation Data Centre, Shape ID: 72597 (Attached).

The site conditions do not provide habitat for this species that prefer marine dunes environment.

4 Recommendations

4.1 Best Management Practices (BMPs)

The following BMPs are applicable to potential future construction activities at the Site:

- Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia (FLRNO, 2014)

4.2 General Recommendations

QEP Environmental proposes the following general recommendations:

- Do not disturb the Site beyond that which is required for development.
- Nests of some raptors are protected year-round. If raptor nests are found on the Site, protection measures (e.g., noise buffer zones) should be established prior to proceeding. A raptor survey is recommended prior to any vegetation removal and/or noise-generating activities at any time of year, to be conducted by a QEP and following RISC methodology.
- If tree clearing during the bird and bat breeding season is unavoidable, appropriate bird surveys must be conducted a maximum of 3 days prior to the start of works, following RISC methodology. If active nests are found, a QEPs recommended to prepare a specific management plan prior to works proceeding.
- Machinery used during construction activities should be inspected prior to mobilization and be clean of soil and plant fragments. Clean vehicles of plant fragments before leaving the Site.
- Staging equipment must be operated in a manner to minimize site disturbance. Whenever possible, avoid tight turns and number of trips to staging location.
- Spoil and waste materials should be stored 30 m from any watercourses or drainage features.
- Stop work immediately and readjust ESC measures if runoff from the construction is observed flowing off-site.
- Fuel storage should be reviewed with the contractor before any works commence to ensure it is 30 m away from any watercourses or drainage features.

- No concrete work should be done during rainy days.
- No concrete mixing should occur within 30 m of any watercourses or drainage features.
- Re-seed any areas of disturbed and exposed soil after construction completion.
- All soils are required to be handled and transported as per the *Contaminated Sites Regulation* of the *BC Environmental Management Act*.
- No contaminated, suspect-contaminated or undetermined-contaminated soil should be transported off-site without all legislated and guideline documentation.
- All contaminated and suspect-contaminated soils are required to be transported only to designated facilities licensed to receive contaminated soil.
- All contaminated and suspect-contaminated soils should be segregated from other stockpiles, placed atop impermeable liner and covered with impermeable liner when not in use.
- If groundwater is encountered during site surface work and excavations and requires dewatering, adhere to and secure necessary approvals under the *BC Water Sustainability Act*.
- All contaminated or suspect-contaminated water should be segregated and sent off-site for treatment at a designated facility.

5 Assessment and Conclusion:

The Assessment determined that there were no SEI areas in the Site, and it does not contain important ecological features or attributes. Therefore, there are no sensitive ecosystems (DPA-2 Sensitive Ecosystem Protection) there are no SEI implications associated with future development of the Site. Observing the recommendations in this report for future development are recommended.

Closure

This report is based on observations made during a site visit, published information available at the time of the assessment, and information from government sources. Should additional information become available, these findings may be revised accordingly.

This report has been prepared exclusively for the client and any of its authorized clients or agents, which includes distribution as required for the purposes for which this assessment was commissioned. This study has been carried out in accordance with Biological practices in BC. No other warranty is made, either expressed or implied. Professional judgment has been applied in developing the recommendations in this report. We trust that this report provides with the required information at this time.

QEP Environmental retains the right to withdraw this report and its contents at any time. If you have further questions or comments, please contact the undersigned.

Sincerely,

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Photo 1. The gravel road along west side of the subject property.



Photo 2. The subject site.

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BC Conservation Data Centre: Species Occurrence Report

Shape ID: 72597

Scientific Name: *Anarta edwardsii*
English Name: Edwards' Beach Moth

Identifiers

Occurrence ID: 9928
Shape ID: 72597
Taxonomic Class: insects
Element Group: Invertebrate Animal

Status

Provincial Rank: S1
BC List: Red
Global Rank: GNR
COSEWIC: E (MAY 2021)
SARA Schedule:

Locators

Survey Site: MILL BAY
Directions: Mill Bay
Biogeoclimatic Zone:
Ecoregion: NAL;SOG

Area Description

General Description:

Vegetation Zone:

Min. Elevation (m): Max. Elevation (m)

Habitat: TERRESTRIAL

